The Great Grid Upgrade

North Humber to High Marnham

NHHM-AEC-CNS-REP-0058

North Humber to High Marnham

Volume 6: Environmental Statement

Document 6.9.A2 Environmental Statement Appendix 9.2 - Ornithology Baseline Report. Part 1 of 8

Final Issue A

October 2026

Planning Inspectorate Reference: EN020034

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 Regulation 5(2)(a)

nationalgrid

Contents

1. Introduction 1

1.1 Introduction 1

1.2 Ecological Background 3

2. Summary of Legislation and Guidance 5

2.1 Introduction 5

2.2 Legislation 5

2.3 Guidance 5

3. Methodology 7

3.1 Study area 7

3.2 Desk Study Sources 8

3.3 Summary of Surveys Undertaken 10

4. Baseline Data 31

4.1 Overview 31

4.2 Desk Study 31

4.3 Survey Data 61

Table 3.1 – Study areas for designated sites and desk study data 7
Table 3.2 – Ornithology survey programme 12
Table 3.3 – Locations of River Ouse Wetland Bird Count sectors relative to the Project draft Order Limits 22
Table 3.4 – Locations of Broomfleet Tileworks Wetland Bird Count sectors relative to the Project Order Limits 23
Table 3.5 – Ornithology survey programme for breeding Schedule 1 raptors in 2025 28
Table 4.1 – Humber Estuary low tide counts summary (count year 2011-12) 37
Table 4.2 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Broomfleet Tileworks 40
Table 4.3 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Blacktoft Sands RSPB Nature Reserve 42
Table 4.4 – Peak counts of golden plover in fields between Luddington and Eastoft between October 2024 and February 2025 44
Table 4.5 – Peak counts of lapwing in fields between Luddington and Eastoft between October 2024 and February 2025 47
Table 4.6 – Breeding bird counts for Blacktoft Sands RSPB Reserve and Broomfleet Tileworks 51
Table 4.7 – BTO Data Report non-breeding species presence up to and beyond 10 km and conservation status records 59
Table 4.8 – BTO Data Report breeding species presence up to and beyond 10 km and conservation status records 60

Table 4.9 – Summary year-round flight data for all target species at all VPs 66
Table 4.10 – River Ouse high and low tide count summary data (April 2023-March 2024) 71
Table 4.11 – River Ouse high and low tide count summary data (April 2024-June 2025) 79
Table 4.12 – Monthly peak counts of wetland birds at Broomfleet Tileworks 96
Table 4.13 – Pink-footed goose records exceeding 1% of the Humber Estuary SPA qualifying population 2023-24 114
Table 4.14– Pink-footed goose records exceeding 1% of the Humber Estuary SPA qualifying population 2024-2025 115
Table 4.15– Summary flight data for non-breeding pink-footed goose 119
Table 4.16 – Summary flight data for non-breeding golden plover 122
Table 4.17 – Greylag goose records exceeding 1% of the Humber Estuary SPA qualifying population within 500m of the Order Limits on the Humberhead Levels. 123
Table 4.18 – Greylag goose records exceeding 1% of the Humber Estuary SPA qualifying population in Broomfleet Tileworks 124
Table 4.19 – Summary flight data for non-breeding greylag goose 125
Table 4.20 – Lapwing records exceeding 1% of the Humber Estuary SPA qualifying population 127
Table 4.21 – Summary flight data for non-breeding lapwing 127
Table 4.22 – Curlew records exceeding 1% of the Humber Estuary SPA qualifying population 129
Table 4.23 – Summary flight data for non-breeding curlew 130
Table 4.24 – Mallard records exceeding 1% of the Humber Estuary SPA qualifying population 131
Table 4.25 – Location-specific teal records exceeding 1% of the Humber Estuary SPA qualifying population 132
Table 4.26 – Summary flight data for non-breeding marsh harrier 135
Table 4.27 – Summary flight data for non-breeding little egret 136
Table 4.28– Summary flight data for non-breeding whooper swan 139
Table 4.29 – Priority Species occurring as part of the Farmland Bird Assemblage across the Project, as recorded from vantage points between March and August 2024 147
Table 4.30 – Summary flight data for peregrine falcon during the breeding season 150
Table 4.31 – Summary of breeding lapwing recorded during surveys (in geographical order from north to south) 151
Table 4.32 – Summary flight data for marsh harrier during the breeding season 153

References 158

Annex A – Combined Survey Timeline
Annex B – Survey Metadata
Annex C – Target Species for Vantage Point Surveys
Annex D – WeBS Core Count Data
Annex E – BTO Data Report
Annex F – Common Birds Census Summary Tables

Figures

1. Introduction

1.1 Introduction

1.1.1 This Appendix to **Application Document 6.9 Chapter 9 Ornithology** of the Environmental Statement (ES) provides the baseline ornithology information used to support the impact assessment presented in the Chapter.

1.1.2 The Project has been sub-divided into six geographical Route Sections; these are shown on **Application Document 6.1.F1 Figure 1.1 Project Location and Route Sections** and comprise:

- Route Section A – between the proposed Birkhill Wood Substation and the River Ouse;
- Route Section B – between the River Ouse and Crowle;
- Route Section C – between Crowle and North Moor (M180);
- Route Section D – between North Moor (M180) and the River Idle;
- Route Section E – between the River Idle and Darlton; and
- Route Section F – between Darlton and the proposed High Marnham Substation.

1.1.3 The results reported in this appendix reference the Route Section that the habitat is located within, where appropriate.

1.1.4 This appendix is supported by the following figures:

- **Figure A9.2.1 Study Areas**
- **Figure A9.2.2 British Trust for Ornithology Wetland Bird Survey Core Count Sectors**
- **Figure A9.2.3 British Trust for Ornithology Wetland Bird Low Tide Count Sectors**
- **Figure A9.2.4 RSPB Monitored Sites**
- **Figure A9.2.5 Vantage Point Locations**
- **Figure A9.2.6 Vantage Point Viewing Arcs**
- **Figure A9.2.7 Field Survey Areas**
- **Figure A9.2.8 Potential Functionally Linked Land Survey Areas (2023-24)**
- **Figure A9.2.9 Through the Tide Counts Survey Areas**
- **Figure A9.2.10 River Ouse Wetland Bird Count Sectors**
- **Figure A9.2.11 Nightjar Survey Area**
- **Figure A9.2.12 Common Birds Census Survey Areas**

- **Figure A9.2.13 Potential Functionally Linked Land Survey Areas (2024-25)**
- **Figure A9.2.14 Nocturnal Bird Count Survey Area**
- **Figure A9.2.15 Wintering Birds Field Counts Survey Areas**
- **Figure A9.2.16 Breeding Schedule 1 Bird Survey Areas**
- **Figure A9.2.17 Broomfleet Tileworks Wetland Bird Count Area**
- **Figure A9.2.18 Wintering Wild Swan Field Count Area**
- **Figure A9.2.19 Pink-footed Goose Tracking Survey Area**
- **Figure A9.2.20 Corn Bunting Census Survey Area**
- **Figure A9.2.21 Statutory International Designated Sites of Ornithological Importance**
- **Figure A9.2.22 Statutory National and Local Designated Sites of Ornithological Importance**
- **Figure A9.2.23 Non-Statutory Designated Sites of Ornithological Importance**
- **Figure A9.2.24 Non-breeding bird distribution (all species)**
- **Figure A9.2.25 Non-breeding pink-footed goose distribution**
- **Figure A9.2.26 Cumulative and peak counts of Pink-footed goose over winter 2023-24**
- **Figure A9.2.27 Cumulative and peak counts of Pink-footed goose over winter 2024-25**
- **Figure A9.2.28 Non-breeding golden plover distribution**
- **Figure A9.2.29 Non-breeding greylag goose distribution**
- **Figure A9.2.30 Cumulative and peak counts of non-breeding greylag goose over winter 2023-24**
- **Figure A9.2.31 Cumulative and peak counts of non-breeding greylag goose over winter 2024-25**
- **Figure A9.2.32 Non-breeding lapwing distribution**
- **Figure A9.2.33 Cumulative and peak counts of non-breeding lapwing over winter 2023-24 and 2024-25**
- **Figure A9.2.34 Non-breeding curlew distribution**
- **Figure A9.2.35 Non-breeding mallard distribution**
- **Figure A9.2.36 Cumulative and peak counts of non-breeding mallard over winter 2023-24 and 2024-25**
- **Figure A9.2.37 Non-breeding Teal distribution**
- **Figure A9.2.38 Non-breeding Wigeon distribution**
- **Figure A9.2.39 Non-breeding Goldeneye distribution**

- **Figure A9.2.40 Non-breeding Gadwall distribution**
- **Figure A9.2.41 Non-breeding Pochard distribution**
- **Figure A9.2.42 Non-breeding Marsh Harrier distribution**
- **Figure A9.2.43 Non-breeding Little egret distribution**
- **Figure A9.2.44 Non-breeding Shelduck distribution**
- **Figure A9.2.45 Non-breeding Shoveler distribution**
- **Figure A9.2.46 Non-breeding Snipe distribution**
- **Figure A9.2.47 Non-breeding Bewick's swan distribution**
- **Figure A9.2.48 Non-breeding Whooper Swan distribution**
- **Figure A9.2.49 Breeding Lapwing distribution**

1.2 Ecological Background

1.2.1 The Project passes through a mixture of arable and pastoral farmland, the former dominating the landscape across most of the study area. The landscape is punctuated by woodlands, and the fields are intersected by hedgerows, both of which are more prominent features of the landscape south of the M180 motorway. Occasional wetland habitats, including reedbed, swamp, estuarine, riverine, and still waters are present within the Project and surrounding environs. The wider landscape surrounding the central-northern sections of the Project, particularly within Yorkshire and Lincolnshire (the southern half of Route Section A through to the northern half of Route Section D), includes sites designated for peatland and wetland habitats that support a wide range of avifauna.

1.2.2 As determined by desk study and consultation, the following locations and broad areas across the Project represent key locations that can be considered to support the most valuable bird populations:

- The Humber Washlands either side of the River Ouse, which support qualifying species of the Humber Estuary Special Protection Area (SPA), Ramsar site and Site of Special Scientific Interest (SSSI) (Route Sections A and B);
- The Royal Society for the Protection Birds (RSPB) Blacktoft Sands reserve and the River Ouse, both of which are within or adjoining the Humber Estuary SPA, Ramsar site and SSSI (Route Section B);
- The River Idle Valley and Chesterfield Canal, which may provide inland flyway linkages between the River Trent and habitats where wintering migrant swans are known to occur, including the River Idle Washlands SSSI;
- Other linear wetland habitats, which include major drains that intersect the Isle of Axholme and associated open arable habitats;
- Habitats within 5 km of Thorne and Hatfield Moors SPA (for nightjar (Caprimulgus europaeus) and common crane (Grus grus)); and
- Potential flyways between Beckingham Marshes/the River Trent to the east of the Project and Sutton and Lound Gravel Pits to the west.

1.2.3 The survey methodologies and desk study set out herein have been developed iteratively to meet the needs of the Project design as it has evolved. The scope of the baseline data gathering has been agreed with key stakeholders including local planning authorities, Natural England and RSPB, as set out in sections 9.3 and 9.4 of **Application Document 6.9 Chapter 9 Ornithology**. Surveys were carried out on a year-round basis between mid-2022 and mid-2026 using established survey methods with adaptations to suit the specific baseline and assessment requirements of the Project, where necessary, and to align to the seasonal presence of birds during the breeding and non-breeding seasons.

2. Summary of Legislation and Guidance

2.1 Introduction

2.1.1 Legislation and guidance relevant to birds are summarised in this section.

2.1.2 More detailed information on legislation can be found in Section 9.2 of **Application Document 6.9 Chapter 9 Ornithology**. Regional and Local planning policy relevant to ornithology is presented in **Application Document 6.9.A1 Appendix 9.1 Regional and Local Planning Policy**.

2.2 Legislation

2.2.1 Section 9.2 of **Application Document 6.9 Chapter 9 Ornithology** provides a list of relevant legislation and an overview of relevant guidance; it also includes a summary of planning policy relevant to energy transmission infrastructure. **Application Document 6.9.A1 Appendix 9.1 Regional and Local Planning Policy** provides a summary of relevant regional and local planning policies.

2.2.2 The key legislation relevant to ornithology includes:

- The Conservation of Habitats and Species Regulations 2017 (as amended) (HM Government, 2017);
- Directive 2009/147/EC on the conservation of wild birds (the codified version of Council Directive 79/409/EEC as amended (Birds Directive) (The European Parliament and the Council of the European Union, 2009);
- Wildlife and Countryside Act 1981 (as amended) (WCA) (HM Government, 1981); and
- Natural Environment and Rural Communities Act 2006 (NERC) (HM Government, 2006).

2.3 Guidance

Birds of Conservation Concern (BoCC)

2.3.1 The Birds of Conservation Concern (BoCC) Red, Amber and Green lists assign UK species to those categories in accordance with criteria that are based on their population status and trends (Stanbury A. E., 2021). The latest review was published in December 2021 as Birds of Conservation Concern 5 (BoCC5), with an addendum to this published in September 2024. This addendum set out assessments for 28 species of current or former breeding seabird in the UK (Stanbury A. B., 2024), resulting in the addition of Leach's storm-petrel (*Hydrobates leucorhous*), common gull (*Larus canus*), great black-backed gull (*Larus marinus*) and Arctic tern (*Sterna paradisaea*) to the Red List.

2.3.2 Red List species are those species of highest conservation concern and Amber List species are those species of moderate conservation concern. Green List species are those of low conservation concern.

2.3.3 These lists confer no legal status; however, they are useful when assessing the significance of predicted impacts and determining the level of mitigation that may be required when birds are to be affected by development. Where these species are present at a site, their conservation status should be considered in determining the likely impacts of a development.

Local Biodiversity Action Plans (LBAPs)

2.3.4 The Project passes through more than one administrative area; therefore, the following LBAPs are relevant:

- East Riding of Yorkshire Biodiversity Action Plan (ERYBAP);
- Lincolnshire BAP; and
- Nottinghamshire BAP.

2.3.5 Full guidance specific to the ornithology assessment is summarised in section 9.4 of **Application Document 6.9 Chapter 9 Ornithology**.

3. Methodology

3.1 Study area

3.1.1 The study area for the ornithology assessment and data gathering includes the land within the Order Limits as well as all designated sites and areas likely to support birds that occur within the relevant Zones of Influence (ZoI) of the Project. The study areas for the ornithology baseline data gathering and assessment are described in Table 3.1 and shown **in Figure A9.2.1 Study Areas**[1]. These study areas were originally applied to a broad development area referred to as the 'Scoping Boundary', with subsequent design iterations resulting in a narrower Project boundary, referred to as the "Order Limits", around which the study areas are applied.

Table 3.1 – Study areas for designated sites and desk study data

Study area (distance from draft Order Limits)	Feature
20 km	Statutory designated sites of international nature conservation value (Ramsar sites and SPAs) where bird species with large foraging and migratory ranges are a qualifying feature.
10 km	All other statutory designated sites of international nature conservation value (Ramsar sites and SPAs).
5 km	Statutory designated sites of national and local nature conservation value e.g. SSSIs (also referencing Natural England Impact Risk Zones for SSSIs on the 'Multi-Agency Geographic Information for the Countryside' (MAGIC) website (Department for Environment, Food & Rural Affairs, 2024), National Nature Reserves (NNR) and Local Nature Reserves (LNR))[2]. Species records and data for wetland birds from the British Trust for Ornithology (BTO) Wetland Birds Survey (WeBS)[3].
2 km (route-wide)	Non-statutory designated sites and species records from Biological Records Centres; BTO data report.

[1] The study areas have been defined based on a best estimate of ZoI - for example a much larger study area was set for SPAs supporting 'species with large foraging ranges' (e.g. pink-footed goose) than for other sites.

[2] There is often spatial overlap between SSSIs/SPAs and qualifying ornithological features of SSSIs in some cases might forage over relatively large distances outside of the designated site. Therefore, the study area for SSSIs with qualifying ornithological features is extended to 10 km.

[3] The Wetland Bird Survey (WeBS) is a joint scheme run by the British Trust for Ornithology (BTO), the Wildfowl & Wetlands Trust (WWT), Royal Society for the Protection of Birds (RSPB) and Joint Nature Conservation Committee (JNCC) to monitor non-breeding waterbirds in the UK. The scheme aims to identify population sizes, to determine trends in numbers and distribution, and to identify important sites for waterbirds. Year – round monthly coordinated 'core' counts are made during high tide periods. Low tide counts are carried out at major estuaries over winter (November – February) across the UK on a rolling 6-year cycle (this is the standard survey cycle for low tide counts; however, counts are sometimes undertaken more or less frequently than this).

Study area (distance from draft Order Limits)	Feature
2 km (between the A63 and the M180)	Crop Cover data from Centre for Ecology and Hydrology, for the area of the Humberhead Levels and northern Isle of Axholme between Ellerker and Keadby.
500 m	Barn owl nest and roost sites as obtained from the Wildlife Conservation Partnership.
Site-specific	RSPB site-specific data for Blacktoft Sands reserve (and associated monitoring sites) and Beckingham Marshes reserve; Humber Nature Partnership monitoring reports for Alkborough Flats.

3.1.2 NatureScot (formerly Scottish Natural Heritage, SNH) identify a core foraging distance for pink-footed goose (*Anser brachyrhynchus*) of 15-20 km from roosts (NatureScot, 2025), although a study by Bell (Bell, 1988) showed that 82.1% of pink-footed goose movements were within 8 km of the roost and it is likely that, at most locations, pink-footed goose activity tails off significantly at distances from roosts that are greater than this. The core foraging ranges of other non-breeding species (including other geese and whooper swan (*Cygnus cygnus*)), as set out by NatureScot are lower than 20 km, with the exception of barnacle goose (*Branta leucopsis)*, which can forage up to 25 km from roosts. Therefore, the inclusion of sites up to 20 km provides a sufficient level of caution to the assessment for all species likely to be encountered in the study area.

3.2 Desk Study Sources

3.2.1 The following data have been acquired and are summarised herein:

- The locations of statutory designated sites were obtained from Multi Agency Geographic Information for the Countryside (Department for Environment, Food & Rural Affairs, 2024);
- Reasons for designation of international statutory designated sites were obtained from the site data sheets available from Joint Nature Conservation Committee (JNCC) website (Joint Nature Conservation Committee, 2026);
- Reasons for designation of national and local statutory designated sites were sourced from the Natural England designated sites search website (Natural England, 2026);
- Non-statutory designated site details and species records were supplied by Local Records Centres (LRCs) including North and East Yorkshire Ecological Data Centre NEYEDC), Lincolnshire Environmental Records Centre (LERC) and Nottinghamshire Biological and Geological Records Centre (NBGRC);
- BTO WeBS data for core count (high tide) and low tide count sectors within 5 km of the Project, as shown on **Figure A9.2.2 BTO WeBS Core Count Sectors** and **Figure A9.2.3 BTO WeBS Low Tide Count Sectors** respectively. These were identified within a search area based on the “Scoping Boundary”, which was used during the early stages of the Project design phase as a guide to the approximate

route being developed for the proposed overhead line. This search area was retained when updating the desk study after the draft Order Limits had been defined, in order to maintain sufficient caution in the assessment;

- Site-specific monitoring data supplied by the RSPB, including wetland bird counts and breeding bird data for locations across the Humberhead Levels either side of the River Ouse, that are monitored and/or managed by the RSPB. These locations range from those that overlap the draft Order Limits, to locations up to 7.5 km away;
- Aerial imagery (Google Maps), which was used to identify broad habitat types and topographical/geographical features relevant to baseline survey design and bird distribution;
- BTO data report;
- RSPB data unit, for bird counts and monitoring data for Beckingham Marshes RSPB Reserve;
- Barn owl (*Tyto alba*) data from local/regional barn owl groups, curated and supplied by the Wildlife Conservation Partnership (WCP);
- Humber Nature Partnership monitoring reports for Alkborough Flats, at the confluence of the Rivers Trent and Humber; and
- Species and taxon experts identified during consultation with stakeholders.

3.2.2 The reserve manager for RSPB Blacktoft Sands provided data from routine monitoring and survey work carried out over the last 5 years for multiple locations across the Humberhead Levels, as shown on **Figure A9.2.4 RSPB Monitored Sites**. These include:

- Annual peak counts for consecutive count years 2019-2023 and 5-year mean of peaks of wetland birds at Broomfleet tileworks (Table 4.2Table 4.2);
- The same data for Blacktoft Sands RSPB Reserve (Table 4.3 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Blacktoft Sands RSPB Nature Reserve). These data overlap with the core count data supplied by WeBS for Count Sector 38430 Blacktoft Sands but are more contemporary;
- Monitoring data (field counts of birds) within the fields surrounding Island Farm (paragraph 4.2.26) and Whitton Island/Sands (paragraph 4.2.27);
- Field counts of lapwing (*Vanellus vanellus*) and golden plover (*Pluvialis apricaria*) carried out within a series of fields between Luddington and Eastoft (paragraphs 4.2.28 - 4.2.30 and Table 4.4 – Peak counts of golden plover in fields between Luddington and Eastoft between October 2024 and February 2025 and Table 4.5 – Peak counts of lapwing in fields between Luddington and Eastoft between October 2024 and February 2025);
- Ad hoc records of the breeding locations of bittern (*Botaurus stellaris*) and flights to and from Blacktoft Sands RSPB Reserve (paragraphs 4.2.31 - 4.2.33);
- Breeding bird data from 2022 (paragraphs 4.2.34 - 4.2.42) for various sites; and
- Breeding bird data from 2023 for Broomfleet Tileworks and Blacktoft Sands (paragraphs 4.2.36 - 4.2.38 and Table 4.6).

3.2.3 Further bird count data were acquired from RSPB's data unit for Beckingham Marshes Reserve (also shown on **Figure A9.2.4 RSPB Monitored Sites**), located approximately 33 km south of the River Ouse.

3.2.4 In addition to the above sources, data supporting other planning applications, including Development Consent Order (DCO) submissions and environmental statements, were reviewed alongside other information available from monitoring or tracking studies and surveys that focused on bird movements and habitat use, where these are spatially relevant to the Project.

3.2.5 Further information regarding the population levels and spatial distribution of species receptors was extracted from the following bird atlases:

- Yorkshire Bird Report 2018/19 (Yorkshire Naturalists Union, 2022);
- Birds of Lincolnshire (Casey, 2021); and
- Nottinghamshire Bird Atlas (Reece, 2019).

3.2.6 Discussions with Natural England regarding the occurrence of large numbers of pink-footed geese close to the River Idle Valley, approximately 30 km south of the Rivers Ouse and Humber, identified a need to understand the foraging and roosting habits of these birds. Consequently, a bespoke desk study was carried out in conjunction with a short-term field-based monitoring protocol to determine the occurrence of any roost sites less than 30 km from the River Idle Valley and the locations of routinely used foraging sites within the typical foraging distance (maximum 20 km) of the roost(s), as far south as the River Idle, and the Misterton and Gringley Carrs. The desk study included a review of information from the bird atlases listed above, plus the following online resources:

- BTO WeBS Report online (Frost, 2026) for counts from Beckingham Marshes, River idle Washlands, Hatfield Moors and River Trent-Littleborough;
- Hatfield Moors Birding Blog (Hatfield Moors Birding Blog, 2026);
- Thorne Moors Birding Blog (Thorne Moors Birding Blog, 2026);
- Idle Washlands Bird Report 2021 (Furber, 2021);
- Doncaster Bird Report 2002/03 (Doncaster and District Ornithological Society , 2026)
- Yorkshire Bird Report 2010 (Yorkshire Naturalist's Union, 2010); and Yorkshire bird Report 2018/19 ((Yorkshire Naturalists Union, 2022); and
- Nottinghamshire Birders Sightings (Nottinghamshire Birdwatchers, 2026) for individual species records; and county guide (Nottinghamshire Birdwatchers , 2026) for information specific to Beckingham Marshes.

3.3 Summary of Surveys Undertaken

3.3.1 The scope of the surveys was designed, in combination with detailed desk study, to inform the assessments of effects on birds across the entire length of the Project and its environs. Survey effort was targeted to known and suspected locations and broad areas of elevated bird activity; thus, effort was focused on the habitats that may serve the species that are qualifying features of designated sites, and on potential flyways between sites that support large numbers of birds. Significant focal points for survey

effort included the Humberhead Levels and northern Isle of Axholme either side of the Humber Estuary SPA/Ramsar and SSSI; and Misterton and Gringley Carrs, east and south of the River Idle Washlands SSSI. Both of these broad areas potentially provide supporting habitats to designated sites. Other focal points for survey effort included:

- Locations of significant permanent or temporary infrastructure, other than pylon bases;
- Blocks of woodlands and scrub that may be subjected to habitat management or loss for the purposes of facilitating construction of the Project;
- Potential nesting sites for Schedule 1 birds; and
- Habitats suitable for foraging and/or roosting wetland birds that lie within or adjacent to (within 500 m of) the Project.

3.3.2 The scope of the baseline gathering was therefore proportionate to the assessments presented in Application document 6.9 Environmental Statement Chapter 9 - Ornithology and Application Document 5.2 Habitats Regulations Assessment Report and, in line with the consultation undertaken for the Project, enabled the following:

- Identification of the distribution and magnitude of bird flight activity and habitat use within land potentially functionally linked to the Humber Estuary SPA/Ramsar site and at key locations more widely across the draft Order Limits;
- Identification of the distribution and use of potentially suitable habitat for foraging nightjar within 5 km of Thorne and Hatfield Moors SPA;
- Sampling of breeding and non-breeding bird populations across the Project, including use of wetland habitats in the environs of the River Ouse crossing point;
- Detection of wintering migrant swans and other wetland bird species using potential flyways between wetland sites, where such flyways are likely to result in birds flying across the proposed overhead line;
- Quantification of breeding corn bunting (*Emberiza calandra*) populations across Misterton and Gringley Carrs; and
- Identification of pink-footed goose roost sites, foraging locations and connectivity between them in the wide area around the River Idle.

Survey Methodologies

Summary

3.3.3 Surveys (as detailed in the ornithology survey programme summarised in Table 3.2) began in the summer of 2022 and continued up to and including the summer of 2026. Multiple methodologies were executed across numerous locations and were either temporally exclusive (i.e. they occurred sequentially) or overlapping (i.e. with multiple surveys across multiple locations occurring within a single month). An overview of the survey programme is presented in Table 3.2 and supported by **Figure A9.2.5 Vantage Point Locations** to **Figure A9.2.20 Corn Bunting Census Survey Area** showing the spatial scope/location(s) of each. To provide an understanding of the relative magnitude and spatial distribution of survey effort in each month over the entire survey period, a survey timeline is presented in Annex A – Combined Survey Timeline, showing the months in which each survey was undertaken at each location.

3.3.4 The survey protocols are set out in paragraphs 3.3.5 - 3.3.82 and survey metadata are presented in Annex B – Survey Metadata.

Table 3.2 – Ornithology survey programme

Survey type	Overview and survey area	Date range
Vantage Point Surveys (**Figure A9.2.5 Vantage Point Locations** and **Figure A9.2.6 Vantage Point Viewing Arcs**)	Monitoring of flight activity at 24 locations for a selection of target species: • twenty-one VPs were initially selected to monitor flights across terrestrial habitats and at the River Ouse crossing; • two further VPs were added for winter 2024-2025 across the Yorkshire Wolds to address advice from RSPB that surveys to identify potential functional linkages to the Humber Estuary SPA should be carried out there; and • one additional VP was added for winter 2025-26, and an established VP was continued, in response to stakeholder feedback, for the purposes of monitoring the flights of wintering wild swans on Gringley and Misterton Carrs.	June 2022-March 2026
Field Counts (**Figure A9.2.7 Field Survey Areas**)	Field counts targeting qualifying species of the Humber Estuary SPA and Priority Species within broad areas either side of the River Ouse to accommodate early Project design.	January 2023-January 2024
Potential Functionally Linked Land (FLL) Field Counts 2023-24 (**Figure A9.2.8 Potential Functionally Linked Land Survey Areas (2023-24)**)	Extended survey areas centred on the former Scoping Corridor, plus a 500 m buffer, to count qualifying species of the Humber Estuary SPA, within the hinterland (also referred to as potential FLL) either side of the River Ouse. These extend along a length of the Project measuring approximately 13 km north and 14 km south of the River Ouse.	December 2023-April 2024

Survey type	Overview and survey area	Date range
Through-the-tide Counts (**Figure A9.2.9 Through the Tide Counts Survey Areas**)	Monitoring use of habitats and abundance of species using the River Ouse at and adjacent to the proposed crossing point.	June 2022-March 2023
River Ouse High/Low Tide Counts (**Figure A9.2.10 River Ouse Wetland Bird Count Sectors**)	Tally counts of birds within pre-determined count sectors including riverine intertidal (at low tide) and surface (at high tide) habitats of the River Ouse where it forms part of the Humber Estuary SPA, and adjacent terrestrial habitats. The survey area is up to 500 m either side of the former Scoping Corridor and a minimum of 500 m either side of the Order Limits.	April 2023-June 2025
Foraging Nightjar (*Caprimulgus europaeus*) surveys (**Figure A9.2.11 Nightjar Survey Area**)	Transects to detect and monitor nightjar activity within suitable habitats within the former Scoping Corridor and up to 500 m either side of it, where this lies within 5 km of Thorne and Hatfield Moors SPA/SSSI.	June and July 2022; June and July 2024.
Common Birds Census (Breeding Bird Surveys) (**Figure A9.2.12 Common Birds Census Survey Areas**[4])	Common Birds Census (CBC) surveys of 13 broad areas, providing coverage of: • a representative sample of habitats within and adjacent to the draft Order Limits; • locations that are potentially sensitive due to the habitats present and/or proximity to known locations of value for breeding birds; or • locations where significant temporary losses of breeding bird habitat may be required to facilitate the construction of the proposed overhead line.	Completed at 12 locations between March and August 2024. One location completed in 2025[5] between March and July.
Potential FLL Field Counts 2024-25 (**Figure A9.2.13 Potential Functionally Linked Land Survey Areas (2024-25**)	Methodology and purpose as described above. Survey areas centred on the draft Order Limits plus a 500 m buffer for approximately 13 km north and 14 km south of the River Ouse, plus approximately 8 km across the Yorkshire	October 2024-April 2025

[4] Survey areas are shown in ascending numerical order from north to south on **Figure A9.2.12 Common Birds Census Survey Areas**.

[5] Access to one location was not available in 2024.

Survey type	Overview and survey area	Date range
	Wolds between Brantingham and Skidby.	
Nocturnal Bird Counts (**Figure A9.2.14 Nocturnal Bird Count Survey Area**)	Counts of non-breeding qualifying species of the Humber Estuary SPA, in particular waders and pink-footed goose, within a 500 m buffer of the Order Limits south of the River Ouse (Luddington-Ousefleet) and north of the River Ouse (Blacktoft- Ellerker).	October 2024-April 2025
Wintering Bird field counts (**Figure A9.2.15 Wintering Birds Field Counts Survey Areas**)	Field counts of Priority Species and any qualifying species of a designated sites repeated three times within each of two broad areas between the Chesterfield Canal and Warping Drain. A particular focus was to determine field use by wildfowl and wading birds within this potential corridor for movement along the River Idle Valley, to supplement flight data recorded from VPs in this area.	October 2024-February 2025
Breeding Schedule 1 Bird Surveys (**Figure A9.2.16 Breeding Schedule 1 Bird Survey Areas**) (barn owl, peregrine falcon *Falco peregrinus*, red kite *Milvus milvus*, hobby *Falco subbuteo* and kingfisher *Alcedo atthis*)	Breeding activity recorded during the other surveys outlined herein, with follow up visits using species-specific methods applied as required during the specified date range.	April-September 2025
Broomfleet Tileworks Wetland Bird Count Area (**Figure A9.2.17 Broomfleet Tile Works Wetland Bird Count Area**)	Monthly tally counts of birds at high tide within pre-determined count sectors mapped to waterbodies adjacent to the Order Limits.	October 2024-January 2026 (excluding May to August 2025[6]); and April-July 2026.
Wintering Wild Swan Field Count Area (**Figure A9.2.18 Wintering Wild Swan Field Count Area**)	Counts of wild swans foraging on farmland across Misterton and Gringley Carrs, south of the River Idle, repeated each month (six visits in total). Added to	October-March 2026

[6] Monthly high tide counts were programmed between October 2024 and September 2025 however there was no access to Broomfleet Tileworks from May to August 2025 (inclusive) due to clay extraction works. Surveys were extended to January 2026, with further surveys completed in Spring and Summer 2026 to address the shortfall in survey effort.

Survey type	Overview and survey area	Date range
	the scope in response to stakeholder feedback.	
Pink-footed Goose Tracking Survey Area (**Figure A9.2.19 Pink-footed Goose Tracking Survey Area**)	Monitoring of geese departing from and arriving at roost sites on Hatfield Moor SPA and tracking of their diurnal foraging patterns across the wider countryside between Hatfield Moor, Haxey, Misterton and Bawtry.	November-December 2025
Corn bunting Census Survey Area (identical to the area mapped on **Figure A9.2.20 Corn Bunting Census Survey Area**)	Censusing of singing male corn buntings across Misterton and Gringley Carrs.	May-July 2026

Vantage point surveys

3.3.5 Twenty-four VPs were surveyed across 22 separate locations (**Figure A9.2.5 Vantage Point Locations**), one of which is focused on the River Ouse and habitats immediately adjacent to it. The areas viewed from each of them are shown on **Figure A9.2.6 Vantage Point Viewing Arcs** and include coverage up to 2 km from the VP within a typically 180-degree viewing arc. These VPs were identified to include key habitats within at least 500 m of the Order Limits.

3.3.6 Two of the VP locations (4 and 18) provide 360-degree views and are each sub-divided into two VPs (4a, 4b; and 18a and 18b). Vantage Points 18a/b are approximately 1.2 km from the Project; these serve to provide flight and habitat use data for qualifying species of the Humber Estuary designations that might move along the Market Weighton Canal, and Oxmardyke Washlands and the surrounding habitats, including the Humber Estuary.

3.3.7 The combined survey duration achieved at all vantage points is 2,380.25 hours, which is broken down by VP as follows[7]:

- VP 1: 86 hours;
- VP 19: 42 hours;
- VP 20: 42 hours;
- VP 2: 87.5 hours;
- VP 3: 124.5 hours;
- VP 18a: 105 hours;
- VP 18b: 105 hours;
- VP 4a: 100 hours;

[7] Vantage Points were added and amended at different times throughout the survey period; therefore numerical order does not represent geographical order. Vantage Point data are herein presented and discussed in geographical order from North to South.

- VP 4b: 102 hours;
- VP 5: 143 hours;
- VP 6: 137 hours;
- VP Ouse Crossing: 199.75 hours;
- VP 7: 138.5 hours;
- VP 8: 108.5 hours;
- VP 9: 108 hours;
- VP 10: 109.5 hours;
- VP 11: 84 hours;
- VP 12: 99 hours;
- VP 13: 90 hours;
- VP 21; 36 hours;
- VP 14: 109 hours;
- VP 15: 75 hours;
- VP 16: 75 hours; and
- VP 17: 74 hours.

3.3.8 The methodology follows the principles of the standard vantage point method for surveying onshore wind farms (NatureScot, 2025) but, since the data were not collected for the purposes of a mathematical collision risk model[8], some modifications to the methodology were made to ensure the data set is manageable (given the spatial scope of the Project) while providing sufficient detail to determine collision risk on a qualitative or semi-quantitative basis.

3.3.9 During each VP watch, the 2 km viewing arc was scanned constantly using high resolution binoculars and, where required, telescopes, until a target species was detected in flight anywhere within the viewshed. Depending on the location of the VP, data were recorded in one of the two ways, as described in paragraphs 3.3.11 to 3.3.24. On all VP watches, target birds engaging in habitat use (their locations, numbers and behaviours) within the viewshed were recorded regardless of whether they took flight at any point during the survey.

3.3.10 Target species included all qualifying species of the Humber Estuary SPA/Ramsar site and SSSI, and most other water birds including swans, geese, ducks, waders and herons. Most raptors and owls were also included. A full list of target species recorded during the surveys (regardless of VP location) is provided in Annex C – Target Species for Vantage Point Surveys.

Data recorded – route-wide vantage points

3.3.11 Target species in flight were recorded along with any other identifying characteristics such as age and/or gender where possible, and the number of birds involved in the flight event. Once detected, the individual bird or flock was observed continuously

[8] A sufficiently robust peer reviewed collision risk model for overhead lines has not been developed.

until it either landed within the viewshed, passed across and exited the viewshed, or was lost from view (if it was still within the viewshed).

3.3.12 The time the bird or flock was first detected, and the duration of the flight whilst in view, were recorded and a mean height was estimated for flocks of birds. The bird's flight height was estimated at the time it was first detected within the viewshed and then at 15-second intervals until it landed, exited the viewshed or was lost from view. The locations at which birds landed, or from which they took off, were also recorded and these records contribute to the database of habitat use recorded for target species.

3.3.13 The flight heights recorded were chosen to reflect the typical dimensions of the proposed pylons and to provide some flexibility to accommodate the evolution of the design and the potential use of different pylon dimensions and span heights in different parts of the Project. Consequently, the following height bands were used:

- 0-7 m (not at risk of collision);
- 7-25 m (potentially at risk of collision);
- 25-45 m (potentially at risk of collision);
- 45-60 m (potentially at risk of collision); and
- >60 m (not at risk of collision).

3.3.14 The potential risk of collision is assigned to height bands that would be occupied by any length of new overhead wire.

3.3.15 The flight direction was recorded using an 8-point compass and the behaviour of the birds was coded on VP recording forms as follows:

- Perpendicular across the proposed route corridor (including direction of flight);
- Parallel to the proposed route corridor (including direction of flight);
- Flying into and back out of the Scoping Boundary without crossing it;
- Random flight (e.g. spiralling flight within the Scoping Corridor);
- Flight involving evasive action – gaining height to pass above existing wires;
- Flight involving evasive action – losing height to pass beneath existing wires;
- Evasive flight – change of direction;
- Flight through an existing cable span; and
- Collision with existing wires.

3.3.16 The latter five behaviour categories were recorded only where there is an existing overhead line within the VP viewshed, which occurred at (in geographical order from north to south) VPs 1, 19, 20, 2-8, 10, 12 and 17. A key attribute recorded for all flights was whether any part of the recorded flight path overlapped the draft Order Limits[9] for the Project. The recording of this flight attribute was introduced to the survey protocol in April 2024, when the Project design had advanced significantly

[9] The Order Limits includes access routes, working areas and other elements of the Project that are not an overhead line. A bird was determined as entering the Order Limits only if it entered the main corridor within which an overhead line is proposed to be installed.

towards a more detailed design proposal that included a set of draft Order Limits. Prior to this the flight descriptors above were used to distinguish flights that interacted with the Scoping Corridor as a proxy for risk of collision.

3.3.17 Flights recorded prior to the existence of the draft Order Limits were subsequently sub-divided into those that did and those that did not enter the draft Order Limits. This was determined from the recorded flight metrics which, in combination, have in most cases provided sufficient spatial information to make this determination. The following information has informed this assessment:

- The recorded flight behaviours;
- Direction of flight;
- Duration of flight;
- The proximity (to one another) of the scoping corridor and Order Limits;
- Whether and where a target species was seen to land or take off;
- Any ad hoc surveyor notes regarding the location and/or behaviour of the target bird(s); and
- The recorded location(s) of habitat use by the target species.

3.3.18 Any target species flights that could not confidently be assigned to groupings of those entering (or not entering) the Order Limits were cautiously assumed to have entered the Order Limits.

3.3.19 For the purposes of the assessments in this ES, a target species flight is considered to be at risk of collision with the proposed overhead line if the flight data demonstrate both of the following:

- The flight included any time at a height that could theoretically put the bird(s) into contact with the proposed overhead line (i.e., the flight entered any of the three height bands listed above covering altitudes from 7 m – 60 m above ground); and
- The flight entered the Order Limits.

3.3.20 Flights that met these conditions are herein referred to as “at risk”. However, it is important to note that this does not imply that collision with the overhead infrastructure is inevitable. Indeed, current knowledge of the behaviour of birds around overhead lines and the risks to birds is strongly suggestive that collisions with overhead lines are highly unlikely for most species in most circumstances. This is discussed in greater detail in **Application Document 6.9 Chapter 9 Ornithology** and **Application Document 6.9.A3 Appendix 9.3 Flight Activity Assessment**.

Data recorded – River Ouse crossing

3.3.21 The surveys at this location followed largely the same methods as those used at other VPs.

3.3.22 Prior to April 2024, bird behaviour and flight patterns were recorded using the coded behaviour descriptors previously summarised, combined with the recording of locations of where birds alighted or landed such that flights between the River Ouse, the terrestrial wetlands of Blacktoft Sands RSPB reserve, and the surrounding non-designated terrestrial habitats could be identified. However, in April 2024, the mapping of bird flights was included to give a more accurate insight into habitat use

at this key location. Flights recorded prior to this were reviewed and divided into those at risk or not at risk depending on whether they were likely to have crossed the Order Limits, as described in paragraph 3.3.17.

3.3.23 The existing and proposed pylon and conductor span heights at the River Ouse crossing are higher than those that cross terrestrial habitats across the rest of the Project, with a proposed tower height of 129 m and a minimum cable span height of 60 m. The existing towers are 109 m tall, and the minimum height of the existing cable span is 60 m. The following height bands were used when recording target species flights, with the upper two bands reflecting the flexibility required around the design of the Project at this location:

- 0-30 m (not at risk of collision);
- 30-60 m (not at risk of collision);
- 60-90 m (potentially at risk of collision);
- 90-120 m (potentially at risk of collision);
- 120-140 m (potentially at risk of collision);
- 140-165 m (not at risk of collision); and
- >165 m (not at risk of collision).

3.3.24 Only the lower half of the 120-140 m height band would present any risk of collision to passing birds, however for the purposes of assigning risk it has been cautiously assumed that any bird within this height band would be at risk of collision. The potential risk of collision is assigned to height bands that would be occupied by any length of new cable.

Field counts

3.3.25 Monthly field counts were undertaken between January 2023 and January 2024 (inclusive) across the areas shown in **Figure A9.2.7 Field Survey Areas**, covering terrestrial habitats directly adjacent to the River Ouse crossing point.

3.3.26 The surveys specifically targeted the recording of qualifying features of the Humber Estuary SPA, Ramsar site and SSSI, although this list was extended to include the occurrence of Schedule 1 birds and any habitats suitable for breeding (such as the occurrence of tree or pole mounted barn owl boxes).

3.3.27 Surveyors followed a transect route around the survey area that enabled them to view suitable habitats and to count target species, such records being annotated on field maps. All surveys were carried out during daylight hours.

Field counts – potential functionally linked land (FLL) survey areas

3.3.28 The surveys followed a similar protocol to the one described above for field counts. Surveys were carried out once per month during daylight hours over the following periods and broad areas:

- December 2023 to April 2024 (inclusive) across the Scoping Corridor plus a 500 m area either side of it between Brantingham in the north and the M180 in the south (**Figure A9.2.8 Potential Functionally Linked Land Survey Areas (2023-24**); and

- October 2024 to April 2025 (inclusive) across the Order Limits plus a 500 m area either side of it between the A614 near Cottingham in the north and the M180 in the south (**Figure A9.2.13 Potential Functionally Linked Land Survey Areas (2024-25)**).

Nocturnal field counts within potential FLL

3.3.29 Twice-monthly nocturnal bird counts were carried out between and including October 2024 and April 2025. The surveys followed a similar protocol to the field counts described above; however, all surveys were carried out in the hours of darkness using thermal imaging monoculars to identify birds from driven and walked transects. Surveys were timed to coincide with high tides wherever possible.

3.3.30 The survey area included all habitat up to 500 m either side of the Order Limits across a core area of bird activity as identified by diurnal surveys between Ellerker in the north and Luddington in the south (**Figure A9.2.14 Nocturnal Bird Count Survey Area**).

Wintering bird field counts

3.3.31 Field counts were carried out over three repeat visits to each of two broad survey areas either side of the River Idle (**Figure A9.2.15 Wintering Birds Field Counts Survey Areas**), centred approximately on the Order Limits. The surveys were completed between October 2024 and February 2025.

3.3.32 These areas were selected in anticipation that Gringley and Misterton Carrs between the Chesterfield Canal and the River Idle might support wetland birds that are qualifying features of the River Idle Washlands SSSI, including wintering wild swans.

Wild swan field counts

3.3.33 In response to stakeholder comments from Nottinghamshire County Council, further field counts across Misterton and Gringley Carrs were carried out, with the principal aim of recording the numbers and distribution of wintering wild swans and other waterfowl populations that are qualifying features of the River Idle Washlands SSSI, that forage across this broad area. All target species identified in Annex C – Target Species for Vantage Point Surveys were prioritised for recording.

3.3.34 The survey area covers all fields up to 500 m either side of the Order Limits between The River Idle and the Chesterfield Canal (**Figure A9.2.18 Wintering Wild Swan Field Count Area**). Monthly surveys were completed between and including October 2025 and March 2026, during which target species were plotted on field maps. These records were then transferred to a data base of habitat use by target species.

Wild swan VP surveys

3.3.35 Vantage Point surveys were executed across the same period as the wild swan field counts, to supplement the field counts with additional records of habitat use and flight activity by wild swans and other target species across Misterton and Gringley Carrs.

3.3.36 Six hours of survey effort were achieved each month at each of two VPs. The VP locations included VP 14, which had previously been used for project-wide recording of target species flights; plus an additional VP (VP 21), which was added to address the requirements for flight data specific to non-breeding target species, and in particular wild swans, within this part of the route corridor. The VP locations and

areas viewed from each of them are shown on **Figure A9.2.5 Vantage point Locations and A9.2.6 Vantage Point Viewing Arcs** respectively.

3.3.37 The method was a hybrid of that used at the River Ouse crossing VP, and all other VPs. In practice this meant that target species flights were mapped on every survey, but that the height bands used were the same as those previously detailed in paragraph 3.3.13 for route-wide VP surveys.

Wetland bird surveys

River Ouse through the tide counts

3.3.38 Monthly through the tide counts (TTTC) were carried out between June 2022 and March 2023. The survey area included the River Ouse channel only (including all intertidal habitats up to the riverbanks) and extended up to 500 m either side of the proposed overhead line crossing, the location of which was assumed at the time to be immediately adjacent to the existing overhead line (i.e. the survey area included all channel habitat up to 500 m either side of the existing overhead line (**Figure A9.2.9 Through the Tide Counts Survey Areas**).

3.3.39 The method involved tally counting all wetland birds within the survey area over a six-hour period at 30-minute intervals across a tidal cycle. The locations of individual birds or groups of birds were plotted as accurately as possible on a field map and field recording forms. The following attributes for each bird were recorded:

- Species (using standard BTO code);
- Number of birds;
- Behaviour: feeding (F), roosting (R), loafing (L) other activity (O); and
- Location: intertidal (I), water (W).

3.3.40 This survey method was replaced by counts at high and low tide from April 2023 onwards.

River Ouse high and low tide counts

3.3.41 Wetland bird counts at high and low tide replaced the TTTC counts in April 2023 to provide data at a resolution more suited to the design and assessment requirements of the project and to minimise repeat counts of the same birds within a survey period.

3.3.42 The surveys followed the standard WeBS count protocol published online by BTO (British Trust for Ornithology, 2026). This involves tallying wetland birds within pre-determined count sectors. The count sectors were chosen to provide sufficient granularity to the count data to allow any impact assessment to consider the positions of birds within the survey area relative to the proposed overhead line without plotting locations of individual birds[10]. The sectors counted are shown on **Figure A9.2.10 River Ouse Wetland Bird Count Sectors**. The minimum distance of each sector from the Project is summarised in Table 3.3.

[10] Plotting individual birds can be labour intensive and prone to significant error because wetland birds frequently occur en-masse and a bird's position must be estimated by eye. Furthermore, birds will move around in response to factors such as tide height, weather conditions and disturbance. Small count sectors represent an acceptable compromise between accuracy of data collection and spatial resolution of the bird records without attempting to record the precise location of each bird.

Table 3.3 – Locations of River Ouse Wetland Bird Count sectors relative to the Project draft Order Limits[11]

Sector	Minimum distance from Order Limits (m)	Minimum distance from Limits of Deviation (m)
N1	607 west	636 west
N2	436 west	506 west
N3	87 west	232 west
N4	0 (overlapping)	0 (overlapping)
N5	226 southeast	255 southeast
N6	500 east	507 east
N7	312 east	355 east
R1	261 west	425 west
R2	396 west	430 west
R3	162 west	183 west
R4	331 west	398 west
R5	0 (overlapping)	0 (overlapping)
R6	0 (overlapping)	0 (overlapping)
R7	0 (overlapping)	0 (overlapping)
R8	96 east	120 east
R9	422 east	477 east
S1	64 west	214
S2	0 (overlapping)	0 (overlapping)
S3	93 east	236 east
S4	315 east	408 east
S5	556 east	678 east
S6	931 east	1,020 east
RSPB1	0 (overlapping)	0 (overlapping)
RSPB2	157 east	413 east
RSPB3	542 east	705 east
RSPB4	804 east	922 east
RSPB5	690 east	711 east

[11] Measured from the proposed overhead line corridor.

Sector	Minimum distance from Order Limits (m)	Minimum distance from Limits of Deviation (m)
RSPB6	1,144 east	1,233 east
RSPB7	1,026 east	1,031 east
RSPB8	1,300 east	1,408 east

3.3.43 Birds were counted and tallied by species and sector. Bird behaviours were also recorded within pre-determined broad behaviour categories (foraging, roosting, loafing) and a note was made if birds were in flight (and their direction of travel).

3.3.44 Surveys were carried out within two hours either side of high tide and low tide each month (i.e. surveys were bi-monthly). The surveys began in April 2023 and concluded in March 2025.

3.3.45 All count sectors shown in **Figure A9.2.10 River Ouse Wetland Bird Count Sectors** that are not within RSPB Blacktoft Sands Reserve were counted for the entire survey period up to and including March 2025. Sectors within the reserve (RSPB 1 – 8) were not counted due to potential disturbance to birds using the RSPB reserve and the potential limitations of gaining access to the reserve outside of opening hours. To ensure adequate coverage of the sectors within the reserve, RSPB Blacktoft Sands Reserve staff were engaged to carry out these surveys between July 2024 and June 2025 (inclusive), following the same methods as AECOM and, for the period July 2024-March 2025, synchronised with AECOM surveys.

Broomfleet Tileworks high tide counts

3.3.46 These followed the count method set out above for the River Ouse, but with bespoke count sectors mapped to water bodies (**Figure A9.2.17 Broomfleet Tile Works Wetland Bird Count Area**). The minimum distance of each sector from the Project is summarised in Table 3.4.

Table 3.4 – Locations of Broomfleet Tileworks Wetland Bird Count sectors relative to the Project Order Limits

Sector[12]	Minimum distance from Order Limits (m)	Minimum distance from Limits of Deviation (m)
Broomfleet 1	102	278
Broomfleet 2	208	396
Broomfleet 3	262	271
Broomfleet 4	108	116
Broomfleet 5	14	24
Broomfleet 6	0	0

[12] Sector 17 was not plotted or counted due to a numbering error at the survey design stage.

Sector[12]	Minimum distance from Order Limits (m)	Minimum distance from Limits of Deviation (m)
Broomfleet 7	11	17
Broomfleet 8	119	264
Broomfleet 9	107	367
Broomfleet 10	14	258
Broomfleet 11	14	463
Broomfleet 12	149	498
Broomfleet 13	6	540
Broomfleet 14	262	335
Broomfleet 15	245	389
Broomfleet 16	274	279
Broomfleet 18	134	171
Broomfleet 19	3	35
Broomfleet 20	10	29
Broomfleet 21	23	28

3.3.47 Counts were programmed for each month on high tides between October 2024 and September 2025 (inclusive). However, access to the tileworks could not be gained between May and August (inclusive) 2025 while Wienerberger carried out clay extraction works at the southern end of the Tileworks area. This resulted in an additional pit being dug (Sector 21 on **Figure A9.2.17 Broomfleet Tileworks Wetland Bird Count Area**) that had not previously been counted. Consequently, the count sectors were updated to include the additional pit and surveys of all sectors were extended for the 4 months up to and including January 2026. These were terminated after the count in January 2026, as the new pit had not generated any notable bird counts and there were sufficient data for all other sectors. However, a further 4 months of counts from April to July 2026 (inclusive) were added to provide counts for the breeding season that were missing for all sectors within the Tileworks.

Common Birds Census (CBC) surveys

3.3.48 The survey followed the methodology in Marchant (Marchant J. , 1983), adapted to five repeat survey visits at 13 survey areas **Figure A9.2.12 Common Birds Census Survey Areas**). Twelve areas were surveyed between early April and the end of July 2024 (inclusive), and one area (Survey Area 6) was surveyed between March and July 2026 (inclusive) due to access restrictions the previous year. During each visit, the surveyor walked a pre-defined transect that covered the full extent and all different habitat types present within the defined area, subject to access permissions.

3.3.49 The surveys were carried out in good weather conditions starting in the early morning and concluding before midday when bird activity decreases and detection rates are adversely affected.

3.3.50 All contacts with birds (either visually or aurally) were marked onto suitably scaled survey maps using BTO species codes and behaviour notations. An assessment was made of the breeding status of each species recorded in the survey area using the breeding evidence criteria adopted by the BTO's Bird Atlas 2007-11 (Balmer, 2013) with each species being assigned to one of four levels;

- Non-breeding – birds flying over or suspected to be on migration and other birds that would not be expected to breed based on the habitat conditions encountered;
- Possible breeding – species observed in the breeding season in suitable habitat but without strong evidence for breeding;
- Probable breeding – species exhibiting behaviour consistent with breeding but not confirmed breeding e.g. pair observed in suitable habitat, permanent territory detected, courtship behaviour, alarm calling or nest building; and
- Confirmed breeding – species exhibiting behaviour or other evidence that would only be expected if breeding occurred e.g. distraction display, used nest or eggshells, recently fledged young, adults entering nest site, carrying food or faecal sacs, nest with eggs or nest with young seen or heard.

3.3.51 Territory analysis was carried out following guidance in Population Trends in British Breeding Birds (Marchant J. H., 1990), and Bird Census Techniques. Second Edition (Bibby, 2000) using the cumulative data from all survey visits to identify clusters of bird registrations indicative of the presence of territories. The main output of this exercise is an estimated number and approximate locations of territories rather than definitive proof of breeding for individual species, although proof of breeding can be obtained if certain behaviours are observed such as the presence of adults visiting nest sites, incubating adults or fledged young.

Breeding corn bunting surveys

3.3.52 Species-specific surveys followed the standard transect method for censusing breeding populations set out in Bird Monitoring Methods: A Manual of Techniques for Key UK Species. (Gilbert, 1998) which involves recording the location and numbers of singing males, from which the number and approximate locations of territories was determined using the cumulative data from all survey visits.

3.3.53 Three repeat visits to the survey area were completed at approximately monthly intervals between and including May and July 2026. Coverage of the survey area varied on each survey visit between approximately 30 % and 90 %. Corn buntings were also recorded wherever they occurred during all other ornithology surveys, the combination of which provided good spatial coverage of the area within and up to 50/1 /2 around the Order Limits.

3.3.54 The species-specific survey area included all land between the River Idle and the Chesterfield Canal up to 500 m from the Order Limits. This covers an area of interest for this species highlighted by stakeholder feedback received from Nottinghamshire County Council, with a sufficient stand off from all working areas to account for potential disturbance of breeding birds during construction. It is identical to the walkover area surveyed for wintering wild swans shown in **Figure A9.2.18 Wintering**

Wild Swan Field Count Area. Any effects of habitat loss or other impact pathways can be accounted for within this area.

Foraging nightjar surveys

3.3.55 Surveys followed the methods set out in (Gilbert, 1998). Surveys were completed between dusk and no later than an hour before dawn, twice in June and twice in July 2022; this was repeated in 2024.

3.3.56 On each survey a transect was followed that took the surveyor through all potentially suitable foraging habitat within the survey area (which is shown on **Figure A9.2.11 Nightjar Survey Area**). The transect incorporated regular stops to listen for calling individuals. Registrations of nightjar were marked on a suitably scaled field map, using BTO species and behaviour codes.

Barn owl surveys

3.3.57 Sightings of barn owls and the locations of habitats suitable for nesting and roosting barn owls were recorded over the course of all surveys carried out up to and including Spring 2025. These records were used to develop a shortlist of locations requiring further survey to determine the status of potential locations of breeding barn owl.

3.3.58 A 2-visit survey protocol was used, with visit 1 carried out in May and June 2025 including a drive-over survey to identify and, if possible, carry out preliminary inspections of all suitable breeding habitats within 175 m[13] of the Order Limits (**Figure A9.2.16 Breeding Schedule 1 Bird Survey Areas**). This was carried out only where breeding status had not already been identified by other means (ongoing surveys and desk study) and/or for locations that were outside of the areas covered by other surveys.

3.3.59 The locations requiring a second visit were determined during review of the results of visit 1 and all other supporting data. Visit 2 was carried out between July and September 2025 and involved closer inspections of potential breeding habitat (nest boxes, buildings and tree holes) by surveyors holding Natural England survey licences, during which the following signs of occupation were searched for:

- Pellets;
- Nesting debris;
- White splash;
- Moulted adult feathers;
- Juvenile down;
- Whole eggs or egg remains;
- Live adult birds;
- Live young; and
- The remains of dead birds.

[13] 175 m is the maximum disturbance distance for this species that could arise from construction activity, following Shawyer (Shawyer, 2011).

3.3.60 Based on the results of the surveys, potential breeding sites that were (on close inspection) unsuitable for occupation by barn owls were disregarded. The remaining sites were assigned the following status, following the conventions in Barn Owl *Tyto alba* Survey Methodology and Techniques for use in Ecological Assessment (Shawyer, 2011):

- Temporary Rest Site (TRS), where droppings sometimes accompanied by an occasional pellet or body feather are identified at a temporary night-time stopping-off place such as underneath a tree, in a building or on a fence post;
- Active Roost Site (ARS), defined as a place (e.g. trees, old buildings) where breeding does not occur, but where a barn owl is seen or heard regularly or where current/recent presence can be confirmed through signs (such as droppings (splashing), regurgitated pellets and moulted feathers);
- Potential Nest Site (PNS), where trees and built structures which were identified as suitable breeding habitat during visit 1 and subsequently inspected at close quarters during visit 2 were confirmed to have a hole or cavity of suitable size to constitute a potential nest site; and
- Occupied Breeding Site (OBS), a site where breeding has been confirmed (including in the recent past) through sufficient evidence such as adults on nest, eggs, eggshells, chicks or juvenile down.

3.3.61 Locations for which a status could not be easily assigned, but that clearly included habitat suitable for breeding, were identified as a PNS.

3.3.62 The results of the barn owl surveys are restricted to Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report

Breeding Schedule 1 raptor surveys

3.3.63 Sightings of target species, their suspected or known breeding locations and the locations of suitable breeding habitats were recorded over the course of all surveys carried out up to and including Spring 2025. Additional diurnal surveys for breeding Schedule 1 raptors were undertaken in the spring and summer of 2025 across the entire length of the Project, to plug gaps in the spatial scope of the baseline data and to ensure that the baseline is contemporary. These were undertaken within the following areas, all of which are shown on **Figure A9.2.16 Breeding Schedule 1 Bird Survey Areas** :

- The Order Limits plus 300 m for red kite;
- The Order Limits plus 450 m for hobby; and
- The existing overhead line where this intersected a buffer of 750 m around the Order Limits for peregrine falcon.

3.3.64 In all cases the survey areas were based on the species-specific disturbance distances set out in (Goodship, N.M. and Furness, R.W. (MacArthur Green), 2022).

3.3.65 Peregrines typically nest on cliff faces and at elevated locations on tall buildings or other tall structures. The only suitable habitat features within the landscape through which the Project passes are existing pylons. Thus, the survey area for this species was based on the presence of an existing overhead line within the survey buffer.

3.3.66 Marsh harrier (*Circus aeruginosus*) is the only other Schedule 1 raptor likely to nest within the landscape through which the Project passes. However, the suite of other

surveys as previously described was sufficient to establish a robust baseline for this species and no species – specific surveys were carried out.

3.3.67 A two-visit survey protocol was employed for all species, in which the first visit involved driven and walked transects around the survey areas to identify suitable nesting habitats and any site occupancy (over and above that already recorded during other surveys) by the target species. The second visit then targeted suitable nesting habitats and followed up on previous sightings, through observations of suitable habitats and suspected nest sites from ad hoc VPs for up to four hours. The visits were carried out according to the schedule set out in Table 3.5, which was designed to match the key periods in which breeding activity, and in particular the presence of nests with young, are most detectable.

Table 3.5 – Ornithology survey programme for breeding Schedule 1 raptors in 2025

Species	Visit 1	Survey aims	Visit 2	Survey aims
Red Kite	Late April-Mid May	Locate nests or potential nest sites and/or territorial or other breeding activity by adult birds	Late May-Late June	To check potential nest sites for occupancy by adults and the presence of young.
Peregrine falcon	March-April	Checking for occupancy of home ranges and breeding territories, and potential nest sites	May-June	Checks for incubating adults and young at nests
Hobby	May-June	Identification of suitable habitat features; Detection of habitat and territory occupancy by adult birds	Early July-Late August	Searches for adults on nests and the presence of young.

3.3.68 The results of these surveys are restricted to Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report.

Breeding kingfisher surveys

3.3.69 The results of the desk study and baseline surveys carried out up to Spring 2025 were used to identify watercourses and other water bodies likely to support nesting kingfisher, on which nesting had not already been identified. Ten suitable locations, all of which are watercourses, were identified (**Figure A9.2.16 Breeding Schedule 1 Bird Survey Areas**) and divided into sub-sections for survey purposes. These are (from north to south):

- Ellerker Beck/Ings Drain (Route Section A);
- Milll Beck (Route Section A);
- Adlingfleet Drain (Route Section B);
- North and South Soak Drains and Keadby Canal (three parallel watercourse channels in Route Section C);

- Three Rivers (comprising five conjoined watercourse channels: Hatfield Waste Drain, Three Rivers, North Engine Drain, the River Torne, South Engine Drain, and a further drain south of the A18 in Route Section C);
- Warping Drain and Ferry Drain (each divided into two survey sections, in Route Section D);
- Mother Drain (on the boundary of Route Sections D and E);
- Chesterfield Canal (in Route Section E);
- Wheatley Beck (Route Section E); and
- North of Darlton (Route Section E).

3.3.70 Diurnal surveys were carried out along all parts of these watercourses that were within 100 m of the Order Limits, in line with the disturbance distance for this species published in (Goodship, N.M. and Furness, R.W. (MacArthur Green), 2022).

3.3.71 A two-stage survey protocol was followed:

- Stage 1, carried out in April, was completed to assess habitat suitability and to detect the presence of kingfishers. Unsuitable habitats were scoped out for further visits at Stage 2; and
- Stage 2, carried out between May and July, involved up to two further visits to each watercourse that was scoped in for further surveys, to search for nests, adults engaging in breeding behaviours (carrying food to nest sites, carrying faecal sacs, or egg remains away from nest sites, defending territories) and recently fledged young.

3.3.72 For each watercourse, the surveyors walked slowly along each accessible bank and also made use of other access features (e.g. footbridges), where available, from which to make visual assessments. Observations of adults, either by sound or by sighting, were followed up to establish if the bird(s) were likely to be breeding, and all potential nest holes were recorded.

3.3.73 In July 2025, a further ad hoc habitat assessment was made to an additional location to support the assessment of a potential design change that would have realigned an access track along the bank of a watercourse where kingfisher had been identified as nesting. This survey involved a daytime habitat assessment and recording of kingfisher sightings and behaviours following the Stage 1 protocol above. The design change was subsequently dropped, but the data have been used in the assessment of impacts on kingfisher and the development of mitigation strategies for this species at the specific location.

3.3.74 The results of these surveys are restricted to Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report.

Other breeding Schedule 1 birds

3.3.75 Other nesting Schedule 1 species likely to occur within the landscape through which the Project passes include Cetti's warbler (*Cettia cetti*), bearded tit (*Panurus biarmicus*), bittern (*Botaurus stellaris*), quail (*Coturnix coturnix*) and some breeding waders (notably little ringed plover (*Charadrius dubius*) and avocet (*Recurvirostra avosetta*)). Goshawk (*Accipiter gentilis*) was noted on one occasion but there was no evidence of breeding behaviour and there were no other sightings of this species.

3.3.76 Specific surveys were not carried out for these species for one or more of the following reasons:

- The third-party and non-specific survey data already adequately describe the baseline for these species, further to which species-specific surveys would not add useful data. This is particularly the case for goshawk, breeding waders, Cetti's warbler, and bittern; and
- Surveys would not adequately census the species in question, the potential effects on the species given the specific attributes of the Project would not be significant, and mitigation of potential effects on the species is best served by pre-construction surveys. This is particularly the case for quail and Cetti's warbler.

Pink-footed goose tracking surveys

3.3.77 Review of ongoing survey data identified large numbers of pink-footed geese periodically foraging on farmland across Gringley Carrs and northwards beyond the River Idle over winter. The desk study revealed the likely source of these birds to be roosts at Hatfield Moor rather than the Humber Estuary.

3.3.78 Surveys were designed to determine the numbers of pink-footed geese moving to and from the Hatfield Moor roosts, and their preferred feeding locations in the wider landscape to the south and east of Hatfield Moor. This was achieved using a stand-alone VP immediately to the south of Hatfield Moor and a series of driven and walked transects across a wide area to the southwest, south, southeast and east of Hatfield Moor (**Figure A9.2.19 Pink-footed Goose Tracking Survey Area**).

3.3.79 Four visits were carried out at the end of 2025 (two in November 2025 and two in December 2025). Visit one included a drive-over and ad hoc walked transects of the wider area to identify the locations of foraging geese; to find and trial a suitable Vantage Point for monitoring goose movements to and from Hatfield Moor roosts; and to establish the distribution of suitable potential foraging sites away from Hatfield Moor.

3.3.80 Visits two to four involved, on each visit, VP watches at dawn and dusk from the VP immediately south of Hatfield Moor. Both watches were undertaken on the same day to count birds leaving the roost in the morning and returning to the roost in the evening, and their directions of flight were mapped.

3.3.81 A daytime driven and walked transect with scanning of farmland from stopping points was undertaken during the period between each dawn and dusk VP roost watch. The locations of foraging geese and any other target species were plotted along with notes on their numbers and behaviours.

3.3.82 Wild swan VP surveys south of the River Idle in October and November 2025 had detected large numbers of pink-footed geese arriving from the north to feed on fields north and in some cases south of the river. Where possible the dawn and dusk roost VPs in November and December 2025 were co-ordinated with those for wild swans south of the River Idle so that the occurrence and behaviours of geese on both surveys could be cross-checked.

4. Baseline Data

4.1 Overview

4.1.1 This section includes the results of the desk study and baseline surveys for all species whose whereabouts can be treated as non-confidential. Species-specific survey locations/areas and breeding locations of species included on Schedule 1 of the WCA are restricted to **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report**. These include:

- Barn owl;
- Red kite;
- Peregrine falcon;
- Kingfisher;
- Hobby;
- Marsh harrier;
- Little ringed plover;
- Avocet;
- Bittern; and
- Bearded tit.

4.2 Desk Study

Key habitats and locations for birds

4.2.1 As determined by desk study and consultation, the following locations and broad areas across the Project represent key locations that can be considered to support the most abundant and valuable bird populations:

- RSPB Blacktoft Sands and the River Ouse, both of which are within or adjoining the Humber Estuary SPA and Ramsar site (Route Section B);
- The Humber Washlands either side of the River Ouse, which support qualifying species of the Humber Estuary SPA/Ramsar site (Route Sections A and B);
- The River Idle Valley, Chesterfield Canal and Misterton and Gringley Carrs, that provide inland flyway linkages between the River Trent and habitats where wintering migrant swans are known to occur (Route Section E);
- Other linear wetland habitats, which include major drains that intersect the Isle of Axholme and associated open arable habitats (particularly within Route Section C);

- Habitats within 5 km of Thorne and Hatfield Moors SPA (for nightjar and common crane) (Route Section C); and
- Potential flyways between Beckingham Marshes/the River Trent and Sutton and Lound Gravel Pits (Route Section E).

Statutory international designated sites of ornithological importance

4.2.2 There are two Ramsar sites and three SPAs within the study area. Their reasons for designation/qualifying features and spatial relationship to the Project are set out in **Application Document 6.8.A2 Appendix 8.2 Designated Sites Information**, and the sites are shown on **Figure A9.2.21 Statutory International Designated Sites of Ornithological Importance**. The designated sites are (geographically from north to south):

- Lower Derwent Valley Ramsar site (Route Section A);
- Lower Derwent Valley SPA (Route Section A);
- Humber Estuary Ramsar site (Route Section B);
- Humber Estuary SPA (Route Section B); and
- Thorne and Hatfield Moors SPA (Route Section B).

National and Local statutory designated sites of ornithological importance

4.2.3 There are 13 SSSIs, one NNR and four LNRs within the study area. Their reasons for designation/qualifying features and spatial relationship to the Project are set out in **Application Document 6.8.A2 Appendix 8.2 Designated Sites Information**, and the sites are shown on **Figure A9.2.22 Statutory National and Local Designated Sites of Ornithological Importance**. The designated sites are:

- Humber Estuary SSSI (Route Section B)
- Treswell Wood SSSI (Route Section E);
- Clarborough Tunnel SSSI (Route Section C);
- River Idle Washlands SSSI (Route Section E);
- Thorne, Crowle and Goole Moors SSSI (Route Section C);
- Humberhead Peatlands NNR (Route Sections A, B, C);
- Misson Line Bank SSSI (Route Section E);
- Misson Training Area SSSI (Route Section E);
- Lea Marsh SSSI (Route Section E);
- South Cliffe Common SSSI (Route Section A);
- Gamston and Eaton Woods and Roadside Verges SSSI (Route Section E);
- Epworth Turbary SSSI (Route Section D);

- Haxey Turbary SSSI (Route Section D);
- Sutton and Lound Gravel Pits SSSI (Route Section E);
- Owston Ferry Castle LNR (Route Section D);
- Phoenix Parkway LNR (Route Section B);
- Conesby Quarry LNR (Route Section B); and
- Atkinson's Warren LNR (Route Section B).

Non-statutory designated sites of ornithological interest

4.2.4 There are 35 non-statutory designated sites that support features of ornithological interest within the study area, including six sites for which there are no available details of qualifying interest features. Six of the sites are within East Yorkshire, nine are within Lincolnshire and 20 are within Nottinghamshire.

4.2.5 The sites are shown on Figure A9.2.23 Non-Statutory Designated Sites of Ornithological Importance and summarised in Application Document 6.8.A2 Appendix 8.2 Designated Sites Information, which lists their reasons for designation and spatial relationship to the Project.

Local records centre bird records

4.2.6 The desk study includes large numbers of bird records, with records up to 2 km from the Order Limits requested from three local record centres. A small proportion of these records provide useable insight into locations of significant numbers or records of note in regard to desk study birds. This is because of a combination of the following factors:

- Very few third-party records provide sufficient details of the behaviour of the birds to determine breeding or non-breeding status, with most records providing no detail at all regarding their breeding/non-breeding status; and
- Most of the third-party records are of insufficient resolution to determine their spatial relationship to the Order Limits.

4.2.7 As such, the information below is a high-level summary of these records, showing conservation status (as described in Section 2 Summary of Legislation and Guidance of this document) of records within the desk study data.

4.2.8 For all Local Record Centre Data, the numbers of species that occur on different lists of conservation priority are summarised rather than presenting an exhaustive list of species recorded, the utility of which is limited by the lack of spatial resolution and information regarding bird behaviours in the data sets.

North and East Yorkshire Ecological Data Centre (NEYEDC)

4.2.9 The North and East Yorkshire Ecological Data Centre provided records from the years 1988 to 2016. Relevant data relating to birds from the last 10 years (2016 to present) include a total of 24 species recorded across 78 bird records, which can be broken down as follows:

- Three Target/Priority Species relevant to the project were present, with two Secondary Species present;

- Six BoCC red list species;
- Eight BoCC amber list species;
- Two Annex 1 (Birds Directive) species;
- Five Schedule 1 species; and
- Five NERC species.

4.2.10 No species present in the data set were listed as qualifying features within the citations for designated sites.

Lincolnshire Environmental Records Centre (LERC)

4.2.11 Lincolnshire Environmental Records Centre provided records ranging from 1961 to 2022. Relevant data relating to birds from the last 10 years (2016 to present) include a total of 89 species recorded across 4,916 records of birds, which can be broken down as follows:

- 18 Humber Estuary SSSI species, 12 Humber Estuary Ramsar site species and 14 Humber Estuary SPA species;
- Two Lower Derwent Valley Ramsar site species and three Lower Derwent Valley SPA species;
- One species included on the citations for Thorne and Hatfield Moors SPA, Thorne Crowle and Goole Moors SSSI, River Idle Washlands SSSI and Hatfield Moors SSSI;
- Four NHHM Target/Priority Species for breeding, 12 NHHM Target/Priority species for non-breeding and eight other NHHM Target/Priority Species;
- 25 BoCC amber list species;
- 27 BoCC red list species;
- 23 Annex 1 (Birds directive) species;
- 41 Schedule 1 Species, and;
- 26 NERC species.

4.2.12 No species present within the data set were listed as qualifying features in the citation for Sutton and Lound Gravel Pits SSSI.

Nottinghamshire Biological and Geological Records Centre (NBGRC)

4.2.13 Nottinghamshire Biological and Geological Records Centre provided records ranging from 2008 to 2022. Relevant data relating to birds from the last 10 years (2016 to present) include a total of 161 species recorded across 3,019 records of birds, which can be broken down as follows:

- 32 Humber Estuary SSSI species, 15 Humber Estuary Ramsar site species and 20 Humber Estuary SPA species;
- Three Lower Derwent Valley Ramsar site species and seven Lower Derwent Valley SPA species;

- One Sutton and Lound Gravel Pits SSSI species;
- One River Idle Washlands SSSI Species;
- Three NHHM Target Species for breeding, 19 NHHM Target species for non-breeding, 10 NHHM general target species and nine other NHHM target species;
- 40 BoCC Amber list species;
- 29 BoCC red list species;
- 17 Annex 1 (Birds Directive) species;
- 29 Schedule 1 species, and;
- 25 NERC species.

4.2.14 No species were present within the data that are qualifying features listed on the citations for Thorne and Hatfield Moors SPA or Thorne Crowle and Goole Moors SSSI.

British Trust for Ornithology (BTO) Wetland Birds Survey (WeBS)

4.2.15 The full data set for all 49 count sectors within 5 km of the Project (for which data were available) is provided in Annex D. The core count and low tide sectors are shown on **Figure A9.2.2 BTO WeBS Core Count Sectors** and **Figure A9.2.3 BTO WeBS Low Tide Count Sectors** respectively. A high-level summary of all Core Count data records is presented below. A cumulative total of 16,757 birds across all count sectors was represented by 110 species, including the following;

- 32 Humber Estuary SSSI species, 20 Humber Estuary Ramsar site species and 25 Humber Estuary SPA species;
- Four Lower Derwent Valley Ramsar site species and eight Lower Derwent Valley SPA species;
- One River Idle Washlands SSSI species;
- One Sutton and Lound gravel Pits SSSI species, as well as a variety of passage bird species;
- Two NHHM Target Species for breeding, 25 NHHM Target Species for non-breeding, twelve other NHHM target species;
- 43 BoCC Amber list species;
- 18 BoCC Red list species;
- 25 Annex 1 (Birds directive) species;
- 29 Schedule 1 species, and;
- Six S41 species.

4.2.16 No records were returned for species present on the citations for Thorne and Hatfield Moors SPA or Thorne, Crowle and Goole Moors SSSI.

4.2.17 The Blacktoft Sands count sector supported the highest total species count (68), followed by North Cave Wetlands (63) and Slaynes South (60). Fewer than 60 species were recorded at each of the remaining count sectors.

4.2.18 The following observations can be made regarding the low tide data (Count year 2011-12):

- Sixteen low tide count sectors are present within 5 km of the draft Order Limits. Sector CH052 overlaps the Order Limits. CH051 is upstream (west) of the draft Order Limits. All other low tide sectors for which data are presented are downstream (east) of the draft Order Limits, with five sectors (CH001, CH057, CH056, CH0055 and CH054) mapping to the channel of the River Trent as far south as Keadby. CH052, CH053 and CH001 overlap Blacktoft Sands RSPB Reserve;
- All sectors supported Humber Estuary SPA qualifying species, the lowest count being two at CH055 and the highest being 11 in CH053, which is 200 m east of the Order Limits. Fifteen species were recorded in CH052, of which half are SPA qualifying species;
- CH053 and CH052 each supported more species at numbers equal to or greater than 1% of the Humber Estuary SPA population (seven and four respectively) than any other single sector; and
- Pink-footed goose, golden plover, and lapwing, which are most likely to forage over land distant from the SPA, were represented predominantly in Sectors CH001, CH052, CH053, CH059, CH089 and CH095. However, pink-footed goose was not present in any low tide count sector at numbers equal to or exceeding 1% of the Humber Estuary SPA population.

4.2.19 The Humber Estuary low tide counts summary for count year 2011-12 is presented in Table 4.1.

Table 4.1 – Humber Estuary low tide counts summary (count year 2011-12)

WeBS Sector Code	Distance from Order Limits (km)[14]	Number of species	Number of SPA species	SPA species exceeding 1% of Humber Estuary population[15]
CH105	4.49 km d/s	9	7	Bar-tailed godwit (*Limosa lapponica*), turnstone (*Arenaria interpres*)
CH089	2.29 km d/s	10	8	Teal (*Anas crecca*), goldeneye (*Bucephala clangula*), bar-tailed godwit
CH059	1.60 km d/s	13	9	Shelduck (*Tadorna tadorna*), wigeon (*Mareca penelope*), lapwing, golden plover
CH095	0.93 km d/s	11	9	Shelduck, wigeon, lapwing, golden plover
CH094	1.23 km d/s	11	9	Teal
CH093	0.99 km d/s	9	6	Wigeon
CH099	2.93 km d/s	7	7	Wigeon, mallard (*Anas platyrhynchos*), teal
CH002	2.42 km d/s	5	3	N/A
CH053	0.20 km d/s	21	11	Shelduck, wigeon, mallard, teal, pochard (*Aythya ferina*), lapwing, golden plover
CH052	Overlapping	15	8	Teal, wigeon, mallard, lapwing, curlew (*Numenius arquata*)
CH051	0.90 km u/s	16	7	Mallard
CH057	1.93 km d/s	11	5	Mallard, wigeon
CH001	1.84 km d/s	15	9	Wigeon
CH056	0.58 km d/s	13	6	Teal, ruff (*Calidris pugnax*)
CH054	1.89 km d/s	11	3	Mallard

[14] d/s = downstream (east) of Order Limits; u/s = upstream (west) of Order Limits.
[15] Not provided for the whole estuary count, as there is insufficient spatial context to the data to enable assessment or meaningful commentary.

WeBS Sector Code	Distance from Order Limits (km)[14]	Number of species	Number of SPA species	SPA species exceeding 1% of Humber Estuary population[15]
CH055	0.64 km d/s	6	2	Mallard
Whole Estuary	N/A	72	25	17

RSPB species records

4.2.20 The RSPB provided data from routine monitoring and survey work carried out by the RSPB over the last 5 years for Blacktoft Sands Reserve and several satellite sites. These are shown on **Figure A9.2.4 RSPB Monitored Sites** and include the following key data for sites within 500 m of the Order Limits:

- Annual peak counts for consecutive count years 2019 – 2023 and 5-year mean of peaks of non-breeding wetland birds at Broomfleet Tileworks (Table 4.2), adjacent to the Project Order Limits);
- The same data for Blacktoft Sands RSPB Reserve (Table 4.3 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Blacktoft Sands RSPB Nature Reserve) (overlapping the proposed overhead line). These data overlap with the core count data supplied by WeBS for Count Sector 38430 Blacktoft Sands (Annex D), but are more contemporary; and
- Breeding bird data from 2022 for Broomfleet Tileworks (adjacent to the Order Limits), Faxfleet Ponds (1.7 km southwest of the Order Limits), Whitton Island (1.6 km east of the Order Limits) Blacktoft Sands (overlapping the Order Limits), Hook Island (7.3 km west of the Order Limits) and Island Farm (2.5 km east of the Order Limits).

4.2.21 Other non-breeding count data are available for more distant monitored sites including Whitton Sands and Island Farm, both of which are at least 1.3 km from the parts of the Order Limits that include construction activities and proposed infrastructure (i.e. not including the Order Limits where these are established purely for potential mitigation habitats or similar).

Non-breeding wetland bird counts

Broomfleet Tileworks

4.2.22 The pools at Broomfleet Tileworks support mainly open fresh waters fringed by reedbed, scrub and grassland, with relatively little exposed mud or sand, and no intertidal habitats. The bird assemblage here broadly reflects this, with a strong bias towards gulls, ducks and some geese, but few regular or significant occurrences of waders.

4.2.23 The Tileworks was observed as being used by 33 species, of which seven are SPA qualifying features. Of these, goldeneye, mallard, marsh harrier, pink-footed goose, pochard and teal reached numbers equalling or exceeding 1% of the Humber Estuary SPA population at least once during the count period. Pink-footed goose was not recorded as a regular visitor to these pools.

Table 4.2 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Broomfleet Tileworks

Species[16]	2019	2020	2021	2022	2023	Five-year peak mean (2019-2023)
Barn owl	0	0	0	0	1	0
Black-headed gull (*Chroicocephalus ridibundus*)	11	51	74	57	3	39
Buzzard (*Buteo buteo*)	0	0	0	0	1	0
Common gull	2	5	4	2	0	3
Common tern (*Sterna hirundo*)	0	3	0	0	0	1
Curlew	0	0	0	24	0	5
Goldeneye	**34**	**42**	**36**	**49**	**61**	**44**
Great black-backed gull	0	0	1	0	0	0
Grey heron (*Ardea cinerea*)	1	2	1	3	1	2
Hobby	0	1	0	0	0	0
Kestrel (*Falco tinnunculus*)	0	1	0	0	0	0
Lapwing	0	0	7	50	0	11
Little egret (*Egretta garzetta*)	0	0	1	0	0	0
Mallard	22	**101**	6	**29**	**60**	**44**
Marsh harrier	0	1	**2**	**1**	**1**	**1**
Merlin (*Falco columbarius*)	0	0	0	1	0	0
Mute swan (*Cygnus olor*)	9	20	19	13	4	13

[16] Qualifying species of the Humber Estuary SPA; and counts that equal or exceed 1% of the SPA population for a species are in **bold** font.

Species[16]	2019	2020	2021	2022	2023	Five-year peak mean (2019-2023)
Pink-footed goose[17]	0	0	1	**800**	3	161
Pochard	0	2	**14**	4	**10**	**8**
Redshank (*Tringa totanus*)	0	0	0	1	0	0
Teal	**377**	**152**	**126**	**62**	**40**	**151**
Wigeon	**60**	**64**	**101**	**100**	**100**	**85**

Blacktoft Sands

4.2.24 Blacktoft Sands, which includes pools, reedbeds, and open wet grasslands (grazing marsh) within the Reserve (and, it is assumed, areas of intertidal habitat within the estuary channel) presents a wider diversity of habitats that are immediately adjacent to the channel of the Rivers Ouse and Trent. Water levels within the pools are managed by the RSPB to suit the needs of a wide range of species, which are offered protection from disturbance and persecution. Thus, conditions at this site are close to optimal for a wide range of birds.

4.2.25 This is reflected in the larger number of species recorded here (than at other monitored sites) overall (50) and the greater representation of SPA qualifying species both in terms of number of species and abundance of each species. 29 of the species recorded are qualifying features of the SPA. Of these, avocet, bittern, black-tailed godwit (*Limosa limosa islandica*), brent goose (*Branta bernicla bernicla*), curlew, dunlin (*Calidris alpina alpina*), golden plover, goldeneye, greenshank (*Tringa nebularia*), hen harrier (*Circus cyaneus*), lapwing, mallard, marsh harrier, pink-footed goose, pochard, redshank, ringed plover (*Charadrius hiaticula*), ruff, sanderling (*Calidris alba*), scaup (*Aythya marila*), shelduck, teal, turnstone , whimbrel (*Numenius phaeopus*) and wigeon reached numbers equalling or exceeding 1% of the SPA population in at least one of the survey years and most of them reached this threshold at the 5-year mean of peaks. Brent goose, grey plover (*Pluvialis squatarola*), redshank and turnstone were the only species for which the 5-year mean of peaks did not reach this threshold, due either to irregular occurrence overall or the low frequency of large peak numbers from year to year.

[17] Pink-footed goose is not formally a qualifying feature of the SPA, however it is treated as a de facto qualifying feature for the purposes of assessment, because the Humber Estuary currently supports internationally important numbers. The latest 5-year (2018/19 – 2022/23) peak mean count for the Humber Estuary is 23,330 (WeBS Report Online. https://app.bto.org/webs-reporting/numbers.jsp).

Table 4.3 – Five-year peak mean counts of species of interest (as defined by RSPB surveyors) at Blacktoft Sands RSPB Nature Reserve

Species[18]	2019	2020	2021	2022	2023	Five-year peak mean (2019-2023)
Avocet	0	**12**	**83**	**50**	**60**	**41**
Barn owl	2	2	3	3	3	3
Bar-tailed godwit	0	0	2	1	0	1
Bittern	0	**2**	**3**	**3**	**4**	**2**
Black tern (*Chlidonias niger*)	0	0	0	2	3	1
Black-headed gull	0	47	63	120	1,300	286
Black-tailed godwit	**51**	**210**	**186**	**340**	**450**	**247**
Brent goose	0	**25**	0	1	0	5
Buzzard	3	2	5	5	3	4
Common gull	0	5	49	4	3	12
Common tern	0	0	0	9	1	2
Crane	9	0	3	12	6	6
Curlew	**270**	**155**	**93**	**105**	**83**	**141**
Dunlin	100	67	140	**640**	**210**	**231**
Golden plover	**4,000**	**3,000**	50	**8,000**	**800**	**3,170**
Goldeneye	4	**5**	3	**7**	4	**5**
Great black-backed gull	1	2	7	3	2	3
Greenshank	**3**	**9**	**4**	**7**	**8**	**6**
Grey heron	2	6	11	8	4	6
Grey plover	0	2	1	5	1	2
Hen harrier	**2**	**2**	**1**	**2**	**1**	**2**
Herring gull (*Larus argentatus*)	0	11	2	2	3	5
Hobby	0	1	3	3	4	2
Kestrel	2	1	2	4	2	2
Lapwing	**7,000**	**1,700**	**300**	**1,100**	**450**	**2,110**

[18] Qualifying species of the Humber Estuary SPA and counts that equal or exceed 1% of the SPA population for a species are in **bold** font.

Species[18]	2019	2020	2021	2022	2023	Five-year peak mean (2019-2023)
Lesser black-backed gull (*Larus fuscus*)	0	0	2	2	1	1
Little egret	1	**11**	**46**	**32**	**60**	**36**
Little ringed plover	1	1	3	6	5	3
Mallard	**228**	**460**	**250**	**288**	**426**	**330**
Marsh harrier	**27**	**25**	**21**	**24**	**30**	**25**
Merlin	1	1	1	1	1	1
Mute swan	11	14	9	36	54	25
Oystercatcher (*Haematopus ostralegus*)	0	5	32	9	2	10
Peregrine falcon	0	1	2	1	2	1
Pink-footed goose	**3,000**	**7,000**	**2,000**	**3,500**	12	**3,102**
Pochard	**42**	6	**14**	**10**	**10**	**16**
Red kite	1	1	4	1	1	2
Red knot (*Calidris canutus*)	0	1	0	0	1	0
Redshank	40	71	23	**88**	18	42
Ringed plover	0	**5**	**9**	**190**	**13**	**43**
Ruff	**20**	**51**	**35**	**48**	**18**	**34**
Sanderling	0	0	0	**30**	1	**6**
Scaup	**1**	0	0	0	0	0
Shelduck	6	34	**244**	**54**	**65**	**81**
Short-eared owl (*Asio flammeus*)	1	1	4	1	1	2
Teal	**1,121**	**1,720**	**1,200**	**1,300**	**2,100**	**1,488**
Turnstone	2	1	1	**6**	4	3
Whimbrel	0	0	**1**	**4**	**2**	**1**
Whooper swan	26	22	34	80	30	38
Wigeon	**280**	**3,500**	**293**	**2,567**	**391**	**1,406**

Island Farm Field Counts

4.2.26 Thirty-eight wetland bird species were recorded by RSPB between October 2022 and September 2023, including 21 qualifying species of the Humber Estuary SPA. The site supported particularly large winter aggregations of golden plover (peak count 5,000), curlew (peak count 120), lapwing (peak count 3,000), teal (peak count 3,000) and wigeon (peak count 828), however 1% of the SPA population was also exceeded for snipe (*Gallinago Gallinago*), shoveler (*Spatula clypeata*), shelduck, redshank, ruff, greylag goose (*Anser anser*) and mallard.

Whitton Sands/Island

4.2.27 Forty-one wetland bird species were recorded by RSPB between October 2022 and September 2023, including 20 qualifying species of the Humber Estuary SPA. Particularly large numbers of shelduck (peak count 547), pink-footed goose (peak count 7,780), lapwing (peak count 700), golden plover (peak count 3,600), and greylag goose (peak count 1,500) were recorded. Other species exceeding 1% of the SPA population included curlew, dunlin, hen harrier and mallard.

Plover counts near Luddington

4.2.28 Monthly surveys of fields between Luddington and Eastoft between October 2024 and February 2025 generated counts of lapwing and golden plover in some of the fields counted (see **Figure A9.2.4 RSPB Monitored Sites**).

4.2.29 Lapwing and golden plover were recorded feeding and roosting on winter wheat, barley, field and mixed bean crops, bare fields and ploughed soils in numbers ranging from single individuals up to 520 golden plover and 940 lapwing, using the combined totals for fields counted on the same day. The peak counts within these fields are summarised in Table 4.4 – Peak counts of golden plover in fields between Luddington and Eastoft between October 2024 and February 2025(for golden plover) and Table 4.5 – Peak counts of lapwing in fields between Luddington and Eastoft between October 2024 and February 2025(for lapwing).

4.2.30 A threshold of 1% of the SPA golden plover population (equal to 307 birds) was exceeded within 500 m of the Order Limits in fields 6, 7, 7c, 8 and 9. For lapwing (equal to 228 birds) this occurred in fields 6, 7, 7b, 7c and 8.

Table 4.4 – Peak counts of golden plover in fields between Luddington and Eastoft between October 2024 and February 2025

Date	Field(s)[19]	Number[20]	Distance from Order Limits[21]	Notes
11/01/2025	6	10	Within	Feeding on winter wheat and field beans mix - weather cold and ground frozen
10/01/2025	6	50	Within	Feeding in winter wheat and mixed beans - cold weather - pm

[19] N/r = Not recorded
[20] Counts in **bold** font are equal to or exceed 1% of the Humber Estuary SPA qualifying population
[21] N/a = Not applicable

Date	Field(s)[19]	Number[20]	Distance from Order Limits[21]	Notes
07/01/2025	6, 8	**350**	Within	Feeding in winter wheat and field beans 13.30 - birds were moving between fields
N/r	6, 8	60	Within	Trying to roost in both 6 and 8
29/11/2024	7	**450**	290 m north-west	Roosting on Wheat and Field Beans 11.00
24/11/2024	7b	300	315 m north	Roosting in early growth cereals 12.40
28/11/2024	7c	**400**	Within	Feeding and Roosting on winter wheat 11.05
05/01/2025	7e	**500**	860 m north-west	Feeding in winter wheat and mixed beans 11.30. Cold snow on the ground
05/01/2025	7f	20	1.5 km north-west	Feeding in Horse paddocks 11.30
2/11/2024	8	1	Within	Feeding in winter wheat set into rape stubble
28/11/2024	8	110	Within	Feeding in Winter wheat and field bean mix (had been OSR in the summer) 11.45
31/12/2024	8	6	Within	Night feeding on Wheat and field beans mix 17.00
07/01/2025	8	**350**	Within	Feeding in winter wheat and mixed beans 13.45 - ground frozen cold
10/01/2025	8	150	Within	Feeding in winter wheat and mixed beans - cold weather - pm
11/01/2025	8, 8a	100	Within	Feeding on winter wheat and field beans mix - weather cold and ground frozen
24/11/2024	9	**350**	Immediately adjacent	Roosting on Ploughed field 12.10
28/11/2024	10,10a,10b	40	Within (10, 10a), 55 m west (10b)	Feeding on bare soil, both ploughed and power harrowed 11.15
30/11/2024	10a	40	Within	Feeding on Ploughed Fields 10.06
02/12/2024	10a	15	Within	Feeding on Ploughed fields 11:00 some feeding in the evening 17:00

Date	Field(s)[19]	Number[20]	Distance from Order Limits[21]	Notes
30/11/2024	10c	8	Within	Roosting/feeding on ploughed fields next housing
08/12/2024	10c	300	Within	Roosting on ploughed fields 11:00
30/11/2024	1	4	10 m north	Roosting on Ploughed fields 10.29
N/r	N/r	60	N/a	Feeding across the area on wheat and field beans
N/r	N/r	160	N/a	Feeding & roosting in well grown wheat and field beans as well as roosting on ploughed field
N/r	N/r	160	N/a	Feeding & roosting in well grown wheat and field beans as well as roosting on ploughed field

Table 4.5 – Peak counts of lapwing in fields between Luddington and Eastoft between October 2024 and February 2025

Date	Field(s)[22]	Number[23]	Distance from Order Limits[24]	Notes
28/11/2024	6	**240**	Within	Feeding in Winter wheat and field beans 11:45
28/11/2024	6	60	Within	Feeding in Winter wheat and field beans 11:45
11/01/2025	6	160	Within	Feeding on winter wheat and field beans mix - weather cold and ground frozen
10/01/2025	6	50	Within	Feeding in winter wheat and mixed beans - cold weather - pm
26/01/2025	6, 8	50	Within	Feeding in 8 in well grown wheat and field beans
12/01/2025	6a, 8	130	Within	Feeding across the area on wheat and field beans
18/01/2025	6b, 8	150	Within	Feeding & roosting in well grown wheat and field beans as well as roosting on ploughed field
19/01/2025	6b, 8	150	Within	Feeding & roosting in well grown wheat and field beans as well as roosting on ploughed field
26/10/2024	7	65	290 m north-west	Feeding in winter wheat mixed with field beans
26/10/2024	7	110	290 m north-west	Feeding in winter wheat mixed with field beans
2/11/2024	7	200	290 m north-west	Feeding on newly emerging wheat
23/11/2024	7	10	290 m north-west	Feeding on Winter cereals just emerging 14:00
29/11/2024	7	120	290 m north-west	Roosting on Wheat and Field Beans 11:00
19/02/2025	7	80	290 m north-west	Feeding in winter wheat but vegetation very low

[22] N/r = Not recorded

[23] Counts in **bold** font are equal to or exceed 1% of the Humber Estuary SPA qualifying population

[24] N/a = Not applicable

Date	Field(s)[22]	Number[23]	Distance from Order Limits[24]	Notes
04/01/2025	7	100	290 m north-west	Feeding, spread over 3 fields some early established winter wheat and some in winter wheat mixed with field beans
07/12/2024	7	15	290 m north-west	Feeding on Wheat and mixed beans 12:00
28/11/2024	7, 7b, 7c	**250**	Within (7c), 290 m north-west (7), 315 m north (7b)	Feeding on winter wheat and field beans mix 11.05
25/12/2024	7, 7b	75	290 m north-west (7), 315 m north (7b)	Feeding on winter wheat and field beans 11:00
25/12/2024	7d	112	1.2 km north	Feeding on Ploughed fields 11:00
05/01/2025	7e	67	860 m north-west	Feeding in winter wheat and mixed beans 11:30. Cold snow on the ground
05/01/2025	7f	60	1.5 km north-west	Feeding in Horse paddocks 11:30 am
05/01/2025	7g[25]	**350**	N/A	Feeding in sheep grazed cover crop with mixed legumes as cover crop 12:00
07/01/2025	8	150	Within	Feeding in winter wheat and mixed beans 13:45 - ground frozen cold
10/01/2025	8	100	Within	Feeding in winter wheat and mixed beans - cold weather - pm
28/11/2024	8	**320**	Within	Feeding in Winter wheat and field bean mix (had been OSR in the summer) 11:45
11/01/2025	8, 8a	20	Adjacent (8) Within (8a)	Feeding on winter wheat and field beans mix - weather cold and ground frozen
24/11/2024	9	1	Immediately adjacent	Roosting on Ploughed field 12:10
24/11/2024	10	50	Within	Feeding/roosting in Ploughed fields with gulls 12:20
28/11/2024	10,10a,10b	170	Within (10, 10a), 55 m west (10b)	Feeding on bare soil, both ploughed and power harrowed 11:15

[25] A plot showing field 7g was not provided by the supplier, therefore the distance from the Order Limits cannot be stated.

Date	Field(s)[22]	Number[23]	Distance from Order Limits[24]	Notes
30/11/2024	10a	50	Within	Feeding on ploughed Fields 10:06
30/11/2024	10c	170	Within	Roosting/feeding on ploughed fields next housing
08/12/2024	10c	35	Within	Roosting on ploughed fields 11:00
30/11/2024	10d	220	10 m north	On ploughed Fields
27/11/2024	15	5	2 km north-west	Feeding in winter wheat
06/01/2025	15	200	2 km north-west	Feeding on Winter wheat/barley in early establishment phase very wet due to snow and heavy rain 12:45
N/r	N/r	150	N/A	Feeding in winter wheat and field beans 13:30 - birds were moving between fields

Ad hoc records of bittern flights

4.2.31 RSPB staff observed a female bittern in June 2025 repeatedly making flights from Blacktoft Sands RSPB Reserve, with return flights back to the reserve. It was speculated that the bird's destination was likely to be Broomfleet Tileworks, where a number of pools contain rudd (*Scardinius erythrophthalmus*) that were introduced to the pools in previous years, presumably to support recreational fishing activities. However, it was also speculated that the destination could be one of the ditches that cross the arable landscape in that area. The approximate flight paths are not shown in a figure to protect the location of a probable nest site.

4.2.32 When leaving the reserve, the bird was observed consistently gaining height to fly above the existing overhead line. Return flights were consistently at a low height below the overhead line, although more specific details of flight height were not provided.

4.2.33 It was also observed that prior to these flights being observed, the same individual had predominantly made flights southwards to a different feeding area somewhere away from the reserve.

Breeding Birds

4.2.34 Breeding bird data were provided by RSPB for six monitored sites, (**Figure A9.2.4 RSPB Monitored Sites**) all of which support numbers of a wide range of breeding birds, including notable species; some support Schedule 1 birds and qualifying species of the Humber Estuary SPA.

4.2.35 Both Blacktoft Sands and Broomfleet Tileworks are adjacent to or overlapping the draft Order Limits for the Project. Tabulated breeding data are provided for these sites in Table 4.6 – Breeding bird counts for Blacktoft Sands RSPB Reserve and Broomfleet Tileworks.

Blacktoft Sands

4.2.36 Blacktoft Sands overlaps the Order Limits. The site held a wide range of breeding species from owls (barn owl), raptors (marsh harrier), ducks (pochard, shoveler, shelduck), waders (avocet, lapwing) and herons (such as bittern) to passerines including notable species such as bearded tit as well as more common and widespread species. Common crane has attempted to breed. The data for 2023 show a similar range and numbers of breeding species. Blacktoft Sands is a clear stronghold for breeding avocet, bittern and marsh harrier, all of which are qualifying features of the Humber Estuary SPA.

4.2.37 All occurrences of breeding qualifying SPA birds (avocet, bittern, marsh harrier), occurred within the reedbeds and pools east of the Project, and as such all were more than 500 m from the Order Limits.

Broomfleet Tileworks

4.2.38 Broomfleet Tileworks is immediately adjacent to the Order Limits and also supported breeding birds including bittern and marsh harrier, and a range of other notable species including Cetti's warbler (Schedule 1), bearded tit (Schedule 1), cuckoo (*Cuculus canorus*) and a range of passerines. The results of the 2023 surveys closely align with those of 2022.

Island Farm

4.2.39 Island Farm is approximately 2.5 km east of the Order Limits where this includes construction areas and proposed infrastructure. The site supported a similar species assemblage, including breeding marsh harrier, bittern, Cetti's warbler, barn owl and large numbers of breeding passerines.

Faxfleet Pond

4.2.40 Faxfleet Pond is approximately 1.7 km southeast of the Order Limits. The site supported an assemblage of 16 relatively common and widespread species including one SPA qualifying species (bittern) and a range of waterbirds and passerine species typically associated with wetland habitats including gadwall (*Mareca strepera*), garganey (*Spatula querquedula*), shoveler, pochard, water rail (*Rallus aquaticus*), Cetti's warbler and sedge warbler (*Acrocephalus schoenobaenus*).

Hook Island

4.2.41 Hook Island is both distant from the Project (at least 7.5 km west of the Order Limits) and supported relatively few breeding species, therefore no further commentary is offered for this site.

Whitton Island

4.2.42 Whitton Island is approximately 1.3 km southeast of the Order Limits. During the breeding season it is notable particularly for breeding marsh harrier, but the avocets recorded there were noted as being the same birds as those that bred at Blacktoft Sands. There were no other breeding qualifying SPA species recorded for the site, which otherwise supports good numbers of a modest range of notable species including predominantly waterbirds and passerines.

Table 4.6 – Breeding bird counts for Blacktoft Sands RSPB Reserve and Broomfleet Tileworks

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
Blacktoft Sands	**Avocet**	17	Pair	0	0 fledged per pair		51 / PR
	Barn Owl	2	Pair	2	1 fledged per pair		2 / P
	Bearded Tit	100	Pair				110 / P
	Bittern	3	Singing/ displaying male				2 / S
	Blackbird (*Turdus merula*)	5	Pair				5 / P
	Blackcap (*Sylvia atricapilla*)	7	Pair				7 / P
	Black-headed Gull	10	AON	0	0 fledged per pair		4 / P
	Blue Tit (*Cyanistes caeruleaus*)	6	Pair				6 / P
	Canada Goose (*Branta canadensis*)	2	Pair				2 / P
	Carrion Crow (*Corvus corone*)	6	Pair	5	0.83 fledged per pair		5 / P
	Cetti's warbler	8	Singing/ displaying male				8 / P
	Chaffinch (*Fringilla coelebs*)	7	Pair				6 / P

[26] Breeding qualifying species of the Humber Estuary SPA are shown in **bold** font.

[27] AON = Apparently Occupied Nest, AOS = Apparently Occupied Site, AOT = Apparently Occupied Territory, N = Nest, P = Pairs, PR = Present, S = Singing.

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Chiffchaff (*Phylloscopus collybita*)	7	Singing/ displaying male				4 / P
	Collared Dove (*Streptopelia decaocto*)	2	Singing/ displaying male				
	Coot (*Fulica atra*)	18	Pair	14	0.78 fledged per pair		17 / P
	Crane	1	Pair			Left site after flooding in early spring	2 / P
	Cuckoo	1	Singing/ displaying male				2 / S
	Dunnock (*Prunella modularis*)	10	Pair				8 / P
	Gadwall	11	Pair	44	4 fledged per pair		14 / P
	Goldfinch (*Carduelis carduelis*)	3	Pair				2 / P
	Grasshopper Warbler (*Locustella naevia*)	4	Singing/ displaying male				5 / S
	Great Tit (*Parus major*)	3	Pair				4 / P
	Greylag Goose	10	Pair				12 / P
	Lapwing	2	Pair	0	0 fledged per pair		2 / P
	Lesser Whitethroat (*Curruca curruca*)	2	Pair				Y / PR

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Linnet (*Linaria cannabina*)	3	Pair				Y / PR
	Little Grebe (*Tachybaptus ruficollis*)	16	Pair	23	1.44 fledged per pair		16 / P
	Long-tailed Tit (*Aegithalos caudatus*)	3	Pair				1 / P
	Magpie (*Pica pica*)	3	Pair				3 / P
	Mallard	24	Pair	65	2.71 fledged per pair		17 / P
	Marsh Harrier	10	Nest	9	0.9 fledged per pair	5 failed	12 / N
	Meadow Pipit (*Anthus pratensis*)	Present	Pair				Y / PR
	Moorhen (*Gallinula chloropus*)	9	Pair	18	2 fledged per pair		9 / P
	Mute Swan	3	Pair	24	8 fledged per pair		2 / P
	Pheasant (*Phasianus colchicus*)	Present	Pair				Y / PR
	Pochard	3	Pair	5	1.67 fledged per pair		4 / P
	Reed Bunting (*Emberiza schoeniclus*)	300	Pair				300 / P
	Reed Warbler (*Acrocephalus scirpaceus*)	250	Pair				250 / P

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Robin (*Erithacus rubecula*)	6	Pair				4 / P
	Savi's warbler (*Locustella lusciniodes*)	1	Singing/ displaying male		Sang for one week		
	Sedge Warbler	275	Pair				250 / P
	Shelduck	7	Pair				3 / P
	Shoveler	7	Pair				6 / P
	Skylark (*Alauda arvensis*)	Present	Pair				Y / PR
	Stock Dove	2	Pair				3 / P
	Tree Sparrow *(Passer montanus*)	10	Pair				23 / P
	Tufted Duck (*Aythya fuligula*)	2	Pair	15	7.5 fledged per pair		7 / P
	Water Rail	20	Pair				16 / P
	Whitethroat (*Curruca communis*)	6	Pair				5 / S
	Willow Warbler (*Phylloscopus trochilus*)	2	Singing/ displaying male				3 / P
	Woodpigeon (*Columba palumbus*)	19	Singing/ displaying male				17 / S
	Wren (*Troglodytes troglodytes*)	18	Singing/ displaying male				18 / S

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Yellow Wagtail (*Motacilla flava*)	4	Pair			Territories part on arable	4 / P
Broomfleet Tileworks	Bearded Tit	2	Pair				3 / P
	Bittern	1	Singing/ displaying male				1 / S
	Blackbird	Present	Pair				Y / PR
	Blackcap	8	Pair				8 / P
	Bullfinch (*Pyrrhula pyrrhula*)	Present	Pair				
	Carrion Crow	Present	Pair				Y / PR
	Cetti's warbler	6	Singing/ displaying male				7 / S
	Chiffchaff	14	Pair				8 / P
	Cuckoo	1	Singing/ displaying male				1 / S
	Dunnock	Present	Pair				Y / PR
	Goldcrest (*Regulus regulus*)	2	Pair				
	Great Crested Grebe (*Podiceps cristatus*)	1	Pair				1 / P

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Great Spotted Woodpecker (*Dendrocopos major*)	1	AOT				1 / P
	Greylag Goose	3	Pair	3	1 fledged per pair		2 / P
	Lesser Whitethroat	Present	Pair				2 / P
	Linnet	Present	Pair				Y / PR
	Little Grebe	2	Pair				
	Magpie	Present	Pair				Y / PR
	Mallard	4	Pair				
	Marsh Harrier	1	Nest			failed	1 / N
	Meadow Pipit	Present	Pair				Y / PR
	Moorhen	1	Pair	2	2 fledged per pair		2 / P
	Mute Swan	3	Pair	7	2.33 fledged per pair		2 / P
	Reed Bunting	Present	Pair				Y / PR
	Reed Warbler	Present	Pair				11 / P
	Robin	Present	Pair				Y / PR
	Sedge Warbler	Present	Pair				4 / P
	Skylark	Present	Pair				Y / PR
	Song Thrush (*Turdus philomelos*)	5	AOT				4 / P

Recording area	Species[26]	Breeding count	Unit	Fledged count	Productivity	Comments	Breeding records in 2022[27]
	Water Rail	2	Pair				3 / P
	Whitethroat	2	AOT				3 / P
	Willow Warbler	Present	Pair				4 / P
	Wren	Present	Pair				Y / PR

Humber Nature Partnership

4.2.43 Alkborough Flats is an area of low-lying farmland that was targeted for managed realignment and strategic breaches of the flood defences that formerly allowed them to function as agricultural land. The flats lie on the confluence of the Rivers Ouse, Humber and Trent, on the eastern bank of the mouth of the River Trent and the southern bank of the Humber, approximately 3.8 km east of the Order Limits.

4.2.44 The data for Alkborough Flats include very detailed information on non-breeding and breeding birds collected over multiple surveys spanning up to 30,000 hours of observation over a 15-year period. It is impossible to represent these data sets in detail within this report; however, paragraphs 4.2.45 - 4.2.51 provide a summary of the key information.

Non-breeding birds

4.2.45 Ducks, waders and geese accounted for most of the bird records at Alkborough Flats during winter over the monitoring period,

4.2.46 Overall winter wildfowl numbers at Alkborough Flats peaked between the 2013-2014 and 2017-2018 winters, with a decline since the 2018 winter period. This is due to a reduction in the numbers of teal using the site, which arose as saltmarsh vegetation was replaced by reedbed habitat. However, other species including wigeon, shoveler, gadwall and pintail (*Anas acuta)* increased over the same period.

4.2.47 The numbers of waders overall at Alkborough Flats are most strongly influenced by the numbers of lapwing and golden plover, since these species make the greatest contribution to total wader counts. Wader numbers peaked in winter during the 2013-2014 winter but declined rapidly and then stabilised from 2019 onwards. This is likely due to the habitat changing from inter-tidal mudflats to wet grassland.

4.2.48 Wading birds occurring at Alkborough Flats that are qualifying features of the Humber Estuary SPA include oystercatcher, golden plover, dunlin, snipe, curlew, redshank, avocet, lapwing, ruff and black-tailed godwit.

4.2.49 Wildfowl species that are qualifying features of the Humber Estuary SPA and Derwent Valley SPA that occurred during winter over the monitoring period included:

- Pink-footed goose (up to 3,000);
- Greylag goose (up to 1,280);
- Shelduck (up to 740);
- Wigeon (up to 2,778);
- Teal (up to 4,460);
- Mallard (up to 399);
- Shoveler (up to 236);
- Scaup (occasional in ones and twos); and
- Goldeneye (small numbers but up to eight in recent count years).

4.2.50 Also of note was the presence of sometimes large numbers of whooper swans (up to 550 on autumn passage and smaller numbers in winter) and occasional Bewick's swan.

Breeding Birds

4.2.51 Seventy-four species of birds were proven to breed on Alkborough Flats between 2007 and 2021 with an additional six species (ruff, quail, spotted crake (*Porzana porzana)*, baillon's crake (*Zapornia pusilla)*, spoonbill (*Platalea leucorodia)* and common crane) showing behaviours consistent with probable or possible breeding.

BTO data report

4.2.52 The BTO Data Report provides information on bird species associated with the potential development site, at spatial scales ranging through 1 km, 2 km (tetrad) and 10 km squares. The BTO data reports use long-term ornithological datasets and can provide assessments of the percentage of county, regional and national geographic range and population size for individual species associated with the study Area, as well as recent population changes. The full BTO Data Report is provided in Annex E.

4.2.53 Data were provided for 595, 1 km grid squares, which equates to 183 tetrads and 18, 10 km grid squares. Bird presence within a grid square does not necessarily mean it is present within the study area; it means that the grid square that the bird has been recorded in overlaps study area either partially or completely and therefore the species may have occurred in the study area.

4.2.54 Data were provided for the whole study area for the period 2008 – 2011 and for the 2022-26 period for 31% of tetrads using BTO Birdtrack data. A high-level summary narrative is provided below for the period 2022-26 to ensure that the information presented is contemporary.

Non-breeding birds

4.2.55 At the highest level of spatial resolution, 153 species were recorded during the non-breeding season within the tetrads that overlap the study area. At a range of spatial resolutions, 186 species in total were recorded within the vicinity of the study area

4.2.56 Table 4.7 shows the number of species present, recorded within the breeding seasons during the years 2022-2026, of various conservation status.

Table 4.7 – BTO Data Report non-breeding species presence up to and beyond 10 km and conservation status records

Conservation status	1 km	2 km	10 km	> 10km
All species	0	153	23	10
Annex 1 (Birds Directive)	0	35	6	0
BoCC Amber	0	61	8	4
BoCC Red	0	32	8	3

Conservation status	1 km	2 km	10 km	> 10km
RBBP	0	44	16	3
Schedule 1	0	31	7	2
S41 NERC	0	23	5	0

Breeding birds

4.2.57 At the highest level of spatial resolution, 77 species were recorded during the breeding season within the 1 km grid squares that overlap the study area. At a range of spatial resolutions, 186 species in total were recorded within the vicinity of the study area.

4.2.58 Table 4.8 summarises the number of species present, recorded within the breeding season during the years 2022-2026, of various conservation status.

Table 4.8 – BTO Data Report breeding species presence up to and beyond 10 km and conservation status records

Conservation status	1 km	3 km	10 km	> 10 km
All species	77	76	21	12
Annex 1 (Birds Directive)	0	16	11	8
BoCC Amber	24	34	6	5
BoCC Red	16	23	6	4
RBBP	1	33	17	8
Schedule 1	3	24	14	6
S41 NERC	15	11	6	3

East Riding of Yorkshire

4.2.59 Overall, eight (17%) of the 10 km squares that include the study area lie fully or partially within East Riding of Yorkshire. According to Bird Atlas data, these squares support between 7.1% and 100% of the geographic range in East Riding of Yorkshire of all the species considered (breeding and winter combined).

Lincolnshire

4.2.60 Overall, 11 of the 10 km squares that include the study area are fully or partially within Lincolnshire, accounting for 12% of 10 km squares in Lincolnshire. According to Bird Atlas data, these squares support between 4.5% and 100% of the geographic range in Lincolnshire of all the species considered (breeding and winter combined).

In terms of abundance, these squares represent between 0.1% and 100% of the total population size in Lincolnshire.

Nottinghamshire

4.2.61 Overall, nine of the 10 km squares that include the study area are fully or partially within Nottinghamshire, accounting for 25% of the 10 km squares in Nottinghamshire. According to Bird Atlas data, these squares support between 9.5% and 100% of the geographic range in Nottinghamshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.8% and 100% of the total population size in Nottinghamshire.

Treswell Wood breeding bird monitoring

4.2.62 Treswell Wood is adjacent to an area of proposed Biodiversity Net Gain (BNG) mitigation habitat within the Order Limits, however the closest proposed infrastructure (a proposed access track off Forewood Lane) lies approximately 160 m east of Treswell Wood. The limits of deviation for the proposed overhead line lie approximately 350 m east and therefore the proposed overhead line would be no closer than this distance. The woods include mature deciduous woodland habitats with pockets of standing water and open grasslands on the periphery.

4.2.63 Treswell Wood has been subject to long term ornithological monitoring through annual bird ringing and censusing of breeding populations. It supports an assemblage of largely widespread and relatively common passerine birds numbering around 40 species overall, numbers which vary slightly from year to year.

4.2.64 Notable/priority species include bullfinch, marsh tit (*Poecile palustris*), song thrush, skylark, mistle thrush (*Turdus viscivorus*), dunnock, stock dove (*Columba oenas*) and cuckoo. The woods can be considered a traditional stronghold in particular for marsh tit, with up to 6 pairs recorded for the woodland since monitoring began and 5 pairs as recently as 2021, since when breeding numbers have dropped to 1 territory.

4.3 Survey Data

4.3.1 The narrative and supporting data in this section set out the occurrence of priority species and species that are qualifying features of designated sites, representative of the baseline conditions across a continuous recording period from October 2022 through to July 2026. The records therefore include birds occurring during breeding and non-breeding periods, regardless of their behaviours, and spanning multiple years. The relative levels of survey effort undertaken each month are set out in Table 3.2 and Annex A.

4.3.2 Surveys to detect non-breeding target species have occurred over multiple winters, although the amount and type of survey effort each winter has varied. The periods October 2023-April 2024 and October 2024-April 2025 represent the most intensive periods of non-breeding survey effort, with records accumulated over a suite of monthly field counts, Wetland Bird Counts and Vantage Point Surveys every month. The winters of 2022-23 and 2025-26 generated additional records from, respectively, early project phase surveys (principally VP surveys from a limited number of locations; and wetland bird counts at the River Ouse) and additional surveys added to fill gaps in the data set and in response to stakeholder comments, that address the wider occurrence of pink-footed geese, wintering wild swans and breeding corn

bunting at specific locations, in addition to some ongoing VP surveys and wetland bird counts at Broomfleet Tileworks.

4.3.3 The target species recorded engaging in habitat use (rather than, for example, simply overflying the survey and study areas) are described from the combined results of all field counts, VP surveys, wetland bird counts, and all generic (CBC) and species-specific breeding bird surveys. The combined results provide a more complete baseline of habitat use across the survey and study areas than any single survey method in isolation.

4.3.4 Since the occurrence of a species during the typical species-specific breeding season is not necessarily an indication of breeding activity, identification of breeding locations is restricted to paragraph 4.3.155 onwards. Narrative regarding the breeding bird assemblages recorded during CBC surveys is supported by the summary tables in Annex F. Supplementary data from all survey types that indicate or confirm breeding locations of target species are also provided. For example, Vantage Point surveys that are not specifically designed to detect breeding locations of birds, have nevertheless generated a number of breeding records, since surveyors engaging in these surveys spend large amounts of time at a given location and are likely to detect breeding activities of a variety of species.

4.3.5 The following qualifying features of one or more designated sites either did not occur, or occurred in such low numbers or so infrequently that there are no patterns of habitat use or regular movements to report for them, and as a result there is negligible potential for any significant effects on them. These species are not discussed further within the baseline report unless the third-party data alone demonstrate their regular occurrence in significant numbers within the ZoI of the Project:

- Whimbrel;
- Ruff;
- Little tern (*Sternula albifrons*);
- Knot;
- Dunlin;
- Black-tailed godwit;
- Bar-tailed godwit;
- Grey plover;
- Hen harrier;
- Greenshank;
- Sanderling;
- Scaup;
- Turnstone; and
- Brent goose.

Flight activity – all species, year-round

4.3.6 Table 4.9 summarises the key flight data for all species at each VP. There were 103,910 target species passes[28] through the combined viewsheds over the course of all VP surveys between 2022 and 2026. The contribution of each VP to the flight totals varied across the survey area. Vantage Points 3 – 8 (including the Ouse VP) contributed 81% of all flights recorded and the Ouse VP alone contributed nearly 14% of all flights recorded. However, since the amount of survey effort varied at each VP, comparative values should be expressed as flight rate per hour of observation rather than total number of flights overall. Using this metric, the highest flight rates were recorded at VPs 3-7 (including the Ouse VP), and 12-13. Generally, flight rates were much lower elsewhere, particularly across the Yorkshire Wolds (VPs 1, 2, 19 and 20) and south of the Chesterfield Canal (VPs 15-17) as the proposed overhead line moves away from Misterton Carrs.

4.3.7 The flight rate at VP19 was considerably higher than at the other VPs across the Wolds, the number of bird passes here being inflated by occasional large flocks of pink-footed geese passing over at heights well above the maximum height of the proposed and existing overhead line. Since these were birds commuting to/from likely foraging grounds distant from the Order Limits (including locations near Market Weighton and to the north), this pattern of flight activity did not reflect habitat use within or close to the area viewed from the VP.

4.3.8 The broad observations of flight activity above confirm the assumptions made at the survey planning and early consultation stages of the project about relative levels of bird activity across the route; the key locations for birds along the length of the Project are across the Humberhead Levels and at the River Idle Valley. This is broadly related to the concentrations of birds at key focal points.

4.3.9 Key focal areas are considered to be designated sites (in particular, the Humber Estuary designations, for which qualifying features were the most frequently recorded species in the flight data) and the wetlands and terrestrial habitats associated with the Humber Designations, that attract foraging and roosting birds. Thus, the area between Ellerker and Luddington, which is bisected by the Humber Estuary SPA/Ramsar/SSSI, returned the highest hourly flight rates.

4.3.10 The River Idle Valley, Warping Drain and Misterton and Gringley Carrs, which support qualifying species of the River Idle Washlands SSSI and, at times, pink-footed geese that otherwise roost at Hatfield Moors are also considered to be key focal point areas.

4.3.11 The proportion of flight activity at risk of collision[29] with proposed overhead line infrastructure varied from 13.8% at the River Ouse crossing to 51.7% at VPs 11 and 20, but for most VPs was between 35% and 45%.

[28] The metric “bird passes” is a product of the number of flights recorded and the number of birds in each flight. Expressing flight activity in this way accounts for flocks or pairs of birds making flights together without committing the surveyors to recording each bird individually. For example, a surveyor recording 1,000 geese in a flock or skein would record these birds as a single “flight” that contributes 1,000 bird passes to the data set.

[29] The terms “risk height” and “at risk [of collision]” are used in this report to indicate flights that occurred at a height above ground that would be partly occupied by overhead line infrastructure (conductors and the earth wire). However, it does not follow that flights at these heights would inevitably result in a collision with the overhead line, since the wires occupy only a tiny volume of airspace within the range of “risk height”, and many birds are capable of taking action to avoid collisions either through emergency manoeuvres or through deliberate adjustments to flight

4.3.12 The reason for this consistency at most VPs is likely to be because the dimensions of the pylons and height of the cable spans vary very little along the route. Deviations from the "normal" range of risk values above is due to a combination of localised variations in pylon dimensions and bird behaviours, which themselves would be dependent on how birds move through the landscape to visit preferred foraging and roosting sites. For example, the flight data for the River Ouse include one of the highest recorded flight rates, but the lowest % risk of collision. Flight rates are high because this VP overlooks the River Ouse, which is within the Humber Estuary Designations and adjacent to RSPB Blacktoft Sands Reserve, downstream (east) of which are Alkborough Flats, Trent Falls and the wider estuarine environment of the River Humber; this area is therefore the primary hotspot of bird activity for the entire Project, but the proposed (and existing) overhead lines feature wires suspended at much greater height above ground (minimum 60 m) than elsewhere. There is therefore significant clear airspace beneath the proposed and existing overhead lines beneath which most airborne birds can pass, and many of the bird movements recorded from the River Ouse VP were at low level along the River Channel and to/from the RSPB reserve.

4.3.13 The relative risk of collision for each VP is a product of the flight rate and the % of flights at risk, all other factors being equal. For example, a location with 1 flight per hour of observation and 100% risk of collision would yield lower relative collision risk than a location with 1,000 flights per hour and 50% risk of collision. Taking this into consideration, the highest risk of collision occurred at:

- VPs 3, 4a, 4b, 5, 6 and 7, within the broad areas of the Humberhead Levels between Ellerker and Garthorpe; and
- VPs 12 and 13, overlooking the River Idle Valley and farmland adjacent to Warping Drain near Haxey, covering much of the Project route between Owston Ferry and Misterton.

4.3.14 The surveys carried out at (in geographical order from north to south) VPs 1, 19, 20, 2-8, 10, 12 and 17 included observations of bird interactions with existing overhead lines of similar proportions to the proposed overhead line, which at these locations would be in close parallel with the existing overhead line. There were 89,410 bird passes recorded at these VPs, of which 27,661 (30.1%) were "at risk" (i.e., they passed through the Order Limits at a height that would put them at risk of collision which, in most cases resulted in them crossing the existing overhead line). Of these, approximately two percent included sudden, deliberate action to avoid the existing overhead line by changing the course or height of their flight, or direct flight through the gaps between the cables. Most of these occurrences (around 50%) were recorded at the River Ouse, with VP4a, VP4b, VP5 and VP7 contributing the majority of other occurrences of sudden avoidance behaviours, all other VPs contributing negligible records of such behaviours. The number of recorded occurrences of avoidance was mainly proportional to the amount of observation time, and the number of flights recorded, at each VP.

4.3.15 In some cases, particularly for pink-footed goose in the area between Garthorpe and Blacktoft Sands RSPB reserve, birds appeared to use the existing overhead line as a navigational aid, flying alongside the existing overhead line between roosts on or

trajectories to avoid hazards or barriers to movement. The risk of a collision occurring as a result of bird passes at "risk height" is in reality very low, but for there to be any risk, a bird would have to be flying at "risk height". This is discussed further in **Application Document 6.9 Chapter 9 Ornithology** and **Application Document 6.9.A3 Appendix 9.3 Flight Activity Assessment**.

adjacent to the Humber/Ouse and confirmed feeding areas in farmland south of the River Ouse. This was noted particularly in November 2023 from VP7. There was no evidence to suggest that the overhead line was a significant barrier to the dispersal of these birds since they were frequently observed flying above the overhead line before dropping to foraging areas, and vice versa.

4.3.16 During the surveys there were no direct collisions observed with any overhead line infrastructure that resulted in casualties. However, a single sub-adult Bewick's swan recorded near Broomfleet tileworks became separated from a small flock and "grazed" the earth wire as the flock gained height to clear the overhead line before dropping to the tileworks ponds, where the sub-adult bird rejoined the flock.

4.3.17 Species-specific results are presented below for key target species in relation to their overall distribution and habitat use.

Table 4.9 – Summary year-round flight data for all target species at all VPs

VP[30]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	86	752	8.74	41.3	3.61
19	42	1,226	29.19	16.7	4.87
20	42	39	0.93	51.7	0.48
2	87.5	517	5.91	31.9	1.88
3	124.5	4,644	37.30	34.3	12.79
4a	100	5,326	53.26	41.7	22.21
4b	102	17,904	175.53	41.4	72.67
18a	105	5,440	51.81	14.8	7.67
18b	105	5,277	50.26	15.6	7.84
5	143	11,927	83.41	25	20.85
6	137	4,406	32.16	42.7	13.73
Ouse	199.75	13,757	68.87	13.8	9.50
7	138.5	8,620	62.24	39	24.27
8	108.5	3,964	36.53	41.7	15.23
9	108	1,980	18.33	34.7	6.36
10	109.5	2,137	19.52	42.9	8.37
11	84	779	9.27	51.7	4.79

[30] In geographical order from north to south.

VP[30]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
12	99	2,855	28.84	45.8	13.21
13	90	6,791	75.46	27.9	21.05
21	36	798	22.17	54.3	12.04
14	109	3635	33.35	45	15.01
15	75	375	5.00	36.8	1.84
16	75	142	1.89	46.2	0.87
17	74	619	8.36	17.1	1.43
Total	**2,380.25**	**103,910**			

Non-breeding birds habitat use

4.3.18 The following sections summarise the baseline survey data gathered regarding bird habitat use over the period 2022-2026, setting out:

- The distribution and focal points of non-breeding priority species and qualifying species of designated sites;
- The ways in which these species engage in habitat use across the landscape within the Order Limits and the adjacent areas; and
- The ways in which the recorded flight activity relates to the focal points and habitat use described for key target species in the species accounts below.

4.3.19 The distribution and numbers of birds collectively are described from each of the surveys executed, before the baseline for each species is described in more detail where this is necessary to support the assessments of effects presented in **Application Document 6.9 Environmental Statement Chapter 9 Ornithology**. This is done in particular for the qualifying features of designated sites including: the Humber Estuary Designations (Ramsar site, SPA, SSSI); Lower Derwent Valley (Ramsar site and SPA); Derwent Ings SSSI; Thorne and Hatfield Moors (SPA and SSSI); and the River Idle Washlands SSSI. Within the species-specific narratives a distinction is made between the location-specific records (i.e., birds that were recorded as points that accurately represent their location) and wetland bird count sector records (i.e., birds that occurred within a count sector but were not pinpointed to a specific location within that sector), however all records are considered where they contribute to the overall narrative or to counts that are significant in the context of designated site populations.

Non-specific summary of bird distribution

4.3.20 The majority of bird records, particularly those that are qualifying species of the Humber Estuary designations, occurred within the broad area referred to as the Humber Washlands or Humberhead Levels, which is generally defined as the low - lying agricultural land between Ellerker in the north (as far as the A63) and Luddington in the South (the southern half of Route Section A and all of Route Section B). Within this area species that are qualifying features of the Humber Estuary designations occurred most frequently and in the greatest numbers between Broomfleet and Luddington, with numbers overall falling away markedly beyond these locations. This effect is unlikely to be attributable to variations in survey effort, since there was broadly even and comprehensive coverage across this area. The broad distribution of non-breeding qualifying species records (for all target/priority species collectively) is shown in **Figure A9.2.24 Non-breeding bird distribution (all species)**.

4.3.21 Species that are qualifying features of designated sites and target species for recording of flight activity occurring within terrestrial habitats were represented almost entirely (in order of abundance) by pink-footed goose, greylag goose, lapwing, golden plover, mallard, wigeon, teal and curlew. These species were engaged predominantly in opportunistic foraging and in some cases roosting, with small numbers of Bewick's swan, whooper swan, little egret, snipe, green sandpiper (*Tringa ochropus*), shelduck, and oystercatcher occurring on some of the field drains and adjacent arable fields across the area.

4.3.22 The River Ouse, on the boundary of Route Sections A and B, represents a key focal point for most of the water birds encountered during the surveys, but their numbers were greatest downstream (east) of the Order Limits and especially within Blacktoft Sands RSPB Reserve, upstream of which numbers were significantly lower. Broomfleet Tileworks in Route Section A, 1.8 km north of the River Humber, also supported an assemblage of waterbirds.

4.3.23 Broomfleet tileworks, RSPB Blacktoft Sands and the River Ouse (Route Sections A and B), supported the only occurrences of water birds that are entirely or almost entirely dependent on the presence of open waters (a number of priority species including gadwall, shoveler, goldeneye; kingfisher; and a range of non-priority species including cormorant (*Phalacrocorax carbo*), tufted duck, great-crested grebe, little grebe and coot). Species that occur almost exclusively on intertidal habitats included dunlin and sandpiper. These were generally absent from most of the survey area but did occur in small numbers at Blacktoft Sands Reserve where suitable foraging and roosting habitats exist for them immediately adjacent to the intertidal habitats of the rivers Ouse, Humber and Trent.

4.3.24 Oxmardyke Washlands is immediately north of Broomfleet Tileworks and the Selby railway within Route Section A, approximately 2 km north of the Rivers Ouse and Humber, and is characterised by a series of pools enclosed by reedbeds, scrub/carr habitat and small areas of arable farmland bisected by the Market Weighton Canal. This was a focal point for small numbers of roosting and foraging species in winter, including several ducks (teal, mallard, shelduck) and marsh harrier.

4.3.25 The farmland in Route Section A northwards of the A63 includes predominantly intensively farmed agricultural land across the Yorkshire Wolds. There were few occurrences of Humber qualifying features, or waterbirds in general, throughout this area and no particular focal points for wetland birds. The distribution of species that are Humber Estuary SPA/Ramsar/SSSI qualifying features during the non-breeding surveys is represented for this area by some of the point records in **Figure A9.2.24 Non-breeding bird distribution (all species)**, including small feeding flocks of lapwing and golden plover numbering up to 42 and 24 respectively, but typically occurring in numbers less than ten.

4.3.26 Across the route of the development south of Keadby there were fewer records of notable birds but key areas include Hatfield Moors and the wide area encompassing much of Route Section D southwards towards the River Idle for pink-footed geese[31]; the Warping Drain and adjacent farmland between Haxey and Owston Ferry; and Misterton and Gringley Carrs (Route Section E) for pink-footed geese, whooper swans, mute swans and plovers including small numbers of lapwing and golden plover. Further south, as the Project route moves into Nottinghamshire, there were fewer records of target species and the numbers of species that are qualifying features of designated sites fell away dramatically, as would be expected with increasing distance from designated sites. The birds encountered in these areas were beyond the foraging ranges (from roost sites and designated sites) of the species in question.

4.3.27 Other widespread priority species occurring throughout the survey area included commonly occurring farmland passerines (skylark, reed bunting, yellowhammer (*Emberiza citrinella)*, linnet, redwing (*Turdus iliacus)*, fieldfare (*Turdus pilaris)*,

[31] This area lies almost entirely more than 500 m west of the Order Limits but there is some evidence of pink-footed geese occurring closer to the Order Limits between the River Idle and Chesterfield Canal.

starling (*Sturnus vulgaris)*, grey heron and resident birds of prey including kestrel, sparrowhawk (*Accipiter nisus)*, buzzard and merlin). More locally, corn bunting was recorded across the Isle of Axholme and Humberhead Levels between Ousefleet and Keadby, and across Misterton Carrs, but was infrequent elsewhere. Willow tit (*Poecile montanus*) was present as singles recorded close to Broomfleet Tileworks and along the Market Weighton Canal. Further narrative on these species is included in the descriptions of the farmland bird assemblages (paragraphs 4.3.152 - 4.3.154).

River Ouse through the tide counts

4.3.28 The TTTCs did not identify any significant patterns of habitat use or occurrence by particular species because this survey method ran for a limited period of time and was restricted only to the channel of the River Ouse (i.e. it excluded adjacent wetland and terrestrial habitats). The results included counts of four SPA and SSSI species (curlew, teal, redshank and wigeon) and seven other species (greylag goose, grey heron, mute swan, cormorant, common gull, great black-backed gull and gadwall), all of which were widespread within the river channel, with the exception of curlew, which was recorded only at the western end of the survey area. Counts of the following species reached numbers that equal or exceed 1% of the SPA population:

- Curlew (peak count 60, March 2023);
- Teal (peak count 100, September 2022); and
- Wigeon (peak count 120, March 2023).

River Ouse crossing wetland bird counts

April 2023 – March 2024 (Partial coverage)

4.3.29 Summary data for the period April 2023 – March 2024 are presented in Table 4.10. This sets out the peak counts of each species and the month of the peak count, regardless of tidal state within survey sectors including the northern bank, all of the river channel and several fields on the south bank of the River Ouse.

Table 4.10[32] – River Ouse high and low tide count summary data (April 2023-March 2024)

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
Black-headed Gull													
	R1	-	-	-	-	-	HT 6	-	-	-	-	-	-
	R2	-	-	-	-	-	-	HT 2	-	-	-	-	-
	R3	-	-	-	-	-	HT 3	HT 2	-	-	-	-	-
	R6	-	-	-	-	HT 28	-	-	-	-	-	-	-
	R9	-	-	-	-	LT 28	-	-	-	-	-	-	-
	S2	-	-	-	-	-	-	HT 100	-	-	-	-	-
	S6	-	-	-	-	-	HT 5	-	-	-	-	-	-
Canada Goose													
	R8	-	-	-	-	-	-	-	HT 1	-	-	-	-
	R9	-	LT 9	-	-	-	-	-	-	-	-	-	-
	S6	-	-	-	-	-	-	LT 8	HT 6	-	-	-	HT 7
Cetti's Warbler													
	R2	HT 1	-	-	-	-	-	-	-	-	-	-	-

[32] HT = High Tide Count; LT = Low Tide Count. Qualifying species of the Humber Estuary Ramsar, SPA and SSSI are identified in **bold** font. Counts of these species that equal or exceed 1% of the Ramsar/SPA qualifying population are identified in **bold** font.

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
Common Gull													
	R1	-	-	-	-	-	-	-	-	-	-	-	HT 5
	R6	-	-	-	-	HT 2	-	-	-	-	-	HT 1	-
Common Sandpiper (*Actitis hypoleucos*)													
	R3	-	-	-	-	HT 1	-	-	-	-	-	-	-
	R6	-	-	-	-	-	-	HT 1	-	-	-	-	-
	R9	-	-	-	HT 4	-	-	-	-	-	-	-	-
Cormorant													
	R3	LT 1	-	-	LT 2	HT 1	HT 2	LT 1	-	-	-	-	-
	R6	-	-	-	-	-	-	-	-	HT 2	-	LT 1	-
Curlew													
	R3	-	-	-	LT 1	-	-	-	-	-	-	-	-
	R4	-	-	-	-	-	-	-	-	-	HT 5	-	-
	R6	-	-	-	-	-	HT 1	-	**HT 40**	-	-	-	-
	S2	-	-	-	-	-	-	-	-	-	HT 20	-	-
	S5	-	-	-	-	-	-	-	LT 24	HT 26	-	-	-
Gadwall													

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
	R1	-	-	-	-	-	-	-	-	HT 4	-	-	-
	R6	-	-	-	-	-	-	-	-	HT 3	-	-	-
Greenshank													
	R6	-	-	-	-	-	**HT 1**	-	-	-	-	-	-
Grey Heron													
	N1	LT 1	-	-	-	-	-	-	-	-	-	-	-
	R1	-	-	-	-	-	-	-	-	-	-	-	LT 1
	R2	-	-	-	-	-	-	HT 1	-	-	-	-	-
	R5	-	-	-	-	-	-	HT 1	-	-	-	-	-
	R6	-	-	-	-	-	-	-	HT 1	-	-	-	-
	R9	-	-	-	-	-	-	-	-	LT 1	-	-	-
	S2	-	-	-	-	-	-	-	-	LT 1	-	-	-
	S5	-	-	-	-	-	-	-	LT 1	-	-	-	-
Greylag Goose													
	R1	-	-	HT 10	-	-	-	-	-	-	-	-	-
	R3	-	-	-	-	HT 16	-	-	-	-	-	-	-
	R6	LT 2	HT 4 LT 2	HT 24	HT 5	HT 1	-	-	-	-	-	-	-
	R9	-	-	HT 4	-	-	-	-	-	-	-	-	-

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
	S2	-	-	-	-	-	-	-	-	**HT 38**	-	-	-
	S4	LT 2											
	S5	-	-	-	-	-	-	-	-	-	-	HT 9	HT 1
	S6	-	-	-	-	-	-	**LT 630**	**HT 87**	**HT 300 LT 340**	-	HT 8 **LT 34**	HT 9
Lapwing													
	S2	-	-	-	-	-	-	HT 60	-	-	-	-	-
	S5	-	-	-	-	-	-	-	-	-	HT 14	-	-
Little Egret													
	R8	-	-	-	LT 1	-	-	-	-	-	-	-	-
	R9	-	-	-	LT 1	-	-	-	-	-	-	-	-
Mallard													
	R1	-	-	-	LT 2	-	-	-	-	HT 20	-	HT 4	-
	R2	1	-	-	-	-	-	HT 22	-	-	-	-	-
	R3	-	-	-	-	HT 3	-	LT 3	-	LT 12	HT 3	-	-
	R5	-	-	-	-	-	-	-	-	-	-	-	HT 1

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
	R6	LT 4	LT 9	HT 7 LT 1	-	-	LT 1	HT 3	HT 2 LT 8	-	HT 20	HT 7	-
	R8	-	-	-	-	-	HT 4	-	-	**HT 31**	-	-	HT 4
	R9	1	-	-	-	-	LT 1	-	HT 4 LT 13	LT 7	-	-	HT 1
Marsh Harrier													
	N2	**LT 1**	-	-	-	-	-	-	-	-	-	-	-
	R3	-	-	-	-	-	LT 1						
	R6	-	-	-	-	-	-	-	-	HT 1	-	-	-
Oystercatcher													
	R6	LT 2	-	-	-	-	-	-	-	-	-	-	-
Pink-footed Goose													
	S6	-	-	-	-	-	-	LT 110	-	-	-	-	-
Redshank													
	R2	HT 1	-	-	-	-	-	-	-	-	-	-	-
	R6	-	-	-	-	-	-	-	LT 1	-	HT 1	-	-
Shelduck													
	R5	-	-	HT 9	-	-	-	-	-	-	-	-	-

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
	R6	LT 2	-	-	-	-	-	-	-	-	-	-	-
	R9	-	-	-	-	-	-	-	-	-	-	HT 4	-
Snipe													
	R5	-	-	-	-	-	-	-	-	-	**HT 3**	-	-
	S6	-	-	-	-	-	-	-	-	-	**HT 1**	-	-
Teal													
	R1	-	-	-	-	-	-	-	-	HT 10	-	**LT 60**	-
	R2	-	-	-	-	-	-	HT 3	-	-	-	-	-
	R3	-	-	-	-	-	-	HT 2 LT 18	HT 3 LT 4	LT 1	-	-	-
	R5	-	-	-	-	-	-	-	-	-	-	-	HT 13
	R6	-	-	-	-	-	LT 7	-	HT 6 LT 11	-	**HT 159**	HT 13 **LT 51**	-
	R8	-	-	-	-	-	-	-	**HT 26**	**HT 98** LT 2	-	-	-
	R9	-	-	-	-	-	-	-	**HT 38**	HT 22 LT 1	-	-	**HT 33**
Wigeon													
	R2	-	-	-	-	-	-	-	-	-	-	-	HT 32
	R3	-	-	-	-	-	-	LT 3	HT 7	LT 1	-	-	-

		2023									2024		
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**
	R5	-	-	-	-	-	-	-	-	-	-	-	HT 15
	R6	-	-	-	-	-	-	-	HT 46 LT 1	-	**HT 123**	HT 29 **LT 67**	-
	R7	-	-	-	-	-	-	-	-	-	-	HT 37	-
	R8	-	-	-	-	-	-	-	HT 2	HT 12 LT 1	-	-	HT 4
	R9	-	-	-	-	-	-	-	HT 30	LT 1	-	-	**HT 70**

4.3.30 Twenty-one species were recorded, of which fifteen are qualifying species of the Humber Estuary Ramsar, SPA and SSSI. Four of the qualifying species (pink-footed goose, snipe, little egret and greylag goose) are regarded as species that support the assemblage feature, but they are not specifically named on the site data sheet as qualifying features. There were few clear patterns of distribution overall, but species dependent mainly or exclusively on open water habitats (ducks including mallard, teal, wigeon, shelduck, gadwall) were recorded mostly within sectors that map to the river channel, while other species were more widely distributed across riverine, terrestrial and mixed habitat sectors along the periphery of the river channel. Pink-footed goose was recorded on only one occasion within Sector S6, which maps to an arable field to the south of Blacktoft Sands RSPB reserve and this record was added to the database of terrestrial habitat use for key species that informs the species accounts in paragraphs 4.3.55 - 4.3.151. Most of the records of greylag goose were also within this sector.

4.3.31 The months of October-February contributed the highest peak counts of waterbirds overall and of several qualifying species including curlew, lapwing, little egret, mallard, marsh harrier, pink-footed goose, redshank, shelduck, snipe, teal and wigeon. The months of May-August contributed few records overall and low counts of the species that did occur. During this period the only qualifying breeding species that occurred was marsh harrier, but since all records of this species were of birds in low-level flight above potential foraging habitats, this was not indicative of nesting or roosting. Nevertheless, it is widely known that marsh harriers roost within the reedbeds at Blacktoft Sands RSPB reserve and this is the closest known roosting location to the Order Limits for this species, approximately 530 m from the Order Limits at its closest point, and approximately 750 m east of the Order Limits where they cross the River Ouse.

4.3.32 The following qualifying species attained numbers equalling or exceeding 1% of the qualifying population of the Humber Estuary SPA in the following months:

- Curlew (November);
- Greylag goose (October-December and February);
- Greenshank (on one occasion in September 2023);
- Marsh harrier (April);
- Snipe (January);
- Teal (November-March); and
- Wigeon (January-March).

4.3.33 Greylag goose and mallard occurred regularly year-round in numbers greater than singles or pairs. This is indicative of their status as common and widespread resident birds that both breed and over-winter in the UK. Only their non-breeding or winter numbers count towards the qualifying population of the designated sites.

April 2024-June 2025 (Complete Coverage)

4.3.34 Summary data for the period April 2024-June 2025 are presented in Table 4.11. During this time all sectors were counted. The peak counts and the month of the peak count for each species are presented regardless of tidal state.

Table 4.11[33] – River Ouse high and low tide count summary data (April 2024-June 2025)

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Avocet																
	RSPB 7												**HT 2**	**HT 3** **LT 19**	**HT 107** **LT 40**	
	RSPB 8					**LT 6**							**HT 16**	**LT 15**	**HT 1**	
Bar-tailed Godwit																
	RSPB 7									LT 3						
	RSPB 8					HT 1										
Bittern																
	RSPB 6													**HT 1**		
Black-tailed Godwit																
	RSPB 3												HT 5			
	RSPB 4							HT 1						HT 2		
	RSPB 6					HT 1	HT 2 LT 1									
	RSPB 7							**LT 11**		LT 3			**HT 18** LT 1	**HT 30**	**HT 41** **LT 9**	

[33] HT = High Tide Count; LT = Low Tide Count. Qualifying features of the Humber Estuary Ramsar, SPA and SSSI are identified in **bold** font. Counts of these species that equal or exceed 1% of the Ramsar/SPA qualifying population are identified in **bold** font.

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	RSPB 8					LT **22**	HT 5 LT 7					LT 6	HT 4 LT 2	**LT 21**		
Black-headed Gull																
	R1				HT 8	LT 70	LT 20									
	R2						HT 17	HT 100	LT 21							
	R3				LT 2		HT 16		LT 2							
	R6				HT 45	HT 3 LT 11	LT 360	HT 1500 LT 60					HT 3			
	R8							HT 1500+					HT 1			
	R9						LT 1									
	RSPB 1												LT 132			
	RSPB 2													LT 2		
	RSPB 4							HT 12								
	RSPB 5											LT 15				
	RSPB 6					LT 110										
	RSPB 7						HT 57							HT 14	HT 40 LT 2	
	RSPB 8				HT 3	LT 1									HT 2	
	S2				HT 125											
Brent Goose																
	RSPB 8														LT 2	

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Canada Goose																
	RSPB 4												HT 2	HT 2		
	RSPB 8												HT 2			
	S6	HT 1 LT 12														
Common Gull																
	R1						LT 20									
	R2							HT 20	LT 6							
	R6					HT 1		HT 500+	HT 1				HT 3			
	R8							HT 500+								
	RSPB 1											LT 4	LT 9			
	RSPB 4							HT 3								
	RSPB 7													HT 6		
	S2				HT 4											
	S6												HT 3			
Common Sandpiper																
	R6		HT 1													
	RSPB 2				LT 1											
	RSPB 7														LT 1	
	RSPB 8														LT 1	

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Common Scoter (*Melanitta nigra*)																
	R8												HT 1			
	RSPB 2												HT 1			
Coot															HT 1	
	RSPB 6						LT 1					LT 2	HT 4 LT 2	HT 2 LT 1	LT 2	
	RSPB 8												LT 2		HT 1	
Cormorant																
	R3									LT 1						
	R6			HT 1			HT 1									
	RSPB 1								LT 1							
	RSPB 2															
	RSPB 6														HT 1	
Curlew																
	N1									LT 4						
	N2												LT 17			
	R1				LT 1											
	R3				LT 1											
	R5						LT 5									
	R8											LT 17				
	RSPB 1				LT 4		HT 3							HT 10		
	RSPB 2					LT 1	LT 2					**HT 40**				

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	RSPB 3						LT 1	HT 2	HT 15 **LT 60**			HT 4 **LT 63**	LT 26	HT 4		
	RSPB 4													HT 1 LT 1		
	RSPB 5												**HT 33**	HT 2		
	RSPB 7											LT 7				
	S1										HT 11					
	S5											HT 1				
Dunlin																
	RSPB 2						HT 7									
	RSPB 7									HT 4 LT 1	LT 91	LT 56			HT 3	
Gadwall																
	R6		HT 3					HT 8								
	R9					LT 30							LT 2			
	RSPB 2													HT 6		
	RSPB 3													HT 8		
	RSPB 4													HT 19		
	RSPB 5									HT 8						
	RSPB 6					HT 4	HT 4 LT 3				HT 3	HT 16 LT 6			HT 2	
	RSPB 7												HT 10	HT 5	HT 8 LT 2	
	RSPB 8							LT 24	HT 4				HT 2 LT 9	LT 5	HT 8	
Garganey																
	RSPB 8												HT 2			

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Goosander (*Mergus merganser*)																
	R6									LT 1						
Great Black-backed Gull																
	R3						HT 1									
	R9					LT 1										
Green Sandpiper																
	RSPB 2				**LT 1**											
	RSPB 8				**HT 8 LT 6**	**HT 3 LT 3**	**HT 2 LT 5**									
Greenshank																
	RSPB 8						**LT 1**									
Grey Heron																
	R1					LT 1	LT 1						HT 1			
	R2						HT 1									
	R3				LT 1			LT 1	LT 1							
	R5							HT 6								
	R6						LT 1			LT 1						
	R9				LT 1			LT 1								
	RSPB 1									HT 2						
	RSPB 2												HT 1	LT 1		
	RSPB 3												HT 4			
	RSPB 4												HT 2			

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	RSPB 6						HT 1			HT 1	LT 1	HT 1				
	RSPB 7								HT 1						LT 1	
	RSPB 8				HT 1							LT 1	HT 1	LT 1		
Greylag Goose																
	R1		LT 4		HT 12 LT 4											
	R3		LT 2		HT 5											
	R6	LT 2	HT 2 LT 9	HT 79	HT 38	LT 31		**LT 105**			HT 1					
	R8												HT 2			
	RSPB 2							**HT 120** **LT 120**		LT 3	**LT 30**	LT 22		LT 2		
	RSPB 3									HT 3		HT 16	**LT 32**	HT 7		
	RSPB 4												LT 6	LT 7	LT 6	
	RSPB 5				HT 1											
	RSPB 6					LT 26						HT 1		LT 2		
	RSPB 7				LT 24					LT 2				HT 2	LT 7	
	RSPB 8														LT 2	
	S2				HT 16		HT c700									
	S3											**LT 43**				
	S4							**HT 100**								
	S5	HT 2									**HT 64**		HT 2 LT 22			
	S6	HT 36 LT 14														

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Jack Snipe (*Lymnocryptes minimus*)																
	RSPB 4									**LT 2**						
Lapwing																
	RSPB 4					HT 15										
	RSPB 6						HT 6 LT 1									
	RSPB 7								HT 19	HT 39 LT 27	LT 106	HT 72 **LT 279**	LT 2	HT 1	HT 18	
	RSPB 8				HT 23	HT 5 LT 6	HT 5 LT 18	HT 1	HT 2			HT 2 LT 26				
	S6							LT 49				LT 48				
Lesser Black-backed Gull																
	S2				HT 1											
	R6												LT 1			
Little Egret																
	R1					LT 1										
	R2	HT 1					HT 2									
	R3				LT 2											
	RSPB 2						HT 2						HT 1			
	RSPB 6				HT 1											
	RSPB 8				HT 18 LT 6		LT 2									
Little Grebe																
	RSPB 6				HT 4 LT 2	HT 3 LT 3	HT 1 LT 3					LT 1	HT 4 LT 2	LT 1	HT 1 LT 1	

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Little Ringed Plover																
	RSPB 4													LT 1[34]		
Mallard																
	R1		HT 7	LT 5		LT 26	LT 16		HT 4	HT 13 LT 12	**HT 36** LT 13	LT 2	HT 13 LT 26			
	R2	HT 2					HT 2									
	R3	LT 5		LT 5	LT 26		LT 105	LT 29	LT 5	HT 14	HT 18 LT 13	**HT 35**	HT 1 LT 37			
	R6	HT 1	HT 3			LT 4	HT 27 LT 21	HT 3 LT 14	HT 10	LT 35	HT 7					
	R8		HT 2				HT 18						HT 4			
	R9					LT 20	HT 9 LT 8		LT 19			LT 2	LT 2			
	RSPB 1												LT 40			
	RSPB 2						HT 8	HT 38 LT 8					HT 5 LT 2			
	RSPB 3													LT 1		
	RSPB 4													HT 8		
	RSPB 5					LT 10				HT 3		HT 5				
	RSPB 6				HT 10 LT 8	**HT 31** **LT 53**	**HT 113** **LT 33**	HT 78 LT 8	LT 9	LT 6	LT 3	HT 6 LT 4	LT 3	HT 2	HT 3 LT 2	
	RSPB 7						HT 8	LT 14					HT 7 LT 6	HT 2 LT 2	HT 10 LT 19	
	RSPB 8				HT 5			LT 13	HT 16			LT 3	HT 23 LT 8	HT 2 LT 6	HT 19 LT 11	

[34] This bird flew west over the count sector and was not recorded within it. It demonstrates the likely presence of little ringed plover as a breeding bird at Blacktoft Sands.

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	S2						HT 190									
	S4						LT 40									
Marsh Harrier																
	R2						HT 1									
	RSPB 7				**HT 1**			HT 2						**HT 2**		
	RSPB 8													**LT 1**		
Moorhen																
	RSPB 4											HT 4				
	RSPB 6				LT 1	HT 1 LT 3	HT 2 LT 4	HT 1 LT 1	HT 2						LT 1	
	RSPB 8				HT 3	HT 4 LT 3	LT 3	HT 1	HT 5	HT 2 LT 3					LT 1	
Mute Swan																
	RSPB 6											LT 2	LT 1	LT 2	LT 1	
	RSPB 7												LT 2	HT 3		
	RSPB 8									HT 1		HT 2				
	S6	HT 2														
Oystercatcher																
	R1		LT 1													
	RSPB 7													HT 2	HT 2	
Pectoral Sandpiper (*Calidris melanotos*)																
	RSPB 8						HT 1									

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Pink-footed Goose																
	S2						HT 139									
	S5						HT 1									
	RSPB 3											HT 1				
Pintail																
	RSPB 7							HT 2 LT 1								
Pochard																
	RSPB 6												HT 4	HT 5	LT 4	
	RSPB 8												LT 2		LT 1	
Redshank																
	R1												LT 1			
	RSPB 3							HT 2								
	RSPB 4							HT 11		HT 1				HT 1		
	RSPB 6						HT 6 LT 1									
	RSPB 7												LT 1	HT 1		
	RSPB 8				HT 2	HT 1 LT 3							HT 1			
Ringed Plover																
	RSPB 7														HT 15	
	RSPB 8					LT 4	HT 2									
Ruff																
	RSPB 8						**HT 7**									

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
Sanderling																
	RSPB 7														HT 1	
Shelduck																
	R8	HT 2														
	RSPB 2											LT 2	HT 4	HT 1 LT 2	LT 2	
	RSPB 3											HT 5	LT 3	HT 6		
	RSPB 5					LT 1										
	RSPB 6												HT 13			
	RSPB 7									LT 23	LT 9		LT 22	HT 21 LT 12	HT 1 LT 2	
	RSPB 8									HT 1 LT 3		LT 2		HT 1 LT 1	HT 1	
Shoveler																
	R9									**LT 14**						
	RSPB 3													**HT 4**		
	RSPB 6					HT 4 LT 7	**HT 15** **LT 14**		LT 2							
	RSPB 7							HT 1			**LT 11**			HT 8 LT 1	LT 2	
	RSPB 8							**HT 33** **LT 23**	**HT 24**	**HT 7**		HT 2 **LT 6**		LT 24	HT 2	
Snipe																
	R2									**LT 1**						
	RSPB 1								**LT 1**							
	RSPB 2							**LT 2**	**LT 1**							
	RSPB 3							**LT 12**						**LT 1**		

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	RSPB 4						**HT 1**		**HT 10**	**HT 4** **LT 12**						
	RSPB 5								**HT 2**				**LT 2**			
	RSPB 6						**LT 1**									
	RSPB 7							**HT 1** **LT 2**	**HT 4**				**HT 1**	**HT 1** **LT 3**		
	RSPB 8				HT 1	**HT 7** **LT 15**	**HT 15** **LT 20**	**HT 6** **LT 6**	**HT 13** **LT 5**				**HT 4** LT 2	**HT 1**		
Spoonbill																
	RSPB 7												LT 1		HT 2[35]	
	RSPB 8														HT 1	
Spotted Redshank																
	RSPB 8				HT 1 LT 2	LT 1										
Teal																
	R1									HT 17 **LT 40**	HT 13	**LT 67**	HT 2 **LT 31**			
	R2						HT 5		LT 6							
	R3								**LT 53**	**HT 22** **LT 47**	**HT 54**	**HT 120**	**LT 40**			
	R6									**LT 53**	**HT 36**	**HT 22** LT 12	LT 7			
	R9												HT 3			
	RSPB 1												**LT 52**			

[35] These birds flew over the count sector but were not recorded within it.

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	RSPB 2							**HT 60**					HT 4 LT 2	HT 41 LT 4		
	RSPB 3								HT 12 LT 18				HT 5 **LT 74**	HT 11		
	RSPB 4													HT 15		
	RSPB 5															
	RSPB 6				HT 21 LT 7	HT 18 LT 111	HT 165 LT 17	HT 6 LT 8				**HT 28** LT 1				
	RSPB 7							**HT 86** **LT 73**	**HT 391** **LT 215**	**HT 130**	**HT 178**	**HT 120** **LT 142**	**HT 215** **LT 57**	HT 5 LT 22	HT 1 LT 18	
	RSPB 8				HT 2	HT 6 LT 8	LT 13	**HT 58** **LT 27**	HT 11 LT 18	HT 2		HT 17	**HT 40**	LT 14		
Tufted Duck																
	RSPB 6					HT 3 LT 1	LT 1			HT 1 LT 1		LT 1	LT 2		HT 2 LT 2	
	RSPB 7													HT 3		
Water Rail																
	RSPB 6					**HT 1**	**LT 1**									
	RSPB 7							**LT 1**								
	RSPB 8					**LT 2**			**LT 1**		**HT 1**		**HT 2**			
Whimbrel																
	RSPB 5				**HT 1**											
Wigeon																
	R1									**HT 59**	HT 16					
	R3									HT 2 LT 13	HT 30	**HT 80**	LT 22			
	R6									**LT 76**	HT 23 **LT 72**	**HT 50** LT 41	HT 6 LT 32			

		2024									2025					
Species	**Sector**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**
	R9									**HT 149** LT 5						
	RSPB 1								LT 9	**HT 101**			HT 4 **LT 75**			
	RSPB 2							HT 10	**HT 145**	HT 49			LT 11			
	RSPB 3							HT 3						HT 12		
	RSPB 4													HT 3		
	RSPB 5									HT 7						
	RSPB 7							HT 4 LT 2					HT 1			
	RSPB 8								HT 6	HT 17		HT 4	LT 25	LT 1		

4.3.35 Fifty-one species were recorded, of which twenty-seven are qualifying features of the Humber Estuary Ramsar site, SPA and SSSI. Seven of the species (water rail, snipe, jack snipe, pink-footed goose, shoveler, greylag goose and little egret) are regarded as supporting the non-breeding assemblage feature but are not specifically named on the SPA data sheet.

4.3.36 Temporal patterns of peak waterbird numbers were similar to those reported in paragraph 4.3.32 for the previous year, but the inclusion of the habitats within the RSPB reserve resulted in a greater number of species being recorded and peaks for some species occurring outside the key winter months of October – February, with breeding birds (marsh harrier, avocet) and passage birds (greenshank, green sandpiper, ruff) showing relatively high numbers from March through to September (see paragraph 4.3.47 and Table 4.12).

4.3.37 The sectors overlapping the permanent reserve pools (Sectors RSPB 2 – 8) contributed to the counts for every species and were the only sectors in which many of the species occurred (avocet, bar-tailed godwit, bittern, black-tailed godwit, brent goose, coot, dunlin, garganey, green sandpiper, greenshank, jack snipe, lapwing, little grebe, moorhen, pectoral sandpiper, pintail, pochard, ringed plover, ruff, sanderling, spoonbill, water rail and whimbrel), demonstrating the importance of Blacktoft Sands RSPB reserve to the overall bird counts. In particular, the reserve is important for many of the ducks and waders that show preferences towards shallow non-tidal waters that offer optimal foraging conditions in sheltered and relatively undisturbed locations.

4.3.38 Within these sectors, birds would be at least 160 m from the Order Limits (the shortest distance between the Order Limits and the boundary of sector RSPB 2) and in most cases, considerably further than this; the next nearest RSPB count sector (RSPB 3) is approximately 570 m east of the Order Limits and, even within RSPB 2, almost all birds would congregate on the open waters and its margins, which are at least 230 m east of the Order Limits.

4.3.39 Sector RSPB 1 partially overlaps the Order Limits, and this sector was visited largely by relatively common and widespread non-qualifying species including gulls, cormorant and grey heron. This sector was also visited regularly by curlew, mallard, snipe, teal and wigeon. However informal observations of habitat conditions and bird distribution confirm that the majority or all of the duck species at this location would have occurred on or adjacent to the ephemeral/inundation pools that occur between the existing overhead line and the Order Limits (east of the Order Limits). The wading birds occurring here may have occurred more widely across the saltmarsh habitat closer to the Order Limits, but this cannot be identified from the counts due to the spatial resolution of the data.

4.3.40 The following qualifying features attained numbers equalling or exceeding 1% of the qualifying population of the Humber Estuary SPA in the following months:

- Avocet (April and May, up to 107 birds with some on nests and at least 26 chicks within RSPB7 and 8);
- Bittern (April, within RSPB8);
- Black-tailed godwit (August, October and March-May, within RSPB7 and 8);
- Curlew (November and February, within RSPB2 and 3; March, within RSPB5);
- Green sandpiper (July-September within RSPB2 and 8);

- Greenshank (September, within RSPB8);
- Greylag goose (October within R6, S4 and RSPB2; January within S5 and RSPB2; March within RSPB 3; February within S3);
- Jack snipe (December within RSPB4);
- Lapwing (February within RSPB7);
- Little egret (September within R2, RSPB2 and 8);
- Mallard (January-February in R1 and R3, with very widespread occurrence throughout the survey area);
- Marsh harrier (April and July within RSPB7 and 8);
- Ruff (September in RSPB8);
- Shoveler (September-April within RSPB3, 6, 7 and 8; December only in R9);
- Snipe (widely present August-March, exceeding 1% of the SPA population in R1 and all RSPB sectors);
- Teal (October-March widely within R1, R3, R6, RSPB1-3, RSPB6-8);
- Water rail (August-March within RSPB6-8);
- Whimbrel (July within RSPB); and
- Wigeon (November-February within R1, R3, R6, R9 and RSPB1-2).

4.3.41 Pink-footed goose was recorded only within 3 count sectors (S2, S5 and RSPB3), all of them being in arable fields immediately south of the RSPB reserve; of these, only S2 contributed more than singles, although none of the counts reached 1% of the Humber Estuary population. The RSPB reserve manager noted evidence of the use of Sector RSPB3 at night by foraging pink-footed geese in January 2025 based on the presence of large numbers of droppings, but no count was obtained for this occurrence.

4.3.42 Greylag goose and mallard occurred regularly year-round in numbers greater than singles or pairs. This is indicative of their status as common and widespread resident birds that both breed and over-winter in the UK. Only their non-breeding or winter numbers count towards the qualifying population of the designated sites.

Broomfleet Tileworks wetland bird counts

4.3.43 Summary data covering the period between and including October 2024 and July 2026 (inclusive) are presented in Table 4.12, setting out the peak counts of each species and the month of the peak count. There were no counts during May-August 2025, or during August 2026, due to access restrictions.

Table 4.12 – Monthly peak counts of wetland birds at Broomfleet Tileworks[36]

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
Avocet																	
	4							**2**									
Black-headed Gull																	
	1							2					7	7			
	4	8														1	
	7	2															
	11	18								15	21	21	11				7
	13																2
Canada Goose																	
	4								64					1			
Coot																	
	3									3							
	4									3				2		6	16
	5																1
	7									30					1	1	
	10						16		6								

[36] No surveys were carried out between May and August 2025 (inclusive), or in August 2026, due to access restrictions.

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	11	34	36	21	12	20		4		44	42	38	16	2	9	5	1
Common tern																	
	1															1	4
	3																1
	4														2		
	11															5	
	14															2	
	19															1	
Cormorant																	
	1				1	1	1		2	4		3	1	1			
	2	1															
	3				1												
	4	1		14	12				5	11	3	10	8		2	3	1
	5					18											
	7	3															
	9	1	3		12		5				1	3					
	10			8		12											
	11					1					7	7	4				1
	12					1											

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	13		1	4					1	2	2	1					1
	14											1					
	15								1								
	19									1							
Gadwall																	
	1	1			5	2	2		2		3			1			
	4							4	2		2		3		3	4	
	5		12							3						2	
	7				4										3		
	9		2		2												
	11	19	20		7	4	2	2		20	3	3	3				4
	13		2						4	1							
	15														1		
Goldeneye																	
	1	**5**	**5**	**16**	**35**	2	**35**				**7**	**13**	**5**				
	2		4		2							1					
	3		3		4												
	4	**5**	1			**52**	**5**						1				
	5		1														

		2024			2025								2026				
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	6						3										
	9				**10**		**25**					2					
	10						3										
	11					2								2			
	12					2											
	13	2	**6**	2													
	14			**5**													
Golden Plover																	
	9			14													
Goosander																	
	1				5												
	12					5											
	13		2		3												
Great Crested Grebe																	
	1							2	1	2	1			2	1	4	4
	3															1	
	4						1	2						1			
	6						2										

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	8														1		
	10						2										
	11						1			1				2	1		2
	13	1		2						2							
Great Black-backed Gull																	
	4										2						
Grey Heron																	
	1					1											1
	4		1						1							1	
	7									1							
	11									1							
	14										1						
	15																1
	19														1	1	1
Greylag Goose																	
	1														10		1
	3							2									
	4			2	**119**	12	1	1	142	2	**83**	**29**	**224**		8	57	40

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	5							14						2			
	6	3				2	2	2						33			124
	7	1		2		**64**		4		1							
	8						2										
	9			1			8							2			
	10			**125**													
	11			**125**							**26**						
	14														1		
	21														1	53	7
Herring gull																	
	1																1
Kingfisher																	
	1																1
	13		1						1		1						
	14		3									1					
	20								1								
Lapwing																	
	4						16							1		2	
	5					2											

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	6											2					
	9						16										
	11									2	48	10					
Lesser Black-backed Gull																	
	11	2								1	4	4					
Little Egret																	
	4			1						1				2		1	
	5				1												
	7														1		
	8			1			1					**2**					
	9			1			**2**										
	10						1										
	11			**5**													
	13		1	**2**													
Little Grebe																	
	1								1			3	4				
	4												1				1
	8					8			1		2						

		2024			2025								2026				
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	9				5						2	5	3				
	11	1	3		5	6				7		6	3				
	13		1							5		1					
	15											3					
Little Ringed Plover																	
	4														1		
	6							3						2			
Marsh Harrier																	
	4														**1**		
	6																**1**
	16																**1**
Mallard																	
	1	3			2	2	7	2	6	8	3						5
	2	3					2	1									
	3		2								1						
	4	8		15		1		7		4		2	**34**	4	10	13	2
	5	24	5			20	2			13				2	17		
	6						2									5	

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	7				2			5						2	4	5	
	8														8		
	9	14	1									2				4	
	10						4										
	11	22	14		2	18	6	2		10	5	5	5	2	1	18	25
	12						3										
	13		3						3	13				1	3		
	14			2										1		3	
	15											1					
	19		**28**		3		2			37	18						
Moorhen																	
	2	1															
	9		1		1		1			1							
	11	1	1														
	12	1															
	13								1					1			
	14				2				2			1					
	19							1									
	20															1	

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
Mute Swan																	
	1		3	2	3	2	2		1	3		3	4	2	2	2	1
	3		2		1			1						2	2	1	
	4							4	2	5				2	2	4	4
	6															3	
	7							2									
	8		3				2										
	9	2	4	1		2		1						1			
	11						2			7					7	7	
	12					2	2										
	13	1	7	2	5					3	4	2	2	1			
	14			2	2												2
	15											1		1	6		
	18												2				
	19		2														
	20	2					2								1		
Oystercatcher																	
	4						1									1	
	6														1		

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
Pink-footed Goose																	
	5											1					
	7												1				
Pintail																	
	11	4															
Pochard																	
	4				**11**				**7**				5				
	7				1												
	10						1										
	11	**9**							**25**								
Redshank																	
	4		1		1												
	5	1											1				
Ringed Plover																	
	21									13					**123**		
Shelduck																	
	1														2		
	4					2		3								7	

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	6							3						6	5		
	12					2								10			
	21																
Shoveler																	
	4				1												
	11	3	3	11	1					14							
Snipe																	
	1				**1**												
Teal																	
	4						3				16	4	**62**				
	5					**64**				4		**58**					
	6		2				3										
	7		9														
	9						3										
	10						8										
	11	2	12	**30**						2							
	15											4					
Tufted Duck																	
	1				7	3			12	40	67	14	48	3			3

		2024			2025					2026							
Species	**Sector**	**Oct**	**Nov**	**Dec**	**Jan**	**Feb**	**Mar**	**Apr**	**Sep**	**Oct**	**Nov**	**Dec**	**Jan**	**Apr**	**May**	**June**	**July**
	2			1								6					
	3					1	1										
	4		7	3					23	21				4			
	5										5						
	7							4									26
	9		1	17	70											1	7
	10						10										
	11	25	29	31	2			2						4		1	6
	13	1		2													
Water Rail																	
	11		**1**														
	13									**1**							
	14		**1**														
	16			**1**													
Wigeon																	
	4							3		2		**75**	**88**				2
	5		4			**100**											
	8								2								
	11	20	31	6	4	**127**				7							

4.3.44 Thirty-five species were recorded, of which 18 are qualifying features of the Humber Estuary Ramsar site, SPA and SSSI. Six of the species (water rail, snipe, shoveler, pink-footed goose, little egret and greylag goose) support the non-breeding assemblage feature but are not specifically identified on the SPA site data sheet.

4.3.45 The pools across the northern half and the eastern end of the tileworks (pools 1-3, 9-20), are within extraction pits that were dug long before the baseline surveys were carried out. As such, they have developed mature scrub, rank grassland and reedbed habitats on the steeply banked bunds at their margins. Pools 13, 14, 15, 19 and 20 are managed for recreational fishing. Count sector 18 was an open arable field without a pit, pond or other standing water habitat, but was included in the counts as part of the tileworks in acknowledgement that terrestrial habitats adjacent to wetlands can also attract wetland birds. Count Sector 21 existed only for the counts carried out between September 2025 and July 2026, having been newly excavated between May and August 2025 while surveys were suspended. During the surveys this sector did not hold anything more than small areas of shallow pooled water and dry mud (see Plates 1 and 2), but it would be expected to fill with rainwater and to attract a greater number of water birds over time.

Plate 1 – View northeast across the newly dug clay pit (Sector 21) in October 2025



Plate 2 – View southeast across the newly dug clay pit (Sector 21) in October 2025



4.3.46 Wetland birds occurred on every pool[37], however pools 4 and 11 contributed disproportionately to the assemblage (22 and 20 species, respectively); while pools 1, 5, 7, 9 and 13 each contributed at least 10 species to the assemblage. All other pools supported 8 or fewer species and pools 16, 18, 20 and 21 supported 2 or fewer species.

4.3.47 Strong temporal patterns of occupation by each species outside of the winter period are not clear from the data since surveys outside of the non-breeding period were limited by intermittent site access. Nevertheless, the temporal spread of the data is sufficient to identify peaks or apparent peaks for some SPA qualifying features including avocet in April (this species being absent in all other count months); goldeneye, lapwing and little egret in October-March; pochard in September – January; teal and wigeon in November-February; and foraging marsh harrier between May and July (inclusive).

4.3.48 Greylag goose and mallard occurred regularly year-round in numbers greater than singles or pairs. This is indicative of their status as common and widespread resident birds that both breed and over-winter in the UK. Only their non-breeding or winter numbers count towards the qualifying population of the designated sites

4.3.49 Peak counts of Humber Estuary qualifying features at or above 1% of the qualifying population and that occurred during the qualifying period included[38]:

[37] Due to a numbering error, there was no Sector 17.

[38] This is not confirmation that the birds using the Tileworks are part of the designated site qualifying population, it merely identifies where qualifying species occurred during the surveys and the potential for their occurrence to be significant or to require further discussion within the Environmental Statement (**Application Document 6.9 Chapter 9 Ornithology**) and the Habitats Regulations Assessment (**Application Document 5.2 Habitats Regulations Assessment Report**).

- Avocet (pool 4; April);
- Goldeneye (pools 1, 4, 9, 13 and 14; October - March);
- Greylag goose (pools 4, 7, 10 and 11; November-February);
- Little egret (pools 8, 9, 11 and 13; December);
- Mallard (pool 4; January);
- Pochard (pools 4 and 11; September, October and January);
- Snipe (pool 1; January);
- Teal (pools 4, 5 and 11; December-February);
- Water rail (pools 11, 13, 14 and 16; October-December); and
- Wigeon (pools 4, 5 and 11; December-February).

4.3.50 All count sectors/pools are within 500 m of the Order Limits; however, this includes the use of an existing access road along the northern side of the Tileworks and several ponds that are heavily screened by dense vegetation and tall earth bunds. Therefore, only pools 4-7 and 18-21 would be exposed to “new” construction activities. Pool 6 overlaps the Order Limits.

Non-breeding qualifying species accounts

4.3.51 The following sections describe the patterns of distribution, habitat use and flight activity by key priority species in the non-breeding season, with particular focus on qualifying features of the key designated sites potentially affected by the Project, including Derwent Valley/Ings Ramsar/SPA/SSSI; Humber Ramsar/SPA/SSSI; River Idle Washland SSSI; and Sutton and Lound Gravel Pits SSSI. Accounts are provided for species that occurred in sufficient numbers and/or sufficient frequency to be of relevance to the assessment of effects presented in **Application Document 6.9 Environmental Statement Chapter 9 Ornithology**. These include:

- Pink-footed goose;
- Greylag goose;
- Lapwing;
- Golden plover;
- Curlew;
- Mallard;
- Teal;
- Wigeon;
- Bittern;
- Marsh harrier;
- Goldeneye;
- Redshank;
- Shelduck;

- Shoveler;
- Snipe;
- Little egret; and
- Water rail.

4.3.52 The volume and detail of the narrative describing these species is proportionate to their numbers and frequency of occurrence within the survey area and the contribution they made to the baseline data set, which is commensurate with the perceived potential for the Project to result in significant effects on them. The numbers and distribution of qualifying species that occurred occasionally and sparsely throughout the survey area (whimbrel, jack snipe, dunlin, sanderling, greenshank and green sandpiper), and Bewick's swan, are described collectively at the end of this section.

4.3.53 For the purposes of describing bird distribution, the following broad areas are referred to:

- Yorkshire Wolds area (which includes all of Route Section A north of the A63);
- Humberhead Levels area (either side of the Rivers Ouse and Humber, generally between Broomfleet and Luddington, but sometimes as far north as Ellerker; this includes the southern half of Route Section A and most of Route Section B);
- Isle of Axholme area (which includes the area between Crowle and the Warping Drain/Owston Ferry; this includes Route Sections C and most of D);
- South of Hatfield Moors area (which includes a wide area of washlands and arable farmland west of the Order Limits and southwards from Hatfield Moor as far as Misterton Carrs and Bawtry in Route Sections D and E);
- The River Idle Valley and Carrs area (which includes all habitat between Westwoodside and Gringley on the Hill; this covers the southern end of Route Section D and the northern parts of Route Section E); and
- Beckingham to Marnham area (within most of Route Section E and all of Route Section F).

4.3.54 In particular, the baseline data for pink-footed goose were a poor fit to the standardised Project Route Section convention. The broad areas above are especially useful when describing the distribution of this species.

Pink-footed Goose

4.3.55 Pink-footed goose occurred between the months of September and March (inclusive). Records of this species generated in the winter of 2022-23 were limited by the restricted survey effort at that time, with three flight records only in November and December 2022, each numbering fewer than 50 birds. Surveys over the following three winters demonstrated that this species is distributed widely (**Figure A9.2.25 Non-breeding pink-footed goose distribution**) and occurs locally in large numbers (in the thousands), but in the context of the areas surveyed, it shows particular concentrations of habitat use within the following broad areas:

- The Humberhead levels area either side of the Rivers Ouse and Humber, between Broomfleet and Luddington, with occasional occurrence northeast as far as Ellerker

- The River Idle Valley and Carrs area between Westwoodside and Gringley on the Hill; and
- South of Hatfield Moor area, which for this species included a wide area of washlands and arable farmland west of the Order Limits and southwards from Hatfield Moor as far as Misterton Carrs and Bawtry.

4.3.56 The key area for this species was the Humberhead Levels because it generated the greatest amount of goose activity overall and because the geese present in these areas were most likely to be part of the qualifying population of the Humber Estuary SPA. Goose activity in the River Idle Valley and Carrs area, and South of Hatfield Moor area can be attributed largely or completely to the populations that roost at Hatfield Moor and are therefore highly unlikely to be part of any qualifying population of a designated site[39]. The cumulative distribution of this species is shown as dot plots on **Figure A9.2.25 Non-breeding pink-footed goose distribution** which also show the wetland bird count sectors where the species occurred and within which counts exceeded 1% of the Humber Estuary population.

4.3.57 Within the Humberhead Levels area, the overall distribution of the species showed a strong bias in all survey years to the arable fields southwest of the Selby railway line as far south as Garthorpe and Luddington. Counts of birds on the ground within 500 m of the Order Limits peaked at up to 2,000 in the fields immediately west and southwest of Broomfleet Tileworks, and 3,000 in the fields west of Adlingfleet, with similar numbers southwest of Garthorpe. Peak counts in the high hundreds and low thousands also occurred in isolated fields within the wider landscape. Both the VP data and third-party data indicate that large numbers of foraging pink-footed geese make medium-long distance movements from regular Humber roosts to locations as far away as Beverley, where a 12,000-strong roost was noted in November 2024, and from where large flocks of geese were observed making flights back towards the Humber during VP surveys. The Yorkshire Naturalists Union Bird report (Yorkshire Naturalists Union, 2022) describes yearly observations of pink footed geese making such movements in large numbers, with observations of birds commuting over North Cave wetlands presumably moving to and from the Humber Wildfowl Refuge at Alkborough Flats to feed on the Wolds. These birds are considerably outside of the survey areas and the ZoI of the project at approximately 5 km northeast of the closest part of the Order Limits. Foraging areas near Market Weighton and Arras on the Yorkshire Wolds are approximately 12 km northwest of the Order Limits. There were no records of this species alighting on the Yorkshire Wolds within 500 m of the Order Limits.

4.3.58 In the River Idle Valley and Carrs area, peak counts reached 3,000 birds foraging on Misterton Carrs immediately south of the River Idle, with lesser numbers ranging from six to several hundred birds occurring across Misterton and Gringley Carrs, all but one (six birds) at distances in excess of 500 m west of the Order Limits.

4.3.59 The observations of habitat use in the River Idle Valley and Carrs area were linked to observations from VPs 13 and 14 (and, to supplement these results, additional observations from VP21), of hundreds of birds within the airspace north of and adjacent to, the River Idle (South of Hatfield Moor area), with thousands of additional birds observed beyond (north of) the viewsheds of these VPs. Some of the birds observed from these VPs made their way onto Misterton Carrs to feed on beet tops,

[39] Hatfield Moor is in fact an SPA and SSSI, but its qualifying features do not include pink-footed goose, despite large roosts occurring there each winter.

winter wheat and stubble, while still more were observed deviating west along the River Idle Valley and/or settling at other locations well north of the area viewed from these VPs.

4.3.60 Further investigation of the South of Hatfield Moor area found that these birds had alighted onto winter wheat fields over a wide area north of the River Idle as far as Hatfield Moor, and a long way west of the Order Limits, where peak counts of up to 5,000 foraging birds were recorded on the ground. These birds were later confirmed through tracking surveys to have come off roosts at Hatfield Moor, where up to 8,000 birds were counted.

4.3.61 Habitat use was not recorded south of Misterton and Gringley Carrs and this was reflected in the low levels of flight activity recorded at VPs 15-17, all of which was at high elevation and well above the maximum heights of any of the proposed overhead line infrastructure. Across the southern reaches of the Project the only location in the wider study area where pink-footed goose exceeded numbers in the singles and 10s was Sutton and Lound Gravel pits 4.51 km west of the Order Limits, where counts of up to 500 have been recorded for the period 2019/20 – 2023/24.

2023-24 Habitat Use

4.3.62 **Figure A9.2.26 Cumulative and peak counts of Pink-footed goose over winter 2023-24** shows the field-by field distribution and peak counts of pink-footed goose where they occurred within the Humberhead Levels area each month between September 2023 and March 2024.

4.3.63 Within 500 m of the Order Limits peak counts exceeding 1% of the SPA qualifying population (273 birds or more) occurred at the locations summarised in Table 4.13

Table 4.13 – Pink-footed goose records exceeding 1% of the Humber Estuary SPA qualifying population 2023-24

Record type	Figure code	Month	Peak count	Cumulative number (all counts)	Number of counts (frequency)	Crop cover
Diurnal foraging	P1.12	December 2023	2,000	4,140	3	Winter barley
Diurnal foraging	P1.7	November 2023	1,000	2,488	9	Winter barley
Diurnal foraging	P1.6	October 2023	3,000	3,065	2	Winter barley
Diurnal foraging	P1.3	November 2023	1,000	5,026	10	Winter barley and spring barley

4.3.64 These can be grouped broadly into two subsets:

- Those occurring immediately southwest of Broomfleet Tileworks (P1.12); and

- Those occurring west and southwest of Adlingfleet (P1.3, P1.6 and P1.7).

4.3.65 The wider patterns of occurrence were similar to those occurring within 500 m of the Order Limits, in that all recorded occurrences were of diurnal birds engaging in foraging behaviour within the broad areas described in the bullets above. The majority of records originated from south of the River Ouse.

4.3.66 There were several occurrences on a single day (14 March 2024) at a fishing pond adjacent to Warping Drain in Nottinghamshire, when seven flocks numbering between 6 and 350 birds (cumulative total 1,432) landed at the pond, presumably to roost. This location is approximately 1 km northwest of the Order Limits within the River Idle Valley and Carrs area.

2024-25 Habitat Use

4.3.67 **Figure A9.2.27 Cumulative and peak counts of Pink-footed goose over winter 2024-25** shows the field-by field distribution and peak counts of pink-footed goose where they occurred within the Humberhead Levels (Humberhead Levels area) each month basis between September 2024 and March 2025.

4.3.68 Within 500 m of the Order Limits peak counts exceeding 1% of the SPA qualifying population (273 birds or more) occurred at the locations summarised in Table 4.14.

Table 4.14– Pink-footed goose records exceeding 1% of the Humber Estuary SPA qualifying population 2024-2025

Record type	Figure code	Month	Peak count	Cumulative number (all counts)	Number of counts (frequency)	Crop cover
Diurnal foraging	P2.26	February 2025	860	860	1	Spring barley; Other crops
Diurnal foraging	P2.31	October 2024	450	450	1	Winter wheat
Diurnal foraging	P2.13	February 2025	1,500	2000	2	Winter wheat; ploughed
Diurnal foraging	P2.9	January 2025	1,500	1,500	1	Winter wheat
Diurnal foraging	P2.10	February 2025	1,000	1,210	2	Winter wheat
Diurnal foraging	P2.14	January 2025	950	950	1	Stubble
Diurnal foraging	P2.12	January 2025	1,000	2,000	2	Winter wheat; ploughed

Record type	Figure code	Month	Peak count	Cumulative number (all counts)	Number of counts (frequency)	Crop cover
Nocturnal, probably roosting	P2.27	January 2025	1,000	1,000	1	Open water, marginal grassland and winter wheat
Nocturnal; probably roosting	P2.15	January 2025	1,000	1,000	1	Saltmarsh; ephemeral pools
Diurnal foraging	P2.7	October 2024	1,550	1,550	1	Other crops

4.3.69 These can be grouped broadly into the following subsets, with clear preference shown to the fields north of the River Ouse, in contrast to the previous winter:

- Those occurring immediately west and southwest of Broomfleet Tileworks (P2.9, P2.10, P2.12, P2.14, P2.27, P2.13, P2.26, and P2.31); and
- Those occurring close to Ousefleet and RSPB Blacktoft Sands (P2.15 and P2.7).

4.3.70 Pink-footed goose was more widespread and occurred in larger numbers overall than in the previous winter across the Humberhead Levels, although this might be partly attributable to there being more surveys undertaken than in the previous winter. The majority of records were again of birds foraging on crops diurnally, with the only nocturnal records being single occurrences, one at a pool at Broomfleet Tileworks and the other at Blacktoft Sands RSPB Reserve.

4.3.71 In the River Idle Valley and Carrs area close to the River Idle and Misterton Carrs there were several flocks recorded numbering several thousand birds (peak single count 3,000 birds with cumulative totals of over 4,000 birds) west of the Order Limits but only one flock of 68 birds occurred within 500 m of the Order Limits (**Figure A9.2.25 Non-breeding pink-footed goose distribution**).

2025-26 Habitat Use

4.3.72 Records from this survey year were focused more heavily on the River Idle Valley and Carrs and South of Hatfield Moor areas, as most of the VP and field count effort came to an end across the Humberhead Levels (except for a few ongoing VP surveys) and more attention was placed on the River Idle Valley/Washlands, Misterton and Gringley Carrs and the broad area south of Hatfield Moor.

4.3.73 Within the period November-December 2025, feeding flocks numbering up to 5,000 were recorded close to Misson Training Area SSSI approximately 4 km northwest of the Order Limits. Other flocks numbering in the hundreds occurred both north and south of this location and in some cases east of Hatfield Moor. Their presence was closely linked to the roosting population of Hatfield Moor, as evidenced by

observations of flocks departing and returning to the Hatfield Moor roost in November and December 2025 and corresponding observations of field use made during the goose tracking surveys.

4.3.74 The peak flock size leaving the Hatfield roost was 8,000 birds, which moved off the roost and flew to the southwest, returning from the same direction on the same day in November 2025. Subsequent surveys recorded similar occurrences, with early morning movements from roosts occurring towards the open countryside to the south and southwest and movements back to roost in the opposite direction at the end of each day. Most surveys also recorded smaller numbers of birds moving southeast and eastwards. The patterns of habitat use were closely matched to the flight observations, with birds foraging mainly on winter cereal fields over a wide area north and west of Westwoodside, with particular concentrations between Wroot and Misson, and close to Hatfield Chase Ditches.

4.3.75 Further south, birds were also recorded on regular VP surveys, field counts and tracking surveys landing to forage on winter cereals, stubble and beet tops west of Misterton and at least 1 km west of the Order Limits. In addition to the tracking surveys, observations of distant flight activity from VP14 in October 2025 included large flocks of pink-footed geese numbering several thousand north of the viewshed, over the farmland north of the River Idle, although accurate spatial observations were hindered by the distances involved. These birds were seen dropping to feed north of the River Idle and making movements parallel to the river and back north away from it. These observations align well with those from the tracking surveys and can be taken as further evidence of activity that is entirely or mostly attributable to the Hatfield Moor population.

4.3.76 **Figure A9.2.25 Non-breeding pink-footed goose distribution** shows the distribution of pink-footed goose habitat use in the River Idle Valley and Carrs and south of Hatfield Moor areas as far as Bawtry and Gringley. Records from regular field counts and VP surveys (VPs 14 and 21) are included for completeness

Flight activity

4.3.77 Pink-footed goose flights were observed at all but one VP (VP20 on the Yorkshire Wolds). The majority of flight activity was recorded (from north to south) at VPs 3 though to 8 (Ellerker through to Garthorpe/Luddington), reflecting patterns of habitat use and movements between Humber roosts and foraging areas across adjacent farmland, almost all of the birds travelling less than 6 km to forage.

4.3.78 Flight rates fell away rapidly north and south of these VPs but there was a spike in flight activity at VP13 (and 14 and 21) reflecting the occurrence of the species in large numbers at Hatfield Moor, these birds commuting to and from the River Idle Valley and adjacent arable farmland to forage. Flights recorded at Wolds VPs (VPs1, 2, 19 and 20) and at VPs distant from the Ouse/Humber, Hatfield Moors and River Idle (VPs 9-12; VPs 15-17) were much fewer, resulting in flight rates of only a few birds per hour at most. The highest flight rates correspond to locations where birds moved regularly between roosts (the River Ouse/Humber) and foraging sites (arable fields either side of the River).

4.3.79 The highest risk of collision[40] occurred within the Humberhead Levels. Both the amount of flight activity and the proportion of that activity at risk of collision with the

[40] Expressed as a product of the amount of flight activity and the proportion of that activity that occurred at risk height across the Order Limits

proposed overhead line were higher across this area than they were elsewhere. The proportion at risk height was generally higher in these areas because birds commuted relatively short distances between roosts and foraging locations often at moderate heights, the birds dropping to or gaining height from feeding locations in the vicinity of the existing and proposed overhead lines, their flight trajectories therefore putting them at risk more often. In comparison, flights elsewhere were likely to be longer distance movements to more distant foraging sites. For example, of the flights recorded across the Wolds from VPs 1, 19 and 2, birds would have been commuting to feeding areas close to Beverley and Market Weighton, gaining height to cross the Wolds. Regardless of their actual destination, flight activity recorded from these VPs was almost universally high enough to avoid any chance of collision with existing or proposed overhead wires. Elsewhere, goose flights were focused along corridors of movement that rarely crossed or approached the Order Limits (such as close to the River Idle Valley). Thus, north of VP3 (Ellerker) and south of VP 8 (Luddington) the level of risk dropped to zero or close to zero almost everywhere despite there being some pockets of elevated levels of flight and foraging activity.

4.3.80 There were no cases of birds striking the existing overhead line and very few observations of birds needing to make last-minute evasive action to avoid it. While quantitative or objective analysis of the observed behaviours of pink-footed geese around the existing overhead line is not possible, almost all goose flights involved birds either flying consistently at a “safe” height when crossing it; or appearing to approach the existing overhead line at a “safe” height deliberately to cross the overhead line before dropping quickly to their foraging fields, and vice versa; and there were also occurrences of birds flying alongside the existing overhead line, apparently aware of its presence and potentially using it as a navigational aid between roosts and foraging areas. Some key interactions are summarised below:

- There were 14 occurrences of individual birds or flocks of birds either deliberately evading the overhead line or flying directly between the wires to avoid harm. These occurred at VPs 3, 4b, 5, 7 and the Ouse VP and constitute the only direct interactions observed between pink-footed geese and the existing overhead line; and
- Records of birds flying alongside the existing overhead line were recorded at VP7 in November 2023 on at least two occasions, when birds flew between roosts at or close to Blacktoft Sands Reserve and foraging fields close to Adlingfleet Drain, east of the Order Limits and existing overhead line.

Table 4.15– Summary flight data for non-breeding pink-footed goose

VP[41]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	62	443	7.15	0	0.00
19	36	1,118	31.06	0	0.00
20	36	0	0.00	0	0.00
2	53	464	8.75	0	0.00
3	87	2,906	33.40	24.2	8.08
4a	64	2,479	38.73	8.3	3.21
4b	66	10,555	159.92	11.8	18.87
18a	72	4,152	57.67	10.3	5.94
18b	72	3,972	55.17	17.4	9.60
5	87	8,781	100.93	35.9	36.23
6	80	3,660	45.75	17.9	8.19
Ouse	103.75	4,492	43.30	33.3	14.42
7	88.5	6,172	69.74	25	17.44
8	69	3,360	48.70	34.4	16.75
9	72	321	4.46	0	0.00
10	72	1,895	26.32	0	0.00
11	45	389	8.64	12.5	1.08

[41] In geographical order from north to south.

VP[41]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
12	66	1,244	18.85	6.3	1.19
13	66	6,029	91.35	2.9	2.65
21	36	495	13.75	20	2.75
14	81	4977	61.44	13.2	8.11
15	48	262	5.46	0	0.00
16	45	115	2.56	0	0.00
17	45	303	6.73	0	0.00
Total	**1552.25**	**68,584**			

Golden plover

Habitat Use

4.3.81 Golden plover was sparsely distributed and, with some exceptions, present only in small numbers, as shown on **Figure A9.2.28 Non-breeding golden plover distribution**. It was present as a foraging species at locations widely throughout the Humberhead Levels between Ellerker and Keadby and across Gringley and Misterton Carrs. There were two occurrences of habitat use on the Yorkshire Wolds. In virtually all cases golden plovers fed on cereal and legume crops.

4.3.82 There were no counts of this species that equalled or exceeded 1% of the qualifying population of the Humber Estuary designations within 500 m of the Order Limits. Peak counts reached 55 in some of the fields adjacent to the River Ouse. A single count of 10,000 birds was recorded from VP3, demonstrating the presence in the wider area of very large numbers of golden plover, however these were seen in flight over the northern shores of the River Humber close to Brough where they settled; this was well beyond the viewshed within which formal recording of bird flights or habitat use occurred, and over 1.6 km south of the Order Limits.

4.3.83 Data supplied by RSPB included counts equalling or exceeding 1% of the Humber SPA population within and adjacent to the Order Limits in the fields between Eastoft and Luddington. Here, peak counts of up to 650 were recorded in November 2024 on winter wheat and bean crops. Records for Blacktoft Sands over a longer period, provided by RSPB, include a five-year peak mean count of 3,170 birds.

4.3.84 Vantage point data include overflying birds in numbers that greatly exceeded the records of habitat use, with flocks numbering up to 1,300 individuals. The highest counts occurred at VPs 4a, 4b and 5, beyond which numbers were considerably lower. Given the level of survey coverage between Ellerker and southwards as far as Keadby, this indicates that these birds were moving between roosts on or adjacent to the Rivers Humber and Ouse and feeding locations beyond the areas surveyed that would be largely unaffected by the project.

Flight activity

4.3.85 Golden plover flights were observed at all but three VPs (VP 1, 2 and 17) indicating their widespread occurrence across lowland farmland in winter. The majority of flight activity occurred at VPs 4a and 4b with low to moderate levels of activity at other VPs across the Humberhead Levels between Ellerker and as far south as Keadby. Beyond these distances from the Rivers Ouse and Humber the passes per hour recorded were extremely low, with the exceptions of VPs 14 and 21. However the number of passes per hour at the River Ouse crossing point itself was low and this may reflect that golden plover roosts and favoured wetland foraging areas lie downstream of the crossing point at sites like Blacktoft Sands Reserve, Alkborough Flats and Island Farm and the much larger areas of intertidal mudflats beyond.

4.3.86 The flight data match, as expected, to the patterns of habitat use recorded for the species, demonstrating a general trend of lower risk levels with distance from the Rivers Ouse and Humber, with a small spike in occurrence immediately south of the River Idle washlands, which is a focal point for some wetland birds.

4.3.87 The level of collision risk for this species in flight, taking into account the hourly flight rate and the percentage of those flights at risk, is low for all VPs and zero or close to

zero for most of the VPs, including those lying between the River Ouse/Humber and Ellerker. VPs 4a and 4b, where most golden plover flight activity was recorded, did not contribute any risk since almost all recorded flight was too high for a collision to occur with overhead line infrastructure, and most of the flights did not intersect the Order Limits. The highest risk to overflying golden plover was recorded at VP3 near Ellerker, where the majority of flight was within the height range that would be occupied by the proposed overhead line, albeit the overall passage rate for this species was relatively low.

Table 4.16 – Summary flight data for non-breeding golden plover

VP[42]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	62	0	0.00	0	0.00
19	36	88	2.44	33.3	0.81
20	36	10	0.28	0	0.00
2	53	0	0.00	0	0.00
3	87	706	8.11	71.4	5.79
4a	64	2,372	37.06	0	0.00
4b	66	4,800	72.73	0	0.00
18a	72	123	1.71	0	0.00
18b	72	66	0.92	0	0.00
5	87	916	10.53	0	0.00
6	80	280	3.50	50	1.75
Ouse	103.75	259	2.50	66.7	1.67
7	88.5	40	0.45	0	0.00
8	69	53	0.77	0	0.00
9	72	205	2.85	33.3	0.95
10	72	17	0.24	100	0.24
11	45	175	3.89	50	1.94
12	66	59	0.89	100	0.89
13	66	75	1.14	0	0.00
21	36	12	0.33	50	0.17
14	81	116	1.43	0	0.00

[42] In geographical order from north to south.

VP[42]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
15	48	28	0.58	0	0.00
16	45	6	0.13	0	0.00
17	45	0	0.00	0	0.00
Total	**1552.25**	**10,406**			

Greylag Goose

4.3.88 Greylag goose occurred in every month in all survey years. Records of this species generated in the winter of 2022-2023 were limited by the restricted survey effort at that time, with only two flight records in December 2022, respectively numbering 17 and 24 birds. Survey records from the following three winters show that this species is distributed mostly within the Humberhead Levels either side of the River Ouse with scattered records more widely across the proposed route of the Project, particularly near Three Rivers (Keadby) and Warping Drain near Misterton (**Figure A9.2.29 Non-breeding greylag goose distribution**)

4.3.89 Across the Humberhead levels, the key aggregations of birds within 500 m of the Order Limits were recorded on and immediately south of the River Ouse where peak counts reached 400 birds, and in areas within and immediately surrounding and within Broomfleet Tileworks, where peak counts exceeded 1% of the Humber Estuary SPA population on several occasions and reached 600 birds on one occasion. Wetland bird counts recorded peaks exceeding 1% of the SPA qualifying population within 500 m of the Order Limits at Broomfleet Tileworks (pools 4, 7, 10 and 11) and at the River Ouse/RSPB Blacktoft Sands (Sectors R6, S2, S3, S4 and S5)

Habitat use over winter 2023-24

4.3.90 Habitat use by greylag goose is summarised in Table 4.17 for the winter of 2023-2024 (**Figure A9.2.30 Cumulative and peak counts of non-breeding greylag goose over winter 2023-24**), which sets out where counts exceeded 1% of the SPA qualifying population (22 birds) within 500 m of the Order Limits (which occurred on two occasions).

Table 4.17 – Greylag goose records exceeding 1% of the Humber Estuary SPA qualifying population within 500m of the Order Limits on the Humberhead Levels.

Record type	Figure code	Month	Peak count	Crop cover
VP Survey	GG1.2	December 2023	114	Open water (fishing pond)
VP survey	GG1.13	November 2023	52	Wet grassland/saltmarsh

Habitat use over winter 2024-25

4.3.91 Table 4.18 and **Figure A9.2.31 Cumulative and peak counts of non-breeding greylag goose over winter 2024-25** summarise greylag goose monthly peak counts exceeding 1% of the SPA population and respective habitat use during the winter of 2024-25 within 500 m of the Order Limits.

Table 4.18 – Greylag goose records exceeding 1% of the Humber Estuary SPA qualifying population in Broomfleet Tileworks

Record type	Figure code	Month	Peak count	Crop cover
WeBS survey	GG2.24	September 2024	700	Spring Barley
VP survey	GG2.22	October 2024	40	Wet grassland/saltmarsh
VP Survey	GG2.17	January 2025	600	Winter Wheat
VP Survey	GG2.14	November 2024	250	Beet
VP Survey	GG2.13	February 2025	32	Winter Wheat
VP Survey	GG2.10	December 2024	234	Open water (Tileworks pool)
FLL Survey	GG2.15	December 2024	113	Beet
Nocturnal Survey	GG2.9	November 2024	120	Beet

4.3.92 Greylag geese showed a clear preference for the fields adjacent to, and especially those west of Broomfleet Tileworks, where foraging birds were attracted to cereal and beet crops. The Tileworks ponds were also frequently used. To a lesser extent, the field immediately south of the River Ouse crossing point and the saltmarsh habitats to the east of the crossing were also favoured by foraging greylag geese.

Flight Activity

4.3.93 Flight activity is summarised in Table 4.19. Greylag goose flights were observed at most VPs, excluding VPs 19, 20, 8, 14 and 15. The majority of flight activity was recorded close to the Market Weighton Canal and Broomfleet Tileworks (VP4b) and southwards as far as the River Ouse crossing, reflecting patterns of habitat use and movements between Humber roosts and foraging areas across farmland at Broomfleet Tileworks and within RSPB Blacktoft Sands and adjacent areas.

4.3.94 Flight activity was significantly less frequent elsewhere, except for the areas around Warping Drain (VP12) and the River Idle (VP13).

4.3.95 The highest risk of collision[43] occurred within the Humberhead Levels, especially close to the Market Weighton Canal and the River Ouse. The proportion of flights at risk height was generally higher in these areas because birds commuted relatively short distances between roosts and foraging locations often at moderate heights, the

[43] Expressed as a product of the amount of flight activity and the proportion of that activity that occurred at risk height across the Order Limits.

birds dropping to or gaining height from feeding locations in the vicinity of the existing and proposed overhead lines close to Broomfleet Tileworks and RSPB Blacktoft Sands, their flight trajectories therefore putting them at risk more often.

4.3.96 Birds occurring close to the River Idle and Warping Drain were likely to have originated from Hatfield Moor, which supports large winter goose roosts.

4.3.97 Flight rates and risk were moderately high at VP1, due to birds arriving to feed on Cottingham Golf Course.

4.3.98 There were no cases of birds striking the existing overhead line and very few observations of birds needing to make last-minute evasive action to avoid it, the reasons for which are the same as those described for pink-footed goose in paragraph 4.3.80.

Table 4.19 – Summary flight data for non-breeding greylag goose

VP[44]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	53	139	2.62	61.1	1.60
19	30	0	0.00	0	0.00
20	27	0	0.00	0	0.00
2	44	5	0.11	0	0.00
3	72	35	0.49	28.6	0.14
4a	52	41	0.79	50	0.39
4b	54	293	5.43	52.4	2.84
18a	66	213	3.23	7.1	0.23
18b	66	171	2.59	0	0.00
5	72	1,882	26.14	7.1	1.86
6	65	31	0.48	66.7	0.32
Ouse	91.75	2,427	26.45	9.9	2.62
7	76.5	13	0.17	50	0.08
8	60	0	0.00	0	0.00
9	60	23	0.38	0	0.00
10	60	41	0.68	25	0.17
11	36	6	0.17	100	0.17
12	57	233	4.09	50	2.04

[44] In geographical order from north to south.

VP[44]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
13	57	133	2.33	50	1.17
21	30	2	0.07	0	0.00
14	72	0	0.00	0	0.00
15	42	0	0.00	0	0.00
16	39	3	0.08	0	0.00
17	39	1	0.03	0	0.00
Total	**1321.25**	**5,692**			

Lapwing

4.3.99 Non-breeding lapwing occurred in all winter survey seasons, between September 2023 and March 2024; October 2024 and March 2025; and November 2025 and March 2026. During the 2022/23 winter season, this species was recorded only in January, however this is likely to be due more to limited survey effort than an absence of the species per se.

4.3.100 **Figure A9.2.32 Non-breeding lapwing distribution** shows the overall distribution of non-breeding lapwing records over winter. This species was most abundant throughout the Humberhead Levels, with occasional records from Cottingham to Westfield on the western fringes of the Yorkshire Wolds. Numbers and frequency of occurrence peaked west of Ellerker southwards across the Humberhead Levels as far as Luddington, with key focal points immediately west of Ellerker, east of Oxmardyke Washlands, adjacent to Broomfleet Tileworks, the fields either side of the River Ouse, west of Garthorpe and Luddington.

4.3.101 Further focal points more distant from the Rivers Ouse and Humber include the fields adjacent to Warping Drain southeast of Haxey and fields adjacent to the River Idle, and Misterton Carrs. The species was not recorded south of Walkeringham.

4.3.102 The majority of lapwing records were of singles and groups numbering less than 30 individuals, with occasional records of flocks in the hundreds. There were four occurrences of peak counts equalling or exceeding 1% of the Humber Estuary population (277 birds, 437 birds, 450 birds and 650 birds). Only one of these records (450 birds) was within 500 m of the Order Limits, approximately 150 m west of a proposed access track adjoining Ox Pasture Lane, south of Luddington. This location corresponds to the locations of some of the plover counts made by RSPB, which also included counts in excess of 1% of the SPA population in fields south and southwest of Luddington (see paragraphs 4.2.28 – 4.2.30, Table 4.5 and **Figure A9.2.4 RSPB Monitored Sites**).

Habitat use

4.3.103 **Figure A9.2.33 Cumulative and peak counts of non-breeding lapwing over winter 2023-24 and 2024-25** shows the field-by field distribution and peak counts of

lapwing and where they occurred within the Humberhead levels on a monthly basis between September and March of each respective non-breeding season, and the crop cover at the time they occurred.

4.3.104 Within 500 m of the Order Limits, peak counts exceeding 1% of the SPA qualifying population (227 birds or more) occurred at one location in 2024, summarised in Table 4.20, for all years.

Table 4.20 – Lapwing records exceeding 1% of the Humber Estuary SPA qualifying population

Record type	Figure code	Month	Peak count	Crop cover
Vantage point	L2.61	November 2024	450	Winter Barley

4.3.105 While lapwing was recorded at several wetland bird count sectors within 500 m of the Order Limits (see Table 4.10 to Table 4.12), none of the counts at those locations equalled or exceeded 1% of the Humber SPA population, with peak counts being typically well below 100 birds.

Flight Activity

4.3.106 Lapwing flights were recorded from all VPs except (from north to south) VPs 19, 20, 2 and16. The majority of flight activity was recorded across the Humberhead Levels between Ellerker and Luddington, with particular hotspots of activity close to the Market Weighton Canal (VPs4a/b), the River Ouse and immediately south of the river (River Ouse VP, VP7) and Luddington (VP9). Away from the Humberhead Levels, there was a separate peak of activity close to Warping Drain (VP12), with moderate levels of flight activity close to the River Idle (VP13), across Misterton and Gringley Carrs and at the southern extent of the Project (VP17).

4.3.107 The highest potential risk of collision[45] occurred around the Humberhead levels, at VP4b near the Market Weighton Canal/Broomfleet tileworks, at the River Ouse close to Luddington (VP 9), and at/adjacent to Warping drain (VP12) and the River Idle (VP13).

Table 4.21 – Summary flight data for non-breeding lapwing

VP[46]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	47	26	0.55	0	0.00
19	30	0	0.00	0	0.00
20	27	0	0.00	0	0.00
2	38	0	0.00	0	0.00

[45] Expressed as a product of the amount of flight activity within each viewshed and the proportion of that activity that occurred at risk height across the Order Limits.

[46] In geographical order from north to south.

VP[46]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
3	66	690	10.45	37.5	3.92
4a	46	235	5.11	25	1.28
4b	48	1,381	28.77	22.2	6.39
18a	54	384	7.11	40	2.84
18b	54	291	5.39	28.6	1.54
5	63	101	1.60	50	0.80
6	54	147	2.72	33.3	0.91
Ouse	67.75	2,327	34.35	48.4	16.62
7	65.5	1,071	16.35	12.5	2.04
8	54	445	8.24	22.2	1.83
9	54	1,102	20.41	75	15.31
10	54	143	2.65	0	0.00
11	30	34	1.13	100	1.13
12	51	1,098	21.53	43.8	9.43
13	51	456	8.94	71.4	6.38
21	30	100	3.33	100	3.33
14	66	323	4.89	40	1.96
15	36	72	2.00	100	2.00
16	33	0	0.00	0	0.00
17	33	267	8.09	0	0.00
Total	**1,152.25**	**10,693**			

Curlew

4.3.108 Non-breeding curlew was recorded in all winter survey seasons, with most records occurring within 1 km of the River Ouse, except for occasional small numbers of birds (counts of up to 3 individuals) on arable fields close to Ellerker (**Figure A9.2.34 Non-breeding curlew distribution**). Focal points of habitat use included farmland north of Faxfleet Pond, and the habitats on and immediately adjacent to the River Ouse. However, since all occurrences of curlew north of Faxfleet Pond were more than 500 m from the Order Limits, the remaining narrative on this species focuses on the habitats close to the River Ouse crossing.

Habitat use

4.3.109 Within 500 m of the Order Limits, curlews showed a clear preference for habitats immediately adjacent to the River Ouse, using coastal wetland/saltmarsh grassland within RSPB Blacktoft Sands and on the north bank of the river, and adjacent cereal crops.

4.3.110 Peak counts exceeding 1% of the SPA qualifying population (32 birds) are summarised in Table 4.22.

Table 4.22 – Curlew records exceeding 1% of the Humber Estuary SPA qualifying population

Record type	Month	Peak count	Crop cover
Vantage Point	February 2024	56	Coastal Wetlands
FLL survey	January 2025	37	Coastal Wetlands

4.3.111 Just beyond 500 m from the Order Limits, the 1% SPA population threshold was exceeded to the east of the River Ouse crossing point, where peak counts of 56 birds, 70 birds and 39 birds were recorded. This consolidates observations that curlews do not typically forage far from the estuarine habitats of the Rivers Ouse and Humber.

4.3.112 Wetland bird counts included only one record of curlew exceeding the 1% SPA population threshold within 500 m of the Order Limits, in Sector R6 (40 birds in November 2023), all other significant peak counts occurring more than 500 m east of the Order Limits. The species was absent from Broomfleet Tileworks during the surveys.

Flight activity

4.3.113 Curlew flight activity was negligible or zero at most locations other than the Humberhead Levels between Ellerker (VP3) and Adlingfleet (VP7), with no records from any other VPs (Table 4.23). The majority of flights were recorded at the River Ouse, which suggests movements between foraging areas along the River Humber/Ouse corridors over and above interchange of birds between estuarine and terrestrial locations. At VPs 18a and 18b on the Market Weighton Canal, where respectively the second and third largest numbers of flights were recorded, most flights were in a southerly direction, suggesting that these birds were moving to the Humber Estuary.

4.3.114 The highest risk of potential collision[47] occurred at the River Ouse. Both the amount of flight activity and the proportion of that activity at risk of collision with the overhead line were higher across this area than they were elsewhere. The proportion at risk height was higher in this area due to birds using the estuary and River Ouse as a foraging site, which included birds dropping into or gaining height from foraging locations along the coastal saltmarsh, wet grassland and mudflat habitats.

[47] Expressed as a product of the amount of flight activity and the proportion of that activity that occurred at risk height across the Order Limits.

Table 4.23 – Summary flight data for non-breeding curlew

VP[48]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	56	0	0.00	0	0.00
19	36	0	0.00	0	0.00
20	36	0	0.00	0	0.00
2	47	0	0.00	0	0.00
3	81	11	0.14	33.3	0.05
4a	58	21	0.36	40	0.14
4b	60	10	0.17	50	0.08
18a	60	52	0.87	14.3	0.12
18b	60	122	2.03	17.6	0.36
5	78	0	0.00	0	0.00
6	69	21	0.30	0	0.00
Ouse	79.75	923	11.57	12.1	1.40
7	77.5	2	0.03	100	0.03
8	63	0	0.00	0	0.00
9	66	0	0.00	0	0.00
10	66	0	0.00	0	0.00
11	39	0	0.00	0	0.00
12	60	0	0.00	0	0.00
13	60	0	0.00	0	0.00
21	36	0	0.00	0	0.00
14	75	0	0.00	0	0.00
15	42	0	0.00	0	0.00
16	39	0	0.00	0	0.00
17	39	0	0.00	0	0.00
Total	**1,383.25**	**1,162**			

[48] In geographical order from north to south

Redshank

4.3.115 There were four records of redshank recorded during surveys in January 2024, April 2024, October 2024 and March 2025, all of which were single birds. Two of the records (October 2024 and March 2025) were at Broomfleet Tileworks, the other two being near Ellerker and Broomfleet Drain. Wetland bird counts included further records of single birds at Broomfleet Tileworks and peak counts of up to six birds within RSPB Blacktoft Sands. There were no records of redshank that equalled or exceeded 1% of the Humber Estuary SPA population.

4.3.116 Flight data are not presented for this species, as only one bird (January 2024 near Ellerker) was observed during VP surveys.

Mallard

4.3.117 Non-breeding mallard occurred between the months of October and March for survey years 2023 to 2025. The species was widely distributed throughout the Survey Area (**Figure A9.2.35 Non-breeding mallard distribution**) due to the extensive network of suitable habitat represented by field drains and waterbodies, Notable concentrations of mallard within 500 m of the Order Limits were recorded in the following areas:

- Humberhead levels within Broomfleet Tileworks and the Humber Estuary / River Ouse, and Adlingfleet Drain, with widespread occurrences within the wider drainage network, especially in a wooded pond west of Ellerker;
- The River Ouse channel; and
- Warping Drain and the River Idle.

4.3.118 Key locations where mallard numbers equalled or exceeded 1% of the Humber Estuary SPA qualifying population were the River Ouse (three records over 1%), and Broomfleet Tileworks (two records over 1%). These are summarised in Table 4.24 and **Figure A9.2.36 Cumulative and peak counts of non-breeding mallard over winter 2023-24 and 2024-25**. Several significant records occurred during nocturnal surveys. Broomfleet Tileworks supported regular occurrences of mallard on virtually all of the tileworks ponds, none of which reached 1% of the qualifying population of the Humber Estuary SPA.

Table 4.24 – Mallard records exceeding 1% of the Humber Estuary SPA qualifying population

Record type	Figure code	Month	Peak count	Habitat
FLL survey	MA1.3	January 2024	28	Waterbody (Wooded pond west of Ellerker)
Nocturnal survey	MA2.42	October 2024	30	Waterbody (Tileworks)
Nocturnal Survey	MA2.10	December 2024	56	Waterbody (Tileworks)

Record type	Figure code	Month	Peak count	Habitat
VP survey	MA1.11	November 2023	47	River Ouse
VP survey	MA1.14	November 2023	47	River Ouse

Flight activity

4.3.119 Mallard flight activity was limited, with only 629 flights recorded across all VPs in the winter months. Activity occurred mainly at VPs between Ellerker (VP3) and Warping Drain (VP12), with few records elsewhere. The risk level overall for this species was extremely low. Further information regarding mallard flight activity and risk levels is provided in **Application Document 6.9.A3 Appendix 9.3 Flight Activity Assessment**.

Teal

4.3.120 **Figure A9.2.37 Non-breeding Teal distribution** shows the distribution of non-breeding teal records throughout the Survey Area. Teal were recorded throughout the non-breeding season on water courses and waterbodies within the Humberhead Levels, with two further records within the Isle of Axholme:

- Humberhead Levels – Oxmardyke Washlands, Broomfleet Tileworks and the River Ouse contributed the majority of records, and were the only locations where a threshold of 1% of the Humber Estuary qualifying population was equalled or exceeded within 500 m of the Order Limits. Smaller numbers were recorded within the field drain network north of Broomfleet tileworks, with one record north of the village of Blacktoft; and
- Isle of Axholme – two counts of teal were recorded on Warping Drain and Ferry Drain.

4.3.121 The records in Table 4.25 show the location-specific peak survey counts exceeding 1% of the Humber Estuary SPA qualifying population of 23 birds within 500 m of the Order Limits. The wetland bird Counts at Broomfleet Tileworks and the River Ouse identified significant peak counts within 500 m of the Order Limits at both locations, including:

- Peaks of 30 in pool 11, 62 in pool 4 and 64 in pool 5 between December and February at Broomfleet Tileworks; and
- Peaks of up to 159 occurring between November and March in River Ouse count sectors R1, R3, R6, and RSPB 1-2.

Table 4.25 – Location-specific teal records exceeding 1% of the Humber Estuary SPA qualifying population

Record type	Month	Peak count	Habitat
Nocturnal Survey	February 2025	27	Flooded field
Vantage Point	December 2024	29	Oxmardyke Washlands

Record type	Month	Peak count	Habitat
WeBS Survey	January 2025	36	River Ouse
WeBS Survey	January 2025	93	River Ouse
WeBS Survey	February 2024	51	River Ouse

Flight activity

4.3.122 Teal flight activity was recorded at VP3, VP4b, VP18a, VP18b and the Ouse Crossing VP. Thirty-one flights were recorded, 24 of which were at the River Ouse. This reflects the observations of habitat use at this location, which collectively demonstrate that the key location for teal is the River Ouse, with limited use of the surrounding farmland.

Wigeon

4.3.123 Wigeon was recorded regularly throughout most of the non-breeding months between 2023 and 2025. They were recorded entirely within the Humberhead Levels, mostly on the River Ouse and Broomfleet Tileworks. (**Figure A9.2.38 Non-breeding Wigeon distribution**).

4.3.124 There were only two location-specific records of wigeon that exceeded 1% of the Humber Estuary SPA qualifying population (50 birds) within 500 m of the Order Limits. These are both within the River Ouse and are of 72 birds (January 2025) and 67 birds (February 2024) recorded during wetland bird surveys. The wetland bird surveys identified peak counts exceeding 1% of the Humber Estuary SPA population at:

- Broomfleet Tileworks pool 4 (88 birds), pool 5 (100 birds) and pool 11 (127 birds); and
- All parts of the River Ouse Channel, where individual sector counts reached peaks of 149 birds.

Flight activity

4.3.125 Single flight records of birds were recorded close to the Market Weighton Canal (VP18a and VP18b) and the River Ouse and adjacent farmland (VP6), River Ouse VP and VP7). The majority (77) of the flights were recorded at the River Ouse.

Goldeneye

4.3.126 **Figure A9.2.39 Non-breeding Goldeneye distribution** summarises the distribution of non-breeding goldeneye, which was recorded only at Broomfleet Tileworks. Peak counts exceeding 1% of the Humber Estuary SPA qualifying population occurred at pools 1, 4, 9, 13 and 14 between October and March, as set out in Table 4.12.

4.3.127 This species was not recorded in flight.

Gadwall

4.3.128 **Figure A9.2.40 Non-breeding Gadwall distribution** shows the non-breeding distribution of this species. The wetland bird counts contributed the majority of records of this species, which was widespread within Broomfleet Tileworks and most

of the count sectors overlapping the River Ouse and Blacktoft Sands RSPB reserve. However, there were no significant peak counts of gadwall.

Flight activity

4.3.129 There was very little flight activity (39 flights) for non-breeding gadwall, the majority of which occurred close to the Market Weighton Canal and the River Ouse.

Pochard

4.3.130 **Figure A9.2.41 Non-breeding Pochard distribution** shows the non-breeding distribution of this species. There is one location-specific record of pochard, all other records originating from wetland bird counts at Broomfleet Tileworks pool 4 (11 birds) and pool 11 (25 birds). Counts on the River Ouse did not yield significant numbers (see Table 4.11) although the species was widespread here.

Flight activity

4.3.131 A single flight of three birds was recorded as they flew into land at Broomfleet Tileworks. No further flight activity was observed.

Bittern

4.3.132 Bittern was recorded within 500 m of the Order Limits only during the breeding season; these records are included in **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report**.

Marsh harrier

4.3.133 Marsh harriers occurred regularly during the non-breeding surveys, mostly within the Humberhead Levels, with a small number of records present on the western fringes of the Yorkshire Wolds and Misterton and Gringley Carrs (**Figure A9.2.42 Non-breeding Marsh Harrier distribution**). The highest concentration of marsh harrier activity was within Oxmardyke Washlands, north of Broomfleet Tileworks. There were multiple records of individual birds roosting and foraging in this area.

Flight activity

4.3.134 Marsh harriers were observed at VPs throughout the Humberhead Levels between Ellerker (VP3) and Luddington (VP9), beyond which flight activity was zero or negligible. The greatest levels of flight activity occurred in the vicinity of Broomfleet Tileworks and Oxmardyke Washlands (VPs4a/b, 18a/b and 5) and the River Ouse.

4.3.135 The highest risk of potential collision[49] occurred at VP4b. The proportion of flights at risk height was generally higher in this area because it is possible that birds were commuting to and from foraging grounds at the Humber Estuary and returning to roosts at Oxmardyke Washlands. Outside of this area, the risk dropped to negligible levels despite there being pockets of greater flight and foraging activity (e.g., VP18a).

[49] Expressed as a product of the amount of flight activity and the proportion of that activity that occurred at risk height across the Order Limits.

Table 4.26 – Summary flight data for non-breeding marsh harrier

VP[50]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	62	0	0.00	0	0.00
19	36	0	0.00	0	0.00
20	36	0	0.00	0	0.00
2	53	1	0.02	100	0.02
3	87	23	0.26	38.1	0.10
4a	64	6	0.09	66.7	0.06
4b	66	287	4.35	51.9	2.26
18a	72	80	1.11	8.2	0.09
18b	72	65	0.90	11.1	0.10
5	87	17	0.20	23.5	0.05
6	80	1	0.01	100	0.01
Ouse	103.75	36	0.35	2.9	0.01
7	88.5	9	0.10	66.7	0.07
8	69	5	0.07	60	0.04
9	72	119	1.65	0	0.00
10	72	4	0.06	75	0.04
11	45	4	0.09	100	0.09
12	66	0	0.00	0	0.00
13	66	1	0.02	100	0.02
21	36	1	0.03	100	0.03
14	81	1	0.01	100	0.01
15	48	0	0.00	0	0.00
16	45	0	0.00	0	0.00
17	45	0	0.00	0	0.00
Total	**1,552.25**	**660**			

[50] In geographical order from north to south

Little egret

4.3.136 Little egrets were recorded occasionally within the non-breeding season, with location-specific records from December 2023, January 2024 and October 2025. The majority of records were from the River Ouse, adjacent to Blacktoft Sands, with occasional records north of the River Humber near Faxfleet Lane and a single record near Garthorpe to the south. Three individual records were recorded near Misterton. The species distribution is summarised on **Figure A9.2.43 Non-breeding Little egret distribution**.

4.3.137 All location-specific records within 500 m of the Order Limits were of individual birds, with no records exceeding the 1% Humber Estuary qualifying species population of two birds. There were two records above the 1% threshold beyond the 500 m buffer of the Order Limits; five birds in December 2023 and four in January 2024 northwest of Ellerker. Significant counts were recorded at Broomfleet Tileworks pools 8, 9, 11 and 13.

Flight activity

4.3.138 Little egret flights were observed from most VPs south of Ellerker; however, the majority of flight activity was recorded at VP3 west of Ellerker, where 30 flights were recorded, and the Ouse Crossing VP, where 44 flights were recorded. Elsewhere flight activity was negligible or zero.

Table 4.27 – Summary flight data for non-breeding little egret

VP[51]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	62	0	0.00	0	0.00
19	36	0	0.00	0	0.00
20	36	0	0.00	0	0.00
2	53	0	0.00	0	0.00
3	87	30	0.34	15.4	0.05
4a	66	3	0.05	66.7	0.03
4b	66	3	0.05	66.7	0.03
18a	72	8	0.11	12.5	0.01
18b	72	2	0.03	0	0.00
5	87	8	0.09	28.6	0.03
6	80	7	0.09	16.7	0.01
Ouse	103.75	44	0.42	2.9	0.01

[52] In geographical order from north to south.

VP[51]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
7	88.5	4	0.05	25	0.01
8	69	0	0.00	0	0.00
9	74	1	0.01	0	0.00
10	72	3	0.04	66.7	0.03
11	42	2	0.05	0	0.00
12	66	11	0.17	33.3	0.06
13	66	4	0.06	66.7	0.04
21	36	2	0.06	100	0.06
14	81	4	0.05	100	0.05
15	48	0	0.00	0	0.00
16	45	1	0.02	100	0.02
17	45	3	0.07	0	0.00
Total	**1553.25**	**138**			

Shelduck

4.3.139 Shelduck was recorded occasionally during the non-breeding season, with location-specific records from March 2023, February and March 2024 and 2025, and December 2025. The species occurred across the Humberhead Levels between Ellerker and Adlingfleet, with aggregations of birds occurring widely on riverine habitat and within the lagoons at Blacktoft Sands at the River Ouse; and within Broomfleet tileworks. (**Figure A9.2.44 Non-breeding Shelduck distribution**).

4.3.140 No records exceeded 1% of the Humber Estuary SPA qualifying species population of 44 birds.

Flight activity

4.3.141 Shelduck flight activity was zero or negligible for most VPs and very low overall. The majority of flight activity was recorded between Ellerker (VP3) and the River Ouse, the latter location contributing almost all (65) of the 89 flights recorded.

Shoveler

4.3.142 Non-breeding Shoveler records (see **Figure A9.2.45 Non-breeding Shoveler distribution**) were restricted to:

- Broomfleet Tileworks, where the species was present in numbers exceeding 1% of the Humber Estuary SPA qualifying population (three birds) in pool 11; and

- The River Ouse and Blacktoft Sands RSPB Reserve, where the species occurred within riverine habitat east of the Order Limits.

Flight activity

4.3.143 Shoveler flights were recorded only at the River Ouse with three flight records totalling 12 birds.

Snipe

4.3.144 Snipe occurred widely across the Humberhead Levels (**Figure A9.2.46 Non-breeding Snipe distribution**), within pools, wet grassland/saltmarsh habitat in particular adjacent to the River Ouse, at Broomfleet Tileworks, Oxmardyke Washlands and Adlingfleet Drain. Within 500 m of the Order Limits, the peak count was 7 in a field west of Ellerker. Elsewhere, the species occurred mainly as singles or pairs and in all cases, the numbers recorded were equal to or more than 1% of the Humber Estuary population.

4.3.145 At Broomfleet Tileworks the species was recorded only within pool 1. At the River Ouse, count sectors on the north and south banks of the river contributed all records within 500 m of the Order Limits, although it was present more widely than this as evidenced by the distribution of records in **Figure A9.2.46. Non-breeding Snipe Distribution**. There were no other records of this species other than a single bird close to the River Idle and another on Misterton Carrs. Snipe was not recorded in flight.

Bewick’s swan

4.3.146 All of the Bewick’s swan records occurred close to Broomfleet Tileworks and an adjacent field of winter wheat in November 2024 (**Figure A9.2.47 Non-breeding Bewick's swan distribution**). There was a total of five records, with a peak of four adults recorded foraging on the field of winter wheat. These birds moved between cereal fields adjacent to VP5, briefly alighting on Broomfleet Tileworks before returning to the adjacent arable fields.

4.3.147 The group of four birds foraging close to the tileworks contributed all flight activity recorded for this species, with 12 passes, 3 of which were at risk. One bird was recorded “brushing” the earth wire as it passed over the existing overhead line (see paragraph 4.3.16).

Whooper swan

4.3.148 The distribution of this species is shown in **Figure A9.2.48 Non-breeding Whooper Swan distribution**. Broad areas supporting this species included parts of the Humberhead Levels; and Misterton and Gringley Carrs, with no records from any other locations. Across the Humberhead Levels, scattered groups of whooper swan were recorded at and close to Broomfleet Tileworks (peak count 11), on the River Ouse (peak count 26) and across farmland east of the proposed overhead line, close to RSPB Blacktoft Sands and Island Farm (peak count 46), although the latter area is at least 1 km east of the proposed overhead line.

4.3.149 Gringley and Misterton Carrs generated the largest and most frequent counts of this species. Groups of between 1 and 196 birds were recorded foraging on beet and winter cereal crops west of Misterton as far as Carr Road. Within 500 m of the Order Limits whooper swans numbered between 1 and 72 birds, Almost all records of

whooper swan across the Carrs were north of or adjacent to Cattle Road, with only two records of this species further south, close to the Chesterfield Canal.

Flight activity

4.3.150 Observed flight activity broadly matched the distribution of foraging herds, with the vast majority of flights occurring between Broomfleet Tileworks and Garthorpe (VP5 southwards) as far as approximately Luddington; and across Misterton and Gringley Carrs, where most of the flight activity was across the northern half of the Carrs.

4.3.151 In certain locations (in particular immediately south of the River Ouse as far as Garthorpe as represented by VPs 5, 7 and 9; and the northern half of Misterton and Gringley Carrs as represented by VP21) the proportion of recorded flight at risk of collision with the proposed overhead line was high. However, irrespective of this observation or the spatial distribution of this species, the number of recorded flights within the survey area was relatively low or very low at all locations. This is largely because birds tended to spend long periods of time foraging once they had arrived at their preferred feeding locations and therefore flight events were relatively infrequent.

Table 4.28– Summary flight data for non-breeding whooper swan

VP[52]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes at risk per hour of observation
1	56	10	0.18	0	0.00
19	36	0	0.00	0	0.00
20	36	0	0.00	0	0.00
2	47	0	0.00	0	0.00
3	81	0	0.00	0	0.00
4a	58	0	0.00	0	0.00
4b	60	0	0.00	0	0.00
18a	60	0	0.00	0	0.00
18b	60	0	0.00	0	0.00
5	78	18	0.23	33.3	0.08
6	69	26	0.38	0	0.00
Ouse	79.75	10	0.13	0	0.00
7	77.5	1	0.01	100	0.01
8	63	23	0.37	100	0.37
9	66	11	0.17	0	0.00

[52] In geographical order from north to south.

VP[52]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes at risk per hour of observation
10	66	4	0.06	100	0.06
11	39	0	0.00	0	0.00
12	60	4	0.07	0	0.00
13	60	15	0.25	0	0.00
21	36	170	4.72	61.5	2.90
14	75	131	1.75	10	0.17
15	42	0	0.00	0	0.00
16	39	0	0.00	0	0.00
17	39	5	0.13	0	0.00
Total	**1,383.25**	**428**			

Farmland bird assemblage

4.3.152 Non-target species were recorded during VP surveys when target species were not active. This generated a list of species present across the survey area, including farmland birds typical of the arable and pastoral habitats that are common across the Survey Area.

4.3.153 Outside of the breeding season farmland birds are not closely tied to nests and breeding territories, occurring more widely to exploit food resources on an opportunistic basis. Therefore, any observations of their spatial distribution would provide little useful insight for assessment purposes.

4.3.154 The non-breeding farmland bird assemblage was broadly very similar to that reported in paragraphs 4.3.183 – 4.3.189 and Table 4.29 for the breeding season, with the absence of certain breeding migrants including willow warbler, yellow wagtail, whitethroat, cuckoo and turtle dove (*Streptopelia turtur*) and the widespread presence of a number of winter migrants (fieldfare and redwing) and larger numbers of winter-flocking species such as starling. The winter distribution of corn bunting largely mirrored its distribution during the breeding season (Table 4.29).

Breeding birds habitat use

Common Birds Census

4.3.155 The results of breeding bird (CBC) surveys are presented in this section, supported by the summary tables in Annex F setting out the counts on each survey and the breeding status for each species at each survey location.

Survey Area 1 – Birkhill Wood

4.3.156 Thirty-five species were recorded, of which 10 are confirmed breeders, nine are considered probable breeding species, 14 are considered possible breeding species and the remaining two are incidental occurrences of non-breeding species. Additionally, eight species (bullfinch, dunnock, linnet, reed bunting, skylark, song thrush, tree sparrow and yellowhammer) are species of principal importance[53], four (linnet, skylark, tree sparrow and yellowhammer) are BoCC5 red list species, 13 (bullfinch, dunnock, greylag goose, mallard, moorhen, oystercatcher, reed bunting, song thrush, stock dove, whitethroat, willow warbler, wood pigeon and wren) are BoCC5 amber list species and a further 17 are BoCC5 green list species.

4.3.157 One species (pheasant) is not monitored by BoCC5 and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and woodland fringe habitat recorded on site and is of local importance.

Survey Area 2 – Socken Wood

4.3.158 Thirty-two species were recorded, of which seven are confirmed breeders, 12 are considered probable breeding species, eight are considered possible breeding species and the remaining five are incidental occurrences of non-breeding species. Additionally, one species (black redstart *Phoenicurus ochruros*) is on Schedule 1

[53] Species of Principal Importance are those listed on the Section 41 list of species of principal importance for conservation of biodiversity in England.

(although the individual recorded was non-breeding), nine (corn bunting, dunnock, herring gull, linnet, reed bunting, skylark, song thrush, yellow wagtail and yellowhammer) are species of principal importance, six (corn bunting, herring gull, linnet, skylark, yellow wagtail and yellowhammer) are BoCC5 red list species, ten (black redstart, dunnock, kestrel, reed bunting, rook (*Corvus frugilegus*), song thrush, stock dove, whitethroat, woodpigeon and wren) are BoCC5 amber list species and a further 14 are BoCC5 green list species.

4.3.159 Two species, pheasant and red-legged partridge (*Alectoris rufa*) are not monitored by BoCC and appear on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and woodland habitat recorded on site and is of local importance.

Survey Area 3 – Brantingham Dale

4.3.160 Thirty-eight species were recorded, of which 12 are confirmed breeders, 13 are considered probable breeding species, 11 are considered possible breeding species and the remaining two are incidental occurrences of non-breeding species. Additionally, one species (marsh harrier) is on Schedule 1 and Annex 1, six (bullfinch, dunnock, linnet, skylark, song thrush and yellowhammer) are species of principal importance, seven (greenfinch (*Carduelis chloris)*, linnet, marsh tit, mistle thrush (*Turdus viscivorus*), skylark, woodcock (*Scolopax rusticola)* and yellowhammer) are BoCC5 red list species, ten (bullfinch, dunnock, marsh harrier, meadow pipit, sparrowhawk, song thrush, stock dove, willow warbler, wood pigeon and wren) are BoCC5 amber list species and a further 20 are BoCC5 green list species.

4.3.161 One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the woodland and woodland edge (arable) habitat recorded on site and is of local importance.

Survey Area 4 – Ings Lane (Humberhead Levels)

4.3.162 Thirty-eight species were recorded, of which four are confirmed breeders, 12 are considered probable breeding species, 16 are considered possible breeding species and the remaining six are incidental occurrences of non-breeding species. Additionally, three species (Cetti's warbler, marsh harrier and Mediterranean gull (*Ichthyaetus melanocephalus*) are listed on Schedule 1, two (marsh harrier and Mediterranean gull) are listed on Annex 1, nine (dunnock, lapwing, linnet, reed bunting, skylark, song thrush, tree sparrow, yellow wagtail and yellowhammer) are species of principal importance, eight (house martin (*Delichon urbicum)*, lapwing, linnet, skylark, swift (*Apus apus)*, tree sparrow, yellow wagtail and yellowhammer) are BoCC5 red list species, 16 (black-headed gull, dunnock, gadwall, greylag goose, kestrel, mallard, marsh harrier, Mediterranean gull, oystercatcher, reed bunting, song thrush, stock dove, whitethroat, willow warbler, wood pigeon and wren) are BoCC5 amber list species and a further 13 are BoCC green list species. One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland habitat recorded on site and is of local importance.

Survey Area 5 – River Ouse North Bank

4.3.163 Thirty-eight species were recorded, of which five are confirmed breeders, 14 are considered probable breeding species, 15 are considered possible breeding species

and the remaining four are incidental occurrences of non-breeding species. Additionally, two species (Cetti's warbler and fieldfare[54] are listed on Schedule 1, one (little egret) is listed on Annex 1, seven (bullfinch, dunnock, linnet, reed bunting, skylark, yellow wagtail and yellowhammer) are species of principal importance, five (fieldfare, linnet, skylark, yellow wagtail and yellowhammer) are BoCC5 red list species, 13 (bullfinch, dunnock, greylag goose, mallard, meadow pipit, reed bunting, rook, sedge warbler, shelduck, stock dove, whitethroat, wood pigeon and wren) are BoCC5 amber list species and a further 19 are BoCC5 green list species.

4.3.164 One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and riparian margin habitat recorded on site and is of local importance.

Survey Area 6 – Keadby Power Station

4.3.165 Thirty-nine species were recorded, of which seven are confirmed breeders, 17 are considered probable breeding species, 11 are considered possible breeding species and the remaining four are incidental occurrences of non-breeding species. Additionally one species (fieldfare) is listed on Schedule 1, one (little egret) is listed on Annex 1, seven (dunnock, linnet, reed bunting, skylark, song thrush, yellow wagtail and yellowhammer) are species of principal importance, seven (fieldfare, linnet, mistle thrush, skylark, woodcock, yellow wagtail and yellowhammer) are BoCC5 red list species, 11 (dunnock, kestrel, meadow pipit, reed bunting, sedge warbler, song thrush, stock dove, whitethroat, willow warbler, wood pigeon, wren) are BoCC amber list species and a further 20 are BoCC5 green list species.

4.3.166 One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the open mosaic habitat, including grassland, scrub and woodland recorded on site and is of local importance.

Survey Area 7 – Owston Ferry

4.3.167 Fifty-three species were recorded, of which 15 are confirmed breeders, 13 are considered probable breeding species, 21 are considered possible breeding species and the remaining four are incidental occurrences of non-breeding species. Additionally, one species (Cetti's warbler) is on Schedule 1, ten (bullfinch, dunnock, grey partridge (*Perdix perdix)*, linnet, reed bunting, skylark, song thrush, starling, yellow wagtail and yellowhammer) are species of principal importance, 10 (greenfinch, grey partridge, house martin, linnet, mistle thrush, skylark, starling, swift, yellow wagtail and yellowhammer) are BoCC5 red list species, 16 (bullfinch, dunnock, greylag goose, kestrel, mallard, moorhen, reed bunting, rook, sedge warbler, song thrush, sparrowhawk, stock dove, whitethroat, willow warbler, wood pigeon and wren) are BoCC5 amber list species and a further 24 are BoCC5 green list species.

4.3.168 One species (Canada goose) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and scrubland habitat recorded on site and is of local importance.

[54] Fieldfare (along with redwing) is a migrant thrush whose UK breeding range and numbers are limited to the far north of the UK. In the context of the Project, records of these species are non-breeding birds.

Survey Area 8 – Graizelound

4.3.169 Twenty-eight species were recorded, of which six are confirmed breeders, 11 are considered probable breeding species, nine are considered possible breeding species and the remaining two are incidental occurrences of non-breeding species.

4.3.170 Additionally, two species (barn owl and Cetti's warbler) are on Schedule 1, five (dunnock, linnet, skylark, yellow wagtail and yellowhammer) are species of principal importance, four (greenfinch, linnet, yellow wagtail and yellowhammer) are BoCC5 red list species, eight (black-headed gull, dunnock, kestrel, sedge warbler, stock dove, whitethroat, wood pigeon and wren) are BoCC5 amber list species and a further 13 are BoCC green list species.

4.3.171 One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and riparian margin habitat recorded on site and is of local importance.

Survey Area 9 – River Idle

4.3.172 Forty-six species were recorded, of which ten are confirmed breeders, 16 are considered probable breeding species, 16 are considered possible breeding species and the remaining four are incidental occurrences of non-breeding species.

4.3.173 Additionally, one species (kingfisher) is listed on Schedule 1, two (kingfisher and little egret) are on Annex 1, 11 (cuckoo, dunnock, grasshopper warbler, linnet, reed bunting, skylark, song thrush, starling, tree sparrow, yellow wagtail and yellowhammer) are species of principal importance, nine (cuckoo, grasshopper warbler, greenfinch, linnet, skylark, starling, tree sparrow, yellow wagtail and yellowhammer) are BoCC5 red list species, 15 (dunnock, gadwall, kestrel, mallard, moorhen, oystercatcher, reed bunting, sedge warbler, shoveler, song thrush, stock dove, whitethroat, willow warbler, woodpigeon and wren) are BoCC5 amber list species and a further 21 are BoCC5 green list species.

4.3.174 One species (red-legged partridge) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and riparian margin habitat recorded on site and is of local importance.

Survey Area 10 – Gringley on the Hill

4.3.175 Thirty-one species were recorded, of which four are confirmed breeders, 12 are considered probable breeding species, 11 are considered possible breeding species and the remaining four are incidental occurrences of non-breeding species. Additionally, seven (corn bunting, dunnock, linnet, reed bunting, skylark, song thrush, and yellowhammer) are species of principal importance, seven (corn bunting, greenfinch, house martin, linnet, skylark, swift, and yellowhammer) are BoCC5 red list species, seven (dunnock, reed bunting, song thrush, sparrowhawk, whitethroat, woodpigeon and wren) are BoCC5 amber list species and a further 15 are BoCC5 green list species.

4.3.176 Two species (pheasant and red-legged partridge) are not monitored by BoCC and appear on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland habitat recorded on site and is of local importance.

Survey Area 11 – Beckingham Wood

4.3.177 Thirty species were recorded, of which four are confirmed breeders, 12 are considered probable breeding species, 13 are considered possible breeding species and the remaining one was an incidental occurrences of non-breeding species. Additionally, eight (bullfinch, dunnock, linnet, reed bunting, skylark, song thrush, yellow wagtail and yellowhammer) are species of principal importance, four (linnet, skylark, yellow wagtail and yellowhammer) are BoCC5 red list species, 10 (bullfinch, dunnock, kestrel, meadow pipit, reed bunting, song thrush, stock dove, whitethroat, woodpigeon and wren) are BoCC5 amber list species and a further 14 are BoCC5 green list species.

4.3.178 Two species (pheasant and red-legged partridge) are not monitored by BoCC and appear on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and woodland edge habitat recorded on site and is of local importance.

Survey Area 12 – West Burton

4.3.179 Twenty-seven species were recorded, of which seven are confirmed breeders, 10 are considered probable breeding species, 9 are considered possible breeding species and the remaining one was an incidental occurrence of a non-breeding species. Additionally, four (dunnock, skylark, song thrush and yellowhammer) are species of principal importance, three (greenfinch, skylark and yellowhammer) are BoCC5 red list species, nine (dunnock, mallard, moorhen, song thrush, stock dove, whitethroat, willow warbler, wood pigeon and wren) are BoCC5 amber list species and a further 14 are BoCC5 green list species.

4.3.180 One species (pheasant) is not monitored by BoCC and appears on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland and woodland edge habitat recorded on site and is of local importance.

Survey Area 13 - Fledborough

4.3.181 Thirty-four species were recorded, of which 10 are confirmed breeders, 10 are considered probable breeding species, 12 are considered possible breeding species and the remaining two are incidental occurrences of non-breeding species. Additionally, eight (dunnock, grey partridge, house sparrow (*Passer domesticus*), linnet, reed bunting, skylark, song thrush and yellowhammer) are species of principal importance, six (greenfinch, grey partridge, house sparrow, linnet, skylark and yellowhammer) are BoCC5 red list species, 11 (dunnock, greylag goose, kestrel, mallard, reed bunting, song thrush, stock dove, whitethroat, willow warbler, woodpigeon and wren) are BoCC5 amber list species and a further 15 are BoCC5 green list species.

4.3.182 Two species (little owl *Athene noctua* and red-legged partridge) are not monitored by BoCC and appear on none of the lists of conservation concern. Overall, the bird community is typical of the arable farmland habitat recorded on site and is of local importance.

Farmland bird assemblage

4.3.183 The farmed landscape across the environs of the Project supports a range of breeding farmland bird species that collectively can be regarded as a breeding farmland bird assemblage. This mostly includes species strongly associated with

arable and pastoral habitats, but within such landscapes there are also hedgerows, watercourses, scattered trees, scrub and reedbeds that can accommodate species with specific habitat preferences for breeding purposes while utilising farmland for foraging.

4.3.184 Since the CBC surveys cover specific areas or pockets of habitat, the data presented above have been supplemented with additional records made during the VP surveys, to provide the locations of birds present during the breeding season across a wider spatial area. The records are a tally of the species present that were not targeted for the recording of flight activity (so-called non-target species) and, in some cases, simple information regarding their behaviours. The recording of non-target species provides insight into the assemblage of birds that are present within the breeding season within habitats suitable for breeding and that can be assumed to be breeding in the environs of each VP.

4.3.185 Data were assimilated for the period March – August 2024, during which time the majority of VPs were being visited consistently every month. Outside of this period VPs were removed or added to the survey programme as required to meet the needs of the project and the availability of land access. Vantage Points 19, 20 and 21 were surveyed for limited periods to meet particular assessment needs and as such they contributed breeding bird data only for the months of March and April 2025 (in the case of VPs 19 and 20) and March 2026 (for VP21).

4.3.186 The results of the non-target species recording are presented in Table 4.29 for priority farmland bird species included on the BoCC Amber List, Red List or NERC Section 41 lists, and any species that are not on these lists but are nevertheless rare or undergoing heavy population decline.

4.3.187 Thirty-three species were recorded in total. Common across all or most locations were skylark, yellowhammer, dunnock, linnet, reed bunting, stock dove, swallow (*Hirundo rustica*), swift, wood pigeon and whitethroat. As more of a habitat generalist, wren is not listed but was present at nearly all VPs.

4.3.188 Species with much more restricted distribution included turtle dove (which was detected at only one location within dense scrub on the banks of the River Idle approximately 80 m west of the Order Limits), corn bunting (which occurred sparsely on the Yorkshire Wolds, near Broomfleet, the Isle of Axholme and Gringley Carrs), willow tit (which was detected only at VPs close to Broomfleet Tileworks) and habitat specialists whose occurrence was tied to marshes and swamp habitats (grasshopper warbler, sedge warbler). House sparrow and grey partridge were also encountered very infrequently.

4.3.189 Other common and widespread species present across all or many of the VP locations included a range of passerines (blue tit, great tit, blackbird, robin, chaffinch, goldfinch and lesser whitethroat), pigeons/doves (feral pigeon (*Columba livia)*, collared dove) and corvids (carrion crow (*Corvus corone)*, magpie (*Pica pica)* and jackdaw (*Coloeus monedula)*).

Table 4.29 – Priority Species occurring as part of the Farmland Bird Assemblage across the Project, as recorded from vantage points between March and August 2024[55]

Species	1	2	3	4a/b	5	6	7	8	9	10	11	12	13	14	15	16	17	18a/b	19	20	21
Bullfinch	Y	Y		Y							Y					Y					
Cetti's warbler				Y	Y(s)													Y(s)			
Corn bunting					Y		Y		Y(s)	Y(s)				Y			Y(s)			Y	
Cuckoo				Y				Y				Y	Y					Y			
Dunnock	Y	Y		Y	Y	Y	Y			Y	Y	Y	Y(s)	Y	Y	Y	Y				
Grasshopper warbler				Y									Y								
Greenfinch				Y						Y		Y(s)			Y		Y			Y	
Grey partridge										Y	Y						Y				
House martin	Y	Y	Y	Y		Y	Y			Y	Y	Y		Y	Y		Y				
House sparrow										Y						Y	Y				
Lesser whitethroat	Y			Y	Y						Y			Y		Y			Y		
Linnet	Y	Y		Y	Y(n)	Y	Y	Y	Y	Y	Y	Y	Y(s)	Y	Y	Y	Y		Y	Y	
Marsh tit (woodland near VP)		Y																			
Meadow pipit		Y			Y	Y	Y			Y									Y		
Mistle thrush	Y	Y				Y					Y								Y		
Reed bunting			Y	Y	Y		Y	Y	Y	Y	Y		Y(s)	Y		Y	Y	Y	Y		
Sedge warbler				Y	Y		Y		Y				Y(s)	Y(s)				Y			

[55] Notations are used to denote locations where nesting birds (n), singing males (s) and pairs (p) were recorded. The absence of such records does not imply that these behaviours did not occur since recording of non-target species was secondary to the recording of target species flights during vantage point surveys.

Species	1	2	3	4a/b	5	6	7	8	9	10	11	12	13	14	15	16	17	18a/b	19	20	21
Skylark	Y	Y	Y(s)	Y	Y	Y	Y	Y	Y	Y	Y	Y(s)	Y(s)	Y(s)	Y(s)	Y	Y	Y	Y	Y	
Song thrush	Y	Y								Y	Y		Y(s)	Y				Y		Y	
Starling				Y			Y			Y				Y	Y		Y	Y		Y	
Stock dove	Y	Y			Y	Y		Y	Y	Y	Y		Y(s)	Y		Y	Y	Y			
Swallow	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y		
Swift	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y					
Tree sparrow	Y																				
Turtle dove													Y(s)								
Whitethroat	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y(s)	Y(s)		Y	Y	Y	Y	Y	Y	
Willow tit				Y	Y																
Willow warbler				Y							Y		Y						Y		
Wood pigeon	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y(s)	Y(s)	Y	Y	Y	Y	Y	Y		
Yellow wagtail	Y	Y		Y	Y		Y	Y	Y	Y	Y			Y	Y	Y		Y			
Yellowhammer	Y	Y	Y	Y	Y		Y	Y	Y	Y(s)	Y	Y(s)	Y(s)	Y(p)	Y	Y	Y		Y	Y	Y
Number of species	**16**	**16**	**8**	**21**	**17**	**11**	**15**	**11**	**12**	**19**	**18**	**11**	**16**	**16**	**12**	**14**	**15**	**12**	**11**	**8**	**1**

Breeding target species accounts

4.3.190 The majority of bird activity was recorded over winter and involved predominantly wetland birds that are target species due to their inclusion as qualifying species of designated sites, plus a number of raptors. Fewer target species occurred during the breeding season, and of these, the breeding locations of Schedule 1 birds (barn owl, peregrine, avocet, bittern, marsh harrier, red kite, little ringed plover, kingfisher and hobby) are restricted to **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report** to protect their breeding locations. The descriptions of flight activity for breeding bittern provide significant insight into the whereabouts of nest sites and as such this information is also restricted to **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report.**

4.3.191 The species accounts that follow include: Discussion of flight activity over and above occasional flights; and, for the small number of target species that are both present during the breeding season and not confidential, the locations of habitat use indicative of either foraging or breeding behaviours. Widely occurring target species that are qualifying features of designated sites during winter only but that are otherwise common and widespread during the breeding season are briefly described in terms of their overall distribution and flight activity. In particular, this applies to mallard and greylag goose.

Hobby

4.3.192 Hobby flights were recorded close to Broomfleet Tileworks, over Gringley and Misterton Carrs and at scattered locations close to Keadby, Crowle and South Leverton. Thirty-nine passes were recorded in the cumulative data for all VPs, within the viewsheds of VPs 2, 3, 4b, 9, 11, 14, 15, 16 and 18a. Seven of the flights were at risk of collision.

Peregrine falcon

4.3.193 Peregrine falcon was widely encountered across long sections of the Project that are adjacent to existing overhead line infrastructure. Peregrine falcons utilise existing pylons at all times of year in the absence of other tall structures or semi-natural habitats such as cliff faces. Flight activity was recorded mostly over the Yorkshire Wolds (VPs 1, 19, 20) and across the Humberhead Levels north of the River Ouse, and at the River Ouse crossing (VPs 3-7, 18a, 18b and the River Ouse VP), with lesser amounts of flight activity at VPs 11, 12 and 16 south of the River Ouse.

4.3.194 One hundred and fifty-five flights were recorded in total. The flight activity is summarised for each VP in Table 4.30. Use of pylons for nesting is described in **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report.**

Table 4.30 – Summary flight data for peregrine falcon during the breeding season

VP[56]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	33	6	0.18	0	0.00
19	12	2	0.17	0	0.00
20	15	7	0.47	0	0.00
2	43.5	0	0.00	0	0.00
3	52.5	2	0.04	50	0.02
4a	48	35	0.73	0	0.00
4b	48	36	0.75	33.3	0.25
18a	39	1	0.03	0	0.00
18b	39	0	0.00	20	0.00
5	71	10	0.14	0	0.00
6	72	50	0.69	0	0.00
Ouse	108	8	0.07	0	0.00
7	62	3	0.05	0	0.00
8	48.5	2	0.04	0	0.00
9	48	0	0.00	0	0.00
10	49.5	0	0.00	0	0.00
11	48	1	0.02	0	0.00
12	42	1	0.02	0	0.00
13	33	0	0.00	0	0.00
21	6	0	0.00	0	0.00
14	37	0	0.00	60	0.00
15	33	0	0.00	0	0.00
16	36	2	0.06	50	0.03
17	35	0	0.00	0	0.00
Total	**1,059**	**166**			

[56] Listed in geographical order from north to south

Barn owl

4.3.195 Barn owl flights were rarely recorded; 5 passes were recorded in total during the breeding season, at VPs 10, 11, 13 and the River Ouse. None of the flight activity was at risk of collision. Breeding locations are set out in **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report.**

Red kite

4.3.196 This species was recorded in flight only, on a year-round basis and at various locations across the Project. During the breeding season it was recorded as ones and twos soaring or passing through the viewsheds of VPs 2, 3, 4a, 4b, 10, 13, 15, 19, 20 and the River Ouse. There were 48 flights in total and of these 18 were at risk of collision.

Lapwing

4.3.197 Despite being predominantly of relevance during the wintering season as a qualifying species of the Humber Estuary designations, lapwing was also widely present during the breeding season. The majority of habitat use occurred in the vicinity of Brantingham Dale Head; Ings Lane West of Ellerker; on flooded ground adjacent to Common Road and Broomfleet Drain north of Broomfleet; close to Broomfleet Tileworks; immediately north of Warping Drain east of Haxey; and Misterton Carrs. Elsewhere, there were scattered records of birds occurring in very small numbers.

4.3.198 Breeding within 500 m of the Order Limits was recorded at the locations summarised in Table 4.31 and shown in **Figure A9.2.49 Breeding Lapwing distribution**. All other records, especially those adjacent to Broomfleet Drain, can be regarded as non-breeding birds, typically engaging in foraging activity.

Table 4.31 – Summary of breeding lapwing recorded during surveys (in geographical order from north to south)

Location	NGR	Date	Observations
Creyke Beck (Route Section A)	TA 03296 36176	4 April 2025	A possible nest site with one adult present.
Upper Brantingham Dale (Route Section A)	SE 94179 31424	1 April 2025	One displaying adult
North of Ings Lane, Ellerker (Route Section A)	SE 90396 29108	4 May 2024	One adult displaying and defending a probable nest site in May
North of Ings Lane, Ellerker (Route Section A)	SE 90585 28962	3 April 2024	Three adults displaying early in the breeding season

Location	NGR	Date	Observations
North of Ings Lane, Ellerker (Route Section A)	SE 90352 28757	2 May 2024	One displaying male on territory
North of Warping Drain, Haxey (Route Section D)	SK 787519 8992, SK 78534 98857 and SK 78306 98848	23 April 2024	Displaying adults indicating breeding territory at three locations
North of Warping Drain, Haxey (Route Section D)	SK 78755 98891	28 April 2025	Displaying adults indicating breeding territory
North of Warping Drain, Haxey (Route Section D)	SK 77931 98163	6 March 2024	A displaying male landed on a presumed territory.
North of Warping Drain, Haxey (Route Section D)	SK 78438 98775	6 March 2024	Six pairs alarm calling, mobbing a crow and resting on an inundation pool in an arable field
Gringley Carrs, North of Chesterfield Canal (Route Section E)	SK 74444 92491	4 April 2025	One displaying adult
Gringley Carrs, North of Chesterfield Canal (Route Section E)	SK 74000 92445	31 March 2026	Two adults mobbing a crow (indicating defence of a potential territory or nest site)

4.3.199 Flight activity during the breeding season was very localised, being largely tied to breeding locations and associated with territorial or display flights. Flight activity was recorded at VPs 2, 3, 18a, 18b, 5, 6, 12, 14 and 17. Due to the low number of flights and the nature of breeding flights over territories, which are usually at relatively low heights, the number of passes overall at risk of collision is negligible and no further discussion of this topic is required.

Marsh harrier

4.3.200 The confirmed and potential breeding locations of this species are set out in **Application Document 6.9.A4 Appendix 9.4 Confidential Baseline Report**, but key areas for marsh harrier within the Survey Area are centred on the River Ouse near Blacktoft Sands and some of scattered wetlands across the Humberhead Levels.

4.3.201 Almost all flight activity occurred in the areas viewed from VPs 3-11 (i.e. between Ellerker and Keadby), with peaks in activity occurring near Broomfleet Tileworks, Oxmardyke Washlands, the River Ouse and the farmland immediately adjacent to the River (Table 4.32). All flight activity was associated with foraging and commuting behaviours as reported in **Application Document 6.9.A3 Appendix 9.3 Flight Activity Assessment**.

Table 4.32 – Summary flight data for marsh harrier during the breeding season

VP[57]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
1	24	0	0.00	0	0.00
19	6	0	0.00	0	0.00
20	6	0	0.00	0	0.00
2	34.5	3	0.09	0	0.00
3	37.5	10	0.27	20	0.05
4a	36	1	0.03	0	0.00
4b	36	11	0.31	37.5	0.11
18a	33	54	1.64	9.8	0.16
18b	33	32	0.97	33	0.32
5	56	33	0.59	15.2	0.09
6	57	13	0.23	53.8	0.12
Ouse	96	14	0.15	7.1	0.01
7	50	35	0.70	54.3	0.38
8	39.5	11	0.28	45.5	0.13
9	36	0	0.00	0	0.00
10	37.5	2	0.05	0	0.00
11	39	11	0.28	45.5	0.13

[57] Listed in geographical order from north to south

VP[57]	Hours of observation	Number of passes through viewshed	Passes per hour through viewshed	% at risk (crossing OL at risk height)	Passes per hour at risk
12	33	0	0.00	0	0.00
13	24	1	0.04	0	0.00
21	0	0	0.00	0	0.00
14	28	0	0.00	0	0.00
15	27	0	0.00	0	0.00
16	30	0	0.00	0	0.00
17	29	0	0.00	0	0.00
Total	**828**	**231**			

Mallard

4.3.202 Outside of the wintering period (when mallard is a qualifying species of the Humber designations), mallard is a widespread and abundant species throughout the survey area, foraging and breeding widely, especially in the vicinity of aquatic habitats. As such it occurred most commonly at Broomfleet Tileworks, the River Ouse, Warping Drain, the River Idle, Three Rivers and the Sheffield and South Yorkshire Navigation. It also occurred as a breeding bird on small watercourses and ponds throughout most of the Survey Area.

4.3.203 Flight activity for mallard was recorded at all but two of the VPs, but only the River Ouse VP (343 flights, of which 14.1% were at risk), VP11 (108 flights, of which 53.1% were at risk) and VP9 (142 flights, of which 57.1% were at risk) yielded any more than a few dozen flights.

Greylag goose

4.3.204 Outside of the wintering period (when greylag goose contributes to the wintering assemblage feature of the Humber Estuary SPA), greylag goose is a common and widespread species. Its distribution was very similar to that described for mallard, but with a stronger correlation to the presence of aquatic habitats. Thus, the species occurred predominantly at Broomfleet Tileworks, Oxmardyke Washlands, the River Ouse, Blacktoft Sands and Three Rivers, with very few records elsewhere.

4.3.205 Although flight activity was recorded at 15 VPs widely across the Project, only VPs 4a/b, 18a/b and the River Ouse VP contributed more than a few dozen flights at most, these VPs being adjacent to major waterways and wetland complexes:

- At VP4a there were 17 flights, of which 60% were at risk;
- At VP4b there were 100 flights, of which 63.9% were at risk;
- At VP18a there were 56 flights, of which 9.1% were at risk;

- At VP18b there were 103 flights, of which 11.8% were at risk; and
- At the River Ouse there were 87 flights, of which 13% were at risk.

Corn bunting

4.3.206 The following territory locations are compiled from records of singing male corn buntings and adult corn buntings present in suitable breeding habitat during the breeding season (recorded on all surveys) within 500 m of the Order Limits, taking into account where occurrences of clustered records are likely to indicate a single territory[58]:

- Little Weighton (Route Section A): singing males indicating a territory south of Socken Wood, within or immediately adjacent to Order Limits, at approximate NGR SE 98095 32011;
- Little Weighton (Route Section A): singing males indicating a territory south of Socken Wood, within or immediately adjacent to Order Limits at approximate NGR SE 97432 31897;
- South of Broomfleet Tileworks (Route Section A): singing males and an adult carrying nesting material detected close to VP5 on multiple occasions within or immediately adjacent to the Order Limits, indicating a territory at approximate NGR SE 86131 26522;
- South of Ousefleet (Route Section B): an individual close to VP7 and within or immediately adjacent to the Order Limits at approximate NGR SE 82820 22674, recorded on two occasions, assumed to be one of a breeding pair;
- South of Ousefleet (Route Section B): a singing male approximately 500 m from the Order Limits at approximate NGR SE 73398 22147;
- West of Garthorpe (Route Section B): a singing male recorded on multiple occasions close to VP8, within or immediately adjacent to the Order Limits at approximate NGR SE 83330 19390;
- West of Garthorpe (Route Section B): a singing male within or immediately adjacent to the Order Limits at approximate NGR SE 83856 18925;
- Southwest of Garthorpe (Route Section B): a male calling from long grass at the base of an existing pylon (4ZQ021) immediately adjacent to the Order Limits at NGR SE 84103 18139;
- South of Luddington (Route Section B): multiple corn bunting records close to VP9, including singing males, at approximate NGR SE 82469 15239 within or adjacent to the Order Limits;
- Southeast of Crowle (Route Section C): multiple records of singing males close to VP10, within or adjacent to the Order Limits at approximate NGR SE 78876 12080;
- North of Cornley Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory approximately 130 m east of the Order Limits at approximate NGR SK 75532 95961;

[58] Nest locations are not provided since these are extremely difficult to detect. For this reason, the survey method focuses on detection of singing males as a proxy for the number of nesting pairs.

- Cornley Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory within or adjacent to the Order Limits at approximate NGR SK 75140 95510;
- South of Cornley Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory approximately 400m north of the Order Limits at approximate NGR SK 74218 95050;
- South of Cornley Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory adjacent to or within the Order Limits at approximate NGR SK 75018 94840;
- Cattle Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory adjacent to the Order Limits at approximate NGR SK 74158 94604;
- South of Cattle Road, Misterton Carrs (Route Section E): multiple records of singing corn bunting indicating a territory adjacent to the Order Limits at approximate NGR SK 74041 93601;
- Chesterfield Canal (Route Section E): a calling adult corn bunting was recorded close to VP14 in suitable breeding habitat during the breeding season, however no other records were compiled at this location despite multiple visits to the VP, therefore this was assumed to be a non-breeding bird;
- North of Gringley on the Hill (Route Section E): an adult was observed in suitable breeding habitat during the breeding season adjacent to the Order Limits at approximate NGR SK 75287 90599;
- Wood Lane, south of the A631 (Route Section E): two adult corn buntings were observed together in suitable breeding habitat during the breeding season, adjacent to the Order Limits at NGR SK 76235 89785; and
- West of Fledborough (Route Section F): a singing male south of VP17, within approximately 200 m of the Order Limits at approximate NGR SK 80151 71961.

4.3.207 The estimated corn bunting population within 500 m of the Order Limits is up to 18 territories, six of which were across Misterton Carrs. The distance traversed by the Project across Misterton Carrs is approximately 6 km (of the c. 96 km total distance covered by the Project), therefore this area contributes disproportionately to the corn bunting population within and adjacent to the Order Limits as a whole. Outside of Misterton Carrs, the majority (seven of 12) of the remaining breeding corn bunting records occurred between Crowle and Ousefleet, across a distance of approximately 17 km of the Project route. North of Blacktoft only three territories were detected and between Beckingham and the southern terminus of the Project, only one territory was detected. The key parts of the Project for this species are therefore Misterton Carrs (River Idle to Chesterfield Canal, Route Section E) and Ousefleet to Crowle (Route Sections B and C)

Nightjar

4.3.208 There were no occurrences of nightjar during any of the baseline surveys.

Other species

4.3.209 Flights of curlew and snipe were recorded in very small numbers and, while it is likely that snipe breeds at Blacktoft Sands RSPB Reserve, there were no other records of

these species to suggest that they bred within the Survey Area and therefore no further commentary is offered for them with respect to breeding.

4.3.210 Oystercatcher was recorded in small numbers close to Creyke Beck substation, Ellerker and Haxey, where pairs in suitable breeding habitat suggested possible breeding for this species. The baseline data suggest a maximum of three breeding pairs within 500 m of the Order Limits, with small numbers of foraging birds boosting the numbers slightly in some locations. Only two flights were recorded for this species, close to the River Idle, neither of which were at risk of collision.

4.3.211 A range of other species, predominantly (but not exclusively) wetland birds comprising ducks, geese, waders and herons were present during the breeding season but in such small numbers or so infrequently as to be of little or no relevance for assessment purposes. These included osprey (as a passage migrant), goshawk, gadwall, little egret and ringed plover. No further discussion is offered for these species.

References

Balmer, D. G. (2013). Birds Atlas 2007-11: the Breeding and Wintering Birds of Britain and Ireland. Thetford: British Trust for Ornithology .

Bell, M. (1988). Feeding behaviour of wintering Pink-footed and Greylag Geese in north-east Scotland. Wildfowl, 39, 43 - 53.

Bibby, C. B. (2000). Bird Census Techniques. Second Edition. London: Academic Press.

British Trust for Ornithology. (2026, June 29). WeBS Counter Handbook. Retrieved from https://www.bto.org/get-involved/volunteer/projects/wetland-bird-survey/taking-part/counter-resources

Casey, C. C. (2021). Birds of Lincolnshire. Lincolnshire Bird Club.

Department for Environment, Food & Rural Affairs. (2024). MAGIC on the Map. Retrieved from https://magic.defra.gov.uk/

Doncaster and District Ornithological Society . (2026, May 13). Doncaster Bird Report 2002/03. Retrieved from https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.doncasterbirding.co.uk%2Fwordpress%2Fwp-content%2Fuploads%2F2012%2F01%2FDONCASTER-BIRD-REPORT-2002-2003.doc&wdOrigin=BROWSELINK);

Frost, T. C. (2026). Waterbirds in the UK 2024/25: The Wetland Bird Survey and Goose & Swan Monitoring Programme. Thetford: BTO/RSPB/JNCC/NatureScot.

Furber, S. (2021). IDLE WASHLANDS BIRD REPORT 2021. Idle Washlands Bird Group .

Gilbert, G. G. (1998). Bird Monitoring Methods: A Manual of Techniques for Key UK Species . Bedfordshire, England.: The Royal Society for the protection of Birds.

Goodship, N.M. and Furness, R.W. (MacArthur Green). (2022). Disturbance Distances Review: An updated literature review of disturbance distances of selected bird species. NatureScot Research Report 1283.

HM Government. (1981). Wildlife and Countryside Act 1981. Retrieved August 26, 2015, from legislation.gov.uk: https://www.legislation.gov.uk/ukpga/1981/69

HM Government. (2006). Natural Environment and Rural Communities Act 2006. Retrieved August 26, 2025, from legislation.gov.uk/uk: https://www.legislation.gov.uk/ukpga/2006/16/contents

HM Government. (2017). The Conservation of Habitats and Species Regulations. Retrieved August 26, 2025, from legislation.gov.uk: https://www.legislation.gov.uk/uksi/2017/1012/contents

Joint Nature Conservation Committee. (2026, June 29). JNCC. Retrieved from https://jncc.gov.uk/

Marchant, J. (1983). Common Birds Census Instructions. Tring, Hertfordshire,: British Trust for Ornithology .

Marchant, J. H. (1990). Population Trends in British Breeding Birds. Tring, Hertfordshire: British Trust for Ornithology .

Natural England. (2026). Designated Sites view. Retrieved from https://designatedsites.naturalengland.org.uk/

NatureScot. (2025, March). Recommended bird survey methods to inform impact assessment of onshore wind farms. Retrieved from https://www.nature.scot/doc/recommended-bird-survey-methods-inform-impact-assessment-onshore-windfarms

Nottinghamshire Birdwatchers . (2026, May 13). Nottinghamshire Birdwatchers County Guide. Retrieved from https://www.nottsbirders.net/beckingham.html

Nottinghamshire Birdwatchers. (2026, May 13). Retrieved from Nattinghamshire Birdwatchers Sightings: https://www.nottsbirders.net/latest_sightings.html

Reece, J. C. (2019). The birds of Nottinghamshire. Liverpool University Press.

Shawyer. (2011). Barn Owl Tyto alba Survey Methodology and Techniques for use in Ecological Assessment. Wildlife Conservation Partnership.

Stanbury, A. B. (2024). The status of UK’s breeding seabirds: an addendum to the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds.

Stanbury, A. E. (2021). 'The fifth review of Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man. British Birds, 723–747.

The European Parliament and the Council of the European Union. (2009). Directive 2009/147/EC of the European Parliament and of the Council on the conservation of wild birds. Retrieved August 26, 2025, from https://www.legislation.gov.uk/eudr/2009/147/contents

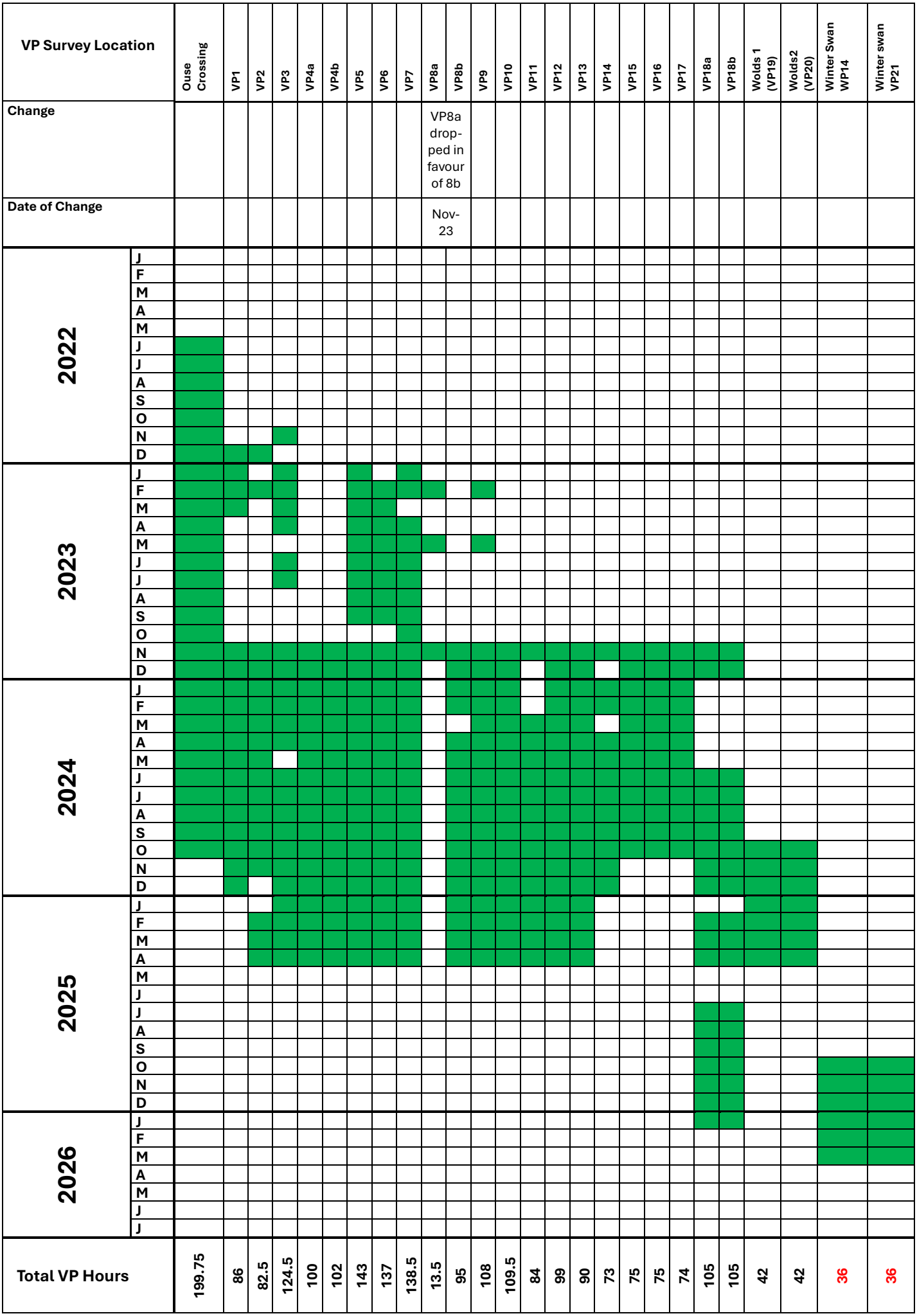
Thorne Moors Birding Blog. (2026, May 13). Thorne Moors Birding Blog. Retrieved from https://birdingsiteguide.com/index.php/birding-blogs/91-thorne-moors-birding-blogs/822-thorne-moors-birding-blog-2026a

Yorkshire Naturalist’s Union. (2010). Retrieved from https://ynu.org.uk/about-the-ynu/publications/download-page?task=download.send&id=169&catid=3&m=0: https://ynu.org.uk/about-the-ynu/publications/download-page?task=download.send&id=169&catid=3&m=0

Yorkshire Naturalists Union. (2022). Yorkshire Bird Report 2018/19. Yorkshire Naturalists Union Bird Section.

Annex A Combined Survey Timeline

nationalgrid


VP Survey Location
Ouse Crossing
VP1
VP2
VP3
VP4a
VP4b
VP5
VP6
VP7
VP8a
VP8b
VP9
VP10
VP11
VP12
VP13
VP14
VP15
VP16
VP17
VP18a
VP18b
Wolds 1 (VP19)
Wolds2 (VP20)
Winter Swan WP14
Winter swan VP21
Change
VP8a dropped in favour of 8b
Date of Change
Nov-23
2022
2023
2024
2025
2026
J F M A M J J A S O N D
Total VP Hours
199.75 86 82.5 124.5 100 102 143 137 138.5 13.5 95 108 109.5 84 99 90 73 75 75 74 105 105 42 42 36 36

Survey Location		Ouse TTTC	Ouse High/Low Tide Counts	Ouse High/Low Tide Counts RSPB	Broomfleet TW WeBS	THH Field Counts	FLL Field Counts – North	FLL Field Counts – South	Nocturnal Field Counts –	FLL Field Counts – Wolds	Wintering Bird Field Counts	Nightjar Surveys	Common Birds Census	Kingfisher Surveys	Peregrine Surveys	Hobby Surveys	Red Kite Surveys	Barn Owl Surveys	Winter Swan Walkovers	Pink-Footed Goose Tracking	Corn Bunting Walkover
Change		Replaced by Ouse High/Low Tide Counts	Replaced Ouse TTTC surveys	Covering south bank sectors within reserve																		
Date of Change		Apr-23	Apr-23	Jul-24																		
2022	J																					
	F																					
	M																					
	A																					
	M											■										
	J	■										■										
	J	■																				
	A	■																				
	S	■																				
	O																					
	N	■																				
	D																					
2023	J	■				■																
	F	■				■																
	M	■				■																
	A		■			■																
	M		■			■																
	J		■			■																
	J		■			■																
	A		■			■																
	S		■			■																
	O		■			■																
	N		■			■																
	D		■			■	■	■														
2024	J		■			■	■	■														
	F		■				■	■														
	M		■				■	■														
	A		■				■	■					■									
	M		■										■									
	J		■									■	■									
	J		■	■								■	■									
	A		■	■																		
	S		■	■																		
	O		■	■	■		■	■	■	■	■											
	N		■	■	■		■	■	■	■	■											
	D		■	■	■		■	■	■	■												
2025	J		■	■	■		■	■	■	■												
	F		■	■	■		■	■	■	■	■											
	M		■	■	■		■	■	■	■			■									
	A			■	■		■	■	■	■				■	■							
	M			■									■			■	■	■				
	J			■									■	■	■	■	■	■				
	J												■	■				■				
	A															■		■				
	S				■													■				
	O				■														■			
	N				■														■	■		
	D				■														■	■		
2026	J				■														■			
	F																		■			
	M																		■			
	A				■																	
	M				■																	■
	J				■																	■
	J				■																	■
	A																					
	S																					
	O																					
	N																					
	D																					

Annex B
Survey Metadata

nationalgrid

B.1 VP Metadata

VP1 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
13/12/2022	08:51	10:51	0	N/A	0	-2	1	3	2	2 (frost)
30/01/2023	15:15	16:30	2	W	0	9	2	3	2	0
31/01/2023	09:25	11:55	4 to 5	W	0	8	2	0	N/A	0
31/01/2023	13:05	15:20	4 to 5	W	0	10	2	1	2	0
28/02/2023	09:29	12:29	2	N	1 to 0	7 to 8	2	8 to 7	1 to 2	0
08/03/2023	10:11	13:11	3	E	2	3	2	8	2	1
23/03/2023	09:50	12:50	5	SW	0	11	2	7	2	0
07/11/2023	08:30	11:30	1 to 2	SW	0	7 to 10	2	1 to 4	2	0
17/11/2023	12:05	15:05	0 to 2	W	0	9 to 10	2	1	2	0
04/12/2023	12:10	15:10	1	E	0 to 1	5 to 6	2	8	1 to 2	0 to 1 (snow)
08/01/2024	13:18	16:18	2 to 3	E	0	3 to 4	2	7 to 8	2	0
17/01/2024	12:45	15:45	1	NW	0	1 to -1	2	0	N/A	0 to 1 (frost)
06/02/2024	09:05	12:05	4 to 3	SW to W	0 to 2	11	2 to 0	8	2 to 0	0
13/02/2024	13:10	16:10	3 to 1	SW to SE	0 to 1	8	2	8	2	0
05/03/2024	09:00	12:00	1 to 2	SE	0 to 1	7	2	8	1 to 2	0
11/04/2024	11:15	14:15	2 to 3	W	0	17 to 18	2	6 to 7	2	0
18/04/2024	07:22	10:22	1	NW	0	5 to 8	2	1 to 8	2	0
10/05/2024	08:14	11:14	1	S	0	16 to 19	2	8 to 6	2	0
21/05/2024	15:45	18:45	1 to 2	NE to E	0	17 to 16	2	7 to 8	2	0
20/06/2024	08:10	11:10	7	SW	0	15 to 17	2	7	2	0
30/07/2024	08:00	11:00	2 to 1	NE to E	0	19 to 21	2	1	2	0
07/08/2024	08:55	11:55	3	SW	0	16 to 17	2	5 to 8	2	0
15/08/2024	08:20	11:20	3	SW	0	17	2	6 to 8	2	0
03/09/2024	12:35	15:35	3	NW-WNW-W	0	17 to 18	2	8	2	0
17/09/2024	11:30	14:30	3	E	3	17	2	2	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
10/10/2024	07:30	10:30	2	N	2	8	2	6	2	0
24/10/2024	08:45	11:45	3	SE	0	10	2	8	2	0
13/11/2024	08:20	11:20	1	W	0	6 to 8	2	4 to 1	2	0
20/11/2024	09:30	12:30	4	NW	2 to 0	1 to 2	2 to 1	7 to 8	2 to 1	1 (frost)
12/12/2024	08:30	11:30	0 to 1	NE	1	8	1	8	1	0

VP2 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
13/12/2022	11:05	13:05	2	S	0	-1	1	6 to 3	2	2 (frost)
08/02/2023	08:58	11:58	3	5	0	2 to 5	2	0		0
07/11/2023	12:45	15:45	2 to 4	W	0	10 to 12	2	3 to 7	2	0
08/12/2023	09:15	12:15	0 to 1	SSW	0	7 to 8	2	8	2	0
11/12/2023	12:55	15:55	3 to 1	NW	0	8 to 7	2	1 to 3	2	0
10/01/2024	12.4	15.4	1	NE	0 to 1	6 to 5	2	2	2	0
23/01/2024	13:05	16:05	3 to 4	S to SW	1	10 to 8	1 to 2	8	2	0
06/02/2024	13:15	16:15	3	W to NW	1 to 0	9 to 8	1 to 2	8	1 to 2	0
13/02/2024	09:05	12:05	2 to 1	SW	0	6 to 8	2	7 to 8	2	0
12/03/2024	14:00	17:00	2 to 1	SW	0	11 to 13	2	6 to 8	2	0
09/04/2024	13:32	15:02	4 to 6	W	2 to 3	8	2 to 1	8	2 to 1	0
18/04/2024	11:24	14:24	2 to 4	W	0	7 to 10	2	8	2	0
01/05/2024	14:34	17:34	2 to 3	E	0	17	2	6	2	0
23/05/2024	13:05	16:05	3 to 4	W	0	14	2	8	2	0
04/06/2024	16:08	19:08	3 to 4	W	2 to 0	14	2	8	2	0
17/06/2024	09:35	12:35	3	SW	0	14	2	7	2	0
02/07/2024	12:01	15:01	2 to 3	W	0	16 to 17	2	8	2	0
18/07/2024	12:24	15:24	3	SW	0	22 to 24	2	3 to 1	2	0
06/08/2024	12:20	15:20	2 to 3	W	0	21 to 22	2	7 to 6	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
21/08/2024	09:15	12:15	4 to 5	W	0	16 to 17	2	5 to 4	2	0
10/09/2024	07:19	10:19	4 to 5	WSW	0,1 & 3	14 to 15	2	8	2	0
12/09/2024	11:25	14:25	3	NW	0	12 to 13	2	5 to 7	2	0
03/10/2024	12:15	15:15	3 to 4	E	0	13 to 14	2	4 to 6	2	0
09/10/2024	07:10	10:10	1	N	1 to 0	12 to 13	2	8	2	0
13/11/2024	12:25	15:25	2	W	0	9 to 8	2	2	2	0
27/02/2025	08:10	11:10	1 to 2	NW to W	0	3 to 7	2	0	2	0
05/03/2025	08:10	11:10	2 to 3	SW	0	5 to 12	2	6 to 5	2	0
13/03/2025	10:40	13:40	3	N to NE	0 to 2	7	2	3 to 8	2	0
01/04/2025	07:45	10:45	1	SE	0	4 to 8	2	1	2	0
24/04/2025	08:10	11:10	0 to 1	NE	0	9 to 12	2	3 to 5	2	0

VP3 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
30/11/2022	10:35	12:35	1	SE	0	6	1	8	1	0
30/11/2022	13:05	15:05	1	SE	0	6	1	8	1	0
11/01/2023	08:30	11:30	3	SW	0	7	2	2	2	0
11/01/2023	12:38	14:38	4	SW	2	8	2	7	2	0
18/01/2023	12:20	15:20	3	W	0	3	2	3	2	2 (frost)
07/02/2023	13:30	16:30	3 to 4	SW	0	7 to 6	2	3 to 4	2	0
09/03/2023	09:04	12:04	3	E	2	2	1	8	1	2 (snow)
14/04/2023	08:38	11:38	2 to 3	S	0	4 to 8	2	3 to 7	2	0
28/06/2023	09:20	12:20	1 to 2	SW	0	20 to 22	2	5 to 8	2	0
20/07/2023	09:35	12:35	1	NNW	0	17 to 19	2	7	2	0
25/07/2023	12:55	14:25	1 to 2	NW	0	17	2	6 to 7	2	0
08/11/2023	08:30	11:30	4	S to SW	0 to 1	8 to 10	2	8	2	0
17/11/2023	08:05	11:05	0	N/A	0	6 to 9	2	4 to 1	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
08/12/2023	12:45	14:45	1 to 2	S	2	9	2	8	2	0
12/12/2023	08:45	11:45	1 to 2	SE	0	7	2 to 1	8	2	0
13/12/2023	13:40	14:40	3	N	0 to 1	6	2	8	2	0
09/01/2024	08:26	11:26	3	NE to N	0	7	2	8	2	2
17/01/2024	08:35	11:35	0 to 1	NW	0	-3 to 0	2	0	N/A	1 to 0 (frost)
07/02/2024	09:00	12:00	1	SW	0	3 to 5	2	4 to 1	2	0
14/02/2024	12:30	15:30	3 to 2	SW	1 to 0	13 to 14	2	7 to 8	2	0
05/03/2024	13:15	16:15	2 to 1	SE to E	0	8	2	3 to 6	2	0
13/03/2024	09:07	12:07	3 to 4	S	0	12 to 13	2	7 to 8	2	0
08/04/2024	10:06	13:06	3 to 4	SW	0	8 to 12	2	8	2	0
24/06/2024	09:30	12:30	2	SW	0	22	2	1	2	0
25/06/2024	11:45	14:45	1 to 2	SE	0	23 to 24	2	7	2	0
17/07/2024	09:30	12:30	2	W	0	18 to 20	2	4 to 5	2	0
30/07/2024	12:00	15:00	1	NE	0	24	2	1	2	0
07/08/2024	12:24	15:24	3	W	0	17 to 19	2	8	2	0
15/08/2024	11:47	14:47	2 to 3	SW to W	0	17	2	8	2	0
03/09/2024	08:55	11:55	3	N to NW	0	17	2	8	2	0
19/09/2024	10:48	13:48	3 to 4	NE	0	17	2	8 to 7	2	0
10/10/2024	10:55	13:55	3	N	0	8	2	4	2	0
24/10/2024	12:10	15:10	5	SE	0	15	2	3	2	0
05/11/2024	10:15	13:15	1	SW	0	10	1	8	1	0
03/12/2024	09:00	12:00	1	NW	0	3 to 5	2	8	2	0
12/12/2024	12:00	15:00	1	NE	0 to 1	9	2	8 to 7	2 to 1	0
08/01/2025	07:50	10:50	1	N	0	-3 to -1	2	4 to 6	2	2 (frost)
15/01/2025	07:35	10:35	1 to 2	SW	0	7 to 8	2	8 to 6	1 to 2	0
05/02/2025	11:10	14:10	3 to 4	SW	0	7	2	2 to 8	2	0
27/02/2025	11:50	14:50	2	N	0	7 to 8	2	4 to 3	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
05/03/2025	11:45	14:45	3 to 4	SW	0	12 to 13	2	5 to 4	2	0
25/03/2025	09:55	12:55	3 to 4	NW	0	12 to 15	2	5 to 8	2	0
01/04/2025	11:15	14:15	3 to 4	SE	0	8		1	2	0
25/04/2025	09:21	12:21	1 to 3	SE	0	11 to 12	2	7 to 8	2	0

VP4 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
01/11/2023	09:30	12:30	2 to 3	S	0	13	2	4 to 6	2	0
18/12/2023	15:00	16:00	3 to 4	SW	0	13	2	8	2	0
23/01/2024	15:38	16:38	4 to 5	SW	0	8	2	8	2	0
24/01/2024	09:45	12:45	3 to 5	W	0	10	2	4 to 8	2	0
24/01/2024	13:15	15:15	3 to 4	W	0	10	2	5 to 6	2	0
15/02/2024	09:45	12:45	3 to 4	S to SSW	0	13 to 15	1	8 to 7	1	0
22/02/2024	10:05	13:05	1 to 2	SW to NW	1 to 0	8 to 7	2	8	2	0
19/03/2024	09:31	12:31	3	WSW	0	13 to 15	2	5 to 6	2	0
26/03/2024	10:15	13:15	1 to 2	E	0	11 to 12	2	7	2	0
17/04/2024	12:45	15:45	2 to 3	NW	2	9 to 10	2	8 to 6	2	0
30/04/2024	14:20	17:20	4	S to SE	0	18 to17	2	2 to 3	2	0
09/05/2024	09:15	12:15	2	SW	0	15 to 18	2	3 to 2	2	0
29/05/2024	09:15	12:15	4	W	0	15 to 16	2	4 to 7	2	0
12/06/2024	10:00	13:00	1 to 2	W	0	16 to 18	2	8 to 7	2	0
19/06/2024	09:23	12:23	1	N	0	14 to 15	2	6 to 7	2	0
18/07/2024	09:05	12:05	2	SW	0	22	2	2	2	0
23/07/2024	11:55	14:55	2	N	0	24	2	2	2	0
14/08/2024	11:48	14:48	1	SW	0	21 to 20	2	8 to 6	2	0
30/08/2024	10:10	13:10	1 to 2	NW	0	17 to 20	2	1 to 3	2	0
10/09/2024	11:50	14:50	4 to 5	W	0 to 2	14 to 15	2	6 to 8	2	0
18/09/2024	13:40	16:40	3 to 4	ENE	0	18 to 17	2	2 to 1	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
08/10/2024	12:00	15:00	1	SE	0	13 to 16	2	8	2	0
16/10/2024	08:25	11:25	1 to 3	SE	0	15	2	8	1	0
12/11/2024	10:20	13:20	2 to 3	NNE to NE	0	10 to 11	2	6 to 5	2	0
19/11/2024	10:20	13:20	2	NW	0	3 to 4	2	8 to 7	2	0
04/12/2024	11:30	14:30	1	S to SSE	0	6	2	3 to 8	2	0
11/12/2024	12:55	15:55	1 to 2	NNE	0	7 to 6	2	8	2	0
16/01/2025	10:05	13:05	1	S	0	3 to 5	2	0	2	1 (frost)
30/01/2025	08:36	11:36	0 to 1	NW	0	1 to 5	2	0	2	1 (frost)
04/02/2025	11:20	14:20	3 to 4	S	0	9 to 10	2	5 to 8	2	0
14/02/2025	08:15	11:15	0 to 3	NW to SE	0	1 to 4	2	8	2	0
07/03/2025	13:10	16:10	2	SW	0	14 to 11	2	4 to 8	2	0
26/03/2025	08:00	11:00	1 to 2	S	0	5 to 14	0 to 2	8 to 3	0 to 2	0
16/04/2025	12:45	15:45	4 to 5	SW to SSW	0	11	2	8 to 7	2	0
30/04/2025	11:00	14:00	1	SW	0	25	2	2	2	0

VP5 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
17/01/2023	13:00	16:00	1 to 2	W	0	2 to 3	2	1	2	2 (frost)
18/01/2023	08:50	11:50	2	W	0	1 to 3	2	4 to 3	2	2 (frost)
07/02/2023	13:27	16:27	1 to 2	SW	0	8 to 9	2	1 to 5	2	0
30/03/2023	11:20	14:20	1 to 2	SW	0 to 4	13	2	4 to 8	2	0
05/04/2023	11:12	14:12	1 to 2	S	1 to 2	9	2	8	2	0
17/05/2023	13:00	14:30	0	W	0	14 to 15	2	4 to 5	2	0
24/05/2023	14:30	16:00	1 to 2	NW	0	19	2	1	2	0
31/05/2023	09:50	12:50	2	NE	0	12 to 14	2	8	2	0
21/06/2023	12:35	14:35	2	SW	0	22	2	3 to 6	2	0
29/06/2023	13:15	14:45	2	NW	0	19	2	5 to 6	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
20/07/2023	13:30	15:00	1 to 2	NW	0	19	2	7	2	0
25/07/2023	09:15	12:15	1	NW	0	15 to 17	2	4 to 5	2	0
31/08/2023	12:05	15:05	1	SE	0	18 to 19	2	5 to 5	2	0
18/09/2023	12:15	15:15	3 to 2	W	2 to 0	16 to 15	2	8 to 7	2	0
08/11/2023	12:50	15:50	3 to 4	W	0	10 to 12	2	7	2	0
16/11/2023	08:46	11:46	0	N	1		0 to 1	8	2	0
05/12/2023	11:25	14:25	1	N	0 to 2	6	2	5 to 7	2	0
12/12/2023	12:50	15:50	1	SE	0	9 to 8	0 to 1	8	2	0
09/01/2024	11:56	14:56	3 to 4	E	0	4	2	5 to 6	2	0
12/01/2024	09:10	12:10	1	NW	0	5	2	8	2	0
07/02/2024	13:00	16:00	1	SW to W	0	6 to 7	2	1 to 3	2	0
14/02/2024	08:30	11:30	2 to 3	SW	0 to 1	11 to 13	2	5 to 8	2	0
05/03/2024	09:10	12:10	2	SE	0		2	7 to 8	2	0
13/03/2024	12:45	15:45	4	S	0 to 1	12	2	8	2	0
08/04/2024	13:50	16:50	3	SW	0 to 1	12	2	6 to 8	2	0
18/04/2024	08:30	11:30	2 to 3	NW	0	11	2	7 to 8	2	0
09/05/2024	13:00	16:00	2	W	0	18 to 20	2	2 to 7	2	0
16/05/2024	08:00	11:00	0 to 1	NW	1 to 0	14 to 15	2	8	1 to 2	0
20/06/2024	11:07	14:07	2 to 1	SW	0	18 to 22	2	5 to 2	2	0
24/06/2024	13:20	16:20	1	SW	0	26	2	5	2	0
17/07/2024	13:00	16:00	1	SW	0	21 to 22	2	7	2	0
30/07/2024	12:55	15:55	1	N	0	25 to 26	2	1	2	0
08/08/2024	09:00	12:00	2 to 3	SW	0	18 to 20	2	3 to 8	2	0
29/08/2024	13:30	16:30	3 to 4	W	0	20	2	6 to 8	2	0
04/09/2024	08:15	11:15	3 to 1	NW	0 to 1	13 to 15	2	8	2	0
11/09/2024	08:25	11:25	3 to 4	W	0	12 to 13	2	4	2	0
02/10/2024	08:05	11:05	4	NE	0	13	2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
09/10/2024	10:35	13:35	1	N	0	14 to 12	2	8	2	0
12/11/2024	13:55	16:55	2 to 1	NE to NNE	0	11 to 9	2	5 to 7	2	0
19/11/2024	13:55	16:55	2 to 3	NW	0	3 to 0	2	7	2	0
04/12/2024	07:40	10:40	1	SW	0	3 to 4	2	2 to 5	2	0
13/12/2024	08:00	11:00	1	N	0	6	2	8	2	0
16/01/2025	14:00	15:00	1	S	0	7 to 4	2	0	2	0
29/01/2025	09:45	12:45	2 to 3	W to NW	0	5 to 7	2	0 to 4	2	0
06/02/2025	07:40	10:40	0 to 1	NNE to NE	0	0 to 3	2	0 to 4	2	0
12/02/2025	09:00	12:00	2	NE	0	5 to 6	1	8	1	0
06/03/2025	11:05	14:05	3 to 4	S	0	12 to 16	2	2	2	0
19/03/2025	08:10	11:10	2	SSE	0	5 to 10	1 to 2	0 to 1	2	0
01/04/2025	11:55	14:55	3	E to SE	0	11 to 13	2	0	N/a	0
15/04/2025	09:10	12:10	1 to 2	NNE to NE	0	10 to 12	1	8	1	0

VP6 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
07/02/2023	13:45	16:45	1 to 2	SW	0	9 to 6	2	2 to 4	2	0
23/03/2023	13:50	16:50	1 to 4	SW	0 to 2	13 to 14	2	4 to 8	2	0
05/04/2023	10:50	13:50	1	SW	1 to 2	8	1 to 2	8	2	0
13/04/2023	13:40	16:40	4 to 5	W	0 to 2	9 to 10	2	7 to 6	2	0
17/05/2023	09:04	13:04	0 to 1	SW to W	0	11 to 14	2	8 to 4	2	0
21/06/2023	09:05	12:05	2	SW	0	19 to 22	2	3 to 4	2	0
29/06/2023	09:50	12:50	2 to 3	NW	0	17 to 19	2	4 to 5	2	0
12/07/2023	13:35	15:05	3	SW	3 to 0	18	2	8 to 7	1 to 2	0
18/07/2023	14:45	16:15	1	SW	4	15 to 16	2	8	2	0
26/07/2023	09:05	12:05	1 to 2	SW	0	17 to 19	2	4 to 5	2	0
24/08/2023	10:41	13:41	1	SW	0	18	2	6	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/09/2023	12:10	15:10	1 to 2	S	0	23 to 26	2	2	2	0
25/09/2023	13:50	15:50	3 to 4	SW	0	20 to 19	2	3	2	0
10/11/2023	13:40	15:40	3	NW	0	9	2	3	2	0
16/11/2023	13:00	16:00	1 to 0	E	0	8 to 9	2	8	2	0
24/11/2023	11:30	12:30	5	NW	0	6	2	3	2	0
06/12/2023	08:20	11:20	0 to 1	NW to W	0	(-1) to 3	2	1	2	1 to 2 (frost)
10/01/2024	12:15	15:15	2 to 3	NE	0 to 1	6	2	5 to 7	2	0
18/01/2024	13:05	16:05	3	NW	0	2 to 0	2	0	N/A	0
08/02/2024	09:20	12:20	3 to 4	SE to E	1 to 2	3 to 2	2 to 0	8	2	0
14/02/2024	13:00	16:00	3	SSW	0	13	1	7 to 8	1	0
05/03/2024	12:45	15:45	1 to 2	SE	0	8 to 9	2	7 to 6	2	0
13/03/2024	09:25	12:25	4 to 5	SW	0	12 to 13	2	4 to 8	2	0
15/04/2024	09:20	12:20	4	W to SW	0 to 2	7 to 9	2	4 to 5	2	0
18/04/2024	11:40	14:40	2	NW	0	9 to 11	2	8	2	0
08/05/2024	08:40	11:40	2	S to SE	0	11 to 16	2	6 to 2	1 to 2	0
16/05/2024	11:40	14:40	1 to 2	N	0	16 to 17	2	6 to 8	2	0
17/06/2024	13:45	16:45	2	W to SW	2	16	2	7	2	0
04/07/2024	10:50	13:50	4 to 5	SW	0	15	2	7 to 8	2	0
16/07/2024	13:35	16:35	3 to 1	N to NW	0	17 to 19	2	4 to 8	2	0
08/08/2024	12:20	15:20	3 to 4	SW to S	0 to 1	21 to 20	2	8	2	0
21/08/2024	12:00	15:00	4 to 3	W	0	17	2	4 to 7	2	0
04/09/2024	12:00	15:00	3 to 1	N	0 to 3 (Hailstorm)	17	2	8	2	0
11/09/2024	12:00	15:00	4	NW	0 to 3 (Hailstorm)	13	2 to 1	5 to 8	2	0
02/10/2024	11:35	14:35	5	NE	0	14	2	6 to 8	2	0
09/10/2024	08:42	11:42	3	N	0 to 2	13	2	8 to 6	2	0
14/11/2024	09:05	12:05	1 to 2	NNW	0	8 to 11	2	1 to 8	2	0
20/11/2024	13:25	16:25	4 to 2	NW	0	2 to 1	2	4 to 2	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/12/2024	12:05	15:05	1	SW	0	8 to 7	2	5 to 6	2	0
13/12/2024	11:10	14:10	1	N	0	6	2	8	2	0
17/01/2025	08:00	11:00	1	S	0	5 to 6	2	7 to 8	2	0
21/01/2025	11:30	13:00	1 to 2	SSW	0	6	2	8	2	0
24/01/2025	09:00	10:30	8	SW	0	8	2	5	2	0
06/02/2025	11:15	14:15	1	NE	0	6 to 7	2	7 to 3	2	0
12/02/2025	13:00	16:00	3	NE	0	6 to 4	1	8	1	0
06/03/2025	07:30	10:30	5	S	0	5 to 12	2	3 to 2	2	0
19/03/2025	12:10	15:10	2	S to SSW	0	11 to 12	2	0 to 1	2	0
01/04/2025	07:50	10:50	2 to 3	E	0	4 to 10	1 to 2	0 to 8	2	0
11/04/2025	07:45	10:45	1	SW	0	12 to 16	2	3	2	0

VP7 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
10/01/2023	09:00	10:00	5	NW	4	6	1	8	2	0
09/02/2023	09:12	12:12	2 to 3	W	0	2 to 7	2	0	N/A	0
13/02/2023	14:15	17:15	2	S	0	6 to 8	2	0 to 7	2	0
25/02/2023	11:45	13:15	2	E	0	17	2	2 to 3	2	0
04/04/2023	09:50	12:50	1 to 2	S	0	6 to 10	2	0 to 1	2	0
15/05/2023	14:50	16:50	2	N	0	13	2	5 to 4	2	0
22/06/2023	09:40	12:40	1	NNW to N	0	20 to 22	2	5 to 6	2	0
19/07/2023	10:05	13:05	1 to 2	NW	0	16 to 17	2	7	2	0
27/07/2023	11:40	13:10	2	W	0	20 to 21	2	7 to 5	2	0
04/08/2023	12:25	13:55	1	NW	0	16 to 17	2	7	2	0
05/09/2023	12:20	14:20	2 to 3	NE	0	24	2	1	2	0
07/09/2023	11:30	14:30	2	E	0	23 to 25	2	3	2	0
19/10/2023	10:00	13:00	3	SE	0 to 1	13 to 17	1 to 2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/11/2023	13:30	16:30	5	SW	0	12 to 10	2	6 to 4	2	0
15/11/2023	08:55	11:55	4	W	0	9 to 11	2	7 to 6	2	0
07/12/2023	09:38	12:38	4 to 5	SE	0 to 2	5 to 6	2	8	2	0
15/12/2023	09:10	12:10	2 to 3	SW	0	6 to 8	2	7	2	0
11/01/2024	08:45	11:45	1 to 2	N to NE	0 to 1	4 to 7	2	8	2	0
18/01/2024	08:45	11:45	2 to 3	NW	0	-3 to 0	2	5 to 0	2	0 to 1
08/02/2024	13:20	16:20	4	E	2 to 1	1 to 2	1	8	1	0
13/02/2024	12:15	15:15	2 to 3	SW	0 to 1	9 to 8	2	8	2	0
06/03/2024	09:25	12:25	0 to 1	N to E	1 to 0	6 to 9	0 to 1	8	0 to 1	0
13/03/2024	14:00	17:00	5 to 4	SW	0	14 to 13	2	8 to 7	2	0
15/04/2024	13:20	16:20	4	W	0 to 1	9 to 11	2	6	2	0
24/04/2024	8.45	11.45	3	NW	0 to 2	6 to 8	2	7	2	0
08/05/2024	12:25	15:25	2	S	0	16 to 18	2	2 to 3	2	0
15/05/2024	08:40	11:40	2	SE	0 to 2	14 to 16	2	8	2	0
18/06/2024	10:23	13:23	2	W	0	16 to 15	2	4 to 7	2	0
26/06/2024	10:50	13:50	2	E	0	21 to 23	2	1	2	0
11/07/2024	12:16	15:16	3	NE	0	15 to 16	2	8	2	0
16/07/2024	09:00	12:00	2 to 3	N	1 to 0	15 to 17	1 to 2	8	1 to 2	0
09/08/2024	08:45	11:45	3 to 4	W	0	17 to 20	2	4 to 5	2	0
21/08/2024	08:15	11:15	3 to 4	SW to W	0	16	2	3 to 6	2	0
04/09/2024	08:45	11:45	2	N	0	13 to 16	2	8	2	0
11/09/2024	11:10	14:10	3 to 4	W	0	14	2	5 to 7	2	0
09/10/2024	12:25	15:25	4 to 5	N	2 to 0	13	2	8	1 to 2	0
18/10/2024	09:30	12:30	2 to 3	S	0	8 to 5	1 to 2	8 to 5	2	0
14/11/2024	13:05	16:05	2	NNW	0	10 to 11	2	7 to 8	2	0
20/11/2024	09:00	12:00	3	W	0	0 to 3	2	1 to 7	2	0
05/12/2024	08:15	11:15	2 to 3	SW	0	10 to 11	2	5 to 7	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
23/12/2024	11:20	14:20	3	NW to W	0	3	2	8	2	0
14/01/2025	11:40	14:40	1 to 2	SW to W	0	10 to 8	2	7 to 4	2	0
21/01/2025	07:40	10:40	1	SSW	0 to 1	4 to 5	2	8	2	0
25/02/2025	07:55	10:55	2 to 3	SW	0	3 to 5	2	0	2	0
28/02/2025	08:00	11:00	1	W	0	1 to 5	1 to 2	0	2	1 to 0 (frost)
06/03/2025	08:10	11:10	3	SSE to S	0	6 to 12	1 to 2	0	1 to 2	0
26/03/2025	11:45	14:45	3	SW to SWW	0	13 to 15	2	5	2	0
11/04/2025	12:00	15:00	1	SW	0	18	2	0	2	0
15/04/2025	13:25	16:25	2	NE	0	11 to 12	2	7 to 8	2	0

VP8a metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
09/02/2023	09:30	12:30	2 to 3	W	0	4 to 8	2	0 to 1	2	0
13/02/2023	14:39	17:39	3 to 1	S	0	9 to 7	2	5	2	0
25/05/2023	13:45	15:15	2	E	0	17	2	1 to 2	2	0
30/05/2023	14:30	16:00	2 to 3	NE	0	15	2	6 to 7	2	0
31/05/2023	13:35	15:05	2	NE	0	13 to 14	2	8	2	0
07/11/2023	13:30	16:30	3	SW	3	11	2	7	2	0

VP8b metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
15/11/2023	13:15	16:15	5 to 4	W	0	11 to 9	2	7 to 4	2	0
07/12/2023	13:27	14:27	4 to 5	SE	2 to 4	6	2	8	1 to 2	0
15/12/2023	12:45	14:45	4 to 2	SW	0	8	2	8 to 7	2	0
11/01/2024	12:33	15:33	3	NE to N	0	7	2	8	2	0
19/01/2024	08:45	11:45	1 to 2	SW	0	-1 to 4	2	1 to 5	2	1 to 0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/02/2024	08:55	11:55	4 to 5	SW	0 to 1	11	2	8	2	0
14/02/2024	09:00	12:00	3	S to SSW	0 to 2	11 to 12	1	6 to 8	2	0
12/03/2024	08:30	11:30	3	SE	3 to 2	6 to 7	0 to 1	8	1	0
16/04/2024	10:12	13:12	4 to 3	N to NW	0	8 to 9	2	8 to 7	2	0
24/04/2024	12:00	15:00	3	N	0	9	2	6 to 7	2	0
15/05/2024	11:55	14:55	1 to 2	SE	0 to 1	15 to 16	2	7 to 8	2	0
17/05/2024	09:00	12:00	2 to 1	SSW to W	0	15 to 18	2	8 to 4	2	0
10/06/2024	14:05	17:05	4 to 3	N to NNM	1 to 0	13	2	8 to 3	2	0
18/06/2024	13:42	15:42	1 to 2	N to E	0 to 4	18 to 15	2	7 to 8	2	0
16/07/2023	11:45	14:45	2	NE to N	0	14 to 15	2	8	2	0
25/07/2024	17:00	20:00		W	3 to 1	21 to 19	2	8	2	0
09/08/2024	12:15	15:15	4 to 3	W	0	20 to 22	2	4 to 3	2	0
30/08/2024	14:35	17:35	2 to 4	S to E	0	21 to 20	2	2	2	0
11/09/2024	07:55	10:55	2 to 3	W	0	14	2	2 to 6	2	0
17/09/2024	07:50	10:50	1	NW	0	10 to 18	0 to 2	8 to 2	0 to 2	0
09/10/2024	09:00	12:00	2	N	2	13-14	2	8	2	0
22/10/2024	10:16	13:16	4 to 3	W	0	13 to 14	2	2 to 5	2	0
20/11/2024	12:20	15:20	3	W to NW	0	3 to 2	2	6 to 3	2	0
26/11/2024	12:30	15:30	2	SW	0	8 to 7	2	1 to 2	2	0
23/12/2024	08:05	11:05	2 to 3	NW	0	3	2	3 to 8	2	0
14/01/2025	08:30	11:30	1	SW	0	6 to 8	2	3 to 7	2	0
21/01/2025	09:00	12:00	3	SW	0	8	2	8	2	0
05/02/2025	08:15	11:15	1	SW to W	0	2 to 7	2	1 to 2	2	0
25/02/2025	11:10	14:10	3	W	0	5	2	3 to 6	2	0
06/03/2025	12:20	15:20	4	S	0	15 to 16	2	0 to 4	2	0
26/03/2025	08:15	11:15	0 to 1	SSW to SW	0	3 to 13	2	8 to 6	1 to 2	0
04/04/2025	10:45	13:45	2	NE to N	0	14	2	1	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
10/04/2025	11:30	14:30	2	W	0	15 to 18	2	0	2	0

VP9 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
09/02/2023	09:35	12:35	2 to 3	W	0	5 to 8	2	2 to 3	2	0
30/05/2023	17:00	19:00	2	NE	0	13 to 14	2	3 to 7	2	0
09/11/2023	08:30	11:30	2 to 3	SW	0	7 to 8	2	3 to 7	2	0
27/11/2023	10:35	13:35	3	NE	0	10	2	5 to 7	2	0
07/12/2023	12:35	15:35	4	SE	0 to 2	6	2	8	1	0
15/12/2023	08:30	11:30	3	SW	0	5 to 7	2	7 to 8	2	0
19/01/2024	12:45	15:45	3 to 2	W to SW	0	4	2	2 to 6	2	0
23/01/2024	08:50	11:50	3 to 4	SW to S	0 to 2	4	2 to 1	8	2	0
06/02/2024	12:40	15:40	4	W	2 to 0	10 to 8	2	8	2	0
15/02/2024	09:45	12:45	3 to 4	S to SSW	0	13 to 15	1	8 to 7	1	0
06/03/2024	13:25	16:25	1	SE	0	9 to 10	1 to 2	7 to 8	1 to 2	0
12/03/2024	08:30	11:30	3	SE	3 to 2	8 to 12	1 to 2	6 to 8	1	0
16/04/2024	13:51	16:51	3 to 4	N	0	10	2	6 to 7	2	0
29/04/2024	09:00	12:00	4	S to SSW	0	10 to 12	2	3 to 6	2	0
16/05/2024	08:30	11:30	2 to 1	N	0 to 1	13 to 14	2	8	2	0
29/05/2024	13:55	16:55	4	W	0	17	2	4 to 7	2	0
18/06/2024	09:20	12:20	3	NW	0	16 to 17	2	6	2	0
26/06/2024	07:30	10:30	2	NE to E	0	17 to 20	2	8 to 1	2	0
16/07/2024	08:30	11:30	1 to 2	N to NE	3 to 0	15	1 to 2	8	2	0
25/07/2024	13:30	16:30	3 to 4	WSW	0	22 to 23	2	8	2	0
13/08/2024	08:25	11:25	1	W to SW	0	18 to 20	2	2	2	0
22/08/2024	11:50	12:50	6	W	0	16	2	6 to 8	2	0
04/09/2024	12:15	15:15	2	N	1	17 to 15	2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
12/09/2024	12:30	15:30	3	NNW to N	0-1	13 to 14	2	4 to 5	2	0
09/10/2024	13:00	16:00	3	N	2	14	2	8	2	0
23/10/2024	07:40	10:40	2 to 3	SW	0	8 to 11	1 to 0	4 to 8	2	0
07/11/2024	11:25	14:25	1 to 2	SE	0	12	2	8	2	0
15/11/2024	07:55	10:55	1	SW	0	6 to 8	2	8	2	0
05/12/2024	10:30	13:50	1 to 2	SW	0	11	2	7 to 8	2	0
10/01/2025	09:25	12:25	1 to 2	NW	0	-2 to 0	2	0	2	1 (frost)
21/01/2025	14:25	15:25	3	SW	0	6	2	2	2	0
23/01/2025	09:00	11:00	3 to 4	S	0	2 to 4	2	6 to 8	2	0
05/02/2025	11:35	14:35	2 to 1	W	0	7 to 8	2	2	2	0
28/02/2025	11:20	14:20	1	W	0	6 to 9	2	0	2	0
10/03/2025	08:00	11:00	1	N	0	5 to 9	0 to 2	8	0 to 1	0
25/03/2025	13:05	16:05	3 to 2	NW to NNE	0	16 to 14	2	8 to 6	2	0
04/04/2025	07:20	10:20	1 to 3	NE	0	10 to 14	2	1	2	0
10/04/2025	08:10	11:10	1 to 2	W	0	7 to 14	2	8 to 2	2	0

VP10 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
09/11/2023	13:05	16:05	2 to 3	SW	0	8 to 9	2	3 to 8	2	0
16/11/2023	11:25	14:25	0	N/A	0	9	2	8	2	0
07/12/2023	08:40	11:40	4	SE	2 to 1	6	2	8	1	0
15/12/2023	12:30	15:30	3	SW	0	8	2	8	2	0
04/01/2024	11:18	14:18	2	SW	0	8	2	3 to 4	2	0
18/01/2024	09:30	12:30	2 to 4	W to NW	0	(-2) to 1	2	1 to 3	2	0 to 1 (snow), 2 (frost)
07/02/2024	09:19	12:19	0 to 1	W	0	2 to 4	2	6	2	0
16/02/2024	12:30	15:30	3	W	0	11	2	8 to 4	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/03/2024	09:31	12:31	0 to 1	N, E, and SE	1 to 0	7 to 8	1 to 2	8	1 to 2	0
14/03/2024	08:55	11:55	4	SW	0 to 1	11 to 13	2	4 to 8	2	0
16/04/2024	08:50	11:50	4 to 5	NW	0	9 to 10	2	4 to 8	2	0
29/04/2024	12:45	15:45	4 to 5	S	0	14 to 15	2	7 to 5	2	0
16/05/2024	11:47	14:47	1	N	1 to 0	15 to 16	2	8	2	0
17/05/2024	12:30	15:30	2	NNW to NNE	0	19 to 21	2	5 to 4	2	0
11/06/2024	12:04	15:04	3	NNW	0	13	2	8	2	0
18/06/2024	13:00	16:00	1 to 4	NE	0 to 2	17	2	7 to 8	2	0
15/07/2024	14:40	16:30	3	SSE to E	0 to 4	22 to 19	2	8	2	0
24/07/2024	09:12	12:12	1 to 3	S	0	18 to 19	2	8 to 6	2	0
31/07/2024	11:20	14:20	1 to 2	SE	0	22 to 23	2	1	2	0
08/08/2024	07:42	10:42	2 to 3	S	0	18 to 19	2	5 to 7	2	0
13/08/2024	12:05	15:05	3	SW	0	23	2	2	2	0
05/09/2024	08:05	11:05	3	NNE	0 to 1	15 to 17	2	8	2	0
12/09/2024	09:15	12:15	2 to 3	NNW to N	0 to 1	10 to 12	2	2 to 3	2	0
08/10/2024	09:15	12:15	2	S	0	13 to 15	2	7	2	0
23/10/2024	11:55	14:55	3	SW	0	12 to 13	2	7 to 4	2	0
12/11/2024	09:00	12:00	1 to 2	N	0	7 to 11	2	3 to 7	2	0
29/11/2024	08:50	11:50	3 to 2	S	0	8 to 7	2	4 to 6	2	0
06/12/2024	08:10	11:10	2 to 3	NE	0	5 to 6	2	2 to 4	2	0
10/12/2024	08:15	11:15	2	NE	0	6	2	8	2	0
07/01/2025	07:50	10:50	1	N	0	-3 to 2	2	2 to 1	2	0
29/01/2025	08:00	11:00	1 to 2	W	0	4 to 6	2	0	2	0
06/02/2025	08:00	11:00	1	E	0	-1 to 3	1 to 2	0 to 2	2	1 to 0 (frost)
25/02/2025	09:20	12:20	1 to 2	SW to W	0	6 to 9	2	1 to 3	2	0
10/03/2025	11:30	14:30	1 to 2	N	0	10 to 12	2	8 to 7	1 to 2	0
24/03/2025	08:05	11:05	1	NW	0	6 to 9	1 to 2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
09/04/2025	08:14	11:14	1	N	0	3 to 11	0 to 2	8 to 6	0 to 2	0
15/04/2025	12:50	15:50	1 to 2	NE	0	12 to 13	2	8 to 7	2	0

VP11 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
01/11/2023	13:27	16:27	3	SW	0	12	2	7	2	0
07/11/2023	08:30	11:30	3	SW	0	8	2	5	2	0
12/03/2024	09:15	12:15	2 to 3	SE	1 to 0	7	1 to 2	8	1 to 2	0
16/04/2024	13:25	16:25	4	N	0`	11 to 10	2	7 to 3	2	0
23/04/2024	08:00	11:00	2	N	2	10 to 11	1 to 2	8	0 to 1	0 to 2
02/05/2024	09:00	12:00	3 to 4	NNE to NE	0	13 to 16	2	3 to 6	2	0
15/05/2024	09:57	12:57	1 to 2	E	0 to 2	15 to 16	2	8 to 7	2	0
11/06/2024	15:45	18:45	3 to 0	N	0	13 to 12	2	8	2	0
19/06/2024	08:50	11:50	2 to 1	NE to N	0	16 to 19	2	5 to 4	2	0
19/06/2024	14:23	17:23	1	NW	0	17 to 18	2	7 to 4	2	0
15/07/2024	10:45	13:45	1 to 3	SE	2	20	2	3 to 6	2	0
17/07/2024	09:10	12:10	1	W to NW	0	18 to 20	2	0 to 5	2	0
08/08/2024	11:30	14:30	3	S	0	19 to 20	2	8	2	0
13/08/2024	09:30	12:30	2	S	0	18 to 24	2	2 to 3	2	0
05/09/2024	11:35	14:35	4 to 5	NW	0 to 1	17 to 18	2	8	1 to 2	0
12/09/2024	08:50	11:50	2	N	0	10 to 14	2	0 to 2	2	0
08/10/2024	12:35	15:35	2	S	0	16 to 15	2	4 to 5	2	0
17/10/2024	09:35	12:35	3	SW	0	14 to 16	2	1 to 3	2	0
12/11/2024	12:30	15:30	3 to 2	N	0	11 to 10	2	7	2	0
10/12/2024	12:10	15:10	3 to 2	NE	0	7 to 6	2	7 to 8	2	0
07/01/2025	11:00	14:00	1	N	0	2 to 3	2	8 to 6	2	1 (frost)
29/01/2025	11:35	14:35	1 to 2	WNW	0	7	2	1	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/02/2025	11:30	14:30	1	E to NE	0	4 to 7	2	1 to 4	2	0
25/02/2025	12:45	15:45	2	W	0	10	2	3 to 5	2	0
11/03/2025	08:15	11:15	1 to 2	N	0	4 to 7	2	3 to 7	0 to 1	0
24/03/2025	11:30	14:30	1	NW	0	10 to 13	2	8 to 6	2	0
09/04/2025	11:40	14:40	1 to 2	N to NE	0	12 to 14	2	6 to 8	2	0
15/04/2025	09:20	12:20	1	NNE	3 to 2 & 0	10 to 12	2	8	2	0

VP12 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
17/11/2023	11:50	14:50	1	W	0	11	2	1	2	0
07/11/2023	12:30	15:30	3	W	0	11	2	6	2	0
07/12/2023	08:50	11:50	1 to 0	W	0	-1 to 2	2	1	2	1 to 0 (frost)
13/12/2023	08:45	11:45	4	N	0	6	2	8	2	0
12/01/2024	12:20	15:20	1	NW	0	6 to 5	2	8	1	0
16/01/2024	08:45	11:45	3	SW	0 to 1	1	2	6	2	1 (frost)
09/02/2024	12:30	15:30	2	SW	0 to 1	7 to 9	0	8	1	0
20/02/2024	09:15	12:15	3 to 1	SW	0	10 to 14	2	8 to 2	2	0
06/03/2024	13:05	16:05	1 to 2	SE	0	9	2	8 to 7	2	0
16/04/2024	09:15	12:15	3	W to N	0	9 to 10	2	6 to 8	2	0
23/04/2024	12:15	15:15	3	N	0	10 to 11	2	4	2	0
02/05/2024	13:00	16:00	3 to 4	NE	0	17 to 18	2	2 to 3	2	0
13/06/2024	09:13	12:13	2	SW	0	13 to 15	2	8	2	0
19/06/2024	12:30	15:30	1 to 2	N	0	18 to 20	2	7 to 6	2	0
08/07/2024	13:30	16:30	1	SW	0	21	2	5 to 6	2	0
17/07/2024	13:25	16:25	1	W	0	21 to 22	2	3 to 7	2	0
13/08/2024	13:15	16:15	2 to 3	S to SW	0	24 to 25	2	3 to 4	2	0
22/08/2024	08:20	11:20	4	W	0	16	2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
12/09/2024	12:20	15:20	2	N	0	14	2	6 to 4	2	0
25/09/2024	10:00	13:00	1 to 2	SSE	0	11 to 12	2	4 to 6	2	0
01/10/2024	10:45	13:45	4 to 5	NNW to N	4	12	1 to 2	8	1	0
10/10/2024	08:10	11:10	3	NE	0	7 to 8	2	4 to 3	2	0
13/11/2024	08:05	11:05	1	W	0	4 to 9	2	3 to 6	2	0
05/12/2024	12:05	15:05	3	SSW	0	12	2	6 to 8	2	0
11/12/2024	08:20	11:20	1	N	0	4 to 6	2	8	2	0
23/01/2025	08:00	11:00	2	SW	0	3 to 5	2	4 to 8	2	0
28/01/2025	08:55	11:55	2	SE to NE	0 to 2	7	2	7 to 8	2	0
07/02/2025	08:00	11:00	1 to 2	NE to E	0	3 to 5	2	6 to 8	2	0
26/02/2025	08:00	11:00	1 to 2	S	1 to 0	3 to 6	2	8 to 7	1 to 2	0
11/03/2025	11:50	14:50	2	N	1 to 0	7	2	7 to 6	2	0
18/03/2025	13:50	16:50	4	SE	0	10 to 9	2	0 to 1	2	0
10/04/2025	08:20	11:20	1	W to SW	0	7 to 11	2	8 to 1	2	0
28/04/2025	09:11	12:11	0 to 2	SW	0	13 to 19	2	4	2	0

VP13 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
02/11/2023	13:15	16:15	3	NW	0 to 2	10 to 11	2	5 to 7	2	0
08/11/2023	08:45	11:45	4 to 3	S to WSW	1	9 to 11	2	8	1	0
22/12/2023	10:10	13:10	6	W	0	11	2	6	2	0
12/01/2024	08:40	11:40	1	NW	1 to 0	5 to 6	2	7 to 8	1	0
16/01/2024	12:45	15:45	3 to 4	SW	0	3 to 4	2	6 to 7	2	0
09/02/2024	08:30	11:30	2 to 3	SE	0 to 1	8	0	8	1	0
21/02/2024	13:25	16:25	4	SW	0	13	2	2 to 8	2	0
14/03/2024	12:55	15:55	4 to 5	SW	1 to 0	13 to 15	2	7 to 8	2	0
16/04/2024	12:50	15:50	3	NW	0	9 to 12	2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
30/04/2024	09:05	12:05	4	SSE	0	13 to 17	2	0	N/A	0
15/05/2024	14:53	17:53	1 to 2	E	0	16	2	8 to 5	2	0
13/06/2024	13:05	16:05	3 to 4	SW	0	15	2	8	2	0
08/07/2024	09:20	12:20	0 to 2	SW	0	15 to 17	2	1 to 6	2	0
15/08/2024	11:01	14:01	4	SW	2 to 0	19 to 20	2	8	2	0
29/08/2024	11:35	14:35	2 to 3	SW	0	19 to 21	2	3 to 5	2	0
17/09/2024	12:00	15:00	1	NW	0	18 to 19	2	1 to 0	2	0
27/09/2024	11:40	14:40	6	NW	0 to 2	12	2	6 to 8	2	0
07/10/2024	08:45	11:45	2 to 3	S	1 to 0	12 to 15	2	8 to 6	2	0
17/10/2024	13:45	16:45	3 to 4	SW	0	17	2	4 to 7	2	0
13/11/2024	11:45	14:45	1 to 2	W to NW	0	10 to 12	2	3 to 2	2	0
29/11/2024	08:30	11:30	3	SSE	0	4 to 7	2	4 to 7	2	0
11/12/2024	12:15	15:15	1	N	0	6 to 7	2	8	2	0
19/12/2024	12:20	15:20	2	NW	0	6	2	0	2	0
23/01/2025	11:30	14:30	2 to 3	S	0 to 1	6 to 7	2	8	2	0
28/01/2025	13:05	16:05	3	NNW	1 to 0	8 to 7	1 to 2	8	1 to 2	0
07/02/2025	11:30	14:30	3	E	0	6 to 5	2	8 to 7	2	0
26/02/2025	11:30	14:30	2	SW to W	0	7 to 9	2	7 to 6	2	0
18/03/2025	09:35	12:35	3	SE to S	0	8 to 9	2	0	2	0
25/03/2025	08:45	11:45	3	W to NW	0	10 to 15	2	4 to 8	2	0
10/04/2025	11:50	14:50	1	SW	0	12 to 17	2	0	2	0

VP14 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
02/11/2023	09:00	12:00	2 to 4	NE	0 to 2	10 to 11	1 to 2	7 to 8	2	0
08/11/2023	12:30	15:50	3	W	0	12 to 9	2	8 to 7	1 to 2	0
10/01/2024	12:10	15:10	1	N to NE	0	5 to 6	2	7 to 5	1	0
19/01/2024	12:30	15:30	2 to 3	SW	0	4	2	3 to 6	2	1 (frost)
21/02/2024	09:00	12:00	4 to 5	S	1	8 to 10	2 to 1	8	2 to 1	0
28/02/2024	09:15	12:15	2	S	0 to 1	6 to 7	1 to 2	8	2	0
14/03/2024	08:45	11:45	3 to 4	SSW	0	11 to 13	2	7 to 6	2	0
17/04/2024	08:55	11:55	3 to 4	NW	0	6 to 9	2	1 to 3	2	0
22/04/2024	14:19	15:19	1	ESE	2	8	2	8	1	0
03/05/2024	08:50	11:50	3 to 2	NNW to W	0	11 to 12	2	8	2	0
10/05/2024	09:00	12:00	1 to 2	SE to S	0	18 to 19	2	7 to 6	2	0
25/06/2024	07:40	10:40	1	SE to S	0	19 to 20	2	7	2	0
27/06/2024	07:40	10:40	2 to 3	SW	0	16 to 18	2	6 to 8	2	0
22/07/2024	13:53	17:03	1 to 4	SW	0	22 to 23	2	4 to 6	2	0
31/07/2024	14:18	17:18	3	SE	0	25 to 24	2	4	2	0
20/08/2024	17:00	20:00	4 to 3	W	0	18 to 16	2	4 to 2	2	0
29/08/2024	08:00	11:00	2	SW	0	18 to 19	2	3 to 7	2	0
10/09/2024	08:45	11:45	2 to 4	W	0 to 3	16 to 15	2	7 to 8	2	0
18/09/2024	08:00	11:00	2	NE	0	14	2	5 to 8	2	0
07/10/2024	12:15	15:15	2	S	0	16 to 17	2	6 to 3	2	0
22/10/2024	14:30	17:30	3	W	0	15 to 13	2	6 to 4	2	0
21/11/2024	09:00	12:00	1	W	0	-2 to 3	2	1 to 0	2	1 (snow)
29/11/2024	12:20	15:20	3	SSE	0	4 to 8	2	4 to 5	2	0
05/12/2024	10:20	13:20	2	SW	0	8	2	8	2	0
19/12/2024	08:30	11:30	2	W	0	4 to 6	2	0	2	0

VP15 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
22/11/2023	10:30	13:30	4	SW to W	0	9 to 11	2	7	2	0
29/11/2023	10:15	13:15	1	NW	0	1 to 3	2	1	2	2 to 0 (frost)
05/12/2023	08:40	11:40	2	NW	0 to 2	5 to 6	2	7 to 8	1	0
13/12/2023	12:45	15:45	4 to 3	NW	0 to 2	6	2	7 to 8	2	0
10/01/2024	08:40	11:40	1	N	0	3 to 4	2	3 to 8	1	0
25/01/2024	12:00	15:00	3 to 4	SSW	0	10 to 11	2	7 to 8	1 to 2	0
08/02/2024	08:30	11:30	3 to 4	E	2	1 to 2	1	8	1	0 to 1 (snow)
21/02/2024	13:00	16:00	5 to 3	SW	1 to 0	11 to 12	2	8	2	0 to 1 (frost)
07/03/2024	09:00	12:00	2	E	0	7 to 8	1	8	1	0
14/03/2024	12:45	15:45	4	SSW to S	2 to 0	13 to 14	2	7 to 8	2	0
17/04/2024	12:55	15:55	4	NW	0 to 2	10	2	3 to 8	2	0
22/04/2024	10:10	13:40	2	SE	2	7	2	8	1	0
03/05/2024	12:30	15:30	3 to 1	WNW	0 to 1	12 to 13	2	8	2	0
07/06/2024	11:00	14:00	2	SW to W	0	15 to 16	2	4 to 6	2	0
27/06/2024	10:50	13:50	2	SW	0	18 to 22	2	5 to 2	2	0
22/07/2024	09:45	12:45	2 to 4	S	2	18 to 21	2	7 to 8	2	0
31/07/2024	10:40	13:40	2	SE	0	22 to 24	2	2 to 5	2	0
07/08/2024	09:45	12:45	4	SW	0 to 1	17 to 19	2	8	2	0
16/08/2024	08:50	11:50	1 to 2	W	0	15 to 19	2	0 to 4	2	0
10/09/2024	12:30	15:30	3	W	0	15	2	8	2	0
25/09/2024	13:30	16:30	2 to 3	SE	0 to 2	13	2	8	2	0
01/10/2024	07:15	10:15	4 to 5	NW	4	11 to 12	1 to 2	8	1	0
10/10/2024	11:40	14:40	3	NE	0	8 to 9	2	4 to 6	2	0
21/11/2024	12:10	15:10	1 to 2	W	0	3 to 2	2	0	2	1 (snow)
29/11/2024	12:30	15:30	3 to 2	S	0	4 to 7	2	4 to 6	2	0

VP16 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
02/11/2023	08:15	11:14	3	NE	0	10	2	7	2	0
07/11/2023	12:30	15:50	3	WSW to W	0	12 to 11	2	3	2	0
04/12/2023	12:45	15:45	2	E to NE	0 to 1	5	2 to 1	8	1 to 0	0
14/12/2023	08:30	11:30	2	S to SW	0	4 to 7	2	7 to 2	1	0
08/01/2024	12:05	15:05	1 to 2	NE	0	4 to 3	2	7 to 8	1	0
19/01/2024	08:30	11:30	3 to 4	S to SW	0	(-2) to 3	2	1 to 2	2	2 (frost)
07/02/2024	12:00	15:00	1	NW to SW	0	5 to 6	2	6 to 7	2	0
27/02/2024	09:20	12:20	2 to 1	SW	0	5 to 6	1	8	2	0
15/03/2024	09:30	12:30	4 to 3	SW	0	12 to 13	2	7 to 8	2	0
28/03/2024	09:25	12:25	4	S to SE	0	8 to 10	2	2 to 4	2	0
19/04/2024	08:35	11:35	3 to 4	NW to N	1 to 0	9 to 10	2	8 to 5	2	0
22/04/2024	12:50	15:50	1	N	1 to 0	7 to 8	2	8	2	0
03/05/2024	08:55	11:55	2	NW	0	11 to 14	2	8	1	0
17/05/2024	08:20	11:20	1 to 0	W	0	14 to 16	2	8 to 6	2	0
14/06/2024	08:28	11:28	3 to 4	SW	0	14 to 15	2	8 to 7	2	0
25/06/2024	11:05	14:05	1 to 0	SE	0	21 to 25	2	6 to 3	2	0
17/07/2024	08:50	11:50	1	W	0	17 to 20	2	1 to 4	2	0
23/07/2024	08:55	11:55	3	NNW	0	17 to 20	2	3 to 7	2	0
16/08/2024	12:20	15:20	2	W	0	19 to 21	2	4 to 3	2	0
20/08/2024	13:23	16:23	4	W	0	20	2	4 to 5	2	0
09/09/2024	09:10	12:10	2	NW	1 to 0	14 to 15	2	8	2	0
18/09/2024	11:30	14:30	2	NE	0	17 to 20	2	4 to 2	2	0
09/10/2024	08:55	11:55	2	S	0	13 to 14	2	8 to 7	2	0
29/10/2024	09:30	12:30	2	W to NW	3 to 0	14 to 16	2	6 to 3	2	0
07/11/2024	10:50	13:50	1	S to SE	0	12 to 13	2	8	2	0

VP17 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
07/11/2023	08:40	11:40	2 to 3	SW to WSW	0	8 to 11	2	7 to 3	2	0
17/11/2023	10:40	13:40	1	SW	0	8 to 10	2	1 to 2	2	0
04/12/2023	08:35	11:35	3	E	2	4	2	8	1	0
14/12/2023	12:10	15:10	2 to 1	SW to W	0	8 to 7	2	3 to 7	1	0
08/01/2024	08:30	11:30	1	NE	0	3 to 4	2	7 to 8	1	0
18/01/2024	13:30	16:30	3	W	0	2 to 3	2	0	2	0
07/02/2024	08:20	11:20	1	NW	0	2 to 5	2	7	2	0
27/02/2024	13:30	16:30	3 to 4	SW	0 to 1	7	2	2	2	0
07/03/2024	13:00	16:00	1 to 2	E	0	9 to 8	1	6 to 8	1 to 2	0
28/03/2024	13:25	16:26	5	SE	0 to 1	9 to 8	2	8 to 4	2	0
19/04/2024	12:00	15:00	4 to 3	N	1 to 0	10 to 12	2	8 to 4	2	0
22/04/2024	08:45	11:45	1	N	2	5 to 6	2	8	2	0
03/05/2024	12:30	15:30	2 to 1	NW to W	1 to 0	15 to 13	2	8	2 to 1	0
17/05/2024	12:00	14:00	1	W	0	17 to 19	2	6	2	0
11/06/2024	11:40	14:40	2	W to NW	0	15 to 14	2	6 to 8	2	0
14/06/2024	11:58	14:58	4 to 2	SW	3 to 0	16	2	7 to 8	2	0
17/07/2024	13:00	16:00	1	W to SW	0	21 to 22	2	7 to 6	2	0
23/07/2024	13:05	16:05	3	NNW to N	0	21	2	2 to 7	2	0
07/08/2024	13:40	16:40	4	W	0	20	2	8	2	0
15/08/2024	15:00	18:00	4	SW	0	21	2	8 to 7	2	0
09/09/2024	12:45	15:45	2	NW to W	0	16 to 17	2	8 to 7	2	0
27/09/2024	07:30	10:30	4 to 5	NW to W	0	9 to 10	2	8 to 7	2	0
09/10/2024	12:40	15:40	2 to 3	N	0 to 3	15 to 14	2	8	2	0
29/10/2024	13:00	16:00	2	NW	0	16	2	6 to 3	2	0
07/11/2024	07:20	10:20	1	S	1 to 0	9 to 11	1 to 2	8	1 to 2	0

VP18a metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
01/11/2023	13:35	16:35	3 to 4	SW	0	11 to 13	2	2 to 7	2	0
19/12/2023	12:50	15:50	2 to 1	W	0	8 to 7	2	3 to 1	1	0
10/06/2024	09:20	12:20	4	NNW to N	0	11 to 12	2	3 to 7	2	0
11/07/2024	16:39	19:39	1 to 2	NE	0	15 to 14	2	8	2	0
18/07/2024	13:54	16:54	2	SW	0	24 to 25	2	1	2	0
14/08/2024	08:05	11:05	1	SW	0	16 to 21	2	8 to 4	2	0
28/08/2024	12:30	15:30	5	S	0	23	2	8	2	0
18/09/2024	09:25	12:25	3	ENE	0	15 to 18	2	5 to 6	2	0
26/09/2024	13:00	16:00	0 to 1	NE	0	13	2	8	2	0
08/10/2024	07:45	10:45	1	SE	1 to 0	13	2	8	2	0
23/10/2024	11:40	14:40	3	SSW	0	12 to 14	2	8 to 2	2	0
05/11/2024	13:30	16:30	0 to 1	SW	0	12 to 11	2	8	2	0
26/11/2024	08:20	11:20	1	SW	0	4 to 7	2	3 to 2	2	0
03/12/2024	12:30	15:30	1	W to SW	0	5 to 4	2	8 to 5	2	0
11/12/2024	09:10	12:10	1 to 2	NE	0	6 to 7	2	8	2	0
05/02/2025	07:45	10:45	1 to 2	SW	0	3 to 7	2	1	2	0
14/02/2025	12:25	15:25	3	SE to SSE	0	5 to 4	2	8	2	0
26/03/2025	11:25	14:25	2	S	0	14 to 16	2	3 to 1	2	0
31/03/2025	13:05	16:05	1	W	0	17	2	2	2	0
16/04/2025	08:35	11:35	3 to 5	SSW to S	0	8 to 9	2	7 to 8	2	0
24/04/2025	11:55	14:55	2 to 3	NE to ENE	0	12	2	7 to 8	2	0
16/07/2025	07:15	10:15	2	NW	0	15 to 18	2	8 to 6	2	0
22/08/2025	08:15	11:15	1 to 3	WSW to W	0	15 to 18	2	7 to 8	2	0
27/08/2025	10:45	13:45	3	S	0	19 to 21	2	3 to 8	2	0
29/08/2025	08:15	11:15	2	S	0	14 to 17	2	4 to 7	2	0
17/09/2025	12:25	15:25	2	SSW to SW	0	18 to 21	2	7 to 5	2	0
25/09/2025	12:12	15:12	4	E	0	17 to 16	2	4 to 2	2	0
09/10/2025	13:00	16:00	3	W	0	16	2	4 to 6	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
28/10/2025	13:48	16:48	3 to 5	W	0 and 2	12	2	3 to 5	2	0
07/11/2025	11:30	14:00	1	SE	0	13 to 14	1	8	2 to 1	0
11/11/2025	08:50	11:50	2 to 3	SE to S	2 to 0	9 to 10	1 to 2	8	2	0
08/12/2025	13:00	16:00	2	SW	0	10 to 11	2	4 to 6	2	0
18/12/2025	08:15	11:15	2	S	0	9	2	8	2	0
07/01/2026	11:30	14:30	4	NW	0	4	2	3 to 4	2	0
21/01/2026	13:20	16:20	4 to 5	SE	1	9	1 to 2	8	1 to 2	0

VP18b metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
01/11/2023	13:35	16:35	3 to 4	SW	0	13 to 11	2	2 to 7	2	0
19/12/2023	08:50	11:50	1 to 2	W	1 to 0	9 to 8	2	8 to 6	1	0
10/06/2024	09:20	12:20	4	NNW to N	0	11 to 12	2	3 to 7	2	0
11/07/2024	16:39	19:39	1 to 2	NE	0	15 to 14	2	8	2	0
18/07/2024	13:54	16:54	2	SW	0	24 to 25	2	1	2	0
14/08/2024	08:05	11:05	1	SW	0	16 to 21	2	8 to 4	2	0
28/08/2024	12:30	15:30	3	S	0	23	2	8	2	0
26/09/2024	13:00	16:00	0 to 1	NE	0	13	2	8	2	0
18/09/2024	09:30	12:30	2 to 5	ENE	0	15 to 18	0	5 to 4	2	0
08/10/2024	07:45	10:45	1	SE	1 to 0	13	2	8	2	0
23/10/2024	11:40	14:40	3	SSW	0	12	2	8 to 2	2	0
05/11/2024	13:30	16:30	0 to 1	SW	0	12 to 11	2	8	2	0
26/11/2024	08:20	11:20	3	WSW	0	4 to 6	2	3 to 5	2	0
03/12/2024	12:30	15:30	1	W to SW	0	5 to 4	2	8 to 5	2	0
11/12/2024	09:10	12:10	1 to 2	NE	0	6 to 7	2	8	2	0
05/02/2025	07:45	10:45	1 to 2	SW	0	3 to 7	2	1	2	0
14/02/2025	12:25	15:25	3	SE to SSE	0	5 to 4	2	8	2	0
26/03/2025	11:25	14:25	2	SW	0	14 to 16	2	2 to 4	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
31/03/2025	13:05	16:05	1	W	0	17	2	2	2	0
16/04/2025	08:35	11:35	3 to 5	SSW to S	0	8 to 9	2	7 to 8	2	0
24/04/2025	11:55	14:55	2 to 3	NE to ENE	0	12	2	7 to 8	2	0
16/07/2025	07:15	10:15	2	NW	0	15 to 18	2	8 to 6	2	0
22/08/2025	08:15	11:15	1 to 3	WSW to W	0	15 to 18	2	8	2	0
27/08/2025	10:45	13:45	3	S	0	19 to 21	2	3 to 8	2	0
29/08/2025	08:15	11:15	2	S	0	14 to 17	2	4 to 7	2	0
17/09/2025	12:25	15:25	2	SSW to SW	0	18 to 21	2	7 to 5	2	0
25/09/2025	12:12	15:12	4	E	0	17 to 16	2	4 to 2	2	0
09/10/2025	13:00	16:00	3	W	0	16	2	4 to 6	2	0
28/10/2025	13:48	16:48	3 to 5	W	0 and 2	12	2	3 to 5	2	0
07/11/2025	11:30	14:00	1	SE	0	13 to 14	1	8	2 to 1	0
11/11/2025	08:50	11:50	2 to 3	SE to S	2 to 0	9 to 10	1 to 2	8	2	0
08/12/2025	13:00	16:00	2	SW	0	10 to 11	2	4 to 6	2	0
18/12/2025	08:15	11:15	2	S	0	9	2	8	2	0
07/01/2026	11:30	14:30	4	NW	0	4	2	3 to 4	2	0
21/01/2026	13:20	16:20	4 to 5	SE	1	9	1 to 2	8	1 to 2	0

VP19 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
08/10/2024	08:55	11:55	2 to 3	S to SW	1 to 0	13 to 14	1 to 2	7 to 8	1 to 2	0
22/10/2024	09:00	12:00	3	SW to W	0	10 to 12	2	1 to 6	2	0
14/11/2024	07:35	10:35	2	N	0	8 to 10	2	2 to 5	2	0
28/11/2024	08:00	11:00	3	WNW	0	2 to 5	2	1	2	0
06/12/2024	08:00	11:00	3	W	0	5 to 6	2	2	2	0
20/12/2024	07:45	10:45	3	NW	0	4	2	6	2	0
09/01/2025	07:50	10:50	3	N	0	-4 to 0	2	1	2	0
21/01/2025	12:15	15:15	2	SW	0	5	2	8	2	0

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
06/02/2025	08:00	11:00	1	NW to N	0	0 to 4	2	0 to 8	2	0
26/02/2025	13:00	16:00	2 to 4	SW to W	0 to 2	8 to 4	2	5 to 7	2	0
12/03/2025	06:10	09:10	2 to 3	NWW to NW	0	1 to 4	2	1 to 4	2	0
20/03/2025	08:50	11:50	1	SE	0	8 to 15	2	0 to 1	2	0
09/04/2025	08:00	11:00	2	NE	0	5 to 9	2	0 to 4	2	0
29/04/2025	08:00	11:00	1	SW	0	14 to 21	2	2	2	0

VP20 metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
08/10/2024	13:05	16:05	2 to 1	SSE	2 to 0	15	2	8 to 5	1 to 2	0
22/10/2024	13:05	16:05	3	SW	0	14	2	3 to 7	2	0
14/11/2024	11:10	14:10	2	N	0	9	2	7	2	0
28/11/2024	11:30	14:30	3 to 4	S	0	4 to 6	2	1 to 4	2	0
06/12/2024	11:30	14:30	2	SW	0	7 to 8	2	2 to 4	2	0
20/12/2024	10:55	13:55	3	NW	0	4	2	8	2	0
09/01/2025	11:00	14:00	3	N-NW	0	-1	2	8	2	0
21/01/2025	08:55	11:55	2	SW	0	5	1	8	2	0
06/02/2025	11:15	14:15	2	NE	0	5 to 7	2	8 to 3	2	0
12/03/2025	09:40	12:40	4 to 6	NNW to N	0, 2 & 3	5 to 7	2	4 to 6	2	0
20/03/2025	12:55	15:55	2	SE	0	15 to 16	2	1	1	0
31/03/2025	09:15	12:15	1	W	0	14 to 16	2	2	2	0
09/04/2025	11:15	14:15	3	N	0	9 to 11	2	8	2	0
29/04/2025	11:30	14:30	1	SW	0	23 to 24	3	4 to 2	2	0

Ouse Crossing VP

Date	Start	End	Tide type	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
21/06/2022	11:30	14:30	No info	0 to 2	NE	0	21 to 24	2	5 to 1	1	0
22/06/2022	08:00	11:00	No info	1 to 0	N	0	15 to 21	2	0 to 1	2	0
28/06/2022	13:30	16:30	No info	4	SSW	0	21 to 22	2	4 to 5	2	0
29/06/2022	07:45	10:45	No info	3 to 4	SSE to S	1 to 0	14 to 16	2	8 to 6	1 to 2	0
12/07/2022	12:30	15:30	No info	1	SW	0	22	2	8	2	0
13/07/2022	06:00	09:00	No info	1	W to SW	0	20 to 22	2	6 to7	2	0
26/07/2022	13:30	16:30	No info	1 to 4	NE	0 to 4	16 to 17	2	8 to 4	2	0
27/07/2022	06:45	09:45	No info	1 to 4	SE to S	0	13 to 16	2	2 to 6	2	0
09/08/2022	15:15	18:15	No info	2 to 4	NW & ESE	0	27 to 24	2	1 to 0	2	0
10/08/2022	10:30	13:30	No info	2	S to SE	0	24 to 27	2	0	N/A	0
24/08/2022	16:00	19:00	No info	2 to 3	W to NW	0	12 to 10	2	7 to 8	2	0
25/08/2022	07:30	10:30	No info	2	W	0	Unknown	2	4 to 5	2	0
06/09/2022	12:40	15:40	No info	3 to 4	W	3 to 1	8	2	8	2	0
07/09/2022	11:00	14:00	No info	2	W	0	10	2	8	2	0
21/09/2022	15:30	18:30	No info	6 to 5	SW	0	19 to 17	2	6 to 7	2	0
22/09/2022	11:00	14:00	No info	6	SW	0	17 to 18	2	2 to 3	2	0
12/10/2022	13:30	16:30	No info	4	SSW	1	14	2	8	2	0
13/10/2022	07:30	10:30	No info	2 to 1	W to SSW	0	12 to 13	2	4 to 5	2	0
25/10/2022	15:30	18:30	No info	2	SSE to SE	0	15 to 14	2	4 to 5	1	0
26/10/2022	07:45	10:45	No info	3 to 4	S to SSW	0	13 to 15	2	1 to 4	2	0
04/11/2022	08:55	11:55	Low	1 to 3	W	0	8 to 11	2	1	2	0
18/11/2022	12:45	15:45	High	3	SW	0	6	2	7	2	0
22/12/2022	12:30	14:15	Low	0	N/A	2	6	0 to 1	8	0 to 1	0
16/01/2023	13:38	16:38	Ebbing	4 to 2	NW	0	2 to 1	2	5 to 2	2	0
17/01/2023	08:50	11:50	Low	1	W	0	-2 to 1	2	0	2	2 (frost)
14/02/2023	10:10	10:55	Rising	1	S	0	7	1 to 0	7 to 8	1 to 0	0
21/02/2023	12:30	14:45	Ebbing	3	SW	0	12	2	7	2	0
28/02/2023	11:50	14:50	High	4	NE	2	8	1	8	1	0

Date	Start	End	Tide type	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
22/03/2023	09:21	12:21	Ebbing	4	SW	0	12	2	2	2	0
30/03/2023	10:40	13:40	Rising	2 to 3	SW	2	13 to 14	2	7 to 8	2	0
04/04/2023	12:51	15:51	Low	4 to 3	SW	0	9 to 11	2		2	0
13/04/2023	10:09	13:09	High	4 to 5	W	2 to 0	9	2	7 to 6	2	0
16/05/2023	08:50	11:50	Ebbing	1 to 2	NW	0	12 to 13	2	4 to 6	2	0
26/05/2023	08:30	11:30	Rising	1 to 2	S	0	13 to 17	2	4 to 2	2	0
01/06/2023	11:45	14:45	Low	1 to 3	NE	1 to 0	14	2	8	2	0
20/06/2023	06:50	09:50	High	0-1	SE	0, 2, 4	17	2	7 to 8	2 to 1	0
12/07/2023	09:45	12:45	Low	2 to 3	SW	0 to 2	17 to 18	2	7 to 8	1 to 2	0
18/07/2023	17:15	20:15	Rising	1	S	0	15 to 14	2	6 to 7	2	0
23/08/2023	11:26	14:26	Ebbing	2	SW	0	21	2	2	2	0
25/08/2023	10:41	13:41	Rising	2	W	0	18	2	7	2	0
08/09/2023	10:00	13:00	Rising	0 to 1	SW	0	19 to 23	2	8 to 5	0 to 2	0
25/09/2023	09:45	12:45	Low	3 to 4	SW	0	17 to 19	2	0 to 3	2	0
12/10/2023	10:45	13:45	Ebbing	1	SW	0	10 to 12	2	1 to 6	2	0
19/10/2023	10:30	13:30	Ebbing	4 to 2	SSE to S	1 to 0	16 to 17	2	7 to 8	2	0
01/11/2023	09:25	12:25	Ebbing	3	SW	0	10	2	7	2	0
22/11/2023	11:30	14:30	Rising	2 to 3	W	0	11 to 12	2	7 to 8	2	0
06/12/2023	12:17	15:17	High	1	S to SE	0	2	2	1 to 3	2	1 to 2 (frost)
13/12/2023	10:00	13:00	Ebbing	4	N	0 to 2	6	2	8	2	0
10/01/2024	08:45	11:45	Ebbing	1 to 2	NE	0 to 1	4 to 6	2	6 to 7	2	0
23/01/2024	09:51	12:51	Ebbing/Low	3 to 6	S	2 to 4	6	2	8	1 to 2	0
07/02/2024	13:52	16:52	Rising	1	W	0	7 to 5	2	6	2	0
20/02/2024	11:45	14:45	Low/Rising Tide	1 to 4	SW	0	13	2	6 to 7	2	0
12/03/2024	10:30	13:30	High/Ebbing	2 to 3	S	0 to 1	7 to 8	2	8	1 to 2	0
19/03/2024	13:20	16:20	High/Ebbing	2	W	0	15	2	5 to 6	2	0
09/04/2024	09:30	12:30	High/Ebbing	2 to 4	W	0 to 2	9 to 10	2	7 to 8	2	0
17/04/2024	08:26	11:26	Low	2 to 3	NW	0	6 to 9	2	5 to 4	2	0
10/05/2024	12:35	15:35	Ebbing	1 to 2	S	0	21	2	7	2	0

Date	Start	End	Tide type	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
23/05/2024	09:10	12:10	Ebbing	3	W	0	13 to 14	2	8	2	0
12/06/2024	05:45	08:45	Low/Rising	0 to 1	S to W	0	10 to 11	2	8	2	0
20/06/2024	12:30	15:30	Ebbing/Low	2	W	0	18 to 19	2	5 to 7	2	0
18/07/2024	08:10	11:10	Ebbing	3	S to SSW	0	17 to 22	2	0 to 2	2	0
30/07/2024	09:10	12:10	Flooding	1	N	0	20 to 24	2	1	2	0
21/08/2024	13:10	16:10	Ebbing	4 to 5	W	0	19	2	6 to 8	2	0
29/08/2024	10:00	13:00	Low/Rising	3 to 4	SWW to W	0	17 to 20	2	8 to 7	2	0
17/09/2024	16:45	19:45	Rising	3 to 2	E	0	17 to 15	2	1	2	0
26/09/2024	08:37	11:37	Low Tide	1	E	0	13	2	8	2	0
16/10/2024	13:00	16:00	High	3	SE to S	0	16 to 18	2	8	1	0
23/10/2024	15:30	18:30	Ebbing/Low	3 to 2	SSW to S	0	13 to 12	2	4 to 7	2	0

Winter Swan VP14

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
22/10/2025	7:35	10:35	2	SW	0	8 to 15	2	0	2	0
29/10/2025	7:07	10:07	3 to 4	SW	0	9 to 11	2	6 to 8	2	0
11/12/2025	11:55	14:55	2	S	0 to 2	14	2	8	1 to 2	0
26/11/2025	7:15	10:15	0 to 1	SW	0	-1 to 3	2	2	2	0 / 1
12/9/2025	13:15	16:15	5 to 6	S	0	14	2	8	2	0
17/12/2025	7:30	10:30	3	S	0 to 1	3 to 5	2	7 to 8	2	0
1/14/2026	12:35	15:35	2 to 3	S	0	4 to 3	2	5	2 to 1	0
1/28/2026	8:35	11:35	1	S	0	2 to 5	2	1 to 2	2	0
2/18/2026	12:40	15:40	4	ESE	0	4 to 5	2	6 to 7	2	0
2/26/2026	8:15	11:15	4	SSW	0 to 1	11 to 12	2	8	2	0
3/17/2026	8:40	11:40	4	SW	0	11 to 13	2	3	2	0
3/31/2026	9:00	12:00	3	NW	0	10 to 12	2	6	2	0

Winter Swan VP21

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
22/10/2025	11:15	14:15	3 to 4	SW	0	16	2	3 to 5	2	0
29/10/2025	11:30	14:30	4	SW to S	0	11 t0 12	2	5 to 6	2	0
12/11/2025	8:20	11:20	2 to 3	S, SSW to SW	0 to 2	13 to 14	2	8	1 to 2	0
26/11/2025	10:50	13:50	2 to 4	SW, SSW & S	0	5	2	2 to 4	2	0
12/9/2025	7:30	10:30	5	S	4, 2 and 0	12 to 14	1 to 2	8	1 to 2	0
17/12/2025	13:25	16:25	4 to 5	SW	0 to 2	8 to 9	2	8	2	0
1/14/2026	9:00	12:00	1 to 2	SSW	0	1 to 4	2	4 to 5	2	0
1/28/2026	12:15	15:15	1 to 2	SE to S	0	6	2	2	2	0
2/18/2026	9:15	12:15	4	ESE	0	3 to 4	2	7 to 8	2	0
2/26/2026	11:50	14:50	4	SSW-NW	0 to 1	12	2	8	2	0
3/17/2026	12:10	15:10	4	SSW	0	14 to 15	2	2	2	0
3/31/2026	12:30	15:30	3	NW	0	12 to 16	2	6 to 4	2	0

B.2 Field Counts

Tunnel-head field counts metadata

Location	Date	Tide	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
Ousefleet	10/01/2023	High/ebbing	10:00	11:30	6	SW	4	5	0	8	1	0
Yokefleet	10/01/2023	Ebbing/low	13:00	15:00	6	SW	3	5	0	8	1	0
Yokefleet	03/02/2023	Ebbing	10:05	11:45	2 to 3	W	0	11	2	8	-	-
Ousefleet	03/02/2023	Low	13:05	14:00	2 to 3	W	0	11	2	8	-	-
Yokefleet	08/03/2023	Low	15:00	17:00	3	NE	0	3	2	8	2	1 (snow)
Yokefleet	23/03/2023	Ebbing	11:35	13:20	2 to 3	SW	0 to 4	13	2	2 to 8	2	0
Yokefleet	14/04/2023	High	12:05	13:05	2 to 3	SSE	1	11	2	8	2	0
Ousefleet	27/04/2023	Low/rising	10:30	11:40	2	S	0	10 to 12	2	6	2	0
Yokefleet	16/05/2023	High/ebbing	12:30	14:00	2	NW	0	13	2	6	2	0
Ousefleet	16/05/2023	Ebbing	14:30	15:10	2	NW	0	13	2	6	2	0
Both	24/05/2023	High	10:00	13:00	1	NW	0	18	2	0-3	2	0
Ousefleet	22/06/2023	Ebbing	12:45	14:15	1	NW	0	21 to 22	2	6	2	0
Yokefleet	28/06/2023	Rising	13:00	14:45	1 to 2	SW	0	22 to 23	2	8	2	0
Yokefleet	11/07/2023	Rising	10:00	11:40	2	SW	0	19	2	6	2	0
Yokefleet	24/08/2023	Ebbing	13:41	14:57	2	W	0	20	2	7	2	0
Ousefleet	31/08/2023	Ebbing	09:50	11:15	1	S	0	15 to 16	2	6	2	0
Yokefleet	06/09/2023	Rising/high	10:00	12:00	1	SW	0	20 to 21	2	4	2	0
Ousefleet	07/09/2023	Rising	09:45	11:15	1	W	0	20 to 21	2	6	2	0
Yokefleet	25/09/2023	Low/rising	13:10	13:30	3 to 4	SW	0	19	2	3	2	0
Yokefleet	03/10/2023	High (Equinox)	09:00	11:52	2 to 3	W	1	12 to 14	2	7 to 8	2	0
Ousefleet	04/10/2023	High (Equinox)	09:25	12:00	2 to 3	SW	0	13 to 14	2	8	2	0
Ousefleet	23/11/2023	High	13:30	15:44	4	WNW	0-1	12 to 13	2	6 to 8	2	0
Yokefleet	24/11/2023	Low/rising	13:30	15:45	5	NW	0	5	2	2	2	0
Yokefleet	19/12/2023	Ebbing tide	12:45	14:50	3 to 4	W	0	8	2	4 to 2	2	0
Ousefleet	20/12/2023	High	11:00	15:00	2	W	0	8 to 11	2	8 to 7	1	0
Yokefleet	25/01/2024	Ebbing	12.1	15.5	1	S	0	10	2	8	2	0

B.3 FFL 23-24

North of the River Ouse

Location	Date	Tide	Tide Time	Peak Tide Height	Start	End	Wind	Wind Direction	Rain	Temp	Visibility	Cloud Cover	Cloud height
Yokefleet to Broomfleet	19/12/2023	Ebbing tide	HT 11:53	4.46	13:30	16:15	3 to 4	W	0	8 to 7	2	2	2
Broomfleet to Crabley Lane	20/12/2023	Rising tide/HT	HT 13:04	4.34	10:05	15:15	3 to 5	W	0 to 2	9 to 10	2	7 to 8	2
Crabley Lane to Brantingham	21/12/2023	Rising tide	HT 14:09	4.3	10:10	12:30	6 to 7	W	0 to 2	11	2	4 to 7	2
Brantingham (Outgang) to Broomfleet Station	24/01/2024	Rising tide	HT 18.16	4.89	11:10	16:00	4	W	0	10 to 9	2	8	2
Broomfleet Station/ Common Lane to Yokefleet	25/01/2024	Ebbing tide	LT 14.30	0.47	9:50	15:50	2 to 1	SE to SW	1 to 0	6 to 11	2	8	2
Yokefleet to Broomfleet east	27/02/2024	High tide/ebbing	HT 08:34	4.9	8:50	15:30	2 to 3	SSW	0 to 1	4 to 7	2	8 to 7	2
Broomfleet east to Brantingham	28/02/2024	High tide/ebbing	HT 08:56	4.9	9:00	15:00	2	S	0	7 to 9	2	7 to 8	2
Metham Lane to Broomfleet	26/03/2024	High tide/ebbing	HT 07:39	5.07	9:00	16:00	1 to 3	Unknown	0	8 to 12	2	8 to 2	2
Brantingham to Broomfleet Station	27/03/2024	High tide/ebbing	HT 07:58	5.09	9:30	16:00	5	S	1 to 0	9 to 11	2	8 to 4	2
Hutch Lane to Broomfleet station	04/04/2024	Low tide/rising	HT 10:33	0.84	10:00	15:30	2 to 1	NW to W	0	7 to 10	2	8 to 6	2
Brantingham to Broomfleet	03/04/2024	Low tide/rising	HT 10:39	0.87	10:00	16:00	5 to 3	S to W	1 to 0	11 to 14	1 to 2	7 to 8	1 to 2

South of the River Ouse

Location	Date	Tide	Tide Time	Peak Tide Height	Start	End	Wind	Wind Direction	Rain	Temp	Visibility	Cloud Cover	Cloud height
Ousefleet to Luddington	20/12/2023	High tide	HT 13:04	4.34	8:30	15:30	2	W	1 to 0	8 to 11	2	8 to 7	1
Luddington to Keadby	21/12/2023	High tide	HT 14:09	4.33	8:30	15:30	6 to 4	W	0	12	2	6 to 4	1
Ousefleet to Luddington	25/01/2024	Ebbing tide	LT 14:30	0.47	9:00	12:00	3	SSW	0 to 1	8 to 11	2	6 to 8	1
Luddington to Keadby	25/01/2024	Ebbing tide	LT 14:30	0.47	12:30	15:30	3 to 4	SSW	0	10	2	7	1
Northern/Central	27/02/2024	High tide/ebbing	HT 08:34	4.9	10:30	15:30	2 to 3	SW	0	9 to 10	2	8	2
Central/Southern	28/02/2024	High tide/ebbing	HT 08:56	4.9	9:00	13:00	3	SE	0	6 to 8	2	8	2
Ousefleet to north of Crowle	27/03/2024	Ebbing tide	LT 15:42	0.51	9:48	14:15	3 to 5	S	0	9 to 11	2	6 to 8	2
North of Crowle to Keadby	28/03/2024	Ebbing tide	HT 08:20	5.1	9:20	11:30	3 to 4	S	0	8 to 10	2	5	0
Ousefleet to Eastoft	03/04/2024	Rising tide	HT 14:31	3.6	10:00	13:30	2 to 3	S to SW	0	12 to 13	2	7 to 8	2
Eastoft to Keadby	04/04/2024	Low tide	LT 10:33	0.8	9:40	12:45	1	NW	1 to 0	7 to 9	2	8	1 to 2

B.4 Ouse TTTC

Ouse TTTC metadata

Date	Tide	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
21/06/2022	High	11:30	14:30	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
22/06/2022	Low	08:00	11:00	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
28/06/2022	Low	13:30	16:30	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
29/06/2022	High	07:45	10:45	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
26/07/2022	Low	13:30	16:30	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
27/07/2022	High	06:45	09:45	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
21/09/2022	Low	11:00	14:00	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
21/09/2022	High	15:30	18:30	N/r	N/r	N/r	N/r	N/r	N/r	N/r	N/r
04/11/2022	Low (either side)	08:55	11:55	2	W	0	8 to 11	2	1	2	0
29/11/2022	Ebbing	11:36	14:36	0	N/A	0	5	1	8	1 to 0	0
24/01/2023	Ebbing	11:55	14:55	1	SW	0	6	2	8	1	0
26/01/2023	High Ebbing	10:37	13:37	3	N	2	6 to 7	2	7	1	0
20/02/2023	High Ebbing	10:00	13:00	4	SW	0	13	2	8 to 6	2	0
27/02/2023	High Ebbing	12:55	15:55	3	NE	2	8	2	5 to 6	1 to 2	0
14/03/2023	High Ebbing	10:42	13:42	3	NW	0	7	2	5 to 6	2	0
23/03/2023	High Ebbing	11:40	14:40	4 to 3	SW	3 to 2	11 to 13	2	7 to 5	1 to 2	0

B.5 Ouse HT-LT

River Ouse HT-LT counts metadata

Date	Tide	Tide time	Tide height (m)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
20/04/2023	Low	15:57	-0.06	13:00	18:30	4	NE	0	13	2	2	1	0
21/04/2023	High	08:30	5.67	07:30	11:00	3	NE	0	11	2	6	2	0
27/04/2023	Low	07:12	0.6	07:40	10:30	1 to 2	S	0	6 to 10	2	6	2	0
12/05/2023	High	12:34	4.2	11:30	14:30	2	NE	0	13	2	8	2	0
15/05/2023	Low	11:24	0.5	11:40	14:40	2	NE	0	13	2	5	2	0
02/06/2023	Low	14:05	0.48	12:35	15:20	2	NE	0	15 to 16	2	1	2	0
23/06/2023	High	10:41	4.7	09:20	12:20	1 to 2	SW	0	19 to 20	2	8	2	0
11/07/2023	High	13:57	4.84	12:30	14:55	2	SW	2	19 to 18	2	6 to 8	2	0
27/07/2023	Low	09:09	0.56	09:25	11:30	1	W	0	19 to 20	2	8	2	0
04/08/2023	High	09:15	6.20	09:15	12:15	1	NW	0	15 to 16	2	8	2	0
30/08/2023	Low	15:16	-0.10	13:15	15:40	2 to 3	NW	0	18	2	5	2	0
05/09/2023	High	11:04	5.68	09:20	12:05	1	NEE	0	20 to 23	2	1	2	0
18/09/2023	Low	17:24	0.2	15:35	18:00	3	W	0-2	15	2	8 to 3	2	0
02/10/2023	High	09:13	6.39	08:00	11:35	2	SW	0	14 to 15	2	7 to 6	2	0
25/10/2023	Low	12:30	0.22	10:30	13:00	1 to 2	W	1	9 to 10	2	8	2	0
28/11/2023	Low	15:09	0.28	13:10	15:15	2	W	0	5 to 4	2	1 to 4	2	0
30/11/2023	High	08:17	5.29	08:05	10:50	0 to 1	NE	0	1	2	4	2	1 (frost)
12/12/2023	Low	14:08	0.26	11:55	14:25	0 to 1	E	0 to 1		1 to 2	8	1 to 2	0
19/12/2023	High	11:53	4.46	10:20	12:40	3 to 4	W	0	8	2	8 to 7	2	0
11/01/2024	Low	14:27	0.34	12.30	15.30	2 to 1	NE	0	7	2	8	2	0
16/01/2024	High	10:25	5.17	10:15	12:15	2	SW	0	1 to 2	2	7	2	2 (frost)
13/02/2024	High	09:14	5.78	09:00	11:45	1 to 2	SW	0	7 to 8	2	7	2	0
20/02/2024	Low	11:17	0.89	09:15	11:25	1 to 2	SW	0	10 to 11	2	6 to 5	2	0
12/03/2024	High	08:09	6.06	08:25	10:15	2 to 3	S	2	7	2	8	1 to 2	0
26/03/2024	Low	15:32	0.55	14:30	16:55	2 to 3	E	0	12	2	6 to 7	2	0

Date	Tide	Tide time	Tide height (m)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
11/04/2024	High	09:21	5.8	08:05	10:15	2 to 3	W	0	14 to 16	2	7 to 8	2	0
23/04/2024	Low	15:33	0.42	12:30	14:35	3 to 4	N	0	9	2	7	2	0
01/05/2024	High	12:45	3.9	11:10	13:15	2	E	0	16 to 17	2	7	2	0
21/05/2024	Low	14:10	0.46	12:15	14:55	2	NE	0	17 to 18	2	7	2	0
04/06/2024	Low	13:36	0.24	13:10	15:25	1 to 2	W	1	15	2	8	2	0
25/06/2024	High	09:35	5.40	08:45	11:24	1	SE	0	21 to 22	2	7 to 8	2	0
02/07/2024	Low	11:26	0.44	09:05	11:20	2	NW	0 to 1	14 to 15	2	8	2	0
23/07/2024	High	08:46	5.8	08:40	10:40	2 to 3	NW	0	17 to 18	2	7	2	0
06/08/2024	High	08:54	5.5	09:05	11:30	1 to 2	W	0	19 to 20	2	8	2	0
28/08/2024	Low	09:29	0.5	08:25	11:25	1	S	0	17	2	5 to 7	2	0
12/09/2024	Low	08:43	0.67	08:05	10:25	2 to 3	NW	0	11 to 12	2	1 to 2	2	0
19/09/2024	High	08:08	6.49	07:35	10:15	2 to 3	NE	0	13	2		8	0
03/10/2024	Low	16:23	0.06	15:55	18:35	3 to 2	E	0	13 to 12	2	6 to 4	2	0
18/10/2024	High	07:42	6.48	07:10	09:20	1	S	0	9	0 & 1	8	1	0
07/11/2024	High	09:46	4.31	08:40	10:40	1 to 2	SSE	0	11	2	8	2	0
15/11/2024	Low	14:04	0.09	11:10	13:30	1	SW	0	10 to 11	2	8 to 6	2	0
05/12/2024	High	08:57	4.80	08:10	10:30	2	WSW	0	10 to 11	2	4	2	0
10/12/2024	Low	08:54	0.52	08:15	10:30	3	NE	0	7	2	8	2	0
10/01/2025	High	15:45	4.27	13:45	16:00	1	NW	0	0	2	0	2	1 (frost)
27/01/2025	Low	12:58	0.43	11:15	14:00	5	SW	0	7	2	5 to 4	2	0
04/02/2025	High	10:54	4.9	10:15	12:45	4 to 5	S and SSW	0	8 to 10	2	3 to 6	2	0
26/02/2025	Low	13:15	0.46	10:15	12:30	3	S	0	5 to 7	2	8 to 7	2	0
13/03/2025	Low	14:29	0.21	14:15	16:40	3	NE	0	7	2	6 to 4	2	0
25/03/2025	High	15:30	3.83	15:35	17:55	3	NE	0	14 to 12	2	7	2	0

Blacktoft Sands Reserve HT-LT counts metadata

Date	Tide	Tide time	Tide height (m)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
15/07/2024	Low	08:52	0.56	07:35	09:15	1 to 2	SE	0	18 to 22	2	8 to 4	2	0
23/07/2024	High	08:46	5.76	07:28	09:00	2 to 3	NW	0	16 to 18	2	6 to 5	2	0
06/08/2024	High	08:54	5.47	07:55	09:15	1	SW	0 to 1	18	2	8	1	0
28/08/2024	Low	09:29	0.5	07:40	09:00	2 to 3	SE	0	17 to 18	2	5 to 4	2	0
03/09/2024	Low	16:27	-0.33	15:51	17:09	3 to 4	W	0	19 to 21	2	2	2	0
19/09/2024	High	08:08	6.49	07:18	08:48	2	NE	0	13	1	8	2	0
03/10/2024	Low	16:23	0.06	15:43	17:00	3	E	0	5 to 3	2	5 to 3	2	0
18/10/2024	High	07:42	6.48	07:35	09:35	2	S	0	8 to 9	0	8	0	0
07/11/2024	High	09:46	4.3	07:50	11:50	3	SE	1 to 0	10 to 11	1	1	8	0
15/11/2024	Low	14:04	0.09	14:00	16:00	3	SW	0	11 to 12	2	2	8 to 7	0
05/12/2024	High	08:57	4.8	08:00	10:30	4 to 2	SW	0	11	2	5 to 6	2	0
10/12/2024	Low	08:54	0.52	08:22	09:43	4	NE	0	9	2	8	2	0
16/01/2025	High	08:23	5.2	08:15	10:00	0	NW	0	0	2	0	2	1 (frost)
28/01/2025	Low	13:44	0.4	13:00	15:00	2	SW	0	8	2	8	2	0
04/02/2025	High	10:54	4.91	08:55	10:34	4 to 5	SW	0	6 to 8	2	1	2	0
25/02/2025	Low	12:23	0.6	12:13	13:50	4	W	0	9	2	5 to 6	2	0
11/03/2025	Low	12:49	0.5	11:00	13:55	4 to 3	N/NW	0 to 2	6 to 8	1 to 2	3 to 7	2	0
25/03/2025	High	15:30	3.6	15:00	16:30	1	NW	0	11 to 12	2	7	2	0
01/04/2025	High	09:34	5.8	07:35	08:36	0 to 4	SE	0	2 to 4	2	1 to 6	2	0
21/04/2025	Low	08:21	0.73	07:38	08:48	0 to 4	S	0	8 to 10	2	7	2	0
06/05/2025	Low	09:44	0.86	08:00	09:00	1 to 2	N/NW	0	7 to 9	2	8	2	0
29/05/2025	High	08:53	5.61	07:45	09:30	2 to 3	SW	0	12 to 14	2	8	1	0
12/06/2025	High	08:07	4.96	07:30	08:30	4	W	0	17-19	2	6	2	0
24/06/2025	Low	14:33	0.14	12:35	14:56	W	SW-W	1 to 0	19	1	7 to 8	1	0

B.6 Nightjar

Nightjar survey metadata

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
28/06/2022	22:30	23:05	2	S	0	16 to 15	Unknown	3 to 4	Unknown	0
29/06/2022	22:30	23:52	1	SW	0	16	Unknown	4	Unknown	0
12/07/2022	20:15	22:55	1	SW	0	23	Unknown	8	Unknown	0
13/07/2022	20:30	23:55	1	SW	0	22	Unknown	6	Unknown	0
26/06/2024	22:30	00:45	1	SE	0	19	2	3 to 4	2	0
27/06/2024	22:30	00:40	2 to 3	SW	0	16 to 15	2	4 to 5	2	0
15/07/2024	21:50	11:50	1	E	2	16 to 15	2	8	1 to 2	0
16/07/2024	21:20	11:45	3	W	0	17 to 15	2	6	2	0

B.7 BBS metadata

CBC survey metadata

Survey area	Date	Sunrise	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
3	04/04/2024	06:25	06:25	10:55	3	SW	1	11	2	8
4	05/04/2024	06:24	06:54	07:24	3	SW	0	12	2	5
5	05/04/2024	06:24	08:02	08:45	4	SSW	1	12	2	4
7	05/04/2024	06:26	10:10	11:10	4 to 5	Unknown	0 to 1	14 to 15	2	3 to 7
8	09/04/2024	06:17	06:17	07:50	2	SW	1	9	2	8
9	09/04/2024	06:17	08:02	10:02	2	SW	0	9	2	8
10	10/04/2024	06:15	08:10	09:05	1 to 2	SW	0	8	2	6
11	10/04/2024	06:15	09:15	10:30	2 to 3	SW	0	9	2	6 to 8
12	10/04/2024	06:15	06:15	08:10	2	SW	0	7	2	4
13	10/04/2024	06:15	09:00	11:00	3	SW	0	11	2	6
1	11/04/2024	06:14	06:14	08:25	3	SW	0	12	2	7
2	11/04/2024	06:14	08:45	10:30	3	SW	0	15	2	7
1	01/05/2024	05:30	07:50	09:30	1	E	0	11 to 15	1	8
2	01/05/2024	05:25	10:10	11:30	1	E	0	15 to 16	2	7
3	02/05/2024	05:22	05:15	09:18	3	NE	0	11	2	8
5	02/05/2024	05:25	09:55	11:15	3 to 4	NE	0	15 to 16	2	6
7	02/05/2024	05:25	07:30	08:30	3 to 4	Unknown	0	12 to 13	2	8 to 7
9	03/05/2024	05:19	05:15	07:15	2	NW	0	11	2	8
10	03/05/2024	05:24	08:25	09:15	2 to 3	W	0	11	2	8
12	03/05/2024	05:24	06:20	07:30	3	NW	0	9 to 11	2	8
13	03/05/2024	05:24	08:15	09:40	3	NW	0	11 to 12	2	8
4	05/05/2024	05:25	08:35	09:35	2 to 3	NE	0	13 to 14	2	7
8	05/05/2024	05:19	07:20	08:50	2	NW	0	11	2	8
1	21/05/2024	04:50	07:00	09:00	1	NE	0	16	2	7
2	21/05/2024	04:50	04:45	06:15	2	NE	3	14	2	8

Survey area	Date	Sunrise	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
3	22/05/2024	04:53	04:45	08:45	2	NE	4	14	2	8
4	22/05/2024	04:50	07:50	08:45	3 to 4	NW	3 to 4	13	2	8
5	22/05/2024	04:50	09:15	10:30	3	NW	4	14	2	8
7	23/05/2024	04:51	08:00	09:00	4	Unknown	0 to 1	12 to 13	2	7 to 8
10	29/05/2024	04:44	04:44	07:05	2	W	0	13	2	4
11	29/05/2024	04:44	07:10	08:45	2 to 4	W	0	14	2	4
12	30/05/2024	04:44	04:40	06:45	2	NW	0	11	2	7
13	30/05/2024	04:44	07:05	08:45	2	NW	0	11	2	8
1	04/06/2024	04:35	04:35	06:15	1	SW	0	11	2	8
2	04/06/2024	04:35	06:25	08:10	2	SW	0	13	2	8
3	05/06/2024	04:34	04:35	08:40	3	SW	0	13	2	4
4	05/06/2024	04:41	10:15	11:00	3 to 4	W	2	12	2	4 to 6
5	05/06/2024	04:41	08:20	09:45	3 to 4	W	0	11	2	2 to 4
7	06/06/2024	04:38	04:38	08:08	2	SW	0	13	2	7 to 8
8	06/06/2024	04:40	10:20	11:00	2	W	0	13	2	6
9	06/06/2024	04:40	08:44	10:00	2	W	1	12	2	4 to 5
10	11/06/2024	04:35	06:13	08:37	1 to 3	NW	0	9 to 11	2	6 to 7
11	11/06/2024	04:35	09:00	10:45	3	NW	0	11	2	7 to 6
12	11/06/2024	04:36	04:30	06:25	1	SW	0	13	2	6
13	11/06/2024	04:36	06:55	08:10	1	SW	0	13	2	6
1	02/07/2024	04:40	06:25	08:15	2	NW	0	15	2	8
2	02/07/2024	04:40	08:20	09:50	2	NW	0	15	2	8
4	03/07/2024	04:40	09:37	10:45	2 to 3	SW	0	13 to 14	2	7 to 8
5	03/07/2024	04:40	07:35	09:05	2 to 3	SW	1 to 0	11 to 12	2	8
7	04/07/2024	04:43	08:26	09:05	3 to 4	W	0	13 to 14	2	8
8	09/07/2024	04:47	09:00	10:00	3	SE	2 to 1	16	2	8
9	09/07/2024	04:47	10:20	11:50	3	SE	1	16 to 17	2	8

Survey area	Date	Sunrise	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
10	09/07/2024	04:45	04:55	06:55	3	E	2	14 to 15	2	8
11	09/07/2024	04:45	07:05	08:10	3	E	2	15	2	8
12	10/07/2024	04:49	05:45	06:45	3	SW	0	15	2	8
13	10/07/2024	04:49	07:25	08:45	3	SW	0	16 to 17	2	8
8	31/07/2024	05:21	05:20	06:40	1	NE	0	18	2	1
9	31/07/2024	05:21	07:00	08:40	1	NE	0	18	2	1
6	26/03/2025	05:47	05:50	08:05	2	-	0	9	2	8
6	14/05/2025	05:03	07:00	09:30	2	-	0	12	2	6
6	13/06/2025	04:32	06:00	08:20	1	-	0	19	2	2
6	03/07/2025	04:40	08:42	10:37	2	W	0	17	2	2

B.8 FLL 24-25

Yorkshire Wolds

Location	Date	Tide	Tide time	Tide height (m)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
Ellerker to Rowley	29/10/2024	Low	12:47	-0.07	12:00	15:00	2	SW	0	14	2	8	2	0
Rowley to Skidby	30/10/2024	Low	13:26	-0.08	09:30	14:30	2	SW	0	12	2	8	2	0
Ellerker to Skidby	26/11/2024	Low	10:50	0.44	08:00	14:00	2	SW	0	2 to 8	2	2	2	0
Ellerker to Skidby	12/12/2024	Low	11:49	0.47	08:30	13:30	1	N	1 to 0	6 to 9	1 to 2	8	1 to 2	0
Ellerker to Skidby	22/01/2025	High	12:27	3.75	08:30	14:30	2	SW	0	5	2	8	2	0
Ellerker to Skidby	26/02/2025	Low	01:15	0.46	10:00	15:00	2	S	0	5	2	8	2	0
Elleker to Rowley	13/03/2025	High	06:34	5.07	09:15	13:15	4 to 3	N to NNE	0 to 3	5 to 7	2	3 to 8	2	0
Rowley to Skidby	14/03/2025	High	07:12	5.23	09:15	12:15	2 to 3	N	0	6 to 7	2	5 to 8	2	0
Rowley to Skidby	22/04/2025	High	14:47	3.65	11:40	15:15	1 to 2	SW	0	14 to 15	2	4 to 8	2	0
Ellerker to Rowley	23/04/2025	High	15:56	4.04	10:00	13:00	1	NE	0	14 to 15	2	3	2	0

North of the River Ouse

Location	Date	Tide	Tide Time	Peak Tide Height	Start	End	Wind	Wind Direction	Rain	Temp	Visibility	Cloud Cover	Cloud height
Yokefleet to Broomfleet	23/10/2024	Rising	HT 11:41	4.61	9:20	13:20	1 to 3	S	0	7 to 11	1 to 2	8 to 7	0 to 2
Broomfleet to Brantingham	24/10/2024	Rising	HT 12:45	3.98	9:30	13:30	2	S	0	9 to 15	2	8 to 7	1 to 2
Yokefleet to Broomfleet east	13/11/2024	Ebbing/LT/Rising	LT 12:20	0.21	9:10	15:00	1	NW	0	7 to 9	2	4 to 5	2
Broomfleet to Brantingham	14/11/2024	Ebbing/LT/Rising	LT 13:15	0.11	8:30	14:00	1	NW	0	7 to 9	2	4 to 6	2
Yokefleet to Brantingham	17/12/2024	High tide/ebbing	HT 07:43	5.51m	8:00	13:15	2	S	0	9	2	8	2
Yokefleet to Broomfleet	22/01/2025	Low tide /rising/HT	HT 12:27	3.75m	8:10	13:30	0 to 1	SW then NWW then NW	1 to 0	3 to 5	1	8	1
Broomfleet to Brantingham	23/01/2025	Low tide /rising/HT	HT 13:25	3.58m	8:20	13:00	1 to 2	S	0 to 1	2 to 5	1 to 2	8	1 to 2
Yokefleet to Market Weighton Canal	19/02/2025	HT/Ebbing	HT 10:38	4.3m	11:00	15:30	4	SE then SSE	0	5 to 6	2	8	2
Market Weighton Canal to Elleker	20/02/2025	Rising/HT survey	HT 11:17	4.0m	9:30	14:00	5	S to SSW	0	12 to 14	2	8 to 7	2
Elleker to Brantingham	21/02/2025	Rising tide	HT 12:15	3.6m	9:00	10:30	6	S	0	13 to 15	2	8	2

Location	Date	Tide	Tide Time	Peak Tide Height	Start	End	Wind	Wind Direction	Rain	Temp	Visibility	Cloud Cover	Cloud height
Yokefleet to Broomfleet	19/03/2025	HT/Ebbing	HT 09:22	4.8m	8:40	15:30	1	S	0	5 to 12	2	1	2
Broomfleet to Brantingham	20/03/2025	HT/Ebbing	HT 09:52	4.5m	9:00	14:00	0 to 1	S to SE	0	10 to 16	2	1	2
Yokefleet to Broomfleet	22/04/2025	HT/ rising	HT 14:47	3.65m	11:00	16:30	2 to 3	W to SSW	0 to 1	13 to 15	2	2 to 6	2
Broomfleet to Brantingham	23/04/2025	LT/ rising	HT 15:56	4.04m	9:15	15:30	2 to 3	NE to ENE	0	12 to 15	2	2 to 5	2

South of the River Ouse

Location	Date	Tide	Tide Time	Peak Tide Height	Start	End	Wind	Wind Direction	Rain	Temp	Visibility	Cloud Cover	Cloud height
Ousefleet to Luddington	14/10/2024	Ebbing	LT 12:32	0.32	9:20	13:20	1	E	0	7 to 13	2	2 to 0	2
Luddington to Keadby	15/10/2024	Ebbing	LT 13:48	0.11	10:05	14:05	2	SE	0 to 1	10 to 13	2	8	2
Ousefleet to Keadby Windfarm	27/11/2024	Ebbing tide/LT/Rising Tide	LT 11:49	0.29	8:30	14:20	2	NW	2 to 0	4 to 5	2	8 to 5	2
Keadby Windfarm to Keadby	28/11/2024	Ebbing Tide /LT	LT 12:37	0.18	8:45	12:30	1	W to SW	0	1 to 3	2	1 to 2	2
Ousefleet to Luddington	17/12/2024	Ebbing	HT 07:43	5.51	8:30	12:30	1 to 2	S	1 to 0	6 to 9	2	7 to 8	2
Luddington to Keadby	18/12/2024	Ebbing	HT 08:30	5.31	8:30	12:30	4	SW to W	0	13 to 12	2	7 to 6	2
Whitgift to Luddington	22/01/2025	Rising tide	HT 12:27	3.75	9:15	12:15	2 to 1	SW	1 to 0	2 to 4	1 to 0	8	1 to 0
Luddington to Keadby (A18)	23/01/2025	Rising tide	HT 13:25	3.58	11:15	13:45	4	S	0 to 1	4 to 5	2	8	2
Whitgift to Luddington	19/02/2025	High tide	HT 10.38	4.3	9:30	14:30	3 to 4	SE	0	3 to 6	2	8 to 7	2
Luddington to Keadby	20/02/2025	Rising tide/ high tide	HT 11:17	4.44	9:15	11:20	4 to 5	S	1 to 0	12 to 13	2	8	2
Keadby to Whitgift	24/03/2025	Rising	LT: 09:00	0.82m	8:30	15:00	2	NW	0	8 to 13	2	4	2
Whitgift to Luddington	07/04/2025	LT to rising	LT 10:09	0.97	8:45	14:45	1	NE to E	0	5 to 15	2	1 to 2	2
Luddington to Keadby	08/04/2025	Ebbing to LT	LT: 04:45	0.31	8:45	14:45	1	E	0	5 to 16	2	1	2

B.9 Nocturnal surveys

Nocturnal surveys metadata

Location	Date	Tide	Tide time	Tide height (m)	Lunar cycle	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
Ellerker to Faxfleet	01/10/2024	High	19:28	5.18	New moon	18:25	22:00	3	NNE	2	12	1	8	2	0
Blacktoft to Whitgift	02/10/2024	High	20:01	5.31	New moon	18:36	22:05	2	NE	0	10	2	4	2	0
Adlingfleet to Luddington	03/10/2024	High	20:28	5.31	New moon	18:30	21:00	2	NE	0	8	2	3	2	0
Ellerker to Faxfleet	15/10/2024	High	18:18	5.36	Full moon	18:15	21:00	2	SE	0	11	2	6	2	0
Blacktoft to Whitgift	16/10/2024	High	19:02	5.80	Full moon	18:05	22:30	2	SE	0	14	2	5	2	0
Adlingfleet to Luddington	17/10/2024	High	19:41	6.06	Full moon	18:15	21:00	3	SW	0	11	2	2	2	0
Luddington to Whitgift	06/11/2024	High	21:11	4.84	Half moon	17:45	22:25	1	SE	0	9	2	2	2	0
Yokefleet to Ellerker	07/11/2024	High	21:57	4.43	Half moon	17:50		2	SE	0	9	2	2	2	0
Ellerker to Faxfleet	19/11/2024	High	20:52	5.42	Half moon	18:15	23:05	2	N	0	0	2	1	2	1 (frost)
Blacktoft to Whitgift	20/11/2024	High	21:38	5.06	Half moon	19:35		2	NW	0	-2	2	1	2	1 (frost)
Adlingfleet to Luddington	21/11/2024	High	22:29	4.65	Half moon	20:30	00:00	2	N	0	-1	2	1	2	1 (frost)
Ellerker to Faxfleet	02/12/2024	High	19:11	5.32	New moon	17:15	21:30	2	NW	0	4	2	6	2	0
Blacktoft to Whitgift	03/12/2024	High	19:43	5.35	New moon	17:45	22:05	2	NW	0	2	2	3	1	0
Adlingfleet to Luddington	04/12/2024	High	20:18	5.28	New moon	18:15	21:15	4	W	0 to 2	6	2	2	0	0
Whitgift to Luddington	18/12/2024	High	19:56	5.60	Full moon	18:00	22:35	3	NW	1 to 2	6	2	8	2	0
Yokefleet to Ellerker	19/12/2024	High	20:36	5.50	Full moon	18:30	23:30	3	NW	0	2	2	1	2	0
Ellerker to Faxfleet	14/01/2025	High	19:10	5.45	Full moon	17:10	21:30	1	W	0	8	2	4	1	1 (frost)
Yokefleet to Blacktoft	15/01/2025	High	19:48	5.61	Full moon	17:40	20:30	1	W	0	2	1	8	0	1 (frost)
Ousefleet to Luddington	16/01/2025	High	20:24	5.63	Full moon	18:25	22:25	3	S	0	2	2	0	2	1 (frost)

Location	Date	Tide	Tide time	Tide height (m)	Lunar cycle	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
Ellerker to Faxfleet	28/01/2025	High	18:11	4.94	New moon	17:30	21:30	2	SW	1	5	2	8	2	0
Blacktoft to Whitgift	29/01/2025	High	18:48	5.39	New moon	17:45	21:45	2	SW	0	3	2	4	2	0
Adlingfleet to Luddington	30/01/2025	High	19:23	5.76	New moon	17:30	20:15	2	SW	0	2	2	2	2	0
Ellerker to Faxfleet	11/02/2025	High	18:21	5.10	Full moon	17:45	22:05	2	NE	1	3	2	8	2	0
Blacktoft to Whitgift	12/02/2025	High	19:00	5.47	Full moon	17:45	21:45	2	NE	0	4	2	7	2	0
Adlingfleet to Luddington	13/02/2025	High	19:36	5.67	Full moon	17:45	20:05	2	NE	0	4	2	4	2	0
Ellerker to Faxfleet	18/02/2025	High	21:59	4.84	New moon	20:00	23:45	3	NE	0	2	2	3	2	0
Blacktoft to Yokefleet	19/02/2025	High	22:31	4.44	New moon	20:30	22:05	3	NE	0	2	2	5	2	0
Whitgift to Luddington	20/02/2025	High	23:13	3.96	New moon	21:15	00:25	3	S	0	9	2	3	2	0
Ellerker to Faxfleet	03/03/2025	High	20:59	6.32	Waxing cresent	19:00	22:40	2	W	0	8	2	3	2	0
Blacktoft to Whitgift	04/03/2025	High	21:43	5.93	Waxing cresent	19:45	23:30	2	SW	0	5	2	3	2	0
Adlingfleet to Luddington	04/03/2025	High	22:35	5.35	Waxing cresent	20:35	22:35	2	SW	0	8	2	1	2	0
Ellerker to Faxfleet	18/03/2025	High	20:55	5.12	New moon	18:55	22:50	2	E	0	3	2	1	2	0
Blacktoft to Yokefleet	19/03/2025	High	21:22	4.84	New moon	19:20	21:50	2	S	0	3	2	1	2	0
Whitgift to Luddington	20/03/2025	High	21:53	4.45	New moon	19:55	00:20	2 to 3	E	0	7	2	1	2	0
Ellerker to Yokefleet	01/04/2025	High	21:43	6.28	New moon	19:40	00:20	2	NE	0	7	2	1	2	0
Whitgift to Luddington	02/04/2025	High	22:30	5.77	New moon	20:30	00:00	2	NE	0	7	2	1	2	0
Ellerker to Faxfleet	15/04/2025	High	21:01	5.10	Full moon	20:15	00:15	2	SW	0	8	2	3	2	0
Blacktoft to Whitgift	16/04/2025	High	21:29	4.93	Full moon	20:20	23:50	3	SW	0	9	2	3	2	0
Adlingfleet to Luddington	17/04/2025	High	21:59	4.66	Full moon	20:20	23:00	2	SW	0	10	2	3	2	0

B.10 Wintering bird field counts

Winter walkovers 24-25 metadata

Area	Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
North	22/10/2024	09:00	14:00	3	SW	0	11	2	4	2	0
South	23/10/2024	09:00	15:00	2	S	0	9	2	4	2	0
North	27/11/2024	09:25	13:15	2	NW	0 to1	4 to 12	2	8	2	0
South	28/11/2024	08:30	13:00	2	NW	0	0 to 11	2	2	2	1 (frost)
North	12/02/2025	09:15	14:30	1 to 2	NE	0	5 to 6	2	8	2	0
South	13/02/2025	09:40	14:30	1	NE	0	3 to 4	2	8	2	0

B.11 Schedule 1 and raptor metadata

Kingfisher survey metadata

Date	Visit number	Location (survey area reference)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
08/04/2025	Stage 1_Habitat Assessment/Scoping	4a (South Soak Drain), 4b (North Soak Drain, Canal, South Soak Drain, & 4c (North Soak Drain, Canal, South Soak Drain)	10:30	15:00	1	SSE	None	11 to 13	>5km+	0
09/04/2025	Stage 1_Habitat Assessment/Scoping	5b & 5d	10:00	12:50	1	NE	None	9 to 13	>5km+	4 to 5
10/04/2025	Stage 1_Habitat Assessment/Scoping	5a & 5c	10:20	13:20	1	SW	None	4 to 2	>5km+	4 to 2
11/04/2025	Stage 1_Habitat Assessment/Scoping	7	10:20	12:20	1	NW	None	15	>5km+	3
12/06/2025	Stage 1_Habitat Assessment/Scoping	1, 2 & 3	10:15	14:15	1	SW	None	24	>5km+	2
18/06/2025	Stage 1_Habitat Assessment/Scoping	8 & 9	09:45	13:20	2	NW	None	19 to 23	>5km+	4
19/06/2025	Stage 1_Habitat Assessment/Scoping	6a, 6b , 6c, 6d & 10	08:30	12:45	2	E	None	19 to 23	>5km+	3 to 1
23/06/2025	Stage 2_Visit 1	2	09:00	13:00	1	S	None	23	>5km+	2
24/06/2025	Stage 2_Visit 1	4 & 5	09:00	16:00	1	S	None	23	>5km+	3
25/06/2025	Stage 2_Visit 1	6a, 6b, 6c & 6d	09:15	11:30	1	SW	None	20 to 23	>5km+	4
26/06/2025	Stage 2_Visit 1	7 & 10	09:25	12:30	4	SW	None	19 to 23	>5km+	4
27/06/2025	Stage 2_Visit 1	8 & 9	07:50	10:15	3	SW	None	16 to 19	>5km+	7
08/07/2025	Stage 2_Visit 2	2	09:45	11:30	3	NW	None	18 to 19	>5km+	3
09/07/2025	Stage 2_Visit 2	4a (South Soak Drain), 4b (Canal, South Soak Drain, & 4c (Canal, South Soak Drain)	09:30	11:45	2	W	None	21 to 22	>5km+	7
09/07/2025	Stage 2_Visit 2	5a, 5b, 5c & 5d	12:00	14:00	1 to 2	W	None	23 to 24	>5km+	7
10/07/2025	Stage 2_Visit 2	6a, 6b, 6c & 6d	09:00	11:00	1	SW	None	22 to 23	>5km+	2

Barn owl survey metadata

Date	Visit number	Location	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
12/05/2025	1	Skidby to Ellerket	09:00	15:00	2	SE	0	20	2	2
13/05/2025	1	Ellerker to Ealand	09:00	15:00	2	NE	0	10 to 18	2	3
14/05/2025	1	Ealand to Misterton	09:00	15:00	2	NE	0	9 to 15	2	7
15/05/2025	1	Misterton to South Leverton	09:00	15:00	2	NE	0	8 to 13	2	8
16/05/2025	1	South Leverton to High Marnham	09:00	15:00	3	NE	0	18	2	3
10/06/2025	1	Epworth to Saundby	09:00	15:00	4	NW	0	17	2	6
11/06/2025	1	Saundby to High Marnham	09:00	15:00	3	SE	0	19	2	7
22/07/2025	2	Cottingham & Rowley	09:00	15:00	1	WNW	0	19 to 20	2	3 to 7
23/07/2025	2	Yokefleet	09:30	12:30	1	NW	0	20	2	7
23/07/2025	Emergence/Re-entry Survey	Yokefleet. SE 83132 24222 Ash Tree (hole) in Land Parcel 2115/3209	20:00	22:15	3 to 1	N	0	17	2	8 to 5
23/07/2025	Emergence/Re-entry Survey	Yokefleet. 3 semi-mature/mature trees on boundary of Land Parcel 'Island' 3200 (SE 83046 24802, SE 82895 24724 & SE 82896 24745)	20:00	22:15	3 to 1	N	0	17	2	8 to 5
24/07/2025	2	High Melwood & Beltoft	09:00	11:00	2	N	0	19	2	8
25/07/2025	2	Ealand & North Moor	09:00	11:15	1	W	0	19 to 21	2	1
30/07/2025	2	Todds lane, Ings Lane, Sleights Lane & Tongue Lane	09:00	12:30	2	WNW	0	18 to 21	2	3 to 7
30/07/2025	Emergence/Re-entry Survey	Ings Lane	19:45	22:00	2	W	0	20 to 17	2	7
05/08/2025	2	West Burton	16:15	17:15	5	WNW	0	20	2	3
05/08/2025	Emergence/Re-entry Survey	North Moor	19:40	22:55	4 to 2	WNW to W	0	18 to 14	2	3 to 4
06/08/2025	2	North Leverton, Treswell & Fledborough	09:30	12:00	2	WSW	0	17 to 22	2	4
19/08/2025	2	Broomfleet, Brantingham & Little Weighton	11:30	15:00	2	NE	0 to 1	18	2	8
28/08/2025	2	Fledborough, Adlingfleet, Yokefleet & Broomfleet	09:30	15:30	2	SSW	0 to 1	19 to 17	2	4 to 8

Date	Visit number	Location	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
09/09/2025	2	Broomfleet, Adlingfleet, Beckingham & Sturton-le-Steeple	10:30	15:00	1	SSE	0	16 to 21	2	2
17/09/2025	2	Skidby & Wienerberger Tileworks	09:00	12:00	2	SSW	2 to 0	15 to 18	2	2

Red kite survey metadata

Date	Visit number	Location (survey area reference)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
12/05/2025	1	Skidby to Ellerker	09:00	15:00	2	SE	0	20	2	2
13/05/2025	1	Ellerker to Ealand	09:00	15:00	2	NE	0	10 to 18	2	3
14/05/2025	1	Ealand to Misterton	09:00	15:00	2	NE	0	9 to 15	2	7
15/05/2025	1	Misterton to South Leverton	09:00	15:00	2	NE	0	8 to 15	2	8
16/05/2025	1	South Leverton to High Marnham	09:00	15:00	3	NE	0	18	2	3
09/06/2025	2	Skidby (VP19) to Epworth	09:00	15:00	3	SW	0	15	2	6
10/06/2025	2	Epworth to Saundby	09:00	15:00	4	NW	0	17	2	6
11/06/2025	2	Saundby to High Marnham	09:00	15:00	3	SE	0	19	2	7

Peregrine survey metadata

Date	Visit number	Location (survey area reference)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
08/04/2025	1	Cottingham substation - Elleker	10:30	15:30	1 to 2	E	0	10 to 15	2	1
09/04/2025	1	Adlingfleet - Owston Ferry	08:50	17:00	1 to 3	N to NNE	0	6 to 13	2	0 to 8
10/04/2025	1	Owston Ferry - High Marnham	09:00	15:45	2 to 1	NW to W	0	7 to 18	2	0 to 8
16/06/2025	2	High Marnham Power Station and all pylons in survey area surrounding it, then West Burton Power Station	09:00	15:00	3	W	0	24	2	2

Date	Visit number	Location (survey area reference)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
20/06/2025	2	West Burton Power Station to Keadby Power Station North	09:30	12:30	2	SSE	0	20 to 28	2	6
20/06/2025	2	Creyke Beck SS - Luddington	08:45	16:15	3	SSE	0	22 to 31	2	0 to 7

Hobby survey metadata

Date	Visit number	Location	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover
12/05/2025	1	Skidby to Ellerker	09:00	15:00	2	SE	0	20	2	2
13/05/2025	1	Ellerker to Ealand	09:00	15:00	2	NE	0	10 to 18	2	3
14/05/2025	1	Ealand to Misterton	09:00	15:00	2	NE	0	9 to 15	2	7
15/05/2025	1	Misterton to South Leverton	09:00	15:00	2	NE	0	8 to 13	2	8
16/05/2025	1	South Leverton to High Marnham	09:00	15:00	3	NE	0	18	2	3
10/06/2025	1	Epworth to Saundby	09:00	15:00	4	NW	0	17	2	6
11/06/2025	1	Saundby to High Marnham	09:00	15:00	3	SE	0	19	2	7
12/08/2025	2	IDs 24 & 25 North Leverton	07:30	10:30	1	ESE	0	17 to 25	2	7
12/08/2025	2	ID 21 Saundby	17:30	20:30	1	E	0	27 to 23	2	7 to 5
13/08/2025	2	IDs 20, 22 and 23 Beckingham	07:30	10:30	1 to 2	ESE to E	0	17 to 25	2	3
13/08/2025	2	IDs 18 and 19 Owston Ferry	17:30	20:30	2	SE	0	29 to 25	2	5
14/08/2025	2	IDs 13, 14, 15, 16 and 17 Beltoft	07:30	10:30	1 to 2	SW to WSW	0	18 to 23	2	3
14/08/2025	2	ID 12 Keadby Wind Farm	17:30	20:30	1	WSW	0	26 to 23	2	3
15/08/2025	2	IDs 10 & 11 Adlingfleet	07:30	10:30	1	NW	0	17 to 23	2	1
19/08/2025	2	ID Ellerker	15:00	15:30	2	NE	0	18	2	8

B.12 Tileworks HT counts

Tileworks WeBS metadata

Date	Tide	Tide time	Tide height (m)	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Lying snow/frost
31/10/2024	Ebbing	6:00	5.17	09:40	12:30	3	SW	0	12	2	8	2	0
08/11/2024	High	10:59	3.88	09:00	12:30	1	SE	0	7	2	7	2	0
10/12/2024	High	14:27	4.32	11:30	15:30	3	NE	0	7	2	8	2	0
08/01/2025	High	13:40	4.22	11:40	14:45	1	NE	0	0	2	6	2	2 ‘(frost)
04/02/2025	High	10:54	4.91	08:55	11:20	3	S	0	9	2	6	2	0
07/03/2025	High	12:16	4.08	10:45	13:10	2	SW	0	14	2	4	2	0
30/04/2025	High	09:10	5.76	08:00	11:00	1	SW	0	21	2	2	2	0
25/09/2025	High	09:22	5.41	08:40	11:55	3 to 4	NE to E	0	17	2	4	2	0
09/10/2025	High	08:35	6.52	09:00	12:15	3	W	0	16	2	6	2	0
07/11/2025	High	07:14	6.34	08:00	11:00	1	S	0	12 to 13	2	1 to 8	2	0
08/12/2025	High	08:48	5.54	09:00	12:30	2	SW	0	10 to 12	2	6	2	0
07/01/2026	High	09:28	5.30	08:45	11:15	3	W	0	3 to 4	2	1	2	0

B.13 Winter Swan Walkovers metadata

Winter Swan Walkovers 2025/2026

Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
13/10/2025	9:40	14:50	0	N/A	0 to 1	13° - 15°	0 to 1	8	0 to 1	0
25/11/2025	9:50	12:40	3	N	0	7° - 7°	2	2	2	0
10/12/2025	8:25	12:25	4	SW	0	9° - 11°	2	2 to 3	2	0
27/01/2026	11:00	15:00	5 to 4	SE	2 to 0	5° - 6°	1	8	1	0
25/02/2026	9:00	13:00	3	S	0	11° - 14°	2	5 to 3	2	0
10/03/2026	9:00	12:45	3 to 4	SW	0	9° - 11°	2	4 to 7	2	0

B.14 PFG Tracking

Pink-footed goose tracking survey metadata

Date	Start	End	Sunrise	Sunset	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Cloud height	Snow/frost
20/11/2025	14:00	16:45	N/A	16:00	3 to 4	NW	0	4 to 3	2	4-8 to 2	2	0
21/11/2025	07:15	10:15	07:39	N/A	0-1	NW	0	-1 to 2	2	1	2	0
25/11/2025	13:30	15:30	N/A	15:52	3	N	0	5 to 7	2	2	2	0
26/11/2025	07:05	09:05	07:48	N/A	0	N/A	0	-1 to 0	2	0	N/A	1
26/11/2025	09:05	12:30	07:48	N/A	2	S	0	6 to 4	2	4 to 8	2	0
26/11/2025	13:40	16:36	N/A	15:53	2	S	0	6 to 4	2	4 to 8	2	0
09/12/2025	07:05	09:40	08:07	N/A	5 to 6	S	3	12	2	8	1	0
09/12/2025	10:10	14:10	08:07	15:42	3	SW	3	14	2	8	1	0
09/12/2025	14:15	16:55	N/A	15:44	5	SW	3	14	2	8	1	0
17/12/2025	07:10	09:42	08:15	N/A	2	S	0	3	2	7 to 8	2	0
17/12/2025	09:50	13:50	08:15	15:44	3	S	2	5 to 8	2	8	2	0
17/12/2025	14:15	16:40	N/A	15:44	3 to 4	S	2	9	2	8	2	0

B.15 Breeding CB

Corn Bunting survey meta data

Visit	Date	Start	End	Wind strength	Wind direction	Precipitation	Temperature (°C)	Visibility	Cloud cover	Location
1	19/5/2026	10:30	13:12	2 to 4	S	0	14 to 18	1 to 2	7 to 8	Chesterfield Canal to Manor Farm
1	26/5/2026	8:05	10:35	2	WSW to WNW	0	25 to 29	2	0-1	Northern parcels (Huddlestone Farm). Access only after 8am.
1	27/5/2026	6:20	10:00	3 to 4	ENE to E	0	11 to 18	2	0-1	Northwards of Cattle Road on PRoW and remaining northern parcels (8am onwards)
2	15/06/2026	10:00	13:00	2	SE	0	15 to 17	2	4	Chesterfield Canal to Manor Farm
2	16/06/2026	8:00	11:00	1	SSE to SSW	0	15 to 18	2	8	Northern extent of survey area - Misterton.
2	17/06/2026	5:30	10:00	3	W to SW	4 to 0	16 to 18	1	8	Initially heavy rain 5:30 , so used that time to determine viewpoints along canal PRoW. Returned along canal when weather improved (7:30 and used PRoW from Misterton > Cattle Farm loop - as no access to large central tract.
3	13/07/2026	4:20	8:00	3 to 3	N to N	0	12 to 17	2	8 to 7	PRoW through northern parcels. Land north of Cattle Road. No CB.
3	14/07/2027	4:30	8:30	3 to 4	N to NNE	0	12 to 20	2	8 to 3	Land south of Cattle Road. Six CB, three singing.
3	15/07/2028	4:20	7:10	1 to 3	N to NE	0	15 to 19	2	8 to 8	Southern parcels. One singing CB/ territory.

Annex C
Target Species for Vantage Point Surveys

nationalgrid

Annex C – Target Species for Vantage Point Surveys

Humber SPA Species Summary

The following species are qualifying features during the breeding season (in bold), non-breeding season and passage periods for the Humber Estuary Special Protection Area (SPA), Ramsar and Site of Special Scientific Interest (SSSI) and therefore by default are interest features of Blacktoft Sands RSPB Nature Reserve.

All these species will be priority target for flight activity surveys during the applicable survey periods.

- *Botaurus stellaris*; great bittern (Breeding)
- *Circus aeruginosus*: marsh harrier (Breeding)
- *Recurvirostra avosetta*; pied avocet (Breeding)
- *Sternula albifrons*; little tern (Breeding)
- *Botaurus stellaris*; great bittern (Non-breeding)
- *Tadorna tadorna*; common shelduck (Non-breeding)
- *Circus cyaneus*; hen harrier (Non-breeding)
- *Recurvirostra avosetta*; pied avocet (Non-breeding)
- *Pluvialis apricaria*; European golden plover (Non-breeding)
- *Calidris canutus*; red knot (Non-breeding/passage)
- *Calidris alpina alpina*; dunlin (Non-breeding/passage)
- *Calidris pugnax*; ruff (Non-breeding)
- *Limosa limosa islandica*; black-tailed godwit (Non-breeding/passage)
- *Limosa lapponica*; bar-tailed godwit (Non-breeding)
- *Tringa totanus*; common redshank (Non-breeding/passage)
- *Branta branta bernicla*; brent goose (dark bellied) (Non-breeding)
- *Numenius arquata*; curlew (Non-breeding)
- *Bucephala clangula*; goldeneye (Non-breeding)
- *Tringa nebularia*; greenshank (Non-breeding)
- *Pluvialis squatarola*; grey plover (Non-breeding)
- *Vanellus vanellus*; lapwing (Non-breeding)
- *Haematopus ostralegus*; oystercatcher (Non-breeding)
- *Aythya ferina*; pochard (Non-breeding)
- *Charadrius hiaticula*; ringed plover (Non-breeding)
- *Calidris alba*; sanderling (Non-breeding)
- *Aythya marila*; scaup (Non-breeding)

- *Anas crecca*; teal (Non-breeding)
- *Arenaria interpres*; turnstone (Non-breeding)
- *Numenius phaeopus*; whimbrel (Non-breeding)
- *Mareca penelope*; wigeon (Non-breeding)
- *Grus grus*; common crane (at all times)

Waterbird assemblage (Non-breeding, includes the species listed above)

Other target species will include waterfowl and raptors including but not limited to:

- *Cygnus cygnus*; whooper swan
- *Egretta garzetta*; little egret
- *Falco peregrinus*; peregrine falcon
- *Falco Subbuteo*; hobby
- *Milvus milvus*; red kite
- *Falco columbarius*; merlin
- *Charadrius dubius*; little ringed plover
- *Tyto alba*; barn owl
- *Asio flammeus*; short-eared owl
- All species of tern not listed above.

Secondary species are those that are potentially vulnerable to collision with the proposed overhead line but that are neither specially protected nor supporting features of a designated site. They will be recorded only if primary target species are not active:

- *Larus argentatus*; European herring gull
- *Larus fuscus*; lesser black-backed gull
- *Larus marinus*; great black-backed gull
- *Chroicocephalus ridibundus*; black-headed gul;
- *Larus canus*; common gull
- *Cygnus olor*; mute swan
- *Ardea cinerea*; grey heron
- *Buteo buteo*; common buzzard
- *Falco tinnunculus*; common kestrel

Annex D
WeBS Core Count Data

nationalgrid

WeBS data for

RSPB Beckingham Marshes

Compiled on 13 February 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

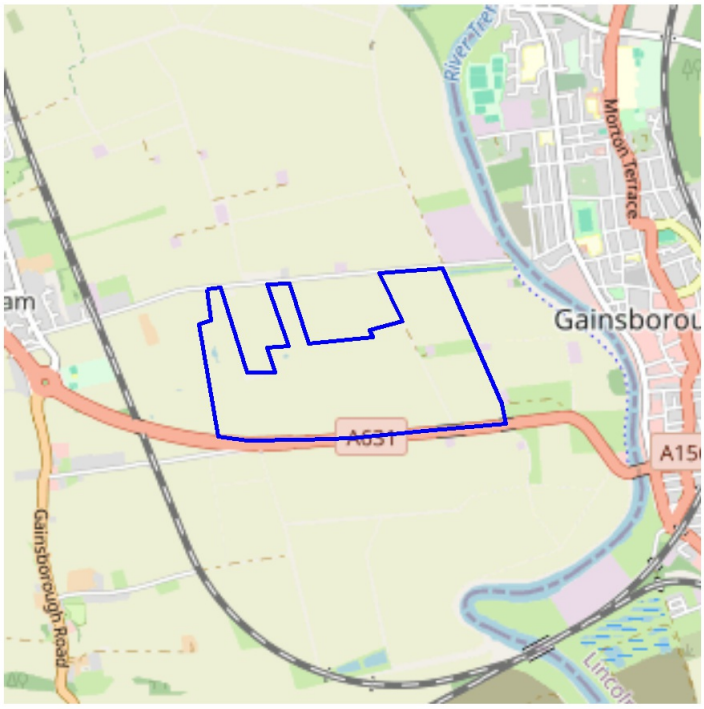
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors RSPB Beckingham Marshes



LOC LABEL	NAME	GRIDREF	Web Link
37329	RSPB Beckingham Marshes	SK793906	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC1077718

Five year summary for RSPB Beckingham Marshes

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	1930	FEB	105	2511	NC
2020/21	1869	JAN	69	2072	NC
2021/22	1925	FEB	1	1993	NC
2022/23	3	NOV	0	3	NC
2023/24	46	OCT	46	NC	NC
MEAN	1155		44	1645	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (3,0)	1 (2,0)	NC	NC	NC
Greylag Goose (British/Irish)	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	21 (2,0)	0 (2,0)	1 (3,0)	13 (2,0)	NC	NC	NC
Pink-footed Goose	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	10 (3,0)	0 (2,0)	NC	NC	NC
Mute Swan	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	2 (2,0)	0 (2,0)	1 (3,0)	1 (2,0)	NC	NC	NC
Whooper Swan	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	1 (2,0)	0 (2,0)	0 (3,0)	0 (2,0)	NC	NC	NC
Shelduck	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	1 (2,0)	1 (3,0)	4 (2,0)	NC	NC	NC
Shoveler	0 (1,0)	1 (1,0)	0 (1,0)	2 (5,0)	0 (4,0)	3 (2,0)	13 (2,0)	25 (3,0)	29 (2,0)	NC	NC	NC
Gadwall	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (3,0)	3 (2,0)	NC	NC	NC
Wigeon	0 (1,0)	0 (1,0)	0 (1,0)	14 (5,0)	139 (4,0)	320 (2,0)	668 (2,0)	668 (3,0)	414 (2,0)	NC	NC	NC
Mallard	0 (1,0)	0 (1,0)	0 (1,0)	3 (5,0)	0 (4,0)	1 (2,0)	5 (2,0)	8 (3,0)	12 (2,0)	NC	NC	NC
Teal	0 (1,0)	0 (1,0)	4 (1,0)	3 (5,0)	15 (4,0)	42 (2,0)	120 (2,0)	202 (3,0)	88 (2,0)	NC	NC	NC
Grey Heron	0 (1,0)	6 (1,0)	4 (1,0)	1 (5,0)	1 (4,0)	1 (2,0)	1 (2,0)	0 (3,0)	2 (2,0)	NC	NC	NC
Little Egret	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	1 (2,0)	0 (3,0)	0 (2,0)	NC	NC	NC
Moorhen	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (3,0)	2 (2,0)	NC	NC	NC
Coot	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	1 (3,0)	23 (2,0)	NC	NC	NC
Oystercatcher	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (3,0)	2 (2,0)	NC	NC	NC
Lapwing	0 (1,0)	30 (1,0)	2 (1,0)	3 (5,0)	198 (4,0)	79 (2,0)	344 (2,0)	141 (3,0)	59 (2,0)	NC	NC	NC
Golden Plover	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	138 (4,0)	175 (2,0)	302 (2,0)	203 (3,0)	0 (2,0)	NC	NC	NC
Snipe	1 (1,0)	0 (1,0)	1 (1,0)	13 (5,0)	2 (4,0)	4 (2,0)	8 (2,0)	7 (3,0)	2 (2,0)	NC	NC	NC
Redshank	0 (1,0)	0 (1,0)	0 (1,0)	0 (5,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (3,0)	2 (2,0)	NC	NC	NC
Black-headed Gull	0 (1,0)	0 (1,0)	0 (1,0)	1 (3,0)	76 (2,0)	44 (1,0)	11 (2,0)	21 (2,0)	6 (2,0)	NC	NC	NC

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mediterranean Gull	0 (1,0)	0 (1,0)	0 (1,0)	0 (3,0)	0 (2,0)	0 (1,0)	0 (2,0)	0 (2,0)	0 (2,0)	NC	NC	NC
Common Gull	0 (1,0)	1 (1,0)	0 (1,0)	0 (3,0)	0 (2,0)	0 (1,0)	0 (2,0)	19 (2,0)	0 (2,0)	NC	NC	NC
Herring Gull	0 (1,0)	0 (1,0)	0 (1,0)	0 (3,0)	1 (2,0)	0 (1,0)	0 (2,0)	1 (2,0)	0 (2,0)	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	0	0	0	0	0	0	0	2	NC	NC	NC
Greylag Goose (British/Irish)	0	0	0	0	0	42	0	2	15	NC	NC	NC
Pink-footed Goose	0	0	0	0	0	0	1	29	0	NC	NC	NC
Mute Swan	0	0	0	2	2	4	0	2	2	NC	NC	NC
Whooper Swan	0	0	0	0	0	2	0	0	0	NC	NC	NC
Shelduck	0	0	0	0	0	0	2	2	7	NC	NC	NC
Shoveler	0	1	0	5	0	6	22	41	37	NC	NC	NC
Gadwall	0	0	0	0	0	0	0	0	6	NC	NC	NC
Wigeon	0	0	0	36	200	374	738	1103	686	NC	NC	NC
Mallard	0	0	0	15	0	2	10	21	13	NC	NC	NC
Teal	0	0	4	10	46	46	121	471	111	NC	NC	NC
Grey Heron	0	6	4	1	1	2	2	0	2	NC	NC	NC
Little Egret	0	0	0	1	1	1	1	0	1	NC	NC	NC
Moorhen	0	0	0	0	1	0	0	0	3	NC	NC	NC
Coot	0	0	0	0	0	0	0	4	31	NC	NC	NC
Oystercatcher	0	0	0	0	0	0	0	0	2	NC	NC	NC
Lapwing	0	30	2	16	657	158	531	242	73	NC	NC	NC
Golden Plover	0	0	0	0	300	350	605	608	0	NC	NC	NC
Snipe	1	0	1	35	4	6	8	13	4	NC	NC	NC
Redshank	0	0	0	0	0	0	0	0	4	NC	NC	NC
Black-headed Gull	0	0	0	4	150	44	20	42	9	NC	NC	NC
Mediterranean Gull	0	0	0	0	0	0	0	0	1	NC	NC	NC
Common Gull	0	1	0	0	0	0	0	38	0	NC	NC	NC
Herring Gull	0	0	0	0	2	0	0	2	0	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for RSPB Beckingham Marshes

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Mute Swan	2 (OCT)	0	0	0	0	0
Shoveler	3 (OCT)	0	0	0	5 (OCT)	2
Wigeon	2 (OCT)	36 (OCT)	0	0	33 (OCT)	14
Mallard	15 (OCT)	0	0	0	0	3
Teal	10 (OCT)	0	0	0	3 (OCT)	3
Grey Heron	6 (AUG)	1 (OCT)	0	0	1 (OCT)	2
Little Egret	1 (OCT)	0	0	0	0	0
Lapwing	30 (AUG)	1 (OCT)	0	0	0	6
Snipe	35 (OCT)	31 (OCT)	1 (OCT)	0	0	13
Black-headed Gull	0	NA	NA	0	4 (OCT)	1
Common Gull	1 (AUG)	NA	NA	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for RSPB Beckingham Marshes

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	Y5	Mean of Peaks
Canada Goose	0	0	2 (MAR)	0	NC	0
Greylag Goose (British/Irish)	0	15 (MAR)	42 (DEC)	0	NC	14
Pink-footed Goose	0	0	29 (FEB)	0	NC	7
Mute Swan	4 (DEC)	0	2 (FEB)	0	NC	2
Whooper Swan	2 (DEC)	0	0	0	NC	0
Shelduck	0	0	7 (MAR)	0	NC	2
Shoveler	41 (FEB)	37 (MAR)	34 (FEB)	0	NC	28
Gadwall	0	6 (MAR)	0	0	NC	2
Wigeon	900 (FEB)	686 (MAR)	1103 (FEB)	0	NC	672
Mallard	3 (FEB)	13 (MAR)	21 (FEB)	0	NC	9
Teal	136 (FEB)	121 (JAN)	471 (FEB)	0	NC	182
Grey Heron	1 (NOV)	2 (MAR)	2 (DEC)	1 (NOV)	NC	2
Little Egret	1 (NOV)	1 (NOV)	1 (DEC)	0	NC	1
Moorhen	0	3 (MAR)	0	1 (NOV)	NC	1
Coot	0	31 (MAR)	15 (MAR)	0	NC	12
Oystercatcher	0	2 (MAR)	2 (MAR)	0	NC	1
Lapwing	657 (NOV)	531 (JAN)	168 (FEB)	0	NC	339
Golden Plover	608 (FEB)	605 (JAN)	0	0	NC	303
Snipe	6 (DEC)	13 (FEB)	9 (FEB)	1 (NOV)	NC	7
Redshank	0	1 (MAR)	4 (MAR)	0	NC	1
Black-headed Gull	150 (NOV)	3 (MAR)	42 (FEB)	NA	NC	65
Mediterranean Gull	0	0	1 (MAR)	NA	NC	0
Common Gull	0	0	38 (FEB)	NA	NC	13
Herring Gull	2 (NOV)	2 (FEB)	0	NA	NC	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	0	0	2 (MAR)	0	0	0
Greylag Goose (British/Irish)	0	15 (MAR)	42 (DEC)	0	0	11
Pink-footed Goose	0	0	29 (FEB)	0	0	6
Mute Swan	4 (DEC)	0	2 (FEB)	0	0	1
Whooper Swan	2 (DEC)	0	0	0	0	0
Shelduck	0	0	7 (MAR)	0	0	1
Shoveler	41 (FEB)	37 (MAR)	34 (FEB)	0	5 (OCT)	23
Gadwall	0	6 (MAR)	0	0	0	1
Wigeon	900 (FEB)	686 (MAR)	1103 (FEB)	0	33 (OCT)	544
Mallard	15 (OCT)	13 (MAR)	21 (FEB)	0	0	10
Teal	136 (FEB)	121 (JAN)	471 (FEB)	0	3 (OCT)	146
Grey Heron	6 (AUG)	2 (MAR)	2 (DEC)	1 (NOV)	1 (OCT)	2
Little Egret	1 (OCT)	1 (NOV)	1 (DEC)	0	0	1
Moorhen	0	3 (MAR)	0	1 (NOV)	0	1
Coot	0	31 (MAR)	15 (MAR)	0	0	9
Oystercatcher	0	2 (MAR)	2 (MAR)	0	0	1
Lapwing	657 (NOV)	531 (JAN)	168 (FEB)	0	0	271
Golden Plover	608 (FEB)	605 (JAN)	0	0	0	243
Snipe	35 (OCT)	31 (OCT)	9 (FEB)	1 (NOV)	0	15
Redshank	0	1 (MAR)	4 (MAR)	0	0	1
Black-headed Gull	150 (NOV)	3 (MAR)	42 (FEB)	0	4 (OCT)	40
Mediterranean Gull	0	0	1 (MAR)	0	0	0
Common Gull	1 (AUG)	0	38 (FEB)	0	0	8
Herring Gull	2 (NOV)	2 (FEB)	0	0	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	11	1%	NA
Pink-footed Goose	6	0%	0%
Mute Swan	1	0%	0%
Shelduck	1	0%	0%
Shoveler	23	12%	3%
Gadwall	1	0%	0%
Wigeon	544	12%	4%
Mallard	10	0%	0%
Teal	146	3%	2%
Grey Heron	2	0%	0%
Little Egret	1	1%	0%
Moorhen	1	0%	0%
Coot	9	0%	0%
Oystercatcher	1	0%	0%
Lapwing	271	4%	1%
Golden Plover	243	6%	2%
Snipe	15	0%	0%
Redshank	1	0%	0%
Black-headed Gull	40	0%	0%
Common Gull	8	0%	0%
Herring Gull	1	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for RSPB Beckingham Marshes

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	0	14	NA		1%	NA		NA	NA
Pink-footed Goose	0	7	NA		0%	NA		0%	NA
Mute Swan	0	2	NA		0%	NA		0%	NA
Shelduck	0	2	NA		0%	NA		0%	NA
Shoveler	2	28	NA	1%	15%	NA	0%	4%	NA
Gadwall	0	2	NA		1%	NA		0%	NA
Wigeon	14	672	NA	0%	15%	NA	0%	5%	NA
Mallard	3	9	NA	0%	0%	NA	0%	0%	NA
Teal	3	182	NA	0%	4%	NA	0%	3%	NA
Grey Heron	2	2	NA	0%	0%	NA	0%	0%	NA
Little Egret	0	1	NA		1%	NA		0%	NA
Moorhen	0	1	NA		0%	NA		0%	NA
Coot	0	12	NA		1%	NA		0%	NA
Oystercatcher	0	1	NA		0%	NA		0%	NA
Lapwing	6	339	NA	0%	5%	NA	0%	2%	NA
Golden Plover	0	303	NA		8%	NA		3%	NA
Snipe	13	7	NA	0%	0%	NA	0%	0%	NA
Redshank	0	1	NA		0%	NA		0%	NA
Black-headed Gull	1	65	NA	0%	0%	NA	0%	0%	NA
Common Gull	0	13	NA		0%	NA		0%	NA
Herring Gull	0	1	NA		0%	NA		0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Alkborough Flats Sector A

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

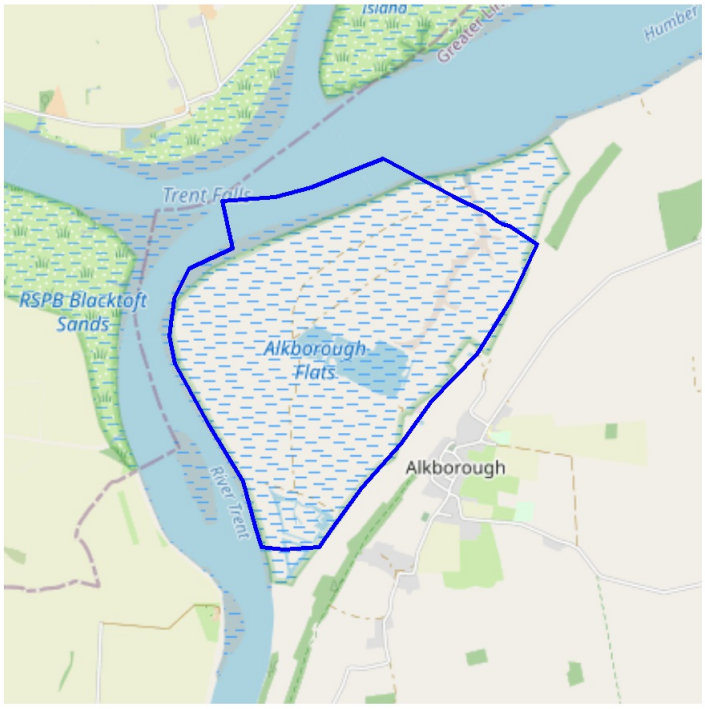
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Alkborough Flats Sector A



LOC LABEL	NAME	GRIDREF	Web Link
38423	Alkborough Flats - Sector A	SE878224	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC654920

Five year summary for Alkborough Flats Sector A

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	3014	JAN	1126	3914	264
2020/21	6372	NOV	1472	7574	693
2021/22	8391	JAN	1947	11626	1265
2022/23	2716	FEB	719	3562	841
2023/24	4536	NOV	1956	6983	788
MEAN	5006		1444	6732	770

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (4,0)	1 (5,0)	0 (5,0)	22 (5,0)	4 (4,0)	18 (5,0)	1 (4,0)	9 (4,0)	3 (5,0)	5 (4,0)	9 (3,0)	2 (5,0)
Barnacle Goose	27 (4,0)	0 (5,0)	0 (5,0)	1 (5,0)	39 (4,0)	58 (5,0)	171 (4,0)	512 (4,0)	391 (5,0)	8 (4,0)	3 (3,0)	27 (5,0)
Greylag Goose (British/Irish)	232 (4,0)	146 (5,0)	80 (5,0)	98 (5,0)	146 (4,0)	59 (5,0)	7 (4,0)	40 (4,0)	55 (5,0)	75 (4,0)	111 (3,0)	90 (5,0)
Pink-footed Goose	0 (4,0)	0 (5,0)	0 (5,0)	7 (5,0)	12 (4,0)	5 (5,0)	25 (4,0)	2 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Black Swan	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Mute Swan	6 (4,0)	8 (5,0)	6 (5,0)	2 (5,0)	8 (4,0)	7 (5,0)	7 (4,0)	3 (4,0)	6 (5,0)	22 (4,0)	67 (3,0)	38 (5,0)
Whooper Swan	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	1 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Shelduck	2 (4,0)	3 (5,0)	9 (5,0)	9 (5,0)	7 (4,0)	17 (5,0)	44 (4,0)	42 (4,0)	50 (5,0)	48 (4,0)	40 (3,0)	13 (5,0)
Ruddy Shelduck	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Garganey	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Shoveler	4 (4,0)	4 (5,0)	20 (5,0)	19 (5,0)	8 (4,0)	1 (5,0)	10 (4,0)	66 (4,0)	86 (5,0)	34 (4,0)	7 (3,0)	4 (5,0)
Gadwall	7 (4,0)	54 (5,0)	51 (5,0)	6 (5,0)	35 (4,0)	17 (5,0)	61 (4,0)	47 (4,0)	107 (5,0)	32 (4,0)	69 (3,0)	64 (5,0)
Wigeon	0 (4,0)	0 (5,0)	33 (5,0)	16 (5,0)	84 (4,0)	23 (5,0)	244 (4,0)	1000 (4,0)	535 (5,0)	4 (4,0)	10 (3,0)	3 (5,0)
Mallard	43 (4,0)	30 (5,0)	18 (5,0)	23 (5,0)	37 (4,0)	27 (5,0)	16 (4,0)	92 (4,0)	29 (5,0)	41 (4,0)	78 (3,0)	76 (5,0)
Pintail	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	2 (4,0)	1 (5,0)	9 (4,0)	4 (4,0)	7 (5,0)	2 (4,0)	0 (3,0)	0 (5,0)
Teal	21 (4,0)	46 (5,0)	83 (5,0)	36 (5,0)	66 (4,0)	93 (5,0)	24 (4,0)	169 (4,0)	259 (5,0)	148 (4,0)	8 (3,0)	23 (5,0)
Tufted Duck	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	5 (4,0)	17 (5,0)	7 (4,0)	0 (3,0)	0 (5,0)
Goldeneye	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Little Grebe	0 (4,0)	0 (5,0)	3 (5,0)	2 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	2 (5,0)	1 (4,0)	0 (3,0)	1 (5,0)
Great Crested Grebe	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Glossy Ibis	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Spoonbill	15 (4,0)	12 (5,0)	5 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)	2 (4,0)	9 (3,0)	8 (5,0)
Bittern	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)	0 (4,0)	1 (3,0)	0 (5,0)
Grey Heron	3 (4,0)	5 (5,0)	1 (5,0)	2 (5,0)	0 (4,0)	0 (5,0)	2 (4,0)	4 (4,0)	2 (5,0)	4 (4,0)	3 (3,0)	4 (5,0)
Purple Heron	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Great White Egret	2 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)	0 (4,0)	2 (3,0)	3 (5,0)
Little Egret	25 (4,0)	17 (5,0)	11 (5,0)	2 (5,0)	0 (4,0)	1 (5,0)	2 (4,0)	2 (4,0)	4 (5,0)	8 (4,0)	10 (3,0)	33 (5,0)
Cormorant	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	1 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	4 (4,0)	10 (3,0)	0 (5,0)
Water Rail	0 (4,0)	0 (5,0)	1 (5,0)	0 (5,0)	1 (4,0)	1 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)	1 (4,0)	0 (3,0)	1 (5,0)
Moorhen	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Coot	2 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	1 (4,0)	4 (4,0)	12 (5,0)	25 (4,0)	17 (3,0)	5 (5,0)
Crane	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	2 (4,0)	0 (3,0)	0 (5,0)
Oystercatcher	1 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	2 (4,0)	0 (3,0)	0 (5,0)
Avocet	41 (4,0)	95 (5,0)	44 (5,0)	1 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)	1 (4,0)	2 (3,0)	7 (5,0)
Lapwing	129 (4,0)	119 (5,0)	76 (5,0)	242 (5,0)	1472 (4,0)	243 (5,0)	1263 (4,0)	472 (4,0)	48 (5,0)	7 (4,0)	20 (3,0)	27 (5,0)
Golden Plover	0 (4,0)	0 (5,0)	0 (5,0)	2 (5,0)	1400 (4,0)	112 (5,0)	1250 (4,0)	55 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Curlew	32 (4,0)	43 (5,0)	9 (5,0)	22 (5,0)	22 (4,0)	29 (5,0)	20 (4,0)	51 (4,0)	34 (5,0)	6 (4,0)	0 (3,0)	1 (5,0)
Bar-tailed Godwit	10 (4,0)	0 (5,0)	0 (5,0)	12 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	14 (5,0)
Black-tailed Godwit	36 (4,0)	65 (5,0)	24 (5,0)	4 (5,0)	6 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	94 (5,0)	30 (4,0)	2 (3,0)	2 (5,0)
Ruff	2 (4,0)	4 (5,0)	9 (5,0)	2 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Curlew Sandpiper	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Dunlin	0 (4,0)	13 (5,0)	26 (5,0)	90 (5,0)	41 (4,0)	4 (5,0)	49 (4,0)	14 (4,0)	14 (5,0)	2 (4,0)	0 (3,0)	0 (5,0)
Snipe	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	1 (4,0)	0 (3,0)	0 (5,0)
Common Sandpiper	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Green Sandpiper	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Redshank	17 (4,0)	23 (5,0)	44 (5,0)	29 (5,0)	6 (4,0)	9 (5,0)	9 (4,0)	6 (4,0)	12 (5,0)	2 (4,0)	0 (3,0)	0 (5,0)
Wood Sandpiper	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)
Spotted Redshank	8 (4,0)	8 (5,0)	8 (5,0)	3 (5,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	2 (4,0)	0 (3,0)	3 (5,0)
Greenshank	0 (4,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	3	0	78	15	54	5	32	7	12	17	8
Barnacle Goose	100	0	0	3	79	222	383	1000	993	21	8	49
Greylag Goose (British/Irish)	354	400	255	207	320	290	17	63	103	110	183	148
Pink-footed Goose	0	0	0	35	62	27	100	10	0	0	0	0
Black Swan	0	0	0	1	0	0	0	0	0	0	0	0
Mute Swan	9	18	14	4	14	20	17	7	9	33	94	50
Whooper Swan	0	0	0	0	2	0	3	0	0	0	0	0
Shelduck	8	8	42	28	9	49	66	79	88	78	61	20
Ruddy Shelduck	0	0	0	1	0	0	0	0	0	0	0	0
Garganey	0	0	0	0	0	0	0	0	0	0	1	0
Shoveler	17	7	35	80	28	5	23	95	108	85	10	14
Gadwall	21	270	250	17	141	80	147	85	220	65	103	192
Wigeon	0	0	84	55	251	71	624	1535	652	9	23	17
Mallard	69	53	34	92	48	65	29	239	61	71	121	136
Pintail	0	0	0	0	4	6	22	6	18	6	0	0
Teal	72	135	230	120	124	342	50	243	369	262	20	74
Tufted Duck	0	0	0	0	0	0	0	20	60	16	1	0
Goldeneye	0	0	0	1	5	0	0	0	2	0	0	0
Little Grebe	1	1	14	9	0	0	0	1	8	3	0	3
Great Crested Grebe	0	0	0	0	0	0	0	0	0	2	1	0
Glossy Ibis	1	0	1	0	0	0	0	0	0	0	1	1
Spoonbill	30	23	17	0	0	0	0	1	4	4	14	17
Bittern	0	0	0	0	0	0	0	0	2	1	1	1
Grey Heron	5	11	2	3	1	1	7	7	7	11	3	9
Purple Heron	0	0	0	0	0	0	0	0	0	0	1	0
Great White Egret	5	0	1	0	1	0	0	2	2	1	4	6
Little Egret	39	59	37	5	0	2	6	5	8	10	11	55
Cormorant	0	2	0	0	0	3	0	1	1	12	27	0
Water Rail	0	2	3	1	1	2	0	1	2	5	1	2
Moorhen	0	0	0	0	0	0	1	0	1	0	0	1
Coot	7	0	1	2	0	0	2	13	25	58	38	16
Crane	0	2	0	0	0	0	0	0	0	10	0	1
Oystercatcher	3	0	0	0	0	0	0	0	0	4	0	1

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Avocet	117	337	101	4	0	0	0	0	3	2	6	17
Lapwing	267	184	168	541	2000	520	3000	1000	188	13	58	49
Golden Plover	0	0	0	8	4100	500	5000	220	0	1	0	0
Curlew	116	139	16	62	56	131	55	78	60	20	0	3
Bar-tailed Godwit	38	0	0	59	0	0	0	0	0	0	0	70
Black-tailed Godwit	93	123	51	21	14	0	1	0	462	68	7	8
Ruff	6	16	22	7	0	0	0	0	0	2	0	0
Curlew Sandpiper	0	0	1	0	0	0	0	0	0	0	0	0
Dunlin	0	30	89	450	83	12	161	40	66	6	0	0
Snipe	0	0	1	0	0	1	0	0	0	2	0	2
Common Sandpiper	1	0	0	0	0	0	0	0	0	0	0	0
Green Sandpiper	0	1	2	0	0	0	0	0	0	0	0	0
Redshank	30	55	95	57	14	31	20	12	20	7	0	0
Wood Sandpiper	0	1	0	0	0	0	0	0	0	0	0	0
Spotted Redshank	14	25	19	15	0	0	0	0	0	8	0	10
Greenshank	1	2	2	0	0	0	0	0	0	0	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	28 (OCT)	0	0	2 (OCT)	78 (OCT)	22
Barnacle Goose	0	3 (OCT)	7 (JUL)	0	100 (JUL)	22
Greylag Goose (British/Irish)	185 (OCT)	276 (JUL)	354 (JUL)	41 (AUG)	400 (AUG)	251
Pink-footed Goose	0	0	35 (OCT)	2 (OCT)	0	7
Black Swan	1 (OCT)	0	0	0	0	0
Mute Swan	5 (SEP)	5 (JUL)	18 (AUG)	0	14 (SEP)	8
Shelduck	3 (SEP)	42 (SEP)	8 (AUG)	19 (OCT)	7 (AUG)	16
Ruddy Shelduck	0	0	0	1 (OCT)	0	0
Shoveler	80 (OCT)	12 (SEP)	27 (SEP)	0	35 (SEP)	31
Gadwall	2 (JUL)	17 (OCT)	4 (JUL)	0	270 (AUG)	59
Wigeon	34 (SEP)	55 (OCT)	44 (SEP)	0	84 (SEP)	43
Mallard	92 (OCT)	22 (OCT)	52 (AUG)	27 (SEP)	62 (JUL)	51
Teal	120 (OCT)	99 (SEP)	230 (SEP)	24 (SEP)	135 (AUG)	122
Goldeneye	0	0	0	0	1 (OCT)	0
Little Grebe	1 (JUL)	0	1 (SEP)	0	14 (SEP)	3
Glossy Ibis	0	0	1 (JUL)	0	0	0
Spoonbill	6 (SEP)	12 (JUL)	17 (JUL)	17 (AUG)	30 (JUL)	16
Grey Heron	5 (JUL)	2 (JUL)	4 (JUL)	11 (AUG)	6 (AUG)	6
Great White Egret	0	0	5 (JUL)	0	2 (JUL)	1
Little Egret	12 (JUL)	22 (JUL)	59 (AUG)	1 (AUG)	39 (JUL)	27
Cormorant	0	0	2 (AUG)	0	0	0
Water Rail	0	2 (AUG)	3 (SEP)	0	1 (OCT)	1
Coot	2 (OCT)	0	0	0	7 (JUL)	2
Crane	0	0	2 (AUG)	0	0	0
Oystercatcher	3 (JUL)	0	0	0	0	1
Avocet	117 (JUL)	337 (AUG)	101 (SEP)	39 (AUG)	12 (AUG)	121
Lapwing	112 (JUL)	225 (OCT)	284 (OCT)	158 (OCT)	541 (OCT)	264
Golden Plover	0	0	8 (OCT)	0	0	2
Curlew	116 (JUL)	65 (AUG)	16 (SEP)	139 (AUG)	33 (OCT)	74

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Bar-tailed Godwit	0	0	59 (OCT)	2 (OCT)	0	12
Black-tailed Godwit	93 (JUL)	116 (AUG)	57 (AUG)	123 (AUG)	23 (JUL)	82
Ruff	16 (AUG)	11 (SEP)	22 (SEP)	0	6 (JUL)	11
Curlew Sandpiper	0	0	1 (SEP)	0	0	0
Dunlin	9 (AUG)	32 (SEP)	450 (OCT)	89 (SEP)	30 (AUG)	122
Snipe	0	1 (SEP)	0	0	0	0
Common Sandpiper	0	0	0	0	1 (JUL)	0
Green Sandpiper	2 (SEP)	0	0	0	0	0
Redshank	55 (AUG)	95 (SEP)	59 (SEP)	22 (OCT)	22 (SEP)	51
Wood Sandpiper	1 (AUG)	0	0	0	1 (AUG)	0
Spotted Redshank	25 (AUG)	19 (SEP)	15 (OCT)	0	1 (AUG)	12
Greenshank	1 (JUL)	2 (AUG)	2 (SEP)	2 (SEP)	1 (JUL)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	5 (JAN)	15 (NOV)	54 (DEC)	22 (DEC)	3 (MAR)	20
Barnacle Goose	425 (MAR)	222 (DEC)	1000 (FEB)	993 (MAR)	350 (MAR)	598
Greylag Goose (British/Irish)	69 (MAR)	290 (DEC)	63 (MAR)	63 (FEB)	320 (NOV)	161
Pink-footed Goose	(62)(NOV)	27 (DEC)	100 (JAN)	10 (FEB)	0	40
Mute Swan	6 (JAN)	16 (DEC)	12 (NOV)	5 (MAR)	20 (DEC)	12
Whooper Swan	3 (JAN)	2 (NOV)	0	0	0	1
Shelduck	53 (JAN)	76 (MAR)	48 (JAN)	88 (MAR)	22 (MAR)	57
Shoveler	84 (MAR)	46 (MAR)	103 (MAR)	95 (FEB)	108 (MAR)	87
Gadwall	147 (JAN)	30 (MAR)	143 (MAR)	220 (MAR)	141 (NOV)	136
Wigeon	756 (FEB)	398 (MAR)	1535 (FEB)	512 (MAR)	1444 (FEB)	929
Mallard	239 (FEB)	46 (NOV)	100 (FEB)	29 (MAR)	48 (NOV)	92
Pintail	22 (JAN)	6 (MAR)	18 (MAR)	6 (JAN)	6 (MAR)	12
Teal	185 (FEB)	342 (DEC)	214 (MAR)	369 (MAR)	250 (MAR)	272
Tufted Duck	6 (MAR)	60 (MAR)	2 (MAR)	0	20 (FEB)	18
Goldeneye	0	0	0	0	5 (NOV)	1
Little Grebe	1 (MAR)	0	1 (MAR)	0	8 (MAR)	2
Spoonbill	0	0	1 (FEB)	0	4 (MAR)	1
Bittern	1 (MAR)	0	2 (MAR)	0	1 (MAR)	1
Grey Heron	2 (FEB)	3 (MAR)	7 (FEB)	2 (FEB)	7 (JAN)	4
Great White Egret	0	0	1 (MAR)	0	2 (FEB)	1
Little Egret	6 (JAN)	2 (DEC)	6 (MAR)	1 (MAR)	8 (MAR)	5
Cormorant	1 (FEB)	0	3 (DEC)	0	1 (FEB)	1
Water Rail	2 (DEC)	1 (NOV)	2 (MAR)	0	2 (DEC)	1
Moorhen	1 (JAN)	1 (MAR)	0	0	0	0
Coot	3 (MAR)	3 (MAR)	25 (MAR)	9 (MAR)	19 (MAR)	12
Avocet	0	3 (MAR)	0	0	0	1
Lapwing	1700 (JAN)	1740 (NOV)	3000 (JAN)	1000 (FEB)	2000 (NOV)	1888
Golden Plover	61 (DEC)	4100 (NOV)	5000 (JAN)	0	1500 (NOV)	2132
Curlew	54 (FEB)	131 (DEC)	78 (FEB)	69 (FEB)	55 (JAN)	77

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Black-tailed Godwit	1 (JAN)	0	6 (MAR)	9 (NOV)	462 (MAR)	96
Dunlin	12 (DEC)	0	70 (NOV)	40 (FEB)	161 (JAN)	57
Snipe	0	0	1 (DEC)	0	1 (DEC)	0
Redshank	7 (MAR)	14 (NOV)	31 (DEC)	20 (MAR)	15 (MAR)	17

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	2 (JUN)	8 (JUN)	17 (MAY)	4 (APR)	4 (APR)	7
Barnacle Goose	41 (JUN)	44 (JUN)	21 (APR)	49 (JUN)	2 (APR)	31
Greylag Goose (British/Irish)	50 (JUN)	104 (JUN)	183 (MAY)	148 (JUN)	126 (JUN)	122
Mute Swan	25 (JUN)	50 (JUN)	59 (MAY)	50 (JUN)	94 (MAY)	56
Shelduck	20 (JUN)	72 (APR)	61 (MAY)	78 (APR)	25 (MAY)	51
Garganey	0	0	0	0	1 (MAY)	0
Shoveler	0	16 (APR)	85 (APR)	28 (APR)	8 (APR)	27
Gadwall	47 (JUN)	12 (APR)	100 (MAY)	65 (APR)	192 (JUN)	83
Wigeon	0	6 (MAY)	9 (APR)	2 (APR)	23 (MAY)	8
Mallard	21 (JUN)	85 (JUN)	136 (JUN)	101 (JUN)	58 (MAY)	80
Pintail	0	0	6 (APR)	2 (APR)	0	2
Teal	0	146 (APR)	262 (APR)	154 (APR)	30 (APR)	118
Tufted Duck	0	0	16 (APR)	8 (APR)	5 (APR)	6
Little Grebe	0	0	1 (APR)	1 (APR)	3 (APR)	1
Great Crested Grebe	0	0	1 (MAY)	0	2 (APR)	1
Glossy Ibis	0	1 (MAY)	0	0	0	0
Spoonbill	5 (JUN)	8 (JUN)	14 (MAY)	3 (JUN)	17 (JUN)	9
Bittern	0	1 (MAY)	1 (APR)	0	1 (MAY)	1
Grey Heron	4 (JUN)	11 (APR)	5 (APR)	1 (JUN)	4 (JUN)	5
Purple Heron	0	0	1 (MAY)	0	0	0
Great White Egret	0	3 (JUN)	4 (MAY)	1 (JUN)	6 (JUN)	3
Little Egret	19 (JUN)	43 (JUN)	42 (JUN)	8 (JUN)	55 (JUN)	33
Cormorant	0	1 (MAY)	2 (APR)	0	27 (MAY)	6
Water Rail	0	1 (MAY)	5 (APR)	1 (JUN)	1 (JUN)	2
Moorhen	0	0	1 (JUN)	0	0	0
Coot	0	9 (MAY)	58 (APR)	18 (APR)	19 (APR)	21
Crane	0	1 (JUN)	10 (APR)	0	0	2
Oystercatcher	1 (JUN)	0	2 (APR)	2 (APR)	4 (APR)	2
Avocet	13 (JUN)	4 (JUN)	17 (JUN)	2 (APR)	6 (MAY)	8

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Lapwing	5 (JUN)	32 (JUN)	58 (MAY)	49 (JUN)	4 (JUN)	30
Golden Plover	0	0	1 (APR)	0	0	0
Curlew	3 (JUN)	20 (APR)	1 (APR)	0	1 (APR)	5
Bar-tailed Godwit	0	0	0	0	70 (JUN)	14
Black-tailed Godwit	8 (JUN)	7 (MAY)	68 (APR)	50 (APR)	0	27
Ruff	0	2 (APR)	0	0	0	0
Dunlin	0	0	0	6 (APR)	0	1
Snipe	0	2 (APR)	2 (JUN)	0	0	1
Redshank	0	2 (APR)	7 (APR)	0	0	2
Spotted Redshank	0	2 (APR)	8 (APR)	10 (JUN)	0	4
Greenshank	0	0	1 (JUN)	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	28 (OCT)	15 (NOV)	54 (DEC)	22 (DEC)	78 (OCT)	39
Barnacle Goose	425 (MAR)	222 (DEC)	1000 (FEB)	993 (MAR)	350 (MAR)	598
Greylag Goose (British/Irish)	185 (OCT)	290 (DEC)	354 (JUL)	148 (JUN)	400 (AUG)	275
Pink-footed Goose	(62)(NOV)	27 (DEC)	100 (JAN)	10 (FEB)	0	40
Black Swan	1 (OCT)	0	0	0	0	0
Mute Swan	25 (JUN)	50 (JUN)	59 (MAY)	50 (JUN)	94 (MAY)	56
Whooper Swan	3 (JAN)	2 (NOV)	0	0	0	1
Shelduck	53 (JAN)	76 (MAR)	61 (MAY)	88 (MAR)	25 (MAY)	61
Ruddy Shelduck	0	0	0	1 (OCT)	0	0
Garganey	0	0	0	0	1 (MAY)	0
Shoveler	84 (MAR)	46 (MAR)	103 (MAR)	95 (FEB)	108 (MAR)	87
Gadwall	147 (JAN)	30 (MAR)	143 (MAR)	220 (MAR)	270 (AUG)	162
Wigeon	756 (FEB)	398 (MAR)	1535 (FEB)	512 (MAR)	1444 (FEB)	929
Mallard	239 (FEB)	85 (JUN)	136 (JUN)	101 (JUN)	62 (JUL)	125
Pintail	22 (JAN)	6 (MAR)	18 (MAR)	6 (JAN)	6 (MAR)	12
Teal	185 (FEB)	342 (DEC)	262 (APR)	369 (MAR)	250 (MAR)	282
Tufted Duck	6 (MAR)	60 (MAR)	16 (APR)	8 (APR)	20 (FEB)	22
Goldeneye	0	0	0	0	5 (NOV)	1
Little Grebe	1 (JUL)	0	1 (SEP)	1 (APR)	14 (SEP)	3
Great Crested Grebe	0	0	1 (MAY)	0	2 (APR)	1
Glossy Ibis	0	1 (MAY)	1 (JUL)	0	0	0
Spoonbill	6 (SEP)	12 (JUL)	17 (JUL)	17 (AUG)	30 (JUL)	16
Bittern	1 (MAR)	1 (MAY)	2 (MAR)	0	1 (MAR)	1
Grey Heron	5 (JUL)	11 (APR)	7 (FEB)	11 (AUG)	7 (JAN)	8
Purple Heron	0	0	1 (MAY)	0	0	0
Great White Egret	0	3 (JUN)	5 (JUL)	1 (JUN)	6 (JUN)	3
Little Egret	19 (JUN)	43 (JUN)	59 (AUG)	8 (JUN)	55 (JUN)	37
Cormorant	1 (FEB)	1 (MAY)	3 (DEC)	0	27 (MAY)	6
Water Rail	2 (DEC)	2 (AUG)	5 (APR)	1 (JUN)	2 (DEC)	2

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Moorhen	1 (JAN)	1 (MAR)	1 (JUN)	0	0	1
Coot	3 (MAR)	9 (MAY)	58 (APR)	18 (APR)	19 (MAR)	21
Crane	0	1 (JUN)	10 (APR)	0	0	2
Oystercatcher	3 (JUL)	0	2 (APR)	2 (APR)	4 (APR)	2
Avocet	117 (JUL)	337 (AUG)	101 (SEP)	39 (AUG)	12 (AUG)	121
Lapwing	1700 (JAN)	1740 (NOV)	3000 (JAN)	1000 (FEB)	2000 (NOV)	1888
Golden Plover	61 (DEC)	4100 (NOV)	5000 (JAN)	0	1500 (NOV)	2132
Curlew	116 (JUL)	131 (DEC)	78 (FEB)	139 (AUG)	55 (JAN)	104
Bar-tailed Godwit	0	0	59 (OCT)	2 (OCT)	70 (JUN)	26
Black-tailed Godwit	93 (JUL)	116 (AUG)	68 (APR)	123 (AUG)	462 (MAR)	172
Ruff	16 (AUG)	11 (SEP)	22 (SEP)	0	6 (JUL)	11
Curlew Sandpiper	0	0	1 (SEP)	0	0	0
Dunlin	12 (DEC)	32 (SEP)	450 (OCT)	89 (SEP)	161 (JAN)	149
Snipe	0	2 (APR)	2 (JUN)	0	1 (DEC)	1
Common Sandpiper	0	0	0	0	1 (JUL)	0
Green Sandpiper	2 (SEP)	0	0	0	0	0
Redshank	55 (AUG)	95 (SEP)	59 (SEP)	22 (OCT)	22 (SEP)	51
Wood Sandpiper	1 (AUG)	0	0	0	1 (AUG)	0
Spotted Redshank	25 (AUG)	19 (SEP)	15 (OCT)	10 (JUN)	1 (AUG)	14
Greenshank	1 (JUL)	2 (AUG)	2 (SEP)	2 (SEP)	1 (JUL)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	275	20%	NA
Pink-footed Goose	40	1%	1%
Mute Swan	56	11%	11%
Whooper Swan	1	1%	0%
Shelduck	61	13%	2%
Shoveler	87	46%	12%
Gadwall	162	52%	12%
Wigeon	929	21%	7%
Mallard	125	2%	1%
Pintail	12	6%	2%
Teal	282	7%	4%
Tufted Duck	22	2%	0%
Goldeneye	1	1%	0%
Little Grebe	3	2%	0%
Great Crested Grebe	1	1%	0%
Spoonbill	16	*32%	8%
Bittern	1	*2%	1%
Grey Heron	8	2%	0%
Great White Egret	3	*6%	0%
Little Egret	37	34%	3%
Cormorant	6	1%	1%
Moorhen	1	0%	0%
Coot	21	1%	0%
Crane	2	*4%	0%
Oystercatcher	2	0%	0%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Avocet	**121**	**139%**	**13%**
Lapwing	1888	30%	9%
Golden Plover	2132	53%	18%
Curlew	104	9%	1%
Bar-tailed Godwit	26	5%	2%
Black-tailed Godwit	172	44%	10%
Ruff	11	*22%	0%
Dunlin	149	4%	1%
Snipe	1	0%	0%
Redshank	51	5%	2%
Spotted Redshank	14	*28%	2%
Greenshank	2	*4%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Alkborough Flats Sector A

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	251	161	122	18%	12%	9%	NA	NA	NA
Pink-footed Goose	7	40	0	0%	1%		0%	1%	
Mute Swan	8	12	56	2%	2%	11%	2%	2%	11%
Whooper Swan	0	1	0		1%			0%	
Shelduck	16	57	51	3%	12%	11%	1%	2%	2%
Shoveler	31	87	27	16%	46%	14%	4%	12%	4%
Gadwall	59	136	83	19%	44%	27%	4%	10%	6%
Wigeon	43	929	8	1%	21%	0%	0%	7%	0%
Mallard	51	92	80	1%	1%	1%	0%	0%	0%
Pintail	0	12	2		6%	1%		2%	0%
Teal	122	272	118	3%	6%	3%	2%	4%	2%
Tufted Duck	0	18	6		1%	0%		0%	0%
Goldeneye	0	1	0		1%			0%	
Little Grebe	3	2	1	2%	1%	1%	0%	0%	0%
Great Crested Grebe	0	0	1			1%			0%
Spoonbill	16	1	9	*32%	*2%	*18%	8%	0%	4%
Bittern	0	1	1		*2%	*2%		1%	1%
Grey Heron	6	4	5	1%	1%	1%	0%	0%	0%
Great White Egret	1	1	3	*2%	*2%	*6%	0%	0%	0%

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Little Egret	27	5	33	25%	5%	30%	2%	0%	3%
Cormorant	0	1	6		0%	1%		0%	1%
Moorhen	0	0	0						
Coot	2	12	21	0%	1%	1%	0%	0%	0%
Crane	0	0	2			*4%			0%
Oystercatcher	1	0	2	0%		0%	0%		0%
Avocet	**121**	**1**	**8**	**139%**	**1%**	**9%**	**13%**	**0%**	**1%**
Lapwing	264	1888	30	4%	30%	0%	1%	9%	0%
Golden Plover	2	2132	0	0%	53%		0%	18%	
Curlew	74	77	5	6%	6%	0%	1%	1%	0%
Bar-tailed Godwit	12	0	14	2%		3%	1%		1%
Black-tailed Godwit	82	96	27	21%	25%	7%	5%	6%	2%
Ruff	11	0	0	*22%			0%		
Dunlin	122	57	1	4%	2%	0%	1%	0%	0%
Snipe	0	0	1			0%			0%
Redshank	51	17	2	5%	2%	0%	2%	1%	0%
Spotted Redshank	12	0	4	*24%		*8%	1%		0%
Greenshank	2	0	0	*4%			0%		

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Blue Lagoon, Scunthorpe

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Blue Lagoon, Scunthorpe



LOC LABEL	NAME	GRIDREF	Web Link
38205	Blue Lagoon, Scunthorpe	SE887147	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC2482760

Five year summary for Blue Lagoon, Scunthorpe

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2017/18	92	JAN	NC	108	37
2018/19	120	JAN	44	143	29
2019/20	159	JAN	50	167	NC
2020/21	75	JAN	44	80	38
2021/22	48	SEP	61	45	NC
MEAN	99		50	109	35

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0 (4,0)	0 (4,0)	0 (4,0)	1 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Mute Swan	0 (4,0)	0 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	1 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Mallard	6 (4,0)	4 (4,0)	3 (4,0)	4 (4,0)	5 (3,0)	3 (3,0)	24 (4,0)	8 (4,0)	6 (4,0)	6 (3,0)	8 (3,0)	5 (3,0)
Pochard	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	1 (3,0)	3 (4,0)	2 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Tufted Duck	0 (4,0)	0 (4,0)	1 (4,0)	0 (4,0)	2 (3,0)	0 (3,0)	2 (4,0)	4 (4,0)	1 (4,0)	1 (3,0)	0 (3,0)	0 (3,0)
Goosander	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Little Grebe	3 (4,0)	4 (4,0)	4 (4,0)	4 (4,0)	5 (3,0)	3 (3,0)	4 (4,0)	4 (4,0)	2 (4,0)	2 (3,0)	3 (3,0)	3 (3,0)
Great Crested Grebe	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	1 (3,0)	0 (3,0)	1 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	1 (3,0)
Grey Heron	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Cormorant	0 (4,0)	4 (4,0)	1 (4,0)	1 (4,0)	1 (3,0)	1 (3,0)	1 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	2 (3,0)	1 (3,0)
Moorhen	0 (4,0)	1 (4,0)	1 (4,0)	2 (4,0)	1 (3,0)	1 (3,0)	1 (4,0)	1 (4,0)	1 (4,0)	1 (3,0)	1 (3,0)	0 (3,0)
Coot	1 (4,0)	2 (4,0)	2 (4,0)	3 (4,0)	5 (3,0)	2 (3,0)	4 (4,0)	3 (4,0)	5 (4,0)	3 (3,0)	4 (3,0)	1 (3,0)
Oystercatcher	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	2 (4,0)	0 (4,0)	1 (3,0)	0 (3,0)	1 (3,0)
Lapwing	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Common Sandpiper	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	1 (3,0)	0 (3,0)	0 (3,0)
Black-headed Gull	5 (4,0)	6 (4,0)	16 (4,0)	8 (4,0)	28 (3,0)	5 (3,0)	70 (4,0)	31 (4,0)	27 (4,0)	9 (3,0)	6 (3,0)	1 (3,0)
Common Gull	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	1 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Herring Gull	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Lesser Black-backed Gull	1 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)
Kingfisher	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly

Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0	0	0	4	0	0	0	0	0	0	0	0
Mute Swan	0	0	4	1	0	0	4	0	0	0	0	0
Mallard	11	8	7	8	12	8	62	16	12	9	16	7
Pochard	0	0	0	0	0	2	8	4	0	0	0	0
Tufted Duck	0	1	3	1	4	0	2	8	4	2	0	0
Goosander	0	0	0	1	0	0	0	0	0	0	0	0
Little Grebe	3	5	5	8	8	4	6	5	5	3	4	4
Great Crested Grebe	1	1	1	1	1	0	3	2	0	1	1	1
Grey Heron	0	0	0	0	0	0	1	0	0	0	0	0
Cormorant	1	6	2	2	1	1	1	1	1	0	4	2
Moorhen	1	1	1	3	1	2	2	2	2	2	1	1
Coot	2	3	7	9	9	2	8	6	9	7	7	3
Oystercatcher	0	0	0	2	0	0	0	2	0	2	0	2
Lapwing	0	0	0	0	0	0	0	2	2	0	0	0
Common Sandpiper	0	0	0	0	0	0	1	0	0	3	0	0
Black-headed Gull	16	8	42	25	47	14	140	46	80	22	7	3
Common Gull	0	0	0	0	0	0	0	0	4	1	0	0
Herring Gull	1	1	0	1	0	1	0	4	0	0	1	0
Lesser Black-backed Gull	4	2	1	0	0	0	0	0	0	0	0	0
Kingfisher	0	1	0	0	0	0	0	0	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2017/18	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Greylag Goose (British/Irish)	NC	0	4 (OCT)	0	0	1
Mute Swan	NC	1 (OCT)	4 (SEP)	0	1 (SEP)	2
Mallard	NC	11 (JUL)	8 (OCT)	3 (JUL)	2 (JUL)	6
Tufted Duck	NC	0	0	3 (SEP)	1 (AUG)	1
Goosander	NC	1 (OCT)	0	0	0	0
Little Grebe	NC	8 (OCT)	5 (SEP)	5 (AUG)	3 (JUL)	5
Great Crested Grebe	NC	1 (JUL)	0	1 (OCT)	1 (AUG)	1
Cormorant	NC	2 (AUG)	1 (SEP)	6 (AUG)	6 (AUG)	4
Moorhen	NC	3 (OCT)	1 (JUL)	1 (AUG)	1 (AUG)	2
Coot	NC	9 (OCT)	2 (JUL)	2 (AUG)	1 (AUG)	4
Oystercatcher	NC	0	0	0	2 (OCT)	0
Black-headed Gull	NC	7 (AUG)	25 (OCT)	17 (SEP)	42 (SEP)	23
Herring Gull	NC	1 (JUL)	0	1 (AUG)	1 (OCT)	1
Lesser Black-backed Gull	NC	0	0	4 (JUL)	0	1
Kingfisher	NC	0	0	1 (AUG)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Blue Lagoon, Scunthorpe

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2017/18	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Mute Swan	4 (JAN)	0	0	0	0	1
Mallard	26 (JAN)	62 (JAN)	8 (DEC)	2 (JAN)	2 (NOV)	20
Pochard	8 (JAN)	0	5 (JAN)	0	0	3
Tufted Duck	8 (FEB)	4 (NOV)	2 (JAN)	2 (JAN)	1 (NOV)	3
Little Grebe	3 (JAN)	8 (NOV)	4 (DEC)	6 (JAN)	2 (NOV)	5
Great Crested Grebe	3 (JAN)	2 (FEB)	0	1 (JAN)	1 (NOV)	1
Grey Heron	1 (JAN)	0	0	0	0	0
Cormorant	1 (JAN)	1 (JAN)	1 (DEC)	1 (NOV)	1 (NOV)	1
Moorhen	1 (JAN)	2 (JAN)	1 (DEC)	2 (DEC)	1 (NOV)	1
Coot	9 (MAR)	9 (NOV)	2 (DEC)	4 (NOV)	2 (NOV)	5
Oystercatcher	0	2 (FEB)	2 (FEB)	2 (FEB)	0	1
Lapwing	0	2 (FEB)	0	0	0	0
Common Sandpiper	0	0	1 (JAN)	0	0	0
Black-headed Gull	40 (JAN)	47 (NOV)	140 (JAN)	60 (JAN)	35 (NOV)	64
Common Gull	0	4 (MAR)	0	0	0	1
Herring Gull	4 (FEB)	0	1 (DEC)	0	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2017/18	2018/19	Y3	2020/21	Y5	Mean of Peaks
Mallard	16 (MAY)	8 (APR)	NC	3 (JUN)	NC	9
Tufted Duck	2 (APR)	0	NC	0	NC	1
Little Grebe	3 (APR)	4 (MAY)	NC	4 (JUN)	NC	4
Great Crested Grebe	1 (APR)	0	NC	1 (JUN)	NC	1
Cormorant	1 (MAY)	1 (MAY)	NC	4 (MAY)	NC	2
Moorhen	1 (APR)	2 (APR)	NC	1 (JUN)	NC	1
Coot	7 (APR)	3 (APR)	NC	1 (MAY)	NC	4
Oystercatcher	0	2 (JUN)	NC	2 (APR)	NC	1
Common Sandpiper	0	3 (APR)	NC	0	NC	1
Black-headed Gull	6 (MAY)	4 (MAY)	NC	22 (APR)	NC	11
Common Gull	0	1 (APR)	NC	0	NC	0
Herring Gull	0	1 (MAY)	NC	0	NC	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Blue Lagoon, Scunthorpe

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2017/18	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Greylag Goose (British/Irish)	0	0	4 (OCT)	0	0	1
Mute Swan	4 (JAN)	1 (OCT)	4 (SEP)	0	1 (SEP)	2
Mallard	26 (JAN)	62 (JAN)	8 (OCT)	3 (JUL)	2 (JUL)	20
Pochard	8 (JAN)	0	5 (JAN)	0	0	3
Tufted Duck	8 (FEB)	4 (NOV)	2 (JAN)	3 (SEP)	1 (AUG)	4
Goosander	0	1 (OCT)	0	0	0	0
Little Grebe	3 (JAN)	8 (OCT)	5 (SEP)	6 (JAN)	3 (JUL)	5
Great Crested Grebe	3 (JAN)	2 (FEB)	0	1 (OCT)	1 (AUG)	1
Grey Heron	1 (JAN)	0	0	0	0	0
Cormorant	1 (JAN)	2 (AUG)	1 (SEP)	6 (AUG)	6 (AUG)	3
Moorhen	1 (JAN)	3 (OCT)	1 (JUL)	2 (DEC)	1 (AUG)	2
Coot	9 (MAR)	9 (OCT)	2 (JUL)	4 (NOV)	2 (NOV)	5
Oystercatcher	0	2 (FEB)	2 (FEB)	2 (FEB)	2 (OCT)	2
Lapwing	0	2 (FEB)	0	0	0	0
Common Sandpiper	0	3 (APR)	1 (JAN)	0	0	1
Black-headed Gull	40 (JAN)	47 (NOV)	140 (JAN)	60 (JAN)	42 (SEP)	66
Common Gull	0	4 (MAR)	0	0	0	1
Herring Gull	4 (FEB)	1 (JUL)	1 (DEC)	1 (AUG)	1 (OCT)	2
Lesser Black-backed Gull	0	0	0	4 (JUL)	0	1
Kingfisher	0	0	0	1 (AUG)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	1	0%	NA
Mute Swan	2	0%	0%
Mallard	20	0%	0%
Pochard	3	1%	0%
Tufted Duck	4	0%	0%
Little Grebe	5	3%	0%
Great Crested Grebe	1	1%	0%
Cormorant	3	0%	0%
Moorhen	2	0%	0%
Coot	5	0%	0%
Oystercatcher	2	0%	0%
Common Sandpiper	1	*2%	0%
Black-headed Gull	66	0%	0%
Common Gull	1	0%	0%
Herring Gull	2	0%	0%
Lesser Black-backed Gull	1	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Blue Lagoon, Scunthorpe

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	1	0	0	0%			NA		
Mute Swan	2	1	0	0%	0%		0%	0%	
Mallard	6	20	9	0%	0%	0%	0%	0%	0%
Pochard	0	3	0		1%			0%	
Tufted Duck	1	3	1	0%	0%	0%	0%	0%	0%
Little Grebe	5	5	4	3%	3%	3%	0%	0%	0%
Great Crested Grebe	1	1	1	1%	1%	1%	0%	0%	0%
Cormorant	4	1	2	1%	0%	0%	0%	0%	0%
Moorhen	2	1	1	0%	0%	0%	0%	0%	0%
Coot	4	5	4	0%	0%	0%	0%	0%	0%
Oystercatcher	0	1	1		0%	0%		0%	0%
Common Sandpiper	0	0	1			*2%			0%
Black-headed Gull	23	64	11	0%	0%	0%	0%	0%	0%
Common Gull	0	1	0		0%			0%	
Herring Gull	1	1	0	0%	0%		0%	0%	
Lesser Black-backed Gull	1	0	0	0%			0%		

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always

possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Bole Ings

Compiled on 27 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

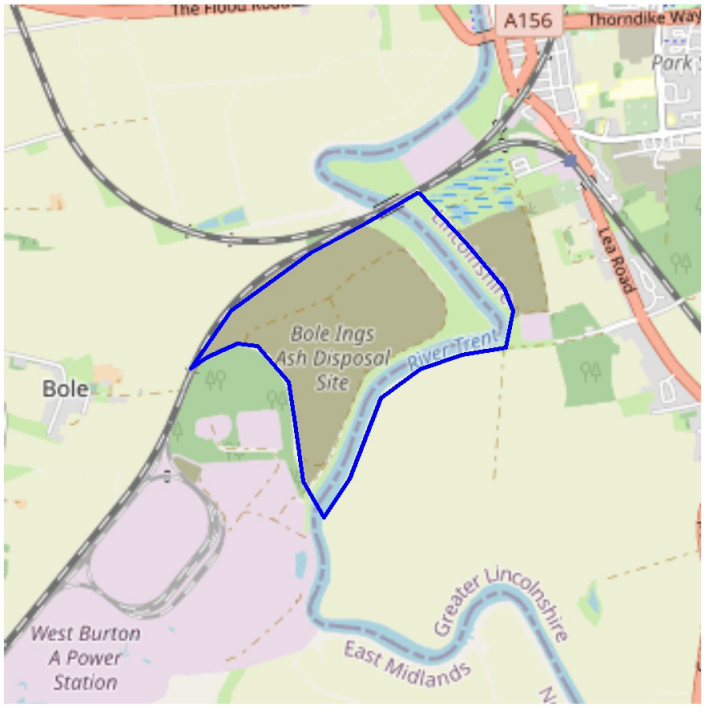
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Bole Ings



LOC LABEL	NAME	GRIDREF	Web Link
37375	Bole Ings	SK807873	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC659167

Five year summary for Bole Ings

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
1981/82	236	FEB	NC	294	NC
1982/83	220	JAN	NC	220	NC
1983/84	286	SEP	286	229	NC
1984/85	96	MAR	NC	105	NC
1985/86	145	JAN	NC	145	NC
MEAN	197		286	199	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mute Swan	NC	NC	2 (1,0)	NC	NC	NC	5 (5,0)	0 (1,0)	10 (1,0)	NC	NC	NC
Bewick's Swan	NC	NC	0 (1,0)	NC	NC	NC	9 (5,0)	0 (1,0)	0 (1,0)	NC	NC	NC
Shelduck	NC	NC	0 (1,0)	NC	NC	NC	0 (5,0)	6 (1,0)	0 (1,0)	NC	NC	NC
Wigeon	NC	NC	0 (1,0)	NC	NC	NC	0 (5,0)	2 (1,0)	0 (1,0)	NC	NC	NC
Mallard	NC	NC	185 (1,0)	NC	NC	NC	94 (5,0)	20 (1,0)	12 (1,0)	NC	NC	NC
Teal	NC	NC	0 (1,0)	NC	NC	NC	10 (5,0)	200 (1,0)	0 (1,0)	NC	NC	NC
Pochard	NC	NC	4 (1,0)	NC	NC	NC	10 (5,0)	8 (1,0)	38 (1,0)	NC	NC	NC
Tufted Duck	NC	NC	26 (1,0)	NC	NC	NC	15 (5,0)	0 (1,0)	14 (1,0)	NC	NC	NC
Goldeneye	NC	NC	0 (1,0)	NC	NC	NC	0 (5,0)	0 (1,0)	0 (1,0)	NC	NC	NC
Great Crested Grebe	NC	NC	4 (1,0)	NC	NC	NC	0 (5,0)	0 (1,0)	2 (1,0)	NC	NC	NC
Coot	NC	NC	65 (1,0)	NC	NC	NC	5 (5,0)	0 (1,0)	20 (1,0)	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mute Swan	NC	NC	2	NC	NC	NC	19	0	10	NC	NC	NC
Bewick's Swan	NC	NC	0	NC	NC	NC	28	0	0	NC	NC	NC
Shelduck	NC	NC	0	NC	NC	NC	2	6	0	NC	NC	NC
Wigeon	NC	NC	0	NC	NC	NC	0	2	0	NC	NC	NC
Mallard	NC	NC	185	NC	NC	NC	198	20	12	NC	NC	NC
Teal	NC	NC	0	NC	NC	NC	28	200	0	NC	NC	NC
Pochard	NC	NC	4	NC	NC	NC	38	8	38	NC	NC	NC
Tufted Duck	NC	NC	26	NC	NC	NC	40	0	14	NC	NC	NC
Goldeneye	NC	NC	0	NC	NC	NC	2	0	0	NC	NC	NC
Great Crested Grebe	NC	NC	4	NC	NC	NC	0	0	2	NC	NC	NC
Coot	NC	NC	65	NC	NC	NC	14	0	20	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1981/82	Y2	1983/84	Y4	Y5	Mean of Peaks
Mute Swan	NC	NC	2 (SEP)	NC	NC	2
Mallard	NC	NC	185 (SEP)	NC	NC	185
Pochard	NC	NC	4 (SEP)	NC	NC	4
Tufted Duck	NC	NC	26 (SEP)	NC	NC	26
Great Crested Grebe	NC	NC	4 (SEP)	NC	NC	4
Coot	NC	NC	65 (SEP)	NC	NC	65

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1981/82	1982/83	1983/84	1984/85	1985/86	Mean of Peaks
Mute Swan	4 (JAN)	2 (JAN)	0	19 (JAN)	0	5
Bewick's Swan	17 (JAN)	0	28 (JAN)	0	0	9
Shelduck	6 (FEB)	2 (JAN)	0	0	0	2
Wigeon	2 (FEB)	0	0	0	0	0
Mallard	57 (JAN)	198 (JAN)	96 (JAN)	12 (MAR)	116 (JAN)	96
Teal	200 (FEB)	0	20 (JAN)	0	0	44
Pochard	8 (FEB)	4 (JAN)	38 (JAN)	38 (MAR)	7 (JAN)	19
Tufted Duck	0	0	40 (JAN)	14 (MAR)	20 (JAN)	15
Goldeneye	0	0	2 (JAN)	0	0	0
Great Crested Grebe	0	0	0	2 (MAR)	0	0
Coot	0	14 (JAN)	5 (JAN)	20 (MAR)	2 (JAN)	8

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1981/82	1982/83	1983/84	1984/85	1985/86	Mean of Peaks
Mute Swan	4 (JAN)	2 (JAN)	2 (SEP)	19 (JAN)	0	5
Bewick's Swan	17 (JAN)	0	28 (JAN)	0	0	9
Shelduck	6 (FEB)	2 (JAN)	0	0	0	2
Wigeon	2 (FEB)	0	0	0	0	0
Mallard	57 (JAN)	198 (JAN)	185 (SEP)	12 (MAR)	116 (JAN)	114
Teal	200 (FEB)	0	20 (JAN)	0	0	44
Pochard	8 (FEB)	4 (JAN)	38 (JAN)	38 (MAR)	7 (JAN)	19
Tufted Duck	0	0	40 (JAN)	14 (MAR)	20 (JAN)	15
Goldeneye	0	0	2 (JAN)	0	0	0
Great Crested Grebe	0	0	4 (SEP)	2 (MAR)	0	1
Coot	0	14 (JAN)	65 (SEP)	20 (MAR)	2 (JAN)	20

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Mute Swan	5	1%	1%
Bewick's Swan	9	*18%	4%
Shelduck	2	0%	0%
Mallard	114	2%	1%
Teal	44	1%	1%
Pochard	19	8%	1%
Tufted Duck	15	1%	0%
Great Crested Grebe	1	1%	0%
Coot	20	1%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Bole Ings

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Mute Swan	2	5	NA	0%	1%	NA	0%	1%	NA
Bewick's Swan	0	9	NA		*18%	NA		4%	NA
Shelduck	0	2	NA		0%	NA		0%	NA
Mallard	185	96	NA	3%	1%	NA	1%	0%	NA
Teal	0	44	NA		1%	NA		1%	NA
Pochard	4	19	NA	2%	8%	NA	0%	1%	NA
Tufted Duck	26	15	NA	2%	1%	NA	0%	0%	NA
Great Crested Grebe	4	0	NA	2%		NA	0%		NA
Coot	65	8	NA	3%	0%	NA	0%	0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Brantingham Pond

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

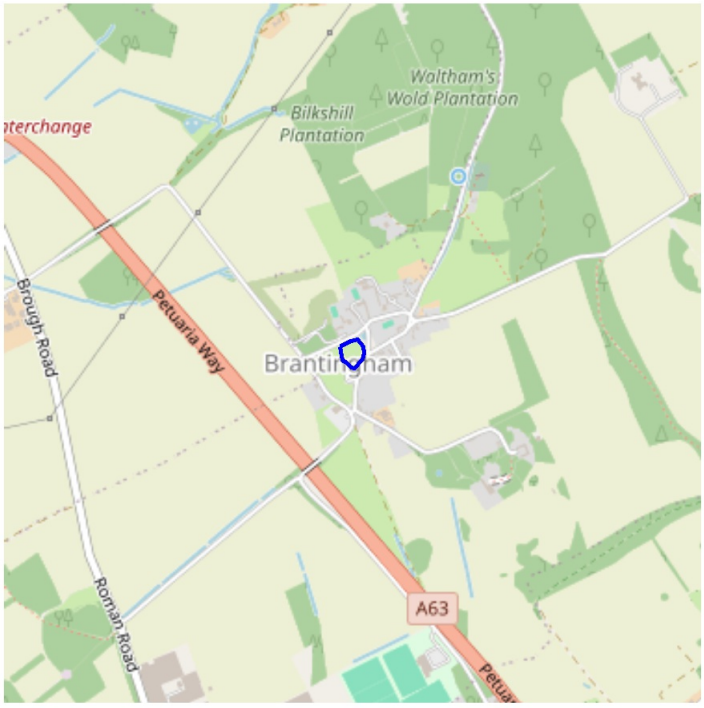
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors
Brantingham Pond



LOC LABEL	NAME	GRIDREF	Web Link
38075	Brantingham Pond	SE939295	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC656300

Five year summary for Brantingham Pond

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
1999/00	91	FEB	NC	91	NC
2002/03	18	JAN	NC	18	NC
2003/04	17	FEB	NC	17	NC
NA	NA	NA	NC	NC	NC
NA	NA	NA	NC	NC	NC
MEAN	42		NC	42	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mallard	NC	NC	NC	NC	NC	NC	18 (1,0)	54 (2,0)	NC	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mallard	NC	NC	NC	NC	NC	NC	18	91	NC	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in autumn

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Brantingham Pond

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1999/00	2002/03	2003/04	Y4	Y5	Mean of Peaks
Mallard	91 (FEB)	18 (JAN)	17 (FEB)	NC	NC	42

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1999/00	2002/03	2003/04	Y4	Y5	Mean of Peaks
Mallard	91 (FEB)	18 (JAN)	17 (FEB)	NC	NC	42

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Mallard	42	1%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Brantingham Pond

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Mallard	NA	42	NA	NA	1%	NA	NA	0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Cottam Power Station Lagoons and Nature

Compiled on 27 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

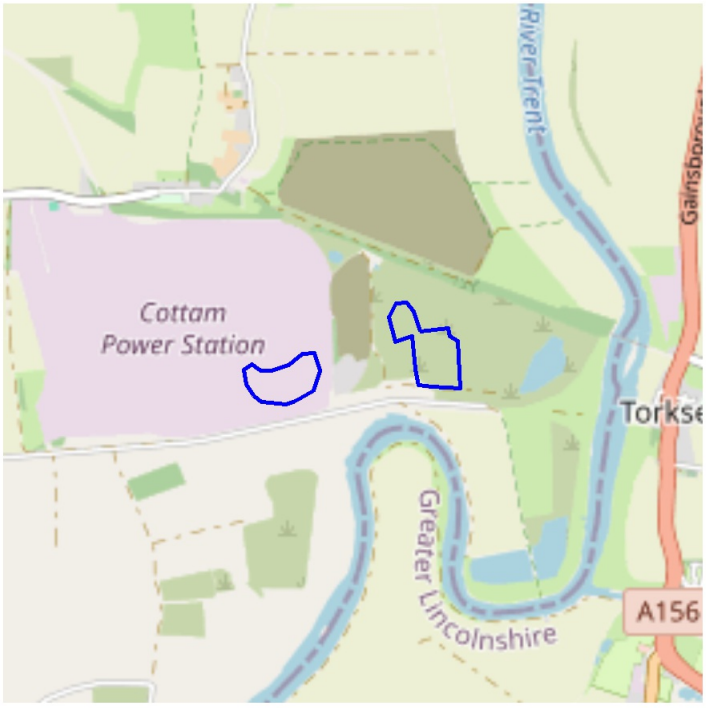
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Cottam Power Station Lagoons and Nature Reserve



LOC LABEL	NAME	GRIDREF	Web Link
37271	Cottam Power Station Lagoons and Nature Reserve	SK826791	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC650915

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2011/12	667	JAN	NC	760	264
2013/14	552	OCT	552	555	212
2014/15	443	FEB	214	604	256
2015/16	806	OCT	887	628	56
2016/17	315	DEC	340	315	NC
MEAN	557		498	572	197

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	21 (4,0)	4 (3,0)	1 (3,0)	0 (3,0)	2 (3,0)	5 (3,0)	0 (4,0)
Greylag Goose (British/Irish)	54 (2,0)	24 (2,0)	46 (2,0)	55 (4,0)	2 (3,0)	52 (4,0)	10 (3,0)	36 (3,0)	17 (3,0)	8 (3,0)	8 (3,0)	8 (4,0)
Pink-footed Goose	0 (2,0)	0 (2,0)	0 (2,0)	6 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Mute Swan	2 (2,0)	2 (2,0)	2 (2,0)	3 (4,0)	2 (3,0)	2 (4,0)	22 (3,0)	13 (3,0)	6 (3,0)	6 (3,0)	5 (3,0)	2 (4,0)
Shelduck	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	1 (3,0)	1 (4,0)	5 (3,0)	5 (3,0)	5 (3,0)	6 (3,0)	2 (3,0)	1 (4,0)
Shoveler	1 (2,0)	0 (2,0)	0 (2,0)	14 (4,0)	13 (3,0)	7 (4,0)	21 (3,0)	22 (3,0)	11 (3,0)	2 (3,0)	1 (3,0)	0 (4,0)
Gadwall	14 (2,0)	30 (2,0)	102 (2,0)	89 (4,0)	45 (3,0)	35 (4,0)	19 (3,0)	25 (3,0)	12 (3,0)	4 (3,0)	7 (3,0)	13 (4,0)
Wigeon	0 (2,0)	0 (2,0)	17 (2,0)	4 (4,0)	1 (3,0)	4 (4,0)	7 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Mallard	48 (2,0)	44 (2,0)	39 (2,0)	28 (4,0)	49 (3,0)	73 (4,0)	58 (3,0)	33 (3,0)	25 (3,0)	23 (3,0)	13 (3,0)	31 (4,0)
Teal	0 (2,0)	2 (2,0)	34 (2,0)	124 (4,0)	64 (3,0)	23 (4,0)	127 (3,0)	193 (3,0)	126 (3,0)	34 (3,0)	8 (3,0)	1 (4,0)
Pochard	0 (2,0)	0 (2,0)	2 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	1 (3,0)	5 (3,0)	1 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Tufted Duck	8 (2,0)	11 (2,0)	2 (2,0)	1 (4,0)	7 (3,0)	2 (4,0)	12 (3,0)	10 (3,0)	8 (3,0)	2 (3,0)	7 (3,0)	6 (4,0)
Red-breasted Merganser	0 (2,0)	0 (2,0)	1 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Little Grebe	2 (2,0)	4 (2,0)	2 (2,0)	7 (4,0)	3 (3,0)	3 (4,0)	4 (3,0)	3 (3,0)	1 (3,0)	1 (3,0)	1 (3,0)	0 (4,0)
Great Crested Grebe	1 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	1 (3,0)	0 (3,0)	1 (3,0)	3 (3,0)	3 (3,0)	2 (4,0)
Black-necked Grebe	1 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Bittern	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	1 (3,0)	0 (3,0)	1 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Grey Heron	3 (2,0)	5 (2,0)	2 (2,0)	3 (4,0)	2 (3,0)	2 (4,0)	2 (3,0)	3 (3,0)	5 (3,0)	5 (3,0)	6 (3,0)	7 (4,0)
Little Egret	1 (2,0)	0 (2,0)	0 (2,0)	1 (4,0)	0 (3,0)	0 (4,0)	1 (3,0)	0 (3,0)	0 (3,0)	1 (3,0)	0 (3,0)	1 (4,0)
Cormorant	5 (2,0)	5 (2,0)	8 (2,0)	11 (4,0)	12 (3,0)	7 (4,0)	11 (3,0)	11 (3,0)	8 (3,0)	4 (3,0)	4 (3,0)	4 (4,0)
Water Rail	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	1 (3,0)	1 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Moorhen	3 (2,0)	12 (2,0)	8 (2,0)	6 (4,0)	9 (3,0)	2 (4,0)	6 (3,0)	5 (3,0)	6 (3,0)	2 (3,0)	2 (3,0)	4 (4,0)
Coot	3 (2,0)	6 (2,0)	18 (2,0)	7 (4,0)	8 (3,0)	6 (4,0)	29 (3,0)	7 (3,0)	6 (3,0)	5 (3,0)	5 (3,0)	6 (4,0)
Oystercatcher	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	1 (3,0)	1 (3,0)	0 (3,0)	2 (4,0)
Lapwing	0 (2,0)	15 (2,0)	0 (2,0)	18 (4,0)	0 (3,0)	6 (4,0)	52 (3,0)	5 (3,0)	15 (3,0)	6 (3,0)	21 (3,0)	3 (4,0)
Curlew	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	2 (3,0)	1 (3,0)	1 (3,0)	1 (4,0)
Woodcock	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Snipe	0 (2,0)	0 (2,0)	0 (2,0)	1 (4,0)	2 (3,0)	1 (4,0)	1 (3,0)	1 (3,0)	4 (3,0)	4 (3,0)	0 (3,0)	0 (4,0)
Green Sandpiper	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Redshank	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Black-headed Gull	6 (2,0)	0 (2,0)	0 (2,0)	58 (4,0)	28 (3,0)	32 (4,0)	30 (3,0)	10 (3,0)	34 (3,0)	8 (3,0)	2 (3,0)	10 (4,0)
Common Gull	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	1 (3,0)	0 (4,0)	2 (3,0)	4 (3,0)	5 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Great Black-backed Gull	0 (2,0)	0 (2,0)	0 (2,0)	3 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	1 (3,0)	1 (3,0)	3 (3,0)	1 (4,0)
Herring Gull	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)
Lesser Black-backed Gull	1 (2,0)	0 (2,0)	0 (2,0)	6 (4,0)	1 (3,0)	0 (4,0)	1 (3,0)	1 (3,0)	2 (3,0)	0 (3,0)	2 (3,0)	6 (4,0)
Common Tern	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (4,0)
Kingfisher	0 (2,0)	0 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	0	0	0	0	84	11	4	0	6	14	0
Greylag Goose (British/Irish)	108	36	70	200	6	186	16	72	22	12	23	30
Pink-footed Goose	0	0	0	23	0	0	0	0	0	0	0	0
Mute Swan	2	2	3	5	2	5	42	18	10	12	8	2
Shelduck	0	0	0	0	3	2	11	10	6	10	3	3
Shoveler	1	0	1	22	25	16	52	54	20	2	3	1
Gadwall	16	50	180	200	120	108	39	40	22	6	10	20
Wigeon	0	0	34	16	2	14	20	0	0	0	0	0
Mallard	86	62	58	42	85	200	84	60	48	51	25	56
Teal	0	3	54	260	116	48	211	254	216	88	25	4
Pochard	1	1	3	1	0	1	4	14	3	0	0	0
Tufted Duck	11	16	2	4	20	4	36	28	14	4	10	14
Red-breasted Merganser	0	0	2	0	0	0	0	0	0	0	0	0
Little Grebe	2	4	3	14	4	4	6	4	3	2	2	0
Great Crested Grebe	2	0	0	1	0	0	2	1	2	4	4	4
Black-necked Grebe	2	0	0	0	0	0	0	0	0	0	0	0
Bittern	0	0	0	0	0	0	1	0	2	1	0	0
Grey Heron	4	9	4	5	2	4	3	5	6	6	8	12
Little Egret	2	0	0	2	0	0	2	0	1	2	0	2
Cormorant	8	6	8	14	14	13	15	16	15	6	6	7
Water Rail	0	0	0	1	0	0	1	2	2	0	0	0
Moorhen	4	20	8	8	16	4	8	8	10	3	4	6
Coot	6	6	25	20	25	26	61	16	6	8	6	15
Oystercatcher	0	0	0	0	0	0	0	0	2	2	1	3
Lapwing	0	30	0	74	1	22	155	16	35	10	52	6
Curlew	0	0	0	2	0	0	0	0	6	2	2	5
Woodcock	0	0	0	0	1	0	0	0	0	0	0	0
Snipe	0	0	1	5	3	4	2	2	12	11	0	0
Green Sandpiper	0	0	0	2	0	0	0	0	1	0	0	0
Redshank	0	0	0	0	1	0	0	0	0	0	0	0
Black-headed Gull	10	0	1	140	34	80	60	20	74	14	4	20
Common Gull	0	0	0	0	4	2	5	12	12	0	0	0
Great Black-backed Gull	0	0	0	12	0	2	1	1	3	2	9	4

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Herring Gull	0	0	0	0	1	0	1	0	1	0	0	0
Lesser Black-backed Gull	2	0	0	26	4	0	2	2	4	0	5	20
Common Tern	0	0	0	0	0	0	0	0	0	0	0	2
Kingfisher	1	0	0	0	1	0	0	0	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2011/12	2013/14	2014/15	2015/16	2016/17	Mean of Peaks
Greylag Goose (British/Irish)	NC	10 (OCT)	10 (OCT)	200 (OCT)	36 (AUG)	64
Pink-footed Goose	NC	0	23 (OCT)	0	0	6
Mute Swan	NC	2 (OCT)	5 (OCT)	2 (JUL)	3 (SEP)	3
Shoveler	NC	22 (OCT)	20 (OCT)	12 (OCT)	1 (JUL)	14
Gadwall	NC	127 (OCT)	11 (OCT)	200 (OCT)	24 (SEP)	90
Wigeon	NC	0	0	34 (SEP)	0	8
Mallard	NC	21 (OCT)	40 (OCT)	86 (JUL)	25 (AUG)	43
Teal	NC	260 (OCT)	68 (OCT)	55 (OCT)	114 (OCT)	124
Pochard	NC	0	0	3 (SEP)	1 (OCT)	1
Tufted Duck	NC	0	4 (OCT)	11 (JUL)	16 (AUG)	8
Red-breasted Merganser	NC	0	0	0	2 (SEP)	0
Little Grebe	NC	14 (OCT)	5 (OCT)	8 (OCT)	4 (AUG)	8
Great Crested Grebe	NC	1 (OCT)	1 (OCT)	2 (JUL)	0	1
Black-necked Grebe	NC	0	0	0	2 (JUL)	0
Grey Heron	NC	2 (OCT)	3 (OCT)	5 (OCT)	9 (AUG)	5
Little Egret	NC	1 (OCT)	0	2 (OCT)	2 (JUL)	1
Cormorant	NC	11 (OCT)	14 (OCT)	10 (OCT)	8 (SEP)	11
Water Rail	NC	1 (OCT)	0	0	0	0
Moorhen	NC	5 (OCT)	2 (OCT)	8 (SEP)	20 (AUG)	9
Coot	NC	2 (OCT)	2 (OCT)	20 (OCT)	25 (SEP)	12
Lapwing	NC	0	0	74 (OCT)	0	18
Curlew	NC	2 (OCT)	0	0	0	0
Snipe	NC	5 (OCT)	0	0	1 (SEP)	2
Green Sandpiper	NC	0	0	0	2 (OCT)	0
Black-headed Gull	NC	40 (OCT)	6 (OCT)	140 (OCT)	45 (OCT)	58
Great Black-backed Gull	NC	0	0	12 (OCT)	0	3
Lesser Black-backed Gull	NC	26 (OCT)	0	2 (JUL)	0	7
Kingfisher	NC	0	0	1 (JUL)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2011/12	2013/14	2014/15	2015/16	2016/17	Mean of Peaks
Canada Goose	0	11 (JAN)	4 (FEB)	0	84 (DEC)	20
Greylag Goose (British/Irish)	22 (MAR)	72 (FEB)	26 (FEB)	186 (DEC)	20 (DEC)	65
Mute Swan	22 (JAN)	42 (JAN)	12 (FEB)	2 (NOV)	0	16
Shelduck	6 (MAR)	4 (JAN)	11 (JAN)	2 (DEC)	0	5
Shoveler	10 (JAN)	25 (NOV)	54 (FEB)	12 (DEC)	0	20
Gadwall	16 (FEB)	40 (FEB)	39 (JAN)	120 (NOV)	4 (DEC)	44
Wigeon	2 (JAN)	20 (JAN)	0	2 (NOV)	0	5
Mallard	82 (JAN)	35 (NOV)	84 (JAN)	85 (NOV)	200 (DEC)	97
Teal	216 (MAR)	150 (FEB)	254 (FEB)	60 (NOV)	0	136
Pochard	14 (FEB)	0	0	0	1 (DEC)	3
Tufted Duck	36 (JAN)	20 (NOV)	9 (MAR)	0	4 (DEC)	14
Little Grebe	4 (JAN)	4 (NOV)	6 (JAN)	4 (DEC)	0	4
Great Crested Grebe	2 (JAN)	0	2 (MAR)	0	0	1
Bittern	2 (MAR)	1 (JAN)	0	0	0	1
Grey Heron	6 (MAR)	3 (FEB)	6 (MAR)	3 (DEC)	0	4
Little Egret	0	2 (JAN)	1 (MAR)	0	0	1
Cormorant	16 (FEB)	12 (JAN)	15 (JAN)	14 (NOV)	0	11
Water Rail	2 (FEB)	2 (MAR)	1 (JAN)	0	0	1
Moorhen	10 (MAR)	16 (NOV)	6 (JAN)	6 (NOV)	0	8
Coot	26 (JAN)	61 (JAN)	6 (MAR)	26 (DEC)	0	24
Oystercatcher	0	0	2 (MAR)	0	0	0
Lapwing	155 (JAN)	6 (MAR)	4 (MAR)	22 (DEC)	0	37
Curlew	6 (MAR)	0	0	0	0	1
Woodcock	0	1 (NOV)	0	0	0	0
Snipe	12 (MAR)	4 (DEC)	3 (NOV)	0	0	4
Green Sandpiper	1 (MAR)	0	0	0	0	0
Redshank	0	1 (NOV)	0	0	0	0
Black-headed Gull	74 (MAR)	23 (NOV)	48 (DEC)	80 (DEC)	0	45
Common Gull	12 (FEB)	0	4 (NOV)	0	0	3

Species	2011/12	2013/14	2014/15	2015/16	2016/17	Mean of Peaks
Great Black-backed Gull	3 (MAR)	0	1 (JAN)	0	2 (DEC)	1
Herring Gull	1 (JAN)	0	1 (NOV)	0	0	0
Lesser Black-backed Gull	2 (JAN)	0	4 (MAR)	4 (NOV)	0	2
Kingfisher	0	0	1 (NOV)	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2011/12	2013/14	2014/15	2015/16	Y5	Mean of Peaks
Canada Goose	0	0	14 (MAY)	0	NC	4
Greylag Goose (British/Irish)	6 (APR)	7 (APR)	30 (JUN)	0	NC	11
Mute Swan	4 (APR)	2 (APR)	12 (APR)	2 (JUN)	NC	5
Shelduck	10 (APR)	2 (APR)	6 (APR)	0	NC	4
Shoveler	3 (MAY)	2 (APR)	2 (APR)	1 (JUN)	NC	2
Gadwall	5 (MAY)	20 (JUN)	16 (JUN)	14 (JUN)	NC	14
Mallard	51 (APR)	56 (JUN)	46 (JUN)	13 (JUN)	NC	42
Teal	88 (APR)	25 (MAY)	12 (APR)	0	NC	31
Tufted Duck	14 (JUN)	10 (MAY)	4 (APR)	4 (JUN)	NC	8
Little Grebe	2 (APR)	2 (MAY)	1 (APR)	0	NC	1
Great Crested Grebe	2 (APR)	4 (APR)	4 (MAY)	0	NC	2
Bittern	1 (APR)	0	0	0	NC	0
Grey Heron	8 (MAY)	5 (JUN)	12 (JUN)	5 (JUN)	NC	8
Little Egret	1 (JUN)	2 (APR)	2 (JUN)	0	NC	1
Cormorant	6 (APR)	4 (MAY)	6 (MAY)	7 (JUN)	NC	6
Moorhen	2 (APR)	6 (JUN)	2 (APR)	5 (JUN)	NC	4
Coot	8 (APR)	15 (JUN)	6 (MAY)	0	NC	7
Oystercatcher	2 (APR)	0	2 (APR)	3 (JUN)	NC	2
Lapwing	10 (APR)	4 (APR)	52 (MAY)	1 (JUN)	NC	17
Curlew	0	0	5 (JUN)	0	NC	1
Snipe	11 (APR)	0	0	0	NC	3
Black-headed Gull	14 (APR)	20 (JUN)	16 (JUN)	1 (JUN)	NC	13
Great Black-backed Gull	9 (MAY)	4 (JUN)	0	0	NC	3
Lesser Black-backed Gull	5 (MAY)	20 (JUN)	6 (JUN)	0	NC	8
Common Tern	2 (JUN)	2 (JUN)	0	0	NC	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2011/12	2013/14	2014/15	2015/16	2016/17	Mean of Peaks
Canada Goose	0	11 (JAN)	14 (MAY)	0	84 (DEC)	22
Greylag Goose (British/Irish)	22 (MAR)	72 (FEB)	30 (JUN)	200 (OCT)	36 (AUG)	72
Pink-footed Goose	0	0	23 (OCT)	0	0	5
Mute Swan	22 (JAN)	42 (JAN)	12 (FEB)	2 (JUL)	3 (SEP)	16
Shelduck	10 (APR)	4 (JAN)	11 (JAN)	2 (DEC)	0	5
Shoveler	10 (JAN)	25 (NOV)	54 (FEB)	12 (OCT)	1 (JUL)	20
Gadwall	16 (FEB)	127 (OCT)	39 (JAN)	200 (OCT)	24 (SEP)	81
Wigeon	2 (JAN)	20 (JAN)	0	34 (SEP)	0	11
Mallard	82 (JAN)	56 (JUN)	84 (JAN)	86 (JUL)	200 (DEC)	102
Teal	216 (MAR)	260 (OCT)	254 (FEB)	60 (NOV)	114 (OCT)	181
Pochard	14 (FEB)	0	0	3 (SEP)	1 (OCT)	4
Tufted Duck	36 (JAN)	20 (NOV)	9 (MAR)	11 (JUL)	16 (AUG)	18
Red-breasted Merganser	0	0	0	0	2 (SEP)	0
Little Grebe	4 (JAN)	14 (OCT)	6 (JAN)	8 (OCT)	4 (AUG)	7
Great Crested Grebe	2 (JAN)	4 (APR)	4 (MAY)	2 (JUL)	0	2
Black-necked Grebe	0	0	0	0	2 (JUL)	0
Bittern	2 (MAR)	1 (JAN)	0	0	0	1
Grey Heron	8 (MAY)	5 (JUN)	12 (JUN)	5 (OCT)	9 (AUG)	8
Little Egret	1 (JUN)	2 (JAN)	2 (JUN)	2 (OCT)	2 (JUL)	2
Cormorant	16 (FEB)	12 (JAN)	15 (JAN)	14 (NOV)	8 (SEP)	13
Water Rail	2 (FEB)	2 (MAR)	1 (JAN)	0	0	1
Moorhen	10 (MAR)	16 (NOV)	6 (JAN)	8 (SEP)	20 (AUG)	12
Coot	26 (JAN)	61 (JAN)	6 (MAR)	26 (DEC)	25 (SEP)	29
Oystercatcher	2 (APR)	0	2 (MAR)	3 (JUN)	0	1
Lapwing	155 (JAN)	6 (MAR)	52 (MAY)	74 (OCT)	0	57
Curlew	6 (MAR)	2 (OCT)	5 (JUN)	0	0	3
Woodcock	0	1 (NOV)	0	0	0	0
Snipe	12 (MAR)	5 (OCT)	3 (NOV)	0	1 (SEP)	4
Green Sandpiper	1 (MAR)	0	0	0	2 (OCT)	1

Species	2011/12	2013/14	2014/15	2015/16	2016/17	Mean of Peaks
Redshank	0	1 (NOV)	0	0	0	0
Black-headed Gull	74 (MAR)	40 (OCT)	48 (DEC)	140 (OCT)	45 (OCT)	69
Common Gull	12 (FEB)	0	4 (NOV)	0	0	3
Great Black-backed Gull	9 (MAY)	4 (JUN)	1 (JAN)	12 (OCT)	2 (DEC)	6
Herring Gull	1 (JAN)	0	1 (NOV)	0	0	0
Lesser Black-backed Gull	5 (MAY)	26 (OCT)	6 (JUN)	4 (NOV)	0	8
Common Tern	2 (JUN)	2 (JUN)	0	0	0	1
Kingfisher	0	0	1 (NOV)	1 (JUL)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	72	5%	NA
Pink-footed Goose	5	0%	0%
Mute Swan	16	3%	3%
Shelduck	5	1%	0%
Shoveler	20	11%	3%
Gadwall	81	26%	6%
Wigeon	11	0%	0%
Mallard	102	2%	1%
Teal	181	4%	3%
Pochard	4	2%	0%
Tufted Duck	18	1%	0%
Little Grebe	7	5%	0%
Great Crested Grebe	2	1%	0%
Bittern	1	*2%	1%
Grey Heron	8	2%	0%
Little Egret	2	2%	0%
Cormorant	13	2%	1%
Moorhen	12	0%	0%
Coot	29	1%	0%
Oystercatcher	1	0%	0%
Lapwing	57	1%	0%
Curlew	3	0%	0%
Snipe	4	0%	0%
Green Sandpiper	1	*2%	0%
Black-headed Gull	69	0%	0%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Common Gull	3	0%	0%
Great Black-backed Gull	6	1%	1%
Lesser Black-backed Gull	8	1%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Cottam Power Station Lagoons and Nature Reserve

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	64	65	11	5%	5%	1%	NA	NA	NA
Pink-footed Goose	6	0	0	0%			0%		
Mute Swan	3	16	5	1%	3%	1%	1%	3%	1%
Shelduck	0	5	4		1%	1%		0%	0%
Shoveler	14	20	2	7%	11%	1%	2%	3%	0%
Gadwall	90	44	14	29%	14%	5%	6%	3%	1%
Wigeon	8	5	0	0%	0%		0%	0%	
Mallard	43	97	42	1%	1%	1%	0%	0%	0%
Teal	124	136	31	3%	3%	1%	2%	2%	0%
Pochard	1	3	0	0%	1%		0%	0%	
Tufted Duck	8	14	8	1%	1%	1%	0%	0%	0%
Little Grebe	8	4	1	5%	3%	1%	0%	0%	0%
Great Crested Grebe	1	1	2	1%	1%	1%	0%	0%	0%
Bittern	0	1	0		*2%			1%	
Grey Heron	5	4	8	1%	1%	2%	0%	0%	0%
Little Egret	1	1	1	1%	1%	1%	0%	0%	0%
Cormorant	11	11	6	2%	2%	1%	1%	1%	1%
Moorhen	9	8	4	0%	0%	0%	0%	0%	0%
Coot	12	24	7	1%	1%	0%	0%	0%	0%
Oystercatcher	0	0	2			0%			0%

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Lapwing	18	37	17	0%	1%	0%	0%	0%	0%
Curlew	0	1	1		0%	0%		0%	0%
Snipe	2	4	3	0%	0%	0%	0%	0%	0%
Green Sandpiper	0	0	0						
Black-headed Gull	58	45	13	0%	0%	0%	0%	0%	0%
Common Gull	0	3	0		0%			0%	
Great Black-backed Gull	3	1	3	0%	0%	0%	0%	0%	0%
Lesser Black-backed Gull	7	2	8	1%	0%	1%	0%	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Dunham Pools

Compiled on 26 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Dunham Pools



LOC LABEL	NAME	GRIDREF	Web Link
37370	Dunham Pools	SK817738	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC656981

Five year summary for Dunham Pools

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	1018	NOV	627	1159	162
2020/21	358	FEB	563	517	232
2021/22	410	SEP	710	340	208
2022/23	606	SEP	703	340	288
2023/24	304	DEC	317	532	313
MEAN	539		584	578	241

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	13 (4,0)	50 (5,0)	76 (5,0)	35 (5,0)	0 (5,0)	15 (5,0)	1 (4,0)	14 (3,0)	8 (5,0)	8 (5,0)	6 (5,0)	7 (5,0)
Greylag Goose (British/Irish)	108 (4,0)	86 (5,0)	127 (5,0)	46 (5,0)	31 (5,0)	68 (5,0)	10 (4,0)	60 (3,0)	50 (5,0)	29 (5,0)	66 (5,0)	151 (5,0)
Pink-footed Goose	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Mute Swan	15 (4,0)	9 (5,0)	7 (5,0)	3 (5,0)	2 (5,0)	2 (5,0)	3 (4,0)	1 (3,0)	4 (5,0)	8 (5,0)	5 (5,0)	12 (5,0)
Shelduck	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Mandarin Duck	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Shoveler	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Gadwall	0 (4,0)	0 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (4,0)	0 (4,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)
Wigeon	0 (5,0)	0 (5,0)	1 (5,0)	6 (5,0)	39 (5,0)	67 (5,0)	62 (4,0)	154 (3,0)	87 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Mallard	57 (4,0)	88 (5,0)	74 (5,0)	38 (5,0)	13 (5,0)	8 (5,0)	17 (4,0)	22 (3,0)	13 (5,0)	14 (5,0)	9 (5,0)	29 (5,0)
Teal	0 (4,0)	0 (5,0)	3 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Pochard	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	2 (4,0)	5 (3,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Tufted Duck	7 (4,0)	13 (5,0)	9 (5,0)	13 (5,0)	7 (5,0)	3 (5,0)	10 (4,0)	4 (3,0)	1 (5,0)	2 (5,0)	1 (5,0)	7 (5,0)
Goldeneye	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Little Grebe	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Great Crested Grebe	2 (4,0)	2 (5,0)	1 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	1 (3,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)
Grey Heron	2 (4,0)	3 (5,0)	3 (5,0)	1 (5,0)	2 (5,0)	2 (5,0)	2 (4,0)	1 (3,0)	1 (5,0)	1 (5,0)	0 (5,0)	2 (5,0)
Great White Egret	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	1 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Little Egret	1 (4,0)	0 (5,0)	1 (5,0)	1 (5,0)	3 (5,0)	2 (5,0)	1 (4,0)	0 (3,0)	1 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)
Cormorant	0 (4,0)	0 (5,0)	3 (5,0)	2 (5,0)	2 (5,0)	2 (5,0)	0 (4,0)	4 (3,0)	1 (5,0)	2 (5,0)	1 (5,0)	0 (5,0)
Moorhen	7 (4,0)	6 (5,0)	8 (5,0)	3 (5,0)	3 (5,0)	2 (5,0)	3 (4,0)	6 (3,0)	2 (5,0)	2 (5,0)	3 (5,0)	2 (5,0)
Coot	2 (4,0)	6 (5,0)	8 (5,0)	9 (5,0)	4 (5,0)	0 (5,0)	0 (4,0)	1 (3,0)	2 (5,0)	2 (5,0)	1 (5,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Oystercatcher	2 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	2 (3,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)
Lapwing	0 (4,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Curlew	1 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Black-tailed Godwit	3 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Snipe	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Green Sandpiper	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)
Black-headed Gull	4 (4,0)	19 (5,0)	67 (5,0)	42 (5,0)	170 (5,0)	18 (5,0)	20 (4,0)	6 (3,0)	5 (5,0)	2 (5,0)	3 (4,0)	4 (5,0)
Common Gull	0 (4,0)	1 (5,0)	2 (5,0)	0 (5,0)	5 (5,0)	0 (5,0)	1 (4,0)	0 (3,0)	1 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)
Great Black-backed Gull	0 (4,0)	0 (5,0)	1 (5,0)	0 (5,0)	3 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)
Lesser Black-backed Gull	0 (4,0)	1 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)
Kingfisher	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	47	118	190	102	0	72	3	37	23	20	14	17
Greylag Goose (British/Irish)	246	241	375	187	155	261	31	131	77	51	96	266
Pink-footed Goose	0	0	0	0	3	0	0	0	0	0	0	0
Mute Swan	28	29	19	9	8	4	8	2	10	30	11	25
Shelduck	0	0	0	2	0	0	0	0	2	0	0	0
Mandarin Duck	0	0	0	0	0	0	0	0	0	2	0	0
Shoveler	0	0	4	1	0	1	0	0	0	0	0	0
Gadwall	0	0	9	2	0	0	4	0	0	1	3	2
Wigeon	0	0	3	25	84	160	187	205	135	1	0	0
Mallard	91	135	115	73	25	12	38	43	21	24	16	68
Teal	0	0	8	4	3	1	2	0	0	0	0	2
Pochard	0	1	0	0	1	3	4	9	6	1	0	0
Tufted Duck	12	27	32	48	18	8	16	8	5	7	2	21
Goldeneye	0	0	0	0	0	0	1	1	0	0	0	0
Little Grebe	0	0	0	1	0	1	2	0	0	0	0	0
Great Crested Grebe	6	6	3	4	1	0	0	3	2	2	2	2
Grey Heron	3	5	5	2	5	4	4	1	2	2	1	3
Great White Egret	0	0	0	0	0	0	1	2	1	0	0	0
Little Egret	4	2	3	3	9	8	1	1	2	2	0	3
Cormorant	2	1	12	6	7	10	1	11	2	6	3	1
Moorhen	19	12	16	5	6	4	5	9	4	4	6	4
Coot	4	29	34	47	18	1	1	2	6	8	4	1
Oystercatcher	4	0	0	0	0	0	0	5	3	2	2	2
Lapwing	0	0	0	3	0	0	0	0	0	0	0	0
Curlew	3	0	0	0	0	0	0	0	0	0	0	0
Black-tailed Godwit	13	0	0	0	0	0	0	0	0	0	0	0
Snipe	0	0	0	0	3	0	0	1	0	0	0	0
Green Sandpiper	0	0	3	0	0	0	0	0	0	0	0	0
Black-headed Gull	5	53	173	140	791	58	34	9	18	7	6	10
Common Gull	0	2	7	2	24	1	3	1	4	0	0	1
Great Black-backed Gull	0	0	2	1	16	1	2	0	0	0	0	1
Lesser Black-backed Gull	1	3	0	2	0	0	0	0	0	0	0	1
Kingfisher	2	0	0	2	1	1	0	0	0	0	1	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly

Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	51 (SEP)	102 (OCT)	190 (SEP)	135 (SEP)	6 (JUL)	97
Greylag Goose (British/Irish)	250 (SEP)	(124)(JUL)	246 (JUL)	375 (SEP)	73 (AUG)	236
Mute Swan	15 (SEP)	0	29 (AUG)	10 (JUL)	8 (JUL)	16
Shelduck	2 (OCT)	0	0	0	0	0
Shoveler	1 (OCT)	0	0	0	4 (SEP)	1
Gadwall	9 (SEP)	0	2 (OCT)	0	0	3
Wigeon	3 (OCT)	25 (OCT)	3 (SEP)	4 (OCT)	0	7
Mallard	135 (AUG)	106 (SEP)	73 (JUL)	74 (AUG)	101 (AUG)	98
Teal	4 (SEP)	2 (SEP)	8 (SEP)	3 (SEP)	0	3
Pochard	0	0	1 (AUG)	0	0	0
Tufted Duck	48 (OCT)	6 (OCT)	25 (AUG)	12 (JUL)	27 (AUG)	24
Little Grebe	1 (OCT)	0	0	0	0	0
Great Crested Grebe	6 (JUL)	(2)(JUL)	2 (AUG)	3 (AUG)	1 (OCT)	3
Grey Heron	3 (JUL)	2 (AUG)	5 (AUG)	3 (AUG)	5 (SEP)	4
Little Egret	0	2 (OCT)	0	4 (JUL)	2 (OCT)	2
Cormorant	3 (OCT)	3 (OCT)	3 (SEP)	6 (OCT)	12 (SEP)	5
Moorhen	15 (SEP)	2 (AUG)	19 (JUL)	10 (AUG)	5 (OCT)	10
Coot	47 (OCT)	(2)(JUL)	4 (SEP)	0	0	13
Oystercatcher	4 (JUL)	(2)(JUL)	0	4 (JUL)	2 (JUL)	2
Lapwing	3 (OCT)	0	0	0	0	1
Curlew	3 (JUL)	0	0	0	0	1
Black-tailed Godwit	13 (JUL)	0	0	0	0	3
Green Sandpiper	0	0	3 (SEP)	0	0	1
Black-headed Gull	11 (OCT)	173 (SEP)	91 (SEP)	53 (AUG)	67 (SEP)	79
Common Gull	0	7 (SEP)	2 (AUG)	2 (AUG)	2 (SEP)	3
Great Black-backed Gull	0	1 (OCT)	2 (SEP)	0	1 (SEP)	1
Lesser Black-backed Gull	0	2 (OCT)	0	3 (AUG)	1 (JUL)	1
Kingfisher	0	0	2 (JUL)	2 (OCT)	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	(37)(FEB)	72 (DEC)	23 (MAR)	6 (MAR)	3 (MAR)	28
Greylag Goose (British/Irish)	155 (NOV)	86 (FEB)	26 (MAR)	77 (MAR)	261 (DEC)	121
Pink-footed Goose	3 (NOV)	0	0	0	0	1
Mute Swan	6 (MAR)	(3)(JAN)	8 (NOV)	10 (MAR)	4 (DEC)	7
Shelduck	1 (MAR)	0	0	0	2 (MAR)	1
Shoveler	0	0	1 (DEC)	0	0	0
Gadwall	0	0	0	0	4 (JAN)	1
Wigeon	(68)(FEB)	205 (FEB)	160 (DEC)	135 (FEB)	187 (JAN)	172
Mallard	(9)(FEB)	43 (FEB)	21 (MAR)	38 (JAN)	25 (NOV)	32
Teal	1 (DEC)	3 (NOV)	0	0	2 (JAN)	1
Pochard	(9)(FEB)	0	6 (FEB)	6 (MAR)	4 (JAN)	5
Tufted Duck	5 (MAR)	8 (NOV)	15 (JAN)	18 (NOV)	16 (JAN)	12
Goldeneye	1 (JAN)	0	0	0	0	0
Little Grebe	1 (DEC)	0	0	0	2 (JAN)	1
Great Crested Grebe	(3)(FEB)	2 (MAR)	2 (FEB)	1 (MAR)	0	2
Grey Heron	5 (NOV)	3 (NOV)	4 (DEC)	4 (JAN)	2 (NOV)	4
Great White Egret	1 (JAN)	1 (MAR)	2 (FEB)	0	0	1
Little Egret	9 (NOV)	1 (NOV)	8 (DEC)	1 (NOV)	2 (MAR)	4
Cormorant	(2)(FEB)	3 (NOV)	11 (FEB)	0	7 (NOV)	5
Moorhen	(3)(FEB)	3 (NOV)	9 (FEB)	7 (FEB)	4 (JAN)	6
Coot	6 (MAR)	18 (NOV)	1 (DEC)	1 (FEB)	0	5
Oystercatcher	(2)(FEB)	2 (MAR)	5 (FEB)	2 (MAR)	0	2
Snipe	(1)(FEB)	0	3 (NOV)	0	0	1
Black-headed Gull	791 (NOV)	58 (DEC)	31 (NOV)	34 (JAN)	6 (JAN)	184
Common Gull	24 (NOV)	4 (MAR)	2 (JAN)	0	0	6
Great Black-backed Gull	16 (NOV)	1 (NOV)	2 (JAN)	0	0	4
Kingfisher	0	1 (NOV)	0	0	1 (DEC)	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always

possible.

Five year summary for Dunham Pools

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	20 (APR)	7 (APR)	5 (APR)	7 (APR)	13 (JUN)	10
Greylag Goose (British/Irish)	54 (MAY)	137 (JUN)	142 (JUN)	161 (JUN)	266 (JUN)	152
Mute Swan	30 (APR)	25 (JUN)	11 (MAY)	9 (JUN)	2 (APR)	15
Mandarin Duck	0	0	0	0	2 (APR)	0
Gadwall	2 (JUN)	0	0	3 (MAY)	0	1
Wigeon	1 (APR)	0	0	0	0	0
Mallard	19 (APR)	28 (JUN)	30 (JUN)	68 (JUN)	17 (APR)	32
Teal	2 (JUN)	0	0	0	0	0
Pochard	0	1 (APR)	0	0	0	0
Tufted Duck	7 (JUN)	7 (APR)	0	21 (JUN)	2 (JUN)	7
Great Crested Grebe	2 (APR)	2 (APR)	2 (JUN)	1 (APR)	0	1
Grey Heron	1 (MAY)	3 (JUN)	2 (JUN)	3 (JUN)	2 (APR)	2
Little Egret	3 (JUN)	2 (APR)	0	1 (JUN)	0	1
Cormorant	1 (JUN)	2 (MAY)	3 (APR)	2 (MAY)	6 (APR)	3
Moorhen	2 (MAY)	2 (APR)	6 (MAY)	4 (MAY)	2 (JUN)	3
Coot	8 (APR)	4 (MAY)	0	1 (JUN)	0	3
Oystercatcher	2 (APR)	2 (APR)	2 (APR)	2 (MAY)	1 (MAY)	2
Black-headed Gull	7 (JUN)	10 (JUN)	4 (MAY)	3 (JUN)	0	5
Common Gull	1 (JUN)	0	0	0	0	0
Great Black-backed Gull	0	0	0	1 (JUN)	0	0
Lesser Black-backed Gull	0	0	0	1 (JUN)	0	0
Kingfisher	0	0	1 (MAY)	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	51 (SEP)	102 (OCT)	190 (SEP)	135 (SEP)	13 (JUN)	98
Greylag Goose (British/Irish)	250 (SEP)	137 (JUN)	246 (JUL)	375 (SEP)	266 (JUN)	255
Pink-footed Goose	3 (NOV)	0	0	0	0	1
Mute Swan	30 (APR)	25 (JUN)	29 (AUG)	10 (JUL)	8 (JUL)	20
Shelduck	2 (OCT)	0	0	0	2 (MAR)	1
Mandarin Duck	0	0	0	0	2 (APR)	0
Shoveler	1 (OCT)	0	1 (DEC)	0	4 (SEP)	1
Gadwall	9 (SEP)	0	2 (OCT)	3 (MAY)	4 (JAN)	4
Wigeon	(68)(FEB)	205 (FEB)	160 (DEC)	135 (FEB)	187 (JAN)	172
Mallard	135 (AUG)	106 (SEP)	73 (JUL)	74 (AUG)	101 (AUG)	98
Teal	4 (SEP)	3 (NOV)	8 (SEP)	3 (SEP)	2 (JAN)	4
Pochard	(9)(FEB)	1 (APR)	6 (FEB)	6 (MAR)	4 (JAN)	5
Tufted Duck	48 (OCT)	8 (NOV)	25 (AUG)	21 (JUN)	27 (AUG)	26
Goldeneye	1 (JAN)	0	0	0	0	0
Little Grebe	1 (OCT)	0	0	0	2 (JAN)	1
Great Crested Grebe	6 (JUL)	(2)(JUL)	2 (AUG)	3 (AUG)	1 (OCT)	3
Grey Heron	5 (NOV)	3 (NOV)	5 (AUG)	4 (JAN)	5 (SEP)	4
Great White Egret	1 (JAN)	1 (MAR)	2 (FEB)	0	0	1
Little Egret	9 (NOV)	2 (OCT)	8 (DEC)	4 (JUL)	2 (OCT)	5
Cormorant	3 (OCT)	3 (OCT)	11 (FEB)	6 (OCT)	12 (SEP)	7
Moorhen	15 (SEP)	3 (NOV)	19 (JUL)	10 (AUG)	5 (OCT)	10
Coot	47 (OCT)	18 (NOV)	4 (SEP)	1 (FEB)	0	14
Oystercatcher	4 (JUL)	(2)(JUL)	5 (FEB)	4 (JUL)	2 (JUL)	4
Lapwing	3 (OCT)	0	0	0	0	1
Curlew	3 (JUL)	0	0	0	0	1
Black-tailed Godwit	13 (JUL)	0	0	0	0	3
Snipe	(1)(FEB)	0	3 (NOV)	0	0	1
Green Sandpiper	0	0	3 (SEP)	0	0	1
Black-headed Gull	791 (NOV)	173 (SEP)	91 (SEP)	53 (AUG)	67 (SEP)	235
Common Gull	24 (NOV)	7 (SEP)	2 (AUG)	2 (AUG)	2 (SEP)	7

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Great Black-backed Gull	16 (NOV)	1 (OCT)	2 (SEP)	1 (JUN)	1 (SEP)	4
Lesser Black-backed Gull	0	2 (OCT)	0	3 (AUG)	1 (JUL)	1
Kingfisher	0	1 (NOV)	2 (JUL)	2 (OCT)	1 (DEC)	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	255	18%	NA
Pink-footed Goose	1	0%	0%
Mute Swan	20	4%	4%
Shelduck	1	0%	0%
Shoveler	1	1%	0%
Gadwall	4	1%	0%
Wigeon	172	4%	1%
Mallard	98	1%	0%
Teal	4	0%	0%
Pochard	5	2%	0%
Tufted Duck	26	2%	0%
Little Grebe	1	1%	0%
Great Crested Grebe	3	2%	0%
Grey Heron	4	1%	0%
Great White Egret	1	*2%	0%
Little Egret	5	5%	0%
Cormorant	7	1%	1%
Moorhen	10	0%	0%
Coot	14	1%	0%
Oystercatcher	4	0%	0%
Lapwing	1	0%	0%
Curlew	1	0%	0%
Black-tailed Godwit	3	1%	0%
Snipe	1	0%	0%
Green Sandpiper	1	*2%	0%
Black-headed Gull	235	1%	1%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Common Gull	7	0%	0%
Great Black-backed Gull	4	1%	0%
Lesser Black-backed Gull	1	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Dunham Pools

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	236	121	152	17%	9%	11%	NA	NA	NA
Pink-footed Goose	0	1	0		0%			0%	
Mute Swan	16	7	15	3%	1%	3%	3%	1%	3%
Shelduck	0	1	0		0%			0%	
Shoveler	1	0	0	1%			0%		
Gadwall	3	1	1	1%	0%	0%	0%	0%	0%
Wigeon	7	172	0	0%	4%		0%	1%	
Mallard	98	32	32	1%	0%	0%	0%	0%	0%
Teal	3	1	0	0%	0%		0%	0%	
Pochard	0	5	0		2%			0%	
Tufted Duck	24	12	7	2%	1%	1%	0%	0%	0%
Little Grebe	0	1	0		1%			0%	
Great Crested Grebe	3	2	1	2%	1%	1%	0%	0%	0%
Grey Heron	4	4	2	1%	1%	0%	0%	0%	0%
Great White Egret	0	1	0		*2%			0%	
Little Egret	2	4	1	2%	4%	1%	0%	0%	0%
Cormorant	5	5	3	1%	1%	0%	1%	1%	0%
Moorhen	10	6	3	0%	0%	0%	0%	0%	0%
Coot	13	5	3	1%	0%	0%	0%	0%	0%
Oystercatcher	2	2	2	0%	0%	0%	0%	0%	0%
Lapwing	1	0	0	0%			0%		

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Curlew	1	0	0	0%			0%		
Black-tailed Godwit	3	0	0	1%			0%		
Snipe	0	1	0		0%			0%	
Green Sandpiper	1	0	0	*2%			0%		
Black-headed Gull	79	184	5	0%	1%	0%	0%	1%	0%
Common Gull	3	6	0	0%	0%		0%	0%	
Great Black-backed Gull	1	4	0	0%	1%		0%	0%	
Lesser Black-backed Gull	1	0	0	0%			0%		

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Ealand Lake

Compiled on 26 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Ealand Lake



LOC LABEL	NAME	GRIDREF	Web Link
38260	Ealand Lake	SE777115	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC650801

Five year summary for Ealand Lake

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
1986/87	168	JAN	NC	215	NC
2020/21	417	FEB	NC	482	NC
NA	NA	NA	NC	NC	NC
NA	NA	NA	NC	NC	NC
NA	NA	NA	NC	NC	NC
MEAN	292		NC	348	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	21 (2,0)	15 (2,0)	NC	NC	NC
Canada x Greylag Goose	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	2 (2,0)	0 (2,0)	NC	NC	NC
Greylag Goose (British/Irish)	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	50 (2,0)	24 (2,0)	NC	NC	NC
Domestic Greylag Goose	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	2 (2,0)	0 (2,0)	NC	NC	NC
Mute Swan	NC	NC	NC	NC	NC	0 (1,0)	4 (1,0)	0 (2,0)	1 (2,0)	NC	NC	NC
Mallard	NC	NC	NC	NC	NC	1 (1,0)	10 (1,0)	16 (2,0)	16 (2,0)	NC	NC	NC
Pochard	NC	NC	NC	NC	NC	21 (1,0)	6 (1,0)	0 (2,0)	0 (2,0)	NC	NC	NC
Tufted Duck	NC	NC	NC	NC	NC	38 (1,0)	8 (1,0)	35 (2,0)	21 (2,0)	NC	NC	NC
Great Crested Grebe	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	0 (2,0)	4 (2,0)	NC	NC	NC
Moorhen	NC	NC	NC	NC	NC	0 (1,0)	0 (1,0)	3 (2,0)	6 (2,0)	NC	NC	NC
Coot	NC	NC	NC	NC	NC	70 (1,0)	140 (1,0)	44 (2,0)	28 (2,0)	NC	NC	NC
Black-headed Gull	NC	NC	NC	NC	NC	NA	NA	100 (1,0)	153 (1,0)	NC	NC	NC
Common Gull	NC	NC	NC	NC	NC	NA	NA	4 (1,0)	0 (1,0)	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	NC	NC	NC	NC	NC	0	0	42	30	NC	NC	NC
Canada x Greylag Goose	NC	NC	NC	NC	NC	0	0	3	0	NC	NC	NC
Greylag Goose (British/Irish)	NC	NC	NC	NC	NC	0	0	101	47	NC	NC	NC
Domestic Greylag Goose	NC	NC	NC	NC	NC	0	0	5	1	NC	NC	NC
Mute Swan	NC	NC	NC	NC	NC	0	4	0	2	NC	NC	NC
Mallard	NC	NC	NC	NC	NC	1	10	33	33	NC	NC	NC
Pochard	NC	NC	NC	NC	NC	21	6	0	0	NC	NC	NC
Tufted Duck	NC	NC	NC	NC	NC	38	8	70	34	NC	NC	NC
Great Crested Grebe	NC	NC	NC	NC	NC	0	0	0	5	NC	NC	NC
Moorhen	NC	NC	NC	NC	NC	0	0	6	11	NC	NC	NC
Coot	NC	NC	NC	NC	NC	70	140	53	35	NC	NC	NC
Black-headed Gull	NC	NC	NC	NC	NC	NA	NA	100	153	NC	NC	NC
Common Gull	NC	NC	NC	NC	NC	NA	NA	4	0	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in autumn

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1986/87	2020/21	Y3	Y4	Y5	Mean of Peaks
Canada Goose	0	42 (FEB)	NC	NC	NC	21
Canada x Greylag Goose	0	3 (FEB)	NC	NC	NC	2
Greylag Goose (British/Irish)	0	101 (FEB)	NC	NC	NC	50
Domestic Greylag Goose	0	5 (FEB)	NC	NC	NC	2
Mute Swan	4 (JAN)	2 (MAR)	NC	NC	NC	3
Mallard	10 (JAN)	33 (FEB)	NC	NC	NC	22
Pochard	21 (DEC)	0	NC	NC	NC	10
Tufted Duck	38 (DEC)	70 (FEB)	NC	NC	NC	54
Great Crested Grebe	2 (MAR)	5 (MAR)	NC	NC	NC	4
Moorhen	0	11 (MAR)	NC	NC	NC	6
Coot	140 (JAN)	53 (FEB)	NC	NC	NC	96
Black-headed Gull	NA	153 (MAR)	NC	NC	NC	153
Common Gull	NA	4 (FEB)	NC	NC	NC	4

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	1986/87	2020/21	Y3	Y4	Y5	Mean of Peaks
Canada Goose	0	42 (FEB)	NC	NC	NC	21
Canada x Greylag Goose	0	3 (FEB)	NC	NC	NC	2
Greylag Goose (British/Irish)	0	101 (FEB)	NC	NC	NC	50
Domestic Greylag Goose	0	5 (FEB)	NC	NC	NC	2
Mute Swan	4 (JAN)	2 (MAR)	NC	NC	NC	3
Mallard	10 (JAN)	33 (FEB)	NC	NC	NC	22
Pochard	21 (DEC)	0	NC	NC	NC	10
Tufted Duck	38 (DEC)	70 (FEB)	NC	NC	NC	54
Great Crested Grebe	2 (MAR)	5 (MAR)	NC	NC	NC	4
Moorhen	0	11 (MAR)	NC	NC	NC	6
Coot	140 (JAN)	53 (FEB)	NC	NC	NC	96
Black-headed Gull	NA	153 (MAR)	NC	NC	NC	153
Common Gull	NA	4 (FEB)	NC	NC	NC	4

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Ealand Lake

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	50	4%	NA
Mute Swan	3	1%	1%
Mallard	22	0%	0%
Pochard	10	4%	1%
Tufted Duck	54	4%	1%
Great Crested Grebe	4	2%	0%
Moorhen	6	0%	0%
Coot	96	5%	1%
Black-headed Gull	153	1%	1%
Common Gull	4	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Ealand Lake

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	NA	50	NA	NA	4%	NA	NA	NA	NA
Mute Swan	NA	3	NA	NA	1%	NA	NA	1%	NA
Mallard	NA	22	NA	NA	0%	NA	NA	0%	NA
Pochard	NA	10	NA	NA	4%	NA	NA	1%	NA
Tufted Duck	NA	54	NA	NA	4%	NA	NA	1%	NA
Great Crested Grebe	NA	4	NA	NA	2%	NA	NA	0%	NA
Moorhen	NA	6	NA	NA	0%	NA	NA	0%	NA
Coot	NA	96	NA	NA	5%	NA	NA	1%	NA
Black-headed Gull	NA	153	NA	NA	1%	NA	NA	1%	NA
Common Gull	NA	4	NA	NA	0%	NA	NA	0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Finningley New Gravel Pits

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Finningley New Gravel Pits



LOC LABEL	NAME	GRIDREF	Web Link
37227	Finningley New Gravel Pits	SK689988	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC2514446

Five year summary for Finningley New Gravel Pits

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2018/19	1239	DEC	741	1684	323
2019/20	1002	FEB	709	1491	272
2020/21	3276	DEC	2146	3942	1241
2021/22	2890	NOV	1690	3763	836
2022/23	4392	JAN	1653	5071	1425
MEAN	2560		1388	3190	819

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	30 (1,0)	11 (3,0)	55 (4,0)	149 (4,0)	20 (3,0)	44 (4,0)	30 (3,0)	22 (3,0)	13 (2,0)	16 (2,0)	26 (2,0)	31 (1,0)
Barnacle Goose	0 (2,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Greylag Goose (British/Irish)	285 (1,0)	37 (3,0)	169 (4,0)	413 (4,0)	104 (3,0)	69 (4,0)	101 (3,0)	119 (3,0)	22 (2,0)	40 (2,0)	44 (2,0)	28 (1,0)
Pink-footed Goose	0 (1,0)	0 (3,0)	0 (4,0)	100 (4,0)	500 (3,0)	702 (4,0)	756 (3,0)	17 (3,0)	4 (2,0)	0 (2,0)	0 (2,0)	1 (1,0)
Hybrid goose	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	1 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)
Mute Swan	4 (1,0)	3 (3,0)	7 (4,0)	7 (4,0)	8 (3,0)	6 (4,0)	3 (3,0)	2 (3,0)	2 (2,0)	1 (2,0)	6 (2,0)	14 (1,0)
Whooper Swan	0 (1,0)	0 (3,0)	0 (4,0)	0 (4,0)	13 (3,0)	2 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (2,0)	0 (2,0)	1 (1,0)
Egyptian Goose	2 (1,0)	0 (3,0)	4 (4,0)	2 (4,0)	3 (3,0)	1 (4,0)	1 (3,0)	0 (3,0)	0 (3,0)	1 (2,0)	2 (2,0)	3 (1,0)
Shelduck	2 (1,0)	0 (3,0)	0 (4,0)	1 (4,0)	13 (3,0)	19 (4,0)	19 (3,0)	20 (3,0)	19 (2,0)	17 (2,0)	12 (2,0)	12 (1,0)
Baikal Teal	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Garganey	0 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (2,0)	0 (2,0)	1 (1,0)
Shoveler	3 (2,0)	0 (3,0)	1 (4,0)	6 (4,0)	3 (3,0)	1 (4,0)	1 (3,0)	0 (3,0)	2 (2,0)	6 (2,0)	4 (2,0)	1 (1,0)
Gadwall	2 (1,0)	0 (3,0)	7 (4,0)	4 (4,0)	3 (3,0)	2 (4,0)	12 (3,0)	4 (3,0)	26 (2,0)	39 (2,0)	18 (2,0)	36 (1,0)
Wigeon	0 (2,0)	0 (3,0)	15 (4,0)	155 (4,0)	440 (3,0)	654 (4,0)	537 (3,0)	282 (3,0)	796 (2,0)	7 (2,0)	0 (2,0)	0 (2,0)
Mallard	23 (1,0)	21 (3,0)	18 (4,0)	12 (4,0)	10 (3,0)	30 (4,0)	5 (3,0)	10 (3,0)	11 (2,0)	20 (2,0)	28 (2,0)	16 (1,0)
Pintail	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Teal	2 (1,0)	10 (3,0)	40 (4,0)	26 (4,0)	93 (3,0)	110 (4,0)	70 (3,0)	47 (3,0)	25 (2,0)	31 (2,0)	0 (2,0)	1 (2,0)
Pochard	4 (1,0)	5 (3,0)	7 (4,0)	4 (4,0)	6 (3,0)	6 (4,0)	1 (3,0)	2 (3,0)	0 (2,0)	0 (2,0)	3 (2,0)	1 (1,0)
Tufted Duck	65 (1,0)	9 (3,0)	33 (4,0)	8 (4,0)	9 (3,0)	11 (4,0)	15 (3,0)	26 (3,0)	35 (2,0)	54 (2,0)	29 (2,0)	18 (1,0)
Goldeneye	0 (2,0)	0 (3,0)	0 (4,0)	0 (4,0)	1 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (2,0)
Little Grebe	4 (1,0)	3 (3,0)	7 (4,0)	6 (4,0)	2 (3,0)	1 (4,0)	0 (3,0)	0 (3,0)	1 (2,0)	2 (2,0)	1 (2,0)	2 (1,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Great Crested Grebe	1 (1,0)	0 (3,0)	2 (4,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	2 (3,0)	0 (2,0)	2 (2,0)	2 (2,0)	5 (1,0)
Black-necked Grebe	0 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	1 (3,0)	2 (2,0)	1 (2,0)	3 (1,0)
African Sacred Ibis	0 (1,0)	1 (3,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	2 (1,0)
Grey Heron	3 (1,0)	2 (3,0)	1 (4,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (2,0)	2 (2,0)	0 (1,0)
Little Egret	1 (1,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (1,0)
Cormorant	0 (2,0)	0 (3,0)	0 (4,0)	1 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	1 (2,0)	0 (4,0)	0 (3,0)	0 (2,0)
Moorhen	0 (2,0)	0 (3,0)	1 (4,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (3,0)	0 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)
Coot	47 (1,0)	10 (3,0)	16 (4,0)	9 (4,0)	2 (3,0)	4 (4,0)	17 (3,0)	30 (3,0)	18 (2,0)	35 (2,0)	26 (2,0)	52 (1,0)
Oystercatcher	6 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	2 (3,0)	6 (2,0)	7 (2,0)	4 (2,0)	4 (1,0)
Avocet	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	2 (2,0)	2 (2,0)	0 (1,0)
Lapwing	14 (1,0)	4 (3,0)	24 (4,0)	18 (4,0)	13 (3,0)	12 (4,0)	84 (3,0)	77 (3,0)	5 (2,0)	11 (2,0)	16 (2,0)	23 (1,0)
Golden Plover	0 (2,0)	0 (3,0)	0 (4,0)	2 (4,0)	17 (3,0)	8 (4,0)	3 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Ringed Plover	0 (2,0)	0 (3,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (2,0)	1 (3,0)	0 (2,0)
Little Ringed Plover	0 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	6 (2,0)	2 (2,0)	2 (1,0)
Whimbrel	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Curlew	2 (1,0)	10 (3,0)	17 (4,0)	20 (4,0)	46 (3,0)	50 (4,0)	82 (3,0)	69 (3,0)	24 (2,0)	21 (2,0)	0 (2,0)	0 (1,0)
Black-tailed Godwit	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Ruff	0 (2,0)	0 (3,0)	0 (5,0)	0 (4,0)	1 (3,0)	0 (4,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Dunlin	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Jack Snipe	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Snipe	0 (2,0)	0 (3,0)	0 (4,0)	0 (4,0)	2 (3,0)	6 (4,0)	2 (3,0)	0 (3,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (1,0)
Common Sandpiper	0 (1,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Green Sandpiper	0 (1,0)	1 (3,0)	2 (4,0)	1 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	1 (3,0)	1 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)
Redshank	0 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	2 (2,0)	4 (2,0)	3 (2,0)	0 (1,0)
Greenshank	0 (1,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Black-headed Gull	120 (1,0)	7 (3,0)	41 (4,0)	72 (4,0)	49 (3,0)	57 (4,0)	12 (2,0)	171 (2,0)	336 (2,0)	685 (2,0)	346 (2,0)	800 (1,0)
Mediterranean Gull	0 (1,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (3,0)	0 (2,0)	0 (2,0)	0 (1,0)
Common Gull	1 (2,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (2,0)	2 (2,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (2,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Great Black-backed Gull	0 (1,0)	1 (3,0)	1 (4,0)	1 (4,0)	0 (3,0)	1 (4,0)	0 (2,0)	0 (2,0)	8 (2,0)	8 (2,0)	12 (2,0)	1 (1,0)
Herring Gull	0 (1,0)	1 (3,0)	2 (4,0)	1 (4,0)	3 (3,0)	2 (4,0)	1 (2,0)	0 (2,0)	3 (3,0)	1 (4,0)	0 (3,0)	0 (2,0)
Yellow-legged Gull	0 (1,0)	1 (3,0)	0 (4,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (2,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)
Lesser Black-backed Gull	3 (1,0)	29 (3,0)	46 (4,0)	54 (4,0)	7 (3,0)	0 (4,0)	0 (3,0)	0 (2,0)	2 (2,0)	2 (2,0)	3 (2,0)	6 (1,0)
Common Tern	0 (1,0)	0 (2,0)	0 (3,0)	0 (2,0)	NA	NA	NA	NA	NA	1 (2,0)	2 (2,0)	2 (1,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	52	25	192	316	33	111	114	41	20	21	41	35
Barnacle Goose	0	0	0	1	0	0	0	0	0	1	0	0
Greylag Goose (British/Irish)	500	100	750	925	142	234	231	212	36	49	84	28
Pink-footed Goose	0	0	0	300	1500	2500	3000	52	9	0	0	1
Hybrid goose	0	0	0	0	0	0	0	0	2	2	0	0
Mute Swan	6	7	16	9	13	16	13	3	5	2	7	22
Whooper Swan	0	0	1	0	30	6	0	0	0	0	0	1
Egyptian Goose	3	0	7	9	8	4	2	0	0	2	3	3
Shelduck	5	1	1	3	20	27	34	30	23	19	15	12
Baikal Teal	0	0	0	0	0	0	1	0	0	0	0	0
Garganey	0	0	0	0	0	0	0	0	0	0	1	1
Shoveler	6	0	3	14	9	4	2	0	6	10	6	2
Gadwall	5	1	23	9	9	5	20	8	45	49	35	36
Wigeon	0	0	54	265	700	1000	1000	600	850	12	1	0
Mallard	23	62	46	39	26	82	12	22	17	21	42	24
Pintail	0	0	0	0	0	0	3	0	0	0	0	0
Teal	3	28	72	87	177	200	220	82	30	40	0	2
Pochard	5	16	12	11	10	22	2	4	0	0	4	2
Tufted Duck	75	19	47	15	18	32	34	35	38	86	40	35
Goldeneye	0	0	0	1	2	0	0	1	0	0	0	0
Little Grebe	5	5	10	9	5	3	1	0	3	4	2	3
Great Crested Grebe	1	0	5	2	1	0	0	4	0	3	4	5
Black-necked Grebe	0	0	0	0	0	0	0	0	2	6	2	3
African Sacred Ibis	0	2	2	2	0	0	0	0	0	0	0	2
Grey Heron	3	6	2	1	1	0	1	0	0	0	2	0
Little Egret	1	0	1	0	0	0	0	0	0	0	0	0
Cormorant	1	0	1	3	1	1	0	1	2	1	1	0
Moorhen	0	0	4	1	1	0	0	0	1	7	0	1
Coot	80	19	38	20	5	10	22	36	30	42	44	52
Oystercatcher	6	0	0	0	0	0	0	5	9	8	6	4
Avocet	0	0	0	0	0	0	0	0	0	4	4	0
Lapwing	28	13	73	50	53	35	250	152	10	16	21	23
Golden Plover	0	0	1	10	50	32	10	0	0	0	0	0

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Ringed Plover	0	0	3	0	0	0	0	0	1	0	2	0
Little Ringed Plover	0	0	0	0	0	0	0	0	0	8	2	2
Whimbrel	0	0	0	0	0	0	0	0	0	1	0	0
Curlew	2	31	62	53	64	93	100	92	49	68	0	0
Black-tailed Godwit	0	0	0	0	0	0	0	0	0	1	0	0
Ruff	0	0	0	0	3	0	0	0	0	0	0	0
Dunlin	0	0	2	0	0	2	0	0	0	0	1	0
Jack Snipe	0	0	0	0	1	0	0	0	0	0	0	0
Snipe	1	0	1	1	4	24	5	0	0	2	1	0
Common Sandpiper	0	1	1	0	0	0	0	0	0	0	0	0
Green Sandpiper	0	2	3	3	2	1	1	3	2	1	0	0
Redshank	0	0	0	0	1	0	0	1	5	4	4	1
Greenshank	0	1	0	0	0	0	0	0	0	0	0	0
Black-headed Gull	120	9	131	92	140	118	24	192	408	1050	600	800
Mediterranean Gull	0	0	0	0	0	0	0	0	0	0	1	0
Common Gull	2	0	0	2	1	0	1	3	0	0	0	0
Great Black-backed Gull	0	3	2	1	0	3	0	1	14	13	32	1
Herring Gull	0	3	4	2	8	6	1	0	9	3	0	0
Yellow-legged Gull	0	1	2	0	0	0	0	0	0	0	0	0
Lesser Black-backed Gull	4	73	92	170	12	0	0	0	3	2	5	6
Common Tern	0	0	0	0	NA	NA	NA	NA	NA	2	4	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Canada Goose	49 (OCT)	122 (OCT)	316 (OCT)	192 (SEP)	(158)(OCT)	170
Barnacle Goose	0	1 (OCT)	0	0	0	0
Greylag Goose (British/Irish)	187 (OCT)	400 (OCT)	925 (OCT)	(500)(JUL)	(750)(SEP)	566
Pink-footed Goose	0	0	0	202 (OCT)	(300)(OCT)	100
Mute Swan	8 (OCT)	2 (AUG)	9 (OCT)	9 (SEP)	(16)(SEP)	9
Whooper Swan	0	0	0	1 (SEP)	0	0
Egyptian Goose	0	0	7 (SEP)	9 (OCT)	(1)(OCT)	4
Shelduck	1 (AUG)	0	3 (OCT)	(5)(JUL)	0	2
Shoveler	0	5 (OCT)	14 (OCT)	6 (JUL)	(5)(OCT)	6
Gadwall	2 (SEP)	7 (OCT)	9 (OCT)	23 (SEP)	(10)(SEP)	10
Wigeon	41 (OCT)	14 (OCT)	265 (OCT)	265 (OCT)	(188)(OCT)	155
Mallard	62 (AUG)	5 (OCT)	23 (JUL)	(14)(JUL)	(46)(SEP)	34
Teal	87 (OCT)	4 (OCT)	50 (SEP)	50 (SEP)	(72)(SEP)	53
Pochard	9 (SEP)	1 (OCT)	16 (AUG)	8 (SEP)	(1)(SEP)	8
Tufted Duck	47 (SEP)	18 (SEP)	55 (JUL)	(75)(JUL)	(25)(SEP)	49
Goldeneye	0	0	1 (OCT)	0	0	0
Little Grebe	8 (OCT)	4 (SEP)	8 (SEP)	9 (OCT)	(10)(SEP)	8
Great Crested Grebe	2 (SEP)	0	1 (JUL)	5 (SEP)	0	2
African Sacred Ibis	0	2 (AUG)	2 (AUG)	0	0	1
Grey Heron	6 (AUG)	1 (AUG)	3 (JUL)	2 (SEP)	0	3
Little Egret	0	0	1 (JUL)	0	0	0
Cormorant	3 (OCT)	1 (SEP)	0	1 (JUL)	(3)(OCT)	2
Moorhen	0	0	0	4 (SEP)	(3)(SEP)	1
Coot	12 (OCT)	7 (AUG)	19 (AUG)	(80)(JUL)	(22)(SEP)	28
Oystercatcher	0	0	6 (JUL)	0	0	2
Lapwing	19 (OCT)	2 (OCT)	73 (SEP)	50 (OCT)	(2)(OCT)	36
Golden Plover	0	0	0	10 (OCT)	(1)(SEP)	2
Ringed Plover	0	0	0	0	3 (SEP)	1
Curlew	0	0	31 (AUG)	62 (SEP)	(12)(OCT)	23

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Dunlin	0	0	0	0	2 (SEP)	0
Snipe	1 (OCT)	0	0	1 (JUL)	(1)(SEP)	1
Common Sandpiper	1 (AUG)	0	0	0	(1)(SEP)	0
Green Sandpiper	3 (SEP)	3 (OCT)	2 (AUG)	2 (SEP)	(2)(OCT)	2
Greenshank	0	1 (AUG)	0	0	0	0
Black-headed Gull	92 (OCT)	30 (OCT)	131 (SEP)	(80)(JUL)	(3)(OCT)	84
Common Gull	2 (OCT)	0	0	2 (JUL)	0	1
Great Black-backed Gull	1 (OCT)	2 (SEP)	3 (AUG)	1 (OCT)	(1)(SEP)	2
Herring Gull	4 (SEP)	3 (AUG)	2 (OCT)	0	0	3
Yellow-legged Gull	2 (SEP)	1 (AUG)	1 (AUG)	0	0	1
Lesser Black-backed Gull	92 (SEP)	73 (AUG)	170 (OCT)	22 (SEP)	(15)(OCT)	89

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Canada Goose	111 (DEC)	64 (DEC)	4 (FEB)	(114)(JAN)	20 (MAR)	63
Greylag Goose (British/Irish)	234 (DEC)	136 (NOV)	54 (FEB)	142 (NOV)	(86)(NOV)	142
Pink-footed Goose	(88)(NOV)	0	2500 (DEC)	1500 (NOV)	(3000)(JAN)	1750
Hybrid goose	0	0	0	0	2 (MAR)	0
Mute Swan	7 (DEC)	3 (NOV)	8 (NOV)	(16)(DEC)	(6)(NOV)	8
Whooper Swan	0	0	9 (NOV)	30 (NOV)	0	13
Egyptian Goose	2 (JAN)	0	4 (DEC)	8 (NOV)	(4)(NOV)	4
Shelduck	30 (FEB)	27 (DEC)	27 (DEC)	(34)(JAN)	(30)(JAN)	30
Baikal Teal	0	0	0	0	1 (JAN)	0
Shoveler	0	3 (DEC)	0	9 (NOV)	(4)(NOV)	4
Gadwall	8 (FEB)	6 (JAN)	20 (JAN)	(45)(MAR)	22 (MAR)	20
Wigeon	(500)(NOV)	600 (FEB)	743 (MAR)	(1000)(DEC)	(1000)(JAN)	836
Mallard	82 (DEC)	22 (FEB)	13 (MAR)	(17)(MAR)	(26)(NOV)	39
Pintail	0	0	0	0	3 (JAN)	1
Teal	(154)(NOV)	45 (FEB)	125 (DEC)	(200)(DEC)	(220)(JAN)	149
Pochard	22 (DEC)	8 (NOV)	0	10 (NOV)	(2)(NOV)	10
Tufted Duck	18 (FEB)	35 (FEB)	38 (MAR)	(35)(MAR)	32 (MAR)	32
Goldeneye	1 (FEB)	0	0	2 (NOV)	0	1
Little Grebe	(5)(NOV)	0	2 (NOV)	(3)(DEC)	2 (DEC)	2
Great Crested Grebe	4 (FEB)	1 (NOV)	1 (FEB)	0	0	2
Black-necked Grebe	0	0	0	2 (MAR)	0	0
Grey Heron	(1)(NOV)	0	1 (NOV)	1 (JAN)	0	1
Cormorant	(1)(NOV)	0	1 (FEB)	(2)(MAR)	(1)(NOV)	1
Moorhen	0	0	0	1 (NOV)	0	0
Coot	36 (FEB)	32 (FEB)	22 (FEB)	(24)(MAR)	30 (MAR)	30
Oystercatcher	0	5 (FEB)	9 (MAR)	(3)(MAR)	4 (MAR)	4
Lapwing	152 (FEB)	250 (JAN)	34 (FEB)	(5)(MAR)	11 (DEC)	112
Golden Plover	(6)(NOV)	0	10 (JAN)	50 (NOV)	32 (DEC)	23
Ringed Plover	0	0	1 (MAR)	0	0	0

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Curlew	59 (DEC)	92 (FEB)	99 (JAN)	(69)(JAN)	(100)(JAN)	88
Ruff	0	0	0	3 (NOV)	0	1
Dunlin	0	0	0	0	2 (DEC)	0
Jack Snipe	0	0	0	0	1 (NOV)	0
Snipe	0	24 (DEC)	0	(5)(JAN)	(4)(NOV)	12
Green Sandpiper	3 (FEB)	1 (FEB)	0	(2)(MAR)	(2)(NOV)	2
Redshank	1 (NOV)	0	1 (MAR)	(5)(MAR)	1 (MAR)	2
Black-headed Gull	150 (FEB)	118 (DEC)	200 (MAR)	(400)(MAR)	408 (MAR)	255
Common Gull	2 (FEB)	1 (NOV)	3 (FEB)	0	(1)(NOV)	2
Great Black-backed Gull	2 (DEC)	0	1 (FEB)	(14)(MAR)	9 (MAR)	5
Herring Gull	4 (DEC)	8 (NOV)	0	9 (MAR)	(3)(NOV)	5
Lesser Black-backed Gull	(1)(NOV)	10 (NOV)	12 (NOV)	(3)(MAR)	(2)(NOV)	11

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Canada Goose	(21)(APR)	(22)(MAY)	41 (MAY)	(15)(APR)	(35)(JUN)	41
Barnacle Goose	0	0	1 (APR)	0	0	0
Greylag Goose (British/Irish)	(49)(APR)	(14)(MAY)	84 (MAY)	(9)(APR)	37 (APR)	60
Pink-footed Goose	0	0	1 (JUN)	0	0	0
Hybrid goose	0	0	0	0	2 (APR)	1
Mute Swan	4 (MAY)	0	7 (MAY)	(2)(APR)	(22)(JUN)	11
Whooper Swan	0	0	1 (JUN)	0	0	0
Egyptian Goose	(2)(APR)	0	3 (MAY)	(2)(APR)	0	2
Shelduck	(14)(APR)	(15)(MAY)	15 (APR)	(18)(APR)	19 (APR)	17
Garganey	0	0	1 (MAY)	0	0	0
Shoveler	2 (MAY)	(1)(MAY)	6 (MAY)	(6)(APR)	10 (APR)	6
Gadwall	(2)(APR)	(4)(MAY)	40 (APR)	(49)(APR)	28 (APR)	39
Wigeon	0	(1)(MAY)	12 (APR)	(7)(APR)	1 (APR)	7
Mallard	13 (MAY)	(12)(MAY)	42 (MAY)	(14)(APR)	(24)(JUN)	28
Teal	(1)(APR)	0	22 (APR)	(8)(APR)	40 (APR)	31
Pochard	2 (MAY)	0	4 (MAY)	0	(2)(JUN)	3
Tufted Duck	18 (MAY)	(12)(MAY)	40 (MAY)	(86)(APR)	44 (APR)	47
Little Grebe	2 (MAY)	(1)(MAY)	0	(2)(APR)	4 (APR)	2
Great Crested Grebe	1 (MAY)	(1)(MAY)	5 (JUN)	(1)(APR)	3 (APR)	3
Black-necked Grebe	0	0	3 (JUN)	(6)(APR)	0	3
African Sacred Ibis	0	0	2 (JUN)	0	0	0
Grey Heron	1 (MAY)	0	2 (MAY)	0	0	1
Cormorant	0	1 (MAY)	0	1 (APR)	0	0
Moorhen	0	0	0	(1)(APR)	7 (APR)	4
Coot	7 (MAY)	(10)(MAY)	52 (JUN)	(42)(APR)	(48)(JUN)	37
Oystercatcher	0	(6)(MAY)	6 (APR)	(8)(APR)	7 (APR)	7
Avocet	4 (MAY)	(2)(MAY)	0	(4)(APR)	2 (APR)	2
Lapwing	10 (MAY)	(8)(MAY)	23 (JUN)	(16)(APR)	(19)(JUN)	17
Ringed Plover	0	2 (MAY)	0	0	0	1

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Little Ringed Plover	2 (MAY)	(2)(MAY)	8 (APR)	(1)(APR)	3 (APR)	4
Whimbrel	0	0	0	0	1 (APR)	0
Curlew	(68)(APR)	0	0	(14)(APR)	1 (APR)	21
Black-tailed Godwit	0	0	1 (APR)	0	0	0
Dunlin	0	1 (MAY)	0	0	0	0
Snipe	0	0	2 (APR)	0	0	1
Green Sandpiper	(1)(APR)	0	1 (APR)	0	1 (APR)	1
Redshank	4 (MAY)	0	4 (APR)	(4)(APR)	4 (APR)	4
Black-headed Gull	92 (MAY)	(116)(MAY)	800 (JUN)	(500)(APR)	1050 (APR)	647
Mediterranean Gull	0	0	1 (MAY)	0	0	0
Great Black-backed Gull	0	(32)(MAY)	3 (MAY)	(13)(APR)	9 (APR)	14
Herring Gull	0	0	0	3 (APR)	0	1
Lesser Black-backed Gull	(2)(APR)	(5)(MAY)	6 (JUN)	(2)(APR)	2 (APR)	4
Common Tern	1 (MAY)	(4)(MAY)	2 (JUN)	(2)(APR)	0	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Canada Goose	111 (DEC)	122 (OCT)	316 (OCT)	192 (SEP)	(158)(OCT)	185
Barnacle Goose	0	1 (OCT)	1 (APR)	0	0	0
Greylag Goose (British/Irish)	234 (DEC)	400 (OCT)	925 (OCT)	(500)(JUL)	(750)(SEP)	577
Pink-footed Goose	(88)(NOV)	0	2500 (DEC)	1500 (NOV)	(3000)(JAN)	1750
Hybrid goose	0	0	0	0	2 (MAR)	0
Mute Swan	8 (OCT)	3 (NOV)	9 (OCT)	(16)(DEC)	(22)(JUN)	12
Whooper Swan	0	0	9 (NOV)	30 (NOV)	0	10
Egyptian Goose	2 (JAN)	0	7 (SEP)	9 (OCT)	(4)(NOV)	4
Shelduck	30 (FEB)	27 (DEC)	27 (DEC)	(34)(JAN)	(30)(JAN)	30
Baikal Teal	0	0	0	0	1 (JAN)	0
Garganey	0	0	1 (MAY)	0	0	0
Shoveler	2 (MAY)	5 (OCT)	14 (OCT)	9 (NOV)	10 (APR)	8
Gadwall	8 (FEB)	7 (OCT)	40 (APR)	(49)(APR)	28 (APR)	26
Wigeon	(500)(NOV)	600 (FEB)	743 (MAR)	(1000)(DEC)	(1000)(JAN)	836
Mallard	82 (DEC)	22 (FEB)	42 (MAY)	(17)(MAR)	(46)(SEP)	49
Pintail	0	0	0	0	3 (JAN)	1
Teal	(154)(NOV)	45 (FEB)	125 (DEC)	(200)(DEC)	(220)(JAN)	149
Pochard	22 (DEC)	8 (NOV)	16 (AUG)	10 (NOV)	(2)(NOV)	14
Tufted Duck	47 (SEP)	35 (FEB)	55 (JUL)	(86)(APR)	44 (APR)	53
Goldeneye	1 (FEB)	0	1 (OCT)	2 (NOV)	0	1
Little Grebe	8 (OCT)	4 (SEP)	8 (SEP)	9 (OCT)	(10)(SEP)	8
Great Crested Grebe	4 (FEB)	1 (NOV)	5 (JUN)	5 (SEP)	3 (APR)	4
Black-necked Grebe	0	0	3 (JUN)	(6)(APR)	0	2
African Sacred Ibis	0	2 (AUG)	2 (AUG)	0	0	1
Grey Heron	6 (AUG)	1 (AUG)	3 (JUL)	2 (SEP)	0	3
Little Egret	0	0	1 (JUL)	0	0	0
Cormorant	3 (OCT)	1 (SEP)	1 (FEB)	(2)(MAR)	(3)(OCT)	2
Moorhen	0	0	0	4 (SEP)	7 (APR)	2
Coot	36 (FEB)	32 (FEB)	52 (JUN)	(80)(JUL)	(48)(JUN)	50

Species	2018/19	2019/20	2020/21	2021/22	2022/23	Mean of Peaks
Oystercatcher	0	(6)(MAY)	9 (MAR)	(8)(APR)	7 (APR)	6
Avocet	4 (MAY)	(2)(MAY)	0	(4)(APR)	2 (APR)	2
Lapwing	152 (FEB)	250 (JAN)	73 (SEP)	50 (OCT)	(19)(JUN)	131
Golden Plover	(6)(NOV)	0	10 (JAN)	50 (NOV)	32 (DEC)	23
Ringed Plover	0	2 (MAY)	1 (MAR)	0	3 (SEP)	1
Little Ringed Plover	2 (MAY)	(2)(MAY)	8 (APR)	(1)(APR)	3 (APR)	4
Whimbrel	0	0	0	0	1 (APR)	0
Curlew	(68)(APR)	92 (FEB)	99 (JAN)	(69)(JAN)	(100)(JAN)	97
Black-tailed Godwit	0	0	1 (APR)	0	0	0
Ruff	0	0	0	3 (NOV)	0	1
Dunlin	0	1 (MAY)	0	0	2 (SEP)	1
Jack Snipe	0	0	0	0	1 (NOV)	0
Snipe	1 (OCT)	24 (DEC)	2 (APR)	(5)(JAN)	(4)(NOV)	9
Common Sandpiper	1 (AUG)	0	0	0	(1)(SEP)	0
Green Sandpiper	3 (SEP)	3 (OCT)	2 (AUG)	2 (SEP)	(2)(OCT)	2
Redshank	4 (MAY)	0	4 (APR)	(5)(MAR)	4 (APR)	3
Greenshank	0	1 (AUG)	0	0	0	0
Black-headed Gull	150 (FEB)	118 (DEC)	800 (JUN)	(500)(APR)	1050 (APR)	530
Mediterranean Gull	0	0	1 (MAY)	0	0	0
Common Gull	2 (OCT)	1 (NOV)	3 (FEB)	2 (JUL)	(1)(NOV)	2
Great Black-backed Gull	2 (DEC)	(32)(MAY)	3 (AUG)	(14)(MAR)	9 (MAR)	12
Herring Gull	4 (SEP)	8 (NOV)	2 (OCT)	9 (MAR)	(3)(NOV)	6
Yellow-legged Gull	2 (SEP)	1 (AUG)	1 (AUG)	0	0	1
Lesser Black-backed Gull	92 (SEP)	73 (AUG)	170 (OCT)	22 (SEP)	(15)(OCT)	89
Common Tern	1 (MAY)	(4)(MAY)	2 (JUN)	(2)(APR)	0	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	577	41%	NA
Pink-footed Goose	1750	34%	32%
Mute Swan	12	2%	2%
Whooper Swan	10	6%	3%
Shelduck	30	6%	1%
Shoveler	8	4%	1%
Gadwall	26	8%	2%
Wigeon	836	19%	6%
Mallard	49	1%	0%
Pintail	1	0%	0%
Teal	149	3%	2%
Pochard	14	6%	1%
Tufted Duck	53	4%	1%
Goldeneye	1	1%	0%
Little Grebe	8	5%	0%
Great Crested Grebe	4	2%	0%
Black-necked Grebe	2	*4%	0%
Grey Heron	3	1%	0%
Cormorant	2	0%	0%
Moorhen	2	0%	0%
Coot	50	2%	0%
Oystercatcher	6	0%	0%
Avocet	2	2%	0%
Lapwing	131	2%	1%
Golden Plover	23	1%	0%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Ringed Plover	1	0%	0%
Curlew	97	8%	1%
Ruff	1	*2%	0%
Dunlin	1	0%	0%
Snipe	9	0%	0%
Green Sandpiper	2	*4%	0%
Redshank	3	0%	0%
Black-headed Gull	530	2%	3%
Common Gull	2	0%	0%
Great Black-backed Gull	12	2%	1%
Herring Gull	6	0%	0%
Yellow-legged Gull	1	*2%	0%
Lesser Black-backed Gull	89	7%	2%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Finningley New Gravel Pits

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	566	142	60	40%	10%	4%	NA	NA	NA
Pink-footed Goose	100	1750	0	2%	34%		2%	32%	
Mute Swan	9	8	11	2%	2%	2%	2%	2%	2%
Whooper Swan	0	13	0		8%			4%	
Shelduck	2	30	17	0%	6%	4%	0%	1%	1%
Shoveler	6	4	6	3%	2%	3%	1%	1%	1%
Gadwall	10	20	39	3%	6%	13%	1%	1%	3%
Wigeon	155	836	7	3%	19%	0%	1%	6%	0%
Mallard	34	39	28	1%	1%	0%	0%	0%	0%
Pintail	0	1	0		0%			0%	
Teal	53	149	31	1%	3%	1%	1%	2%	0%
Pochard	8	10	3	3%	4%	1%	1%	1%	0%
Tufted Duck	49	32	47	4%	2%	4%	1%	0%	1%
Goldeneye	0	1	0		1%			0%	
Little Grebe	8	2	2	5%	1%	1%	0%	0%	0%
Great Crested Grebe	2	2	3	1%	1%	2%	0%	0%	0%
Black-necked Grebe	0	0	3			*6%			0%
Grey Heron	3	1	1	1%	0%	0%	0%	0%	0%
Cormorant	2	1	0	0%	0%		0%	0%	

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Moorhen	1	0	4	0%		0%	0%		0%
Coot	28	30	37	1%	2%	2%	0%	0%	0%
Oystercatcher	2	4	7	0%	0%	0%	0%	0%	0%
Avocet	0	0	2			2%			0%
Lapwing	36	112	17	1%	2%	0%	0%	1%	0%
Golden Plover	2	23	0	0%	1%		0%	0%	
Ringed Plover	1	0	1	0%		0%	0%		0%
Curlew	23	88	21	2%	7%	2%	0%	1%	0%
Ruff	0	1	0		*2%			0%	
Dunlin	0	0	0						
Snipe	1	12	1	0%	0%	0%	0%	0%	0%
Green Sandpiper	2	2	1	*4%	*4%	*2%	0%	0%	0%
Redshank	0	2	4		0%	0%		0%	0%
Black-headed Gull	84	255	647	0%	1%	3%	0%	1%	3%
Common Gull	1	2	0	0%	0%		0%	0%	
Great Black-backed Gull	2	5	14	0%	1%	2%	0%	1%	2%
Herring Gull	3	5	1	0%	0%	0%	0%	0%	0%
Yellow-legged Gull	1	0	0	*2%			0%		
Lesser Black-backed Gull	89	11	4	7%	1%	0%	2%	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Newport Pits

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

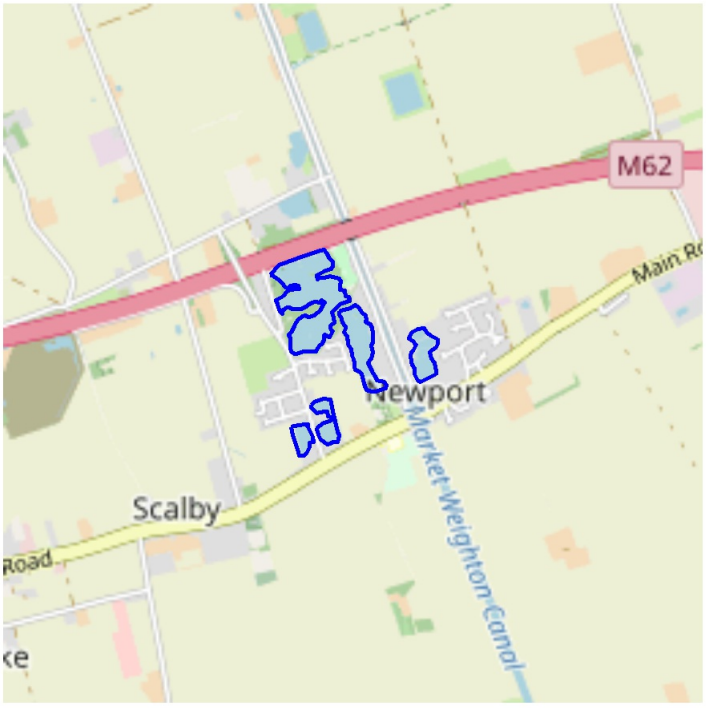
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Newport Pits



LOC LABEL	NAME	GRIDREF	Web Link
38265	Newport Pits	SE853305	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC649299

Five year summary for Newport Pits

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	78	DEC	75	104	NC
2020/21	107	DEC	34	123	NC
2021/22	83	JAN	75	143	NC
2022/23	97	OCT	97	115	NC
2023/24	70	JAN	32	106	NC
MEAN	87		63	118	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Newport Pits

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (3,0)	2 (4,0)	6 (4,0)	NC	NC	NC
Mute Swan	NC	NC	2 (2,0)	2 (5,0)	3 (5,0)	2 (5,0)	1 (3,0)	0 (4,0)	2 (4,0)	NC	NC	NC
Shoveler	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Gadwall	NC	NC	0 (2,0)	0 (5,0)	3 (5,0)	7 (5,0)	1 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Wigeon	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Mallard	NC	NC	4 (2,0)	4 (5,0)	0 (5,0)	2 (5,0)	2 (3,0)	4 (4,0)	2 (4,0)	NC	NC	NC
Pochard	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Tufted Duck	NC	NC	0 (2,0)	16 (5,0)	14 (5,0)	23 (5,0)	29 (3,0)	18 (4,0)	20 (4,0)	NC	NC	NC
Goosander	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	8 (3,0)	10 (4,0)	4 (4,0)	NC	NC	NC
Little Grebe	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Great Crested Grebe	NC	NC	0 (2,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	1 (4,0)	NC	NC	NC
Cormorant	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Moorhen	NC	NC	0 (2,0)	2 (5,0)	1 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC
Coot	NC	NC	6 (2,0)	13 (5,0)	20 (5,0)	25 (5,0)	11 (3,0)	10 (4,0)	12 (4,0)	NC	NC	NC
Black-headed Gull	NC	NC	6 (2,0)	22 (5,0)	10 (5,0)	14 (5,0)	6 (3,0)	5 (4,0)	5 (4,0)	NC	NC	NC
Common Gull	NC	NC	0 (2,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (3,0)	0 (4,0)	0 (4,0)	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Newport Pits

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	NC	NC	0	2	0	0	2	7	15	NC	NC	NC
Mute Swan	NC	NC	4	5	5	5	2	0	3	NC	NC	NC
Shoveler	NC	NC	0	0	0	0	1	1	1	NC	NC	NC
Gadwall	NC	NC	0	2	10	27	2	0	0	NC	NC	NC
Wigeon	NC	NC	0	1	2	0	0	0	0	NC	NC	NC
Mallard	NC	NC	8	9	1	7	4	8	2	NC	NC	NC
Pochard	NC	NC	0	0	0	1	0	0	0	NC	NC	NC
Tufted Duck	NC	NC	1	41	36	34	48	46	29	NC	NC	NC
Goosander	NC	NC	0	0	0	0	16	17	12	NC	NC	NC
Little Grebe	NC	NC	0	1	0	0	0	1	0	NC	NC	NC
Great Crested Grebe	NC	NC	0	2	2	2	0	2	2	NC	NC	NC
Cormorant	NC	NC	0	2	2	1	0	2	0	NC	NC	NC
Moorhen	NC	NC	1	5	3	2	0	1	0	NC	NC	NC
Coot	NC	NC	9	22	34	40	15	17	19	NC	NC	NC
Black-headed Gull	NC	NC	11	50	17	32	10	11	8	NC	NC	NC
Common Gull	NC	NC	0	0	0	2	0	0	0	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Newport Pits

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	0	0	0	2 (OCT)	0	0
Mute Swan	3 (OCT)	0	5 (OCT)	0	4 (SEP)	2
Gadwall	0	0	0	2 (OCT)	0	0
Wigeon	0	0	1 (OCT)	0	0	0
Mallard	7 (OCT)	0	9 (OCT)	1 (OCT)	8 (SEP)	5
Tufted Duck	16 (OCT)	2 (OCT)	41 (OCT)	19 (OCT)	1 (SEP)	16
Little Grebe	0	0	1 (OCT)	0	0	0
Great Crested Grebe	2 (OCT)	0	2 (OCT)	1 (OCT)	0	1
Cormorant	0	0	0	0	2 (OCT)	0
Moorhen	0	3 (OCT)	0	0	5 (OCT)	2
Coot	11 (OCT)	9 (SEP)	15 (OCT)	22 (OCT)	9 (OCT)	13
Black-headed Gull	36 (OCT)	20 (OCT)	1 (OCT)	50 (OCT)	3 (OCT)	22

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Newport Pits

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	2 (FEB)	6 (MAR)	5 (MAR)	15 (MAR)	2 (JAN)	6
Mute Swan	4 (DEC)	2 (DEC)	5 (NOV)	3 (NOV)	3 (NOV)	3
Shoveler	0	0	1 (JAN)	0	1 (FEB)	0
Gadwall	0	27 (DEC)	2 (DEC)	4 (NOV)	2 (DEC)	7
Wigeon	0	2 (NOV)	0	0	0	0
Mallard	4 (FEB)	1 (MAR)	8 (FEB)	2 (MAR)	4 (DEC)	4
Pochard	0	1 (DEC)	0	0	0	0
Tufted Duck	25 (DEC)	34 (DEC)	46 (FEB)	18 (MAR)	48 (JAN)	34
Goosander	17 (FEB)	5 (MAR)	16 (JAN)	11 (FEB)	11 (FEB)	12
Little Grebe	1 (FEB)	0	0	0	0	0
Great Crested Grebe	2 (NOV)	0	2 (DEC)	2 (MAR)	0	1
Cormorant	0	0	0	0	2 (NOV)	0
Moorhen	2 (DEC)	2 (NOV)	1 (NOV)	1 (FEB)	3 (NOV)	2
Coot	15 (DEC)	31 (DEC)	40 (DEC)	34 (NOV)	24 (NOV)	29
Black-headed Gull	32 (DEC)	12 (DEC)	17 (NOV)	23 (DEC)	6 (NOV)	18
Common Gull	0	0	0	2 (DEC)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Newport Pits

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Newport Pits

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	2 (FEB)	6 (MAR)	5 (MAR)	15 (MAR)	2 (JAN)	6
Mute Swan	4 (DEC)	2 (DEC)	5 (OCT)	3 (NOV)	4 (SEP)	4
Shoveler	0	0	1 (JAN)	0	1 (FEB)	0
Gadwall	0	27 (DEC)	2 (DEC)	4 (NOV)	2 (DEC)	7
Wigeon	0	2 (NOV)	1 (OCT)	0	0	1
Mallard	7 (OCT)	1 (MAR)	9 (OCT)	2 (MAR)	8 (SEP)	5
Pochard	0	1 (DEC)	0	0	0	0
Tufted Duck	25 (DEC)	34 (DEC)	46 (FEB)	19 (OCT)	48 (JAN)	34
Goosander	17 (FEB)	5 (MAR)	16 (JAN)	11 (FEB)	11 (FEB)	12
Little Grebe	1 (FEB)	0	1 (OCT)	0	0	0
Great Crested Grebe	2 (OCT)	0	2 (OCT)	2 (MAR)	0	1
Cormorant	0	0	0	0	2 (OCT)	0
Moorhen	2 (DEC)	3 (OCT)	1 (NOV)	1 (FEB)	5 (OCT)	2
Coot	15 (DEC)	31 (DEC)	40 (DEC)	34 (NOV)	24 (NOV)	29
Black-headed Gull	36 (OCT)	20 (OCT)	17 (NOV)	50 (OCT)	6 (NOV)	26
Common Gull	0	0	0	2 (DEC)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Newport Pits

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	6	0%	NA
Mute Swan	4	1%	1%
Gadwall	7	2%	0%
Wigeon	1	0%	0%
Mallard	5	0%	0%
Tufted Duck	34	3%	0%
Goosander	12	8%	1%
Great Crested Grebe	1	1%	0%
Moorhen	2	0%	0%
Coot	29	1%	0%
Black-headed Gull	26	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Newport Pits

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	0	6	NA		0%	NA		NA	NA
Mute Swan	2	3	NA	0%	1%	NA	0%	1%	NA
Gadwall	0	7	NA		2%	NA		0%	NA
Wigeon	0	0	NA			NA			NA
Mallard	5	4	NA	0%	0%	NA	0%	0%	NA
Tufted Duck	16	34	NA	1%	3%	NA	0%	0%	NA
Goosander	0	12	NA		8%	NA		1%	NA
Great Crested Grebe	1	1	NA	1%	1%	NA	0%	0%	NA
Moorhen	2	2	NA	0%	0%	NA	0%	0%	NA
Coot	13	29	NA	1%	1%	NA	0%	0%	NA
Black-headed Gull	22	18	NA	0%	0%	NA	0%	0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

North Cave Wetlands

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

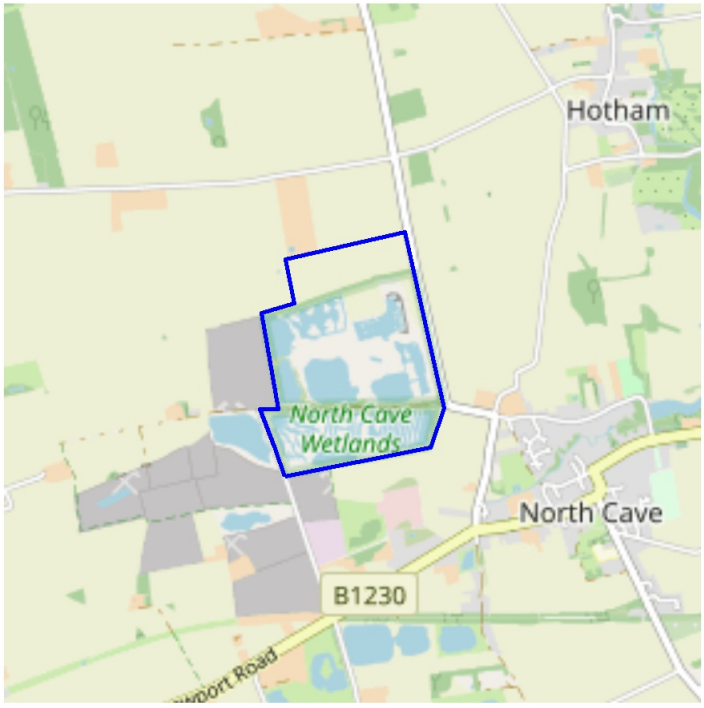
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors North Cave Wetlands



LOC LABEL	NAME	GRIDREF	Web Link
38266	North Cave Wetlands	SE882330	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC656222

Five year summary for North Cave Wetlands

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	2827	SEP	4985	3872	503
2020/21	3163	SEP	4154	3442	891
2021/22	3520	JAN	4496	3933	1026
2022/23	2452	AUG	3297	3372	1167
2023/24	2654	NOV	3160	3457	1225
MEAN	2923		4018	3615	962

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (5,0)	0 (5,0)	34 (5,0)	8 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	5 (5,0)
Barnacle Goose	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Greylag Goose (British/Irish)	232 (5,0)	881 (5,0)	1175 (5,0)	502 (5,0)	292 (5,0)	320 (5,0)	188 (5,0)	77 (5,0)	76 (5,0)	94 (4,0)	177 (4,0)	201 (5,0)
Tundra Bean Goose	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Pink-footed Goose	0 (5,0)	0 (5,0)	3 (5,0)	0 (5,0)	10 (5,0)	8 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
White-fronted Goose (European - albifrons)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Black Swan	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)
Mute Swan	43 (5,0)	44 (5,0)	33 (5,0)	19 (5,0)	10 (5,0)	7 (5,0)	12 (5,0)	15 (5,0)	13 (5,0)	30 (4,0)	59 (4,0)	43 (5,0)
Bewick's Swan	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Whooper Swan	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	18 (5,0)	21 (5,0)	5 (5,0)	1 (5,0)	0 (5,0)	4 (4,0)	0 (4,0)	0 (5,0)
Egyptian Goose	0 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	1 (4,0)	0 (5,0)
Shelduck	5 (5,0)	2 (5,0)	1 (5,0)	0 (5,0)	3 (5,0)	21 (5,0)	30 (5,0)	60 (5,0)	31 (5,0)	14 (4,0)	16 (4,0)	9 (5,0)
Ruddy Shelduck	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Mandarin Duck	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Garganey	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Shoveler	3 (5,0)	13 (5,0)	72 (5,0)	85 (5,0)	29 (5,0)	19 (5,0)	16 (5,0)	24 (5,0)	29 (5,0)	26 (4,0)	4 (4,0)	6 (5,0)
Gadwall	55 (5,0)	105 (5,0)	99 (5,0)	87 (5,0)	85 (5,0)	86 (5,0)	123 (5,0)	111 (5,0)	115 (5,0)	73 (4,0)	42 (4,0)	53 (5,0)
Wigeon	1 (5,0)	0 (5,0)	15 (5,0)	91 (5,0)	190 (5,0)	255 (5,0)	324 (5,0)	272 (5,0)	266 (5,0)	12 (4,0)	1 (4,0)	0 (5,0)
Mallard	187 (5,0)	264 (5,0)	259 (5,0)	279 (5,0)	226 (5,0)	208 (5,0)	196 (5,0)	146 (5,0)	70 (5,0)	42 (4,0)	48 (4,0)	136 (5,0)
Pintail	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Teal	15 (5,0)	83 (5,0)	298 (5,0)	634 (5,0)	619 (5,0)	811 (5,0)	714 (5,0)	453 (5,0)	318 (5,0)	51 (4,0)	5 (4,0)	5 (5,0)
Green-winged Teal	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Red-crested Pochard	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Pochard	12 (5,0)	12 (5,0)	12 (5,0)	13 (5,0)	15 (5,0)	18 (5,0)	15 (5,0)	22 (5,0)	13 (5,0)	4 (4,0)	3 (4,0)	11 (5,0)
Tufted Duck	59 (5,0)	72 (5,0)	53 (5,0)	33 (5,0)	34 (5,0)	38 (5,0)	58 (5,0)	58 (5,0)	83 (5,0)	93 (4,0)	76 (4,0)	66 (5,0)
Scaup	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Common Scoter	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Goldeneye	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Goosander	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Grebe	27 (5,0)	39 (5,0)	41 (5,0)	35 (5,0)	18 (5,0)	11 (5,0)	9 (5,0)	9 (5,0)	12 (5,0)	11 (4,0)	15 (4,0)	16 (5,0)
Great Crested Grebe	7 (5,0)	6 (5,0)	6 (5,0)	3 (5,0)	1 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	6 (5,0)	7 (4,0)	6 (4,0)	9 (5,0)
Spoonbill	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Bittern	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Cattle Egret	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Grey Heron	4 (5,0)	5 (5,0)	3 (5,0)	3 (5,0)	2 (5,0)	2 (5,0)	2 (5,0)	1 (5,0)	2 (5,0)	2 (4,0)	2 (4,0)	2 (5,0)
Great White Egret	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Egret	11 (5,0)	14 (5,0)	9 (5,0)	3 (5,0)	5 (5,0)	2 (5,0)	7 (5,0)	7 (5,0)	5 (5,0)	2 (4,0)	3 (4,0)	13 (5,0)
Cormorant	4 (5,0)	4 (5,0)	10 (5,0)	8 (5,0)	9 (5,0)	6 (5,0)	8 (5,0)	6 (5,0)	8 (5,0)	4 (4,0)	3 (4,0)	4 (5,0)
Water Rail	0 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	3 (5,0)	1 (5,0)	3 (5,0)	1 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Spotted Crake	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Moorhen	17 (5,0)	30 (5,0)	29 (5,0)	20 (5,0)	18 (5,0)	8 (5,0)	10 (5,0)	8 (5,0)	8 (5,0)	8 (4,0)	8 (4,0)	7 (5,0)
Coot	155 (5,0)	153 (5,0)	91 (5,0)	110 (5,0)	97 (5,0)	80 (5,0)	89 (5,0)	135 (5,0)	82 (5,0)	57 (4,0)	41 (4,0)	79 (5,0)
Oystercatcher	7 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	11 (5,0)	15 (5,0)	9 (4,0)	7 (4,0)	7 (5,0)
Avocet	4 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	4 (5,0)	21 (4,0)	22 (4,0)	10 (5,0)
Lapwing	121 (5,0)	494 (5,0)	434 (5,0)	256 (5,0)	368 (5,0)	186 (5,0)	407 (5,0)	663 (5,0)	42 (5,0)	18 (4,0)	11 (4,0)	21 (5,0)
Golden Plover	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Ringed Plover	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	2 (4,0)	0 (5,0)
Little Ringed Plover	2 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	4 (4,0)	4 (4,0)	3 (5,0)
Curlew	0 (5,0)	0 (5,0)	4 (5,0)	6 (5,0)	11 (5,0)	19 (5,0)	10 (5,0)	11 (5,0)	21 (5,0)	34 (4,0)	0 (4,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Black-tailed Godwit	6 (5,0)	2 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	6 (4,0)	0 (4,0)	0 (5,0)
Ruff	0 (5,0)	1 (5,0)	3 (5,0)	3 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	3 (4,0)	0 (4,0)	0 (5,0)
Dunlin	0 (5,0)	0 (5,0)	2 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Stint	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Woodcock	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Jack Snipe	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Snipe	3 (5,0)	6 (5,0)	10 (5,0)	18 (5,0)	24 (5,0)	5 (5,0)	12 (5,0)	7 (5,0)	4 (5,0)	2 (4,0)	0 (4,0)	0 (5,0)
Common Sandpiper	1 (5,0)	3 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Green Sandpiper	4 (5,0)	12 (5,0)	3 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	0 (4,0)	0 (4,0)	1 (5,0)
Redshank	0 (5,0)	0 (5,0)	0 (5,0)	3 (5,0)	22 (5,0)	32 (5,0)	26 (5,0)	34 (5,0)	14 (5,0)	6 (4,0)	0 (4,0)	0 (5,0)
Wood Sandpiper	0 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Spotted Redshank	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Greenshank	0 (5,0)	2 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Kingfisher	0 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	1	168	37	0	0	0	1	0	1	1	27
Barnacle Goose	0	0	1	0	0	0	0	0	0	0	0	0
Greylag Goose (British/Irish)	626	1280	1763	783	723	835	456	136	136	117	320	437
Tundra Bean Goose	0	0	0	0	0	0	0	1	0	0	0	0
Pink-footed Goose	1	1	14	1	50	42	4	1	1	2	0	0
White-fronted Goose (European - albifrons)	0	0	0	0	0	4	0	0	0	0	1	0
Black Swan	1	1	1	0	0	1	1	1	0	0	0	1
Mute Swan	64	79	57	26	18	12	26	35	27	57	90	72
Bewick's Swan	0	0	0	0	0	4	0	0	0	0	0	0
Whooper Swan	0	0	0	3	74	103	25	6	1	15	0	0
Egyptian Goose	0	0	3	6	0	0	2	0	0	2	2	2
Shelduck	17	10	4	0	8	34	57	97	64	24	27	15
Ruddy Shelduck	0	0	0	2	0	0	0	0	0	0	0	0
Mandarin Duck	0	0	1	0	1	0	0	0	0	0	0	0
Garganey	0	2	0	0	0	0	0	0	1	0	0	0
Shoveler	6	20	133	147	39	36	24	46	34	55	6	8
Gadwall	99	153	133	124	175	119	179	161	198	93	50	80
Wigeon	2	0	32	157	363	380	396	431	371	22	3	1
Mallard	211	362	333	457	295	357	381	223	126	55	78	214
Pintail	0	0	0	2	1	1	0	0	1	0	0	0
Teal	25	149	418	1082	959	986	926	640	514	84	8	8
Green-winged Teal	0	0	0	1	1	0	0	0	0	1	0	0
Red-crested Pochard	1	1	0	0	0	0	0	0	0	0	0	0
Pochard	20	29	19	32	29	34	31	31	23	9	5	18
Tufted Duck	77	141	99	50	46	64	100	87	97	112	94	78
Scaup	0	0	0	0	0	0	0	0	1	0	0	0
Common Scoter	1	0	0	0	0	1	0	0	0	0	0	1
Goldeneye	0	0	0	0	3	0	2	0	0	0	0	0
Goosander	0	0	0	0	0	0	6	3	0	0	0	0
Little Grebe	54	55	50	44	26	23	15	11	16	20	20	25
Great Crested Grebe	14	9	10	4	6	1	2	6	8	10	8	14
Spoonbill	0	0	1	0	0	0	0	0	0	0	0	0
Bittern	1	1	1	1	1	1	1	1	0	1	1	0
Cattle Egret	0	0	1	0	0	0	0	0	0	0	0	0
Grey Heron	6	9	5	4	3	3	2	3	4	2	3	5

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Great White Egret	0	0	0	0	0	0	0	2	0	0	0	0
Little Egret	16	32	23	6	15	5	22	10	11	3	5	31
Cormorant	7	6	17	14	19	22	26	10	12	6	4	6
Water Rail	1	3	4	3	3	4	3	4	4	0	1	1
Spotted Crake	0	1	0	0	0	0	0	0	0	0	0	0
Moorhen	26	41	40	26	23	16	14	13	12	12	13	9
Coot	215	248	166	196	221	139	126	161	119	69	51	135
Oystercatcher	12	3	0	0	0	0	0	23	22	14	9	11
Avocet	9	6	0	0	0	0	0	0	13	28	44	18
Lapwing	271	1052	1149	699	628	482	1455	1128	82	23	14	32
Golden Plover	0	0	0	1	0	0	0	0	0	0	0	0
Ringed Plover	0	1	2	0	0	0	0	0	0	2	7	0
Little Ringed Plover	2	1	2	1	0	0	0	0	2	5	7	5
Curlew	1	1	12	18	40	39	42	23	62	71	0	0
Black-tailed Godwit	27	7	3	3	2	3	2	5	5	16	2	0
Ruff	0	3	6	7	3	3	2	2	3	7	0	0
Dunlin	0	1	4	1	5	3	0	0	1	0	1	0
Little Stint	0	1	0	0	0	0	0	0	0	0	0	0
Woodcock	0	0	0	0	0	0	0	1	0	0	0	0
Jack Snipe	0	0	0	1	7	1	5	0	0	0	0	0
Snipe	5	12	16	33	57	12	36	13	12	4	0	2
Common Sandpiper	2	5	3	0	0	0	0	0	0	1	1	0
Green Sandpiper	12	18	5	3	1	2	2	1	1	2	0	2
Redshank	1	0	1	5	49	64	54	64	22	13	2	0
Wood Sandpiper	0	9	0	0	0	0	0	0	0	0	0	0
Spotted Redshank	0	1	1	0	0	0	0	0	0	0	0	0
Greenshank	0	4	3	2	0	0	0	0	0	1	1	0
Kingfisher	1	2	2	2	1	1	0	0	0	1	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	0	2 (SEP)	168 (SEP)	0	0	34
Barnacle Goose	0	0	1 (SEP)	0	0	0
Greylag Goose (British/Irish)	1763 (SEP)	1704 (SEP)	1100 (SEP)	1255 (AUG)	1227 (AUG)	1410
Pink-footed Goose	14 (SEP)	1 (JUL)	0	1 (OCT)	0	3
Black Swan	0	1 (JUL)	1 (JUL)	1 (JUL)	0	1
Mute Swan	31 (AUG)	20 (JUL)	65 (AUG)	79 (AUG)	46 (JUL)	48
Whooper Swan	0	0	0	3 (OCT)	1 (OCT)	1
Egyptian Goose	0	3 (SEP)	0	6 (OCT)	0	2
Shelduck	10 (AUG)	17 (JUL)	4 (JUL)	2 (JUL)	2 (SEP)	7
Ruddy Shelduck	0	0	0	2 (OCT)	0	0
Mandarin Duck	1 (SEP)	1 (SEP)	1 (SEP)	0	0	1
Garganey	2 (AUG)	0	0	0	0	0
Shoveler	65 (SEP)	147 (OCT)	113 (OCT)	63 (SEP)	56 (SEP)	89
Gadwall	153 (AUG)	80 (AUG)	124 (OCT)	134 (AUG)	133 (SEP)	125
Wigeon	76 (OCT)	157 (OCT)	113 (OCT)	24 (OCT)	87 (OCT)	91
Mallard	266 (SEP)	333 (SEP)	362 (AUG)	359 (OCT)	457 (OCT)	355
Pintail	0	0	0	1 (OCT)	2 (OCT)	1
Teal	1082 (OCT)	752 (OCT)	669 (OCT)	389 (SEP)	362 (OCT)	651
Green-winged Teal	0	1 (OCT)	0	0	0	0
Red-crested Pochard	0	0	0	1 (JUL)	0	0
Pochard	5 (JUL)	7 (SEP)	32 (OCT)	19 (SEP)	29 (AUG)	18
Tufted Duck	60 (JUL)	51 (JUL)	141 (AUG)	84 (AUG)	66 (AUG)	80
Common Scoter	0	0	0	0	1 (JUL)	0
Little Grebe	41 (OCT)	37 (SEP)	54 (JUL)	55 (AUG)	47 (SEP)	47
Great Crested Grebe	8 (JUL)	5 (AUG)	7 (SEP)	14 (JUL)	10 (JUL)	9
Spoonbill	0	0	1 (SEP)	0	0	0
Bittern	0	0	1 (OCT)	0	1 (JUL)	0
Cattle Egret	0	0	0	0	1 (SEP)	0
Grey Heron	3 (AUG)	5 (AUG)	6 (AUG)	9 (AUG)	4 (AUG)	5
Little Egret	8 (AUG)	11 (AUG)	23 (SEP)	32 (AUG)	16 (JUL)	18

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Cormorant	7 (OCT)	7 (OCT)	17 (SEP)	13 (SEP)	14 (OCT)	12
Water Rail	2 (SEP)	2 (OCT)	1 (AUG)	4 (SEP)	1 (AUG)	2
Spotted Crake	0	0	0	1 (AUG)	0	0
Moorhen	35 (AUG)	24 (OCT)	41 (AUG)	33 (AUG)	40 (SEP)	35
Coot	248 (AUG)	72 (JUL)	196 (OCT)	215 (JUL)	163 (OCT)	179
Oystercatcher	3 (JUL)	12 (JUL)	7 (JUL)	4 (JUL)	7 (JUL)	7
Avocet	6 (JUL)	1 (JUL)	5 (JUL)	0	9 (JUL)	4
Lapwing	1052 (AUG)	640 (AUG)	1149 (SEP)	436 (SEP)	293 (AUG)	714
Golden Plover	0	0	0	1 (OCT)	0	0
Ringed Plover	2 (SEP)	0	1 (AUG)	1 (AUG)	1 (SEP)	1
Little Ringed Plover	2 (JUL)	2 (SEP)	1 (JUL)	2 (JUL)	2 (JUL)	2
Curlew	2 (OCT)	6 (OCT)	12 (SEP)	5 (SEP)	18 (OCT)	9
Black-tailed Godwit	1 (JUL)	0	7 (AUG)	1 (SEP)	27 (JUL)	7
Ruff	0	7 (OCT)	5 (SEP)	6 (SEP)	2 (OCT)	4
Dunlin	1 (AUG)	1 (SEP)	3 (SEP)	1 (OCT)	4 (SEP)	2
Little Stint	0	0	0	1 (AUG)	0	0
Jack Snipe	0	0	0	1 (OCT)	0	0
Snipe	12 (OCT)	17 (OCT)	33 (OCT)	15 (OCT)	15 (OCT)	18
Common Sandpiper	5 (AUG)	5 (AUG)	3 (AUG)	3 (SEP)	2 (JUL)	4
Green Sandpiper	5 (AUG)	17 (AUG)	18 (AUG)	12 (JUL)	10 (AUG)	12
Redshank	2 (OCT)	2 (OCT)	5 (OCT)	3 (OCT)	2 (OCT)	3
Wood Sandpiper	9 (AUG)	0	1 (AUG)	0	0	2
Spotted Redshank	0	0	0	1 (SEP)	1 (AUG)	0
Greenshank	1 (AUG)	2 (AUG)	4 (AUG)	3 (SEP)	0	2
Kingfisher	2 (AUG)	2 (AUG)	1 (SEP)	2 (SEP)	1 (AUG)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	1 (FEB)	0	0	0	0	0
Greylag Goose (British/Irish)	835 (DEC)	723 (NOV)	109 (FEB)	136 (MAR)	384 (NOV)	437
Tundra Bean Goose	1 (FEB)	0	0	0	0	0
Pink-footed Goose	42 (DEC)	0	0	50 (NOV)	0	18
White-fronted Goose (European - albifrons)	4 (DEC)	0	0	0	0	1
Black Swan	0	1 (DEC)	0	0	0	0
Mute Swan	8 (JAN)	35 (FEB)	13 (MAR)	12 (NOV)	26 (JAN)	19
Bewick's Swan	0	4 (DEC)	0	0	0	1
Whooper Swan	0	103 (DEC)	1 (MAR)	16 (NOV)	0	24
Egyptian Goose	0	0	0	0	2 (JAN)	0
Shelduck	64 (MAR)	92 (FEB)	38 (MAR)	76 (FEB)	97 (FEB)	73
Mandarin Duck	0	0	1 (NOV)	0	0	0
Garganey	0	0	1 (MAR)	0	0	0
Shoveler	34 (MAR)	36 (DEC)	46 (FEB)	32 (NOV)	35 (NOV)	37
Gadwall	198 (MAR)	100 (FEB)	179 (JAN)	153 (MAR)	175 (NOV)	161
Wigeon	302 (JAN)	283 (JAN)	360 (JAN)	308 (MAR)	431 (FEB)	337
Mallard	181 (DEC)	229 (NOV)	254 (DEC)	381 (JAN)	357 (DEC)	280
Pintail	0	0	0	1 (NOV)	1 (DEC)	0
Teal	628 (DEC)	959 (NOV)	986 (DEC)	983 (DEC)	620 (NOV)	835
Green-winged Teal	0	0	1 (NOV)	0	0	0
Pochard	31 (JAN)	34 (DEC)	28 (NOV)	26 (FEB)	31 (FEB)	30
Tufted Duck	72 (MAR)	76 (MAR)	100 (JAN)	85 (MAR)	87 (FEB)	84
Scaup	1 (MAR)	0	0	0	0	0
Common Scoter	0	1 (DEC)	0	0	0	0
Goldeneye	0	3 (NOV)	1 (NOV)	2 (NOV)	2 (JAN)	2
Goosander	6 (JAN)	0	0	0	0	1
Little Grebe	17 (NOV)	12 (NOV)	26 (NOV)	13 (MAR)	24 (NOV)	18
Great Crested Grebe	8 (MAR)	6 (MAR)	4 (MAR)	6 (NOV)	6 (MAR)	6
Bittern	1 (NOV)	0	1 (JAN)	0	1 (JAN)	1
Grey Heron	4 (MAR)	2 (DEC)	3 (NOV)	3 (DEC)	3 (FEB)	3

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Great White Egret	0	0	0	0	2 (FEB)	0
Little Egret	9 (FEB)	4 (DEC)	15 (NOV)	11 (MAR)	22 (JAN)	12
Cormorant	12 (MAR)	26 (JAN)	9 (MAR)	19 (NOV)	15 (NOV)	16
Water Rail	3 (NOV)	3 (DEC)	4 (DEC)	4 (MAR)	3 (DEC)	3
Moorhen	16 (NOV)	14 (NOV)	23 (NOV)	14 (NOV)	22 (NOV)	18
Coot	126 (FEB)	117 (FEB)	126 (NOV)	161 (FEB)	221 (NOV)	150
Oystercatcher	10 (MAR)	8 (MAR)	23 (FEB)	22 (MAR)	22 (MAR)	17
Avocet	0	0	13 (MAR)	0	9 (MAR)	4
Lapwing	1128 (FEB)	457 (NOV)	1455 (JAN)	748 (FEB)	751 (FEB)	908
Little Ringed Plover	0	0	2 (MAR)	0	0	0
Curlew	9 (FEB)	22 (DEC)	42 (JAN)	62 (MAR)	18 (MAR)	31
Black-tailed Godwit	0	0	2 (DEC)	5 (FEB)	1 (NOV)	2
Ruff	1 (DEC)	3 (NOV)	2 (NOV)	3 (MAR)	1 (NOV)	2
Dunlin	0	3 (DEC)	1 (MAR)	5 (NOV)	1 (NOV)	2
Woodcock	0	1 (FEB)	0	0	0	0
Jack Snipe	7 (NOV)	5 (JAN)	0	0	1 (DEC)	3
Snipe	57 (NOV)	36 (JAN)	14 (NOV)	18 (NOV)	22 (NOV)	29
Green Sandpiper	1 (FEB)	2 (JAN)	2 (DEC)	0	0	1
Redshank	54 (JAN)	42 (JAN)	47 (FEB)	16 (FEB)	64 (DEC)	45
Kingfisher	1 (DEC)	0	1 (DEC)	1 (NOV)	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	0	1 (APR)	0	0	27 (JUN)	6
Greylag Goose (British/Irish)	128 (JUN)	171 (MAY)	172 (JUN)	320 (MAY)	437 (JUN)	246
Pink-footed Goose	0	0	0	2 (APR)	0	0
White-fronted Goose (European - albifrons)	0	0	0	0	1 (MAY)	0
Black Swan	1 (JUN)	1 (JUN)	1 (JUN)	0	0	1
Mute Swan	18 (JUN)	46 (JUN)	59 (MAY)	90 (MAY)	72 (JUN)	57
Whooper Swan	0	3 (APR)	0	0	15 (APR)	4
Egyptian Goose	0	2 (APR)	2 (MAY)	0	2 (MAY)	1
Shelduck	6 (JUN)	20 (APR)	24 (APR)	27 (MAY)	15 (MAY)	18
Shoveler	8 (JUN)	55 (APR)	19 (APR)	9 (APR)	20 (APR)	22
Gadwall	38 (JUN)	80 (APR)	93 (APR)	74 (APR)	80 (JUN)	73
Wigeon	1 (JUN)	18 (APR)	4 (APR)	4 (APR)	22 (APR)	10
Mallard	99 (JUN)	76 (JUN)	166 (JUN)	214 (JUN)	126 (JUN)	136
Teal	4 (JUN)	84 (APR)	62 (APR)	45 (APR)	14 (APR)	42
Green-winged Teal	0	1 (APR)	0	0	0	0
Pochard	3 (JUN)	4 (JUN)	10 (JUN)	18 (JUN)	18 (JUN)	11
Tufted Duck	78 (JUN)	81 (APR)	94 (MAY)	91 (APR)	112 (APR)	91
Common Scoter	0	0	0	1 (JUN)	0	0
Little Grebe	6 (JUN)	15 (JUN)	22 (JUN)	18 (MAY)	25 (JUN)	17
Great Crested Grebe	6 (JUN)	7 (JUN)	10 (JUN)	14 (JUN)	10 (APR)	9
Bittern	0	1 (APR)	0	0	1 (MAY)	0
Grey Heron	3 (JUN)	3 (MAY)	5 (JUN)	2 (APR)	2 (APR)	3
Little Egret	3 (JUN)	31 (JUN)	15 (JUN)	12 (JUN)	5 (JUN)	13
Cormorant	2 (JUN)	5 (JUN)	4 (MAY)	5 (APR)	6 (APR)	4
Water Rail	1 (JUN)	1 (MAY)	0	0	1 (MAY)	1
Moorhen	8 (JUN)	8 (APR)	13 (MAY)	12 (MAY)	8 (JUN)	10
Coot	61 (JUN)	43 (APR)	135 (JUN)	109 (JUN)	65 (APR)	83
Oystercatcher	6 (JUN)	8 (MAY)	9 (MAY)	11 (JUN)	14 (APR)	10
Avocet	1 (JUN)	7 (MAY)	28 (APR)	28 (APR)	44 (MAY)	22
Lapwing	16 (JUN)	28 (JUN)	23 (APR)	32 (JUN)	12 (APR)	22

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Ringed Plover	0	1 (MAY)	7 (MAY)	2 (APR)	0	2
Little Ringed Plover	5 (JUN)	7 (MAY)	6 (MAY)	4 (APR)	5 (APR)	5
Curlew	0	71 (APR)	22 (APR)	0	44 (APR)	27
Black-tailed Godwit	0	0	5 (APR)	16 (APR)	1 (APR)	4
Ruff	0	2 (APR)	7 (APR)	1 (APR)	1 (APR)	2
Dunlin	0	1 (MAY)	1 (MAY)	0	0	0
Snipe	0	3 (APR)	1 (APR)	2 (JUN)	4 (APR)	2
Common Sandpiper	0	0	0	1 (APR)	1 (APR)	0
Green Sandpiper	0	0	2 (JUN)	2 (APR)	0	1
Redshank	0	6 (APR)	3 (APR)	1 (APR)	13 (APR)	5
Greenshank	0	0	1 (APR)	0	1 (MAY)	0
Kingfisher	1 (JUN)	0	1 (JUN)	0	1 (APR)	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	1 (FEB)	2 (SEP)	168 (SEP)	0	27 (JUN)	40
Barnacle Goose	0	0	1 (SEP)	0	0	0
Greylag Goose (British/Irish)	1763 (SEP)	1704 (SEP)	1100 (SEP)	1255 (AUG)	1227 (AUG)	1410
Tundra Bean Goose	1 (FEB)	0	0	0	0	0
Pink-footed Goose	42 (DEC)	1 (JUL)	0	50 (NOV)	0	19
White-fronted Goose (European - albifrons)	4 (DEC)	0	0	0	1 (MAY)	1
Black Swan	1 (JUN)	1 (JUL)	1 (JUL)	1 (JUL)	0	1
Mute Swan	31 (AUG)	46 (JUN)	65 (AUG)	90 (MAY)	72 (JUN)	61
Bewick's Swan	0	4 (DEC)	0	0	0	1
Whooper Swan	0	103 (DEC)	1 (MAR)	16 (NOV)	15 (APR)	27
Egyptian Goose	0	3 (SEP)	2 (MAY)	6 (OCT)	2 (JAN)	3
Shelduck	64 (MAR)	92 (FEB)	38 (MAR)	76 (FEB)	97 (FEB)	73
Ruddy Shelduck	0	0	0	2 (OCT)	0	0
Mandarin Duck	1 (SEP)	1 (SEP)	1 (SEP)	0	0	1
Garganey	2 (AUG)	0	1 (MAR)	0	0	1
Shoveler	65 (SEP)	147 (OCT)	113 (OCT)	63 (SEP)	56 (SEP)	89
Gadwall	198 (MAR)	100 (FEB)	179 (JAN)	153 (MAR)	175 (NOV)	161
Wigeon	302 (JAN)	283 (JAN)	360 (JAN)	308 (MAR)	431 (FEB)	337
Mallard	266 (SEP)	333 (SEP)	362 (AUG)	381 (JAN)	457 (OCT)	360
Pintail	0	0	0	1 (OCT)	2 (OCT)	1
Teal	1082 (OCT)	959 (NOV)	986 (DEC)	983 (DEC)	620 (NOV)	926
Green-winged Teal	0	1 (OCT)	1 (NOV)	0	0	0
Red-crested Pochard	0	0	0	1 (JUL)	0	0
Pochard	31 (JAN)	34 (DEC)	32 (OCT)	26 (FEB)	31 (FEB)	31
Tufted Duck	78 (JUN)	81 (APR)	141 (AUG)	91 (APR)	112 (APR)	101
Scaup	1 (MAR)	0	0	0	0	0
Common Scoter	0	1 (DEC)	0	1 (JUN)	1 (JUL)	1
Goldeneye	0	3 (NOV)	1 (NOV)	2 (NOV)	2 (JAN)	2
Goosander	6 (JAN)	0	0	0	0	1
Little Grebe	41 (OCT)	37 (SEP)	54 (JUL)	55 (AUG)	47 (SEP)	47

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Great Crested Grebe	8 (JUL)	7 (JUN)	10 (JUN)	14 (JUL)	10 (JUL)	10
Spoonbill	0	0	1 (SEP)	0	0	0
Bittern	1 (NOV)	1 (APR)	1 (OCT)	0	1 (JUL)	1
Cattle Egret	0	0	0	0	1 (SEP)	0
Grey Heron	4 (MAR)	5 (AUG)	6 (AUG)	9 (AUG)	4 (AUG)	6
Great White Egret	0	0	0	0	2 (FEB)	0
Little Egret	9 (FEB)	31 (JUN)	23 (SEP)	32 (AUG)	22 (JAN)	23
Cormorant	12 (MAR)	26 (JAN)	17 (SEP)	19 (NOV)	15 (NOV)	18
Water Rail	3 (NOV)	3 (DEC)	4 (DEC)	4 (SEP)	3 (DEC)	3
Spotted Crake	0	0	0	1 (AUG)	0	0
Moorhen	35 (AUG)	24 (OCT)	41 (AUG)	33 (AUG)	40 (SEP)	35
Coot	248 (AUG)	117 (FEB)	196 (OCT)	215 (JUL)	221 (NOV)	199
Oystercatcher	10 (MAR)	12 (JUL)	23 (FEB)	22 (MAR)	22 (MAR)	18
Avocet	6 (JUL)	7 (MAY)	28 (APR)	28 (APR)	44 (MAY)	23
Lapwing	1128 (FEB)	640 (AUG)	1455 (JAN)	748 (FEB)	751 (FEB)	944
Golden Plover	0	0	0	1 (OCT)	0	0
Ringed Plover	2 (SEP)	1 (MAY)	7 (MAY)	2 (APR)	1 (SEP)	3
Little Ringed Plover	5 (JUN)	7 (MAY)	6 (MAY)	4 (APR)	5 (APR)	5
Curlew	9 (FEB)	71 (APR)	42 (JAN)	62 (MAR)	44 (APR)	46
Black-tailed Godwit	1 (JUL)	0	7 (AUG)	16 (APR)	27 (JUL)	10
Ruff	1 (DEC)	7 (OCT)	7 (APR)	6 (SEP)	2 (OCT)	5
Dunlin	1 (AUG)	3 (DEC)	3 (SEP)	5 (NOV)	4 (SEP)	3
Little Stint	0	0	0	1 (AUG)	0	0
Woodcock	0	1 (FEB)	0	0	0	0
Jack Snipe	7 (NOV)	5 (JAN)	0	1 (OCT)	1 (DEC)	3
Snipe	57 (NOV)	36 (JAN)	33 (OCT)	18 (NOV)	22 (NOV)	33
Common Sandpiper	5 (AUG)	5 (AUG)	3 (AUG)	3 (SEP)	2 (JUL)	4
Green Sandpiper	5 (AUG)	17 (AUG)	18 (AUG)	12 (JUL)	10 (AUG)	12
Redshank	54 (JAN)	42 (JAN)	47 (FEB)	16 (FEB)	64 (DEC)	45
Wood Sandpiper	9 (AUG)	0	1 (AUG)	0	0	2
Spotted Redshank	0	0	0	1 (SEP)	1 (AUG)	0
Greenshank	1 (AUG)	2 (AUG)	4 (AUG)	3 (SEP)	1 (MAY)	2
Kingfisher	2 (AUG)	2 (AUG)	1 (SEP)	2 (SEP)	1 (AUG)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	**1410**	**101%**	**NA**
Pink-footed Goose	19	0%	0%
White-fronted Goose (European - albifrons)	1	*2%	0%
Mute Swan	61	12%	12%
Bewick's Swan	1	*2%	0%
Whooper Swan	27	17%	8%
Shelduck	73	16%	2%
Shoveler	89	47%	12%
Gadwall	161	52%	12%
Wigeon	337	7%	2%
Mallard	360	5%	2%
Pintail	1	0%	0%
Teal	926	22%	14%
Pochard	31	13%	2%
Tufted Duck	101	8%	1%
Common Scoter	1	0%	0%
Goldeneye	2	1%	0%
Goosander	1	1%	0%
Little Grebe	47	31%	1%
Great Crested Grebe	10	6%	0%
Bittern	1	*2%	1%
Grey Heron	6	1%	0%
Little Egret	23	21%	2%
Cormorant	18	3%	2%
Moorhen	35	1%	0%
Coot	199	10%	1%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Oystercatcher	18	1%	0%
Avocet	23	26%	2%
Lapwing	944	15%	5%
Ringed Plover	3	1%	1%
Curlew	46	4%	1%
Black-tailed Godwit	10	3%	1%
Ruff	5	*10%	0%
Dunlin	3	0%	0%
Jack Snipe	3	0%	0%
Snipe	33	0%	0%
Common Sandpiper	4	*8%	0%
Green Sandpiper	12	*24%	0%
Redshank	45	5%	2%
Greenshank	2	*4%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for North Cave Wetlands

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	**1410**	**437**	**246**	**101%**	**31%**	**18%**	**NA**	**NA**	**NA**
Pink-footed Goose	3	18	0	0%	0%		0%	0%	
White-fronted Goose (European - albifrons)	0	1	0		*2%			0%	
Mute Swan	48	19	57	10%	4%	11%	10%	4%	11%
Bewick's Swan	0	1	0		*2%			0%	
Whooper Swan	1	24	4	1%	15%	2%	0%	7%	1%
Shelduck	7	73	18	1%	16%	4%	0%	2%	1%
Shoveler	89	37	22	47%	19%	12%	12%	5%	3%
Gadwall	125	161	73	40%	52%	24%	9%	12%	5%
Wigeon	91	337	10	2%	7%	0%	1%	2%	0%
Mallard	355	280	136	5%	4%	2%	2%	1%	1%
Pintail	1	0	0	0%			0%		
Teal	651	835	42	15%	19%	1%	10%	12%	1%
Pochard	18	30	11	8%	13%	5%	1%	2%	1%
Tufted Duck	80	84	91	6%	6%	7%	1%	1%	1%
Common Scoter	0	0	0						
Goldeneye	0	2	0		1%			0%	
Goosander	0	1	0		1%			0%	
Little Grebe	47	18	17	31%	12%	11%	1%	0%	0%
Great Crested Grebe	9	6	9	5%	4%	5%	0%	0%	0%

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Bittern	0	1	0		*2%			1%	
Grey Heron	5	3	3	1%	1%	1%	0%	0%	0%
Little Egret	18	12	13	16%	11%	12%	2%	1%	1%
Cormorant	12	16	4	2%	3%	1%	1%	2%	0%
Moorhen	35	18	10	1%	1%	0%	0%	0%	0%
Coot	179	150	83	9%	8%	4%	1%	1%	1%
Oystercatcher	7	17	10	0%	1%	0%	0%	0%	0%
Avocet	4	4	22	5%	5%	25%	0%	0%	2%
Lapwing	714	908	22	12%	15%	0%	4%	5%	0%
Ringed Plover	1	0	2	0%		0%	0%		0%
Curlew	9	31	27	1%	3%	2%	0%	0%	0%
Black-tailed Godwit	7	2	4	2%	1%	1%	0%	0%	0%
Ruff	4	2	2	*8%	*4%	*4%	0%	0%	0%
Dunlin	2	2	0	0%	0%		0%	0%	
Jack Snipe	0	3	0		0%			0%	
Snipe	18	29	2	0%	0%	0%	0%	0%	0%
Common Sandpiper	4	0	0	*8%			0%		
Green Sandpiper	12	1	1	*24%	*2%	*2%	0%	0%	0%
Redshank	3	45	5	0%	5%	1%	0%	2%	0%
Greenshank	2	0	0	*4%			0%		

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Old Pond, North Ferriby

Compiled on 26 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Old Pond, North Ferriby



LOC LABEL	NAME	GRIDREF	Web Link
38438	Old Pond, North Ferriby	SE989253	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC1053900

WeBS
The Wetland Bird Survey

Five year summary for Old Pond, North Ferriby

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	21	FEB	13	30	NC
2020/21	13	OCT	14	10	9
2021/22	16	MAR	15	26	3
2022/23	9	DEC	6	17	9
2023/24	11	FEB	3	17	9
MEAN	14		10	20	8

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Old Pond, North Ferriby

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	1 (4,0)	0 (4,0)	1 (3,0)	2 (1,0)	1 (3,0)	0 (3,0)
Mute Swan	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)
Gadwall	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (4,0)	4 (3,0)	0 (1,0)	1 (3,0)	0 (3,0)
Wigeon	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	1 (4,0)	0 (3,0)	0 (4,0)	3 (4,0)	0 (3,0)	2 (1,0)	0 (3,0)	0 (3,0)
Mallard	6 (2,0)	2 (3,0)	3 (5,0)	2 (5,0)	3 (4,0)	3 (3,0)	3 (4,0)	2 (4,0)	1 (3,0)	2 (1,0)	0 (3,0)	1 (3,0)
Teal	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)
Tufted Duck	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (4,0)	1 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)
Little Grebe	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (1,0)	0 (3,0)	1 (3,0)
Great Crested Grebe	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)
Grey Heron	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	1 (1,0)	0 (3,0)	0 (3,0)
Moorhen	3 (2,0)	1 (3,0)	2 (5,0)	3 (5,0)	0 (4,0)	3 (4,0)	2 (4,0)	1 (4,0)	2 (3,0)	2 (1,0)	2 (3,0)	1 (3,0)
Coot	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (4,0)	1 (4,0)	1 (3,0)	0 (1,0)	2 (3,0)	1 (3,0)
Curlew	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)
Common Gull	0 (2,0)	0 (3,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	4 (3,0)	0 (3,0)	0 (1,0)	0 (3,0)	0 (3,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Old Pond, North Ferriby

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0	0	0	0	0	0	3	0	2	2	2	0
Mute Swan	0	0	0	0	0	1	1	0	0	0	0	0
Gadwall	0	0	0	0	0	0	0	2	7	0	2	0
Wigeon	0	0	0	0	2	0	1	9	0	2	0	0
Mallard	8	3	10	12	8	8	11	8	4	2	0	2
Teal	0	0	0	0	0	0	0	1	0	0	0	0
Tufted Duck	0	0	0	2	0	0	1	0	3	0	0	0
Little Grebe	0	1	1	1	0	1	0	1	1	0	1	2
Great Crested Grebe	0	0	0	0	0	0	0	0	0	0	0	1
Grey Heron	0	0	0	0	0	0	0	0	0	1	0	0
Moorhen	4	1	3	4	1	5	4	4	6	2	4	2
Coot	0	0	0	1	0	1	3	3	2	0	4	3
Curlew	0	0	0	0	0	1	0	0	0	0	0	0
Common Gull	0	0	0	0	0	0	0	12	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Old Pond, North Ferriby

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Mallard	10 (SEP)	12 (OCT)	8 (JUL)	0	0	6
Tufted Duck	0	0	2 (OCT)	0	0	0
Little Grebe	0	1 (OCT)	1 (AUG)	1 (OCT)	0	1
Moorhen	3 (OCT)	1 (SEP)	4 (JUL)	4 (OCT)	3 (OCT)	3
Coot	0	0	0	1 (OCT)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Old Pond, North Ferriby

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	3 (JAN)	0	2 (MAR)	0	0	1
Mute Swan	0	0	1 (JAN)	1 (DEC)	0	0
Gadwall	0	0	7 (MAR)	0	4 (MAR)	2
Wigeon	0	0	2 (NOV)	3 (FEB)	9 (FEB)	3
Mallard	11 (JAN)	8 (DEC)	4 (MAR)	2 (DEC)	0	5
Teal	0	0	1 (FEB)	0	0	0
Tufted Duck	1 (JAN)	0	3 (MAR)	0	0	1
Little Grebe	0	1 (DEC)	0	1 (FEB)	1 (MAR)	1
Moorhen	3 (DEC)	1 (DEC)	5 (DEC)	6 (MAR)	1 (JAN)	3
Coot	0	0	0	3 (JAN)	2 (FEB)	1
Curlew	0	0	1 (DEC)	1 (DEC)	0	0
Common Gull	12 (FEB)	0	0	0	0	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Old Pond, North Ferriby

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	NC	2 (APR)	0	0	2 (MAY)	1
Gadwall	NC	0	0	0	2 (MAY)	0
Wigeon	NC	2 (APR)	0	0	0	0
Mallard	NC	2 (APR)	2 (JUN)	0	0	1
Little Grebe	NC	0	0	2 (JUN)	0	0
Great Crested Grebe	NC	0	0	1 (JUN)	0	0
Grey Heron	NC	1 (APR)	0	0	0	0
Moorhen	NC	2 (APR)	0	2 (JUN)	4 (MAY)	2
Coot	NC	0	1 (JUN)	4 (MAY)	1 (MAY)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Old Pond, North Ferriby

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Greylag Goose (British/Irish)	3 (JAN)	2 (APR)	2 (MAR)	0	2 (MAY)	2
Mute Swan	0	0	1 (JAN)	1 (DEC)	0	0
Gadwall	0	0	7 (MAR)	0	4 (MAR)	2
Wigeon	0	2 (APR)	2 (NOV)	3 (FEB)	9 (FEB)	3
Mallard	11 (JAN)	12 (OCT)	8 (JUL)	2 (DEC)	0	7
Teal	0	0	1 (FEB)	0	0	0
Tufted Duck	1 (JAN)	0	3 (MAR)	0	0	1
Little Grebe	0	1 (OCT)	1 (AUG)	2 (JUN)	1 (MAR)	1
Great Crested Grebe	0	0	0	1 (JUN)	0	0
Grey Heron	0	1 (APR)	0	0	0	0
Moorhen	3 (OCT)	2 (APR)	5 (DEC)	6 (MAR)	4 (MAY)	4
Coot	0	0	1 (JUN)	4 (MAY)	2 (FEB)	1
Curlew	0	0	1 (DEC)	1 (DEC)	0	0
Common Gull	12 (FEB)	0	0	0	0	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Old Pond, North Ferriby

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	2	0%	NA
Gadwall	2	1%	0%
Wigeon	3	0%	0%
Mallard	7	0%	0%
Tufted Duck	1	0%	0%
Little Grebe	1	1%	0%
Moorhen	4	0%	0%
Coot	1	0%	0%
Common Gull	2	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Old Pond, North Ferriby

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	0	1	1		0%	0%		NA	NA
Gadwall	0	2	0		1%			0%	
Wigeon	0	3	0		0%			0%	
Mallard	6	5	1	0%	0%	0%	0%	0%	0%
Tufted Duck	0	1	0		0%			0%	
Little Grebe	1	1	0	1%	1%		0%	0%	
Moorhen	3	3	2	0%	0%	0%	0%	0%	0%
Coot	0	1	2		0%	0%		0%	0%
Common Gull	0	2	0		0%			0%	

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Pulfin Bog and High Eske Nature Reserve

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Pulfin Bog and High Eske Nature Reserve



LOC LABEL	NAME	GRIDREF	Web Link
38285	Pulfin Bog and High Eske Nature Reserve	TA054442	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC644971

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2016/17	1165	DEC	366	1263	252
2017/18	1135	JAN	598	1654	378
2018/19	1207	JAN	1014	1880	258
2019/20	1321	SEP	1529	1408	205
2020/21	3081	FEB	466	5650	NC
MEAN	1582		795	2371	273

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	2 (4,0)	1 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	4 (3,0)
Greylag Goose (British/Irish)	111 (3,0)	375 (2,0)	300 (3,0)	0 (3,0)	49 (4,0)	166 (5,0)	30 (4,0)	52 (4,0)	10 (4,0)	0 (4,0)	33 (4,0)	2 (3,0)
Pink-footed Goose	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	49 (5,0)	6 (4,0)	60 (4,0)	1 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
White-fronted Goose (Greenland - flavirostris)	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	4 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
White-fronted Goose (European - albifrons)	0 (3,0)	0 (2,0)	0 (3,0)	5 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Mute Swan	21 (3,0)	16 (2,0)	11 (3,0)	21 (3,0)	22 (4,0)	14 (5,0)	52 (4,0)	60 (4,0)	13 (4,0)	62 (4,0)	36 (4,0)	22 (3,0)
Whooper Swan	0 (3,0)	0 (2,0)	0 (3,0)	1 (3,0)	4 (4,0)	0 (5,0)	2 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Shelduck	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	1 (4,0)	1 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)
Shoveler	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	2 (4,0)	1 (5,0)	2 (4,0)	2 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Gadwall	1 (3,0)	0 (2,0)	10 (3,0)	12 (3,0)	24 (4,0)	35 (5,0)	23 (4,0)	52 (4,0)	15 (4,0)	3 (4,0)	2 (4,0)	5 (3,0)
Wigeon	0 (3,0)	0 (2,0)	0 (3,0)	8 (3,0)	95 (4,0)	207 (5,0)	366 (4,0)	630 (4,0)	54 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)
Mallard	45 (3,0)	136 (2,0)	97 (3,0)	4 (3,0)	72 (4,0)	128 (5,0)	115 (4,0)	70 (4,0)	9 (4,0)	5 (4,0)	3 (4,0)	6 (3,0)
Pintail	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	2 (5,0)	0 (4,0)	3 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Teal	0 (3,0)	2 (2,0)	6 (3,0)	6 (3,0)	26 (4,0)	62 (5,0)	106 (4,0)	66 (4,0)	29 (4,0)	38 (4,0)	0 (4,0)	0 (3,0)
Red-crested Pochard	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Pochard	0 (3,0)	0 (2,0)	5 (3,0)	0 (3,0)	0 (4,0)	23 (5,0)	1 (4,0)	6 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Tufted Duck	5 (3,0)	2 (2,0)	16 (3,0)	40 (3,0)	54 (4,0)	104 (5,0)	32 (4,0)	16 (4,0)	8 (4,0)	9 (4,0)	0 (4,0)	7 (3,0)
Scaup	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Goldeneye	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	6 (4,0)	21 (5,0)	23 (4,0)	18 (4,0)	14 (4,0)	4 (4,0)	0 (4,0)	0 (3,0)
Smew	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Goosander	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	1 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Little Grebe	0 (3,0)	1 (2,0)	0 (3,0)	2 (3,0)	8 (4,0)	7 (5,0)	6 (4,0)	10 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Great Crested Grebe	5 (3,0)	8 (2,0)	3 (3,0)	6 (3,0)	3 (4,0)	3 (5,0)	2 (4,0)	0 (4,0)	3 (4,0)	4 (4,0)	4 (4,0)	3 (3,0)
Cattle Egret	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Grey Heron	1 (3,0)	3 (2,0)	2 (3,0)	1 (3,0)	3 (4,0)	3 (5,0)	2 (4,0)	1 (4,0)	0 (4,0)	2 (4,0)	3 (4,0)	1 (3,0)
Great White Egret	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Little Egret	0 (3,0)	1 (2,0)	1 (3,0)	1 (3,0)	22 (4,0)	14 (5,0)	6 (4,0)	8 (4,0)	3 (4,0)	2 (4,0)	1 (4,0)	5 (3,0)
Cormorant	2 (3,0)	6 (2,0)	8 (3,0)	9 (3,0)	7 (4,0)	8 (5,0)	11 (4,0)	4 (4,0)	4 (4,0)	6 (4,0)	1 (4,0)	0 (3,0)
Water Rail	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	1 (4,0)	1 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Moorhen	1 (3,0)	0 (2,0)	1 (3,0)	1 (3,0)	4 (4,0)	3 (5,0)	3 (4,0)	4 (4,0)	0 (4,0)	1 (4,0)	0 (4,0)	0 (3,0)
Coot	1 (3,0)	0 (2,0)	26 (3,0)	5 (3,0)	0 (4,0)	1 (5,0)	2 (4,0)	2 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	1 (3,0)
Crane	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Oystercatcher	1 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	2 (4,0)	2 (4,0)	2 (4,0)	1 (4,0)	2 (3,0)
Avocet	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (2,0)
Lapwing	1 (3,0)	21 (2,0)	40 (3,0)	39 (3,0)	28 (4,0)	75 (5,0)	58 (4,0)	47 (4,0)	14 (4,0)	7 (4,0)	2 (4,0)	16 (2,0)
Golden Plover	0 (3,0)	0 (2,0)	32 (3,0)	0 (3,0)	3 (4,0)	1 (5,0)	9 (4,0)	24 (4,0)	0 (4,0)	1 (4,0)	0 (4,0)	0 (2,0)
Little Ringed Plover	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	1 (4,0)	1 (4,0)	0 (2,0)
Curlew	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	2 (4,0)	0 (4,0)	0 (4,0)	2 (4,0)	0 (4,0)	0 (2,0)
Dunlin	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (2,0)
Woodcock	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Snipe	0 (3,0)	9 (2,0)	0 (3,0)	1 (3,0)	0 (4,0)	2 (5,0)	0 (4,0)	2 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Common Sandpiper	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (2,0)
Green Sandpiper	0 (3,0)	0 (2,0)	0 (3,0)	1 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (2,0)
Redshank	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	9 (4,0)	17 (5,0)	16 (4,0)	17 (4,0)	28 (4,0)	14 (4,0)	0 (4,0)	0 (2,0)
Spotted Redshank	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Greenshank	0 (3,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)
Black-headed Gull	11 (3,0)	25 (2,0)	68 (3,0)	125 (2,0)	100 (4,0)	25 (4,0)	0 (2,0)	0 (1,0)	50 (2,0)	6 (4,0)	11 (3,0)	7 (3,0)
Common Gull	1 (3,0)	1 (2,0)	2 (3,0)	4 (2,0)	502 (4,0)	5 (4,0)	0 (2,0)	0 (1,0)	1 (2,0)	23 (4,0)	1 (3,0)	0 (3,0)
Great Black-backed Gull	0 (3,0)	0 (2,0)	6 (3,0)	70 (2,0)	24 (4,0)	4 (4,0)	1 (2,0)	1 (1,0)	0 (2,0)	0 (4,0)	0 (3,0)	0 (3,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Herring Gull	0 (3,0)	0 (2,0)	2 (3,0)	0 (2,0)	11 (4,0)	1 (4,0)	4 (2,0)	8 (1,0)	1 (2,0)	1 (4,0)	0 (3,0)	0 (3,0)
Lesser Black-backed Gull	1 (3,0)	4 (2,0)	1 (3,0)	0 (2,0)	0 (4,0)	0 (4,0)	0 (2,0)	2 (1,0)	0 (2,0)	4 (4,0)	2 (3,0)	3 (3,0)
Common Tern	4 (3,0)	NA	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (2,0)	0 (2,0)	2 (4,0)	2 (3,0)
Kingfisher	0 (3,0)	1 (2,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (4,0)	0 (3,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	0	0	0	0	1	9	3	2	1	0	12
Greylag Goose (British/Irish)	285	750	600	0	100	400	120	106	25	0	47	5
Pink-footed Goose	0	0	0	0	0	200	25	130	4	1	1	0
White-fronted Goose (Greenland - flavirostris)	0	0	0	0	0	0	0	16	0	0	0	0
White-fronted Goose (European - albifrons)	0	0	0	16	0	0	0	0	0	0	0	0
Mute Swan	23	26	25	31	43	37	113	99	33	108	85	62
Whooper Swan	0	0	0	3	18	0	6	0	0	1	0	0
Shelduck	0	0	0	0	0	0	0	2	3	3	1	0
Shoveler	0	0	0	0	8	6	5	7	1	2	1	0
Gadwall	3	0	14	27	62	82	56	187	37	5	4	11
Wigeon	0	0	1	22	250	420	679	2247	160	3	0	0
Mallard	89	152	171	13	160	247	170	212	25	20	13	9
Pintail	0	0	0	0	0	7	1	13	0	0	0	0
Teal	0	5	16	12	85	100	150	175	100	100	0	0
Red-crested Pochard	0	0	0	0	0	0	0	0	0	2	0	0
Pochard	0	0	15	0	1	100	2	18	0	0	0	0
Tufted Duck	11	3	17	72	84	230	75	28	22	18	2	16
Scaup	0	0	0	0	0	1	0	0	0	0	0	0
Goldeneye	0	0	0	1	16	42	56	34	28	7	0	0
Smew	0	0	0	0	0	1	0	0	0	0	0	0
Goosander	0	0	0	0	0	1	2	2	3	1	0	0
Little Grebe	0	1	0	6	14	18	17	18	1	0	0	0
Great Crested Grebe	7	10	6	7	8	4	3	1	4	8	6	6
Cattle Egret	0	0	0	0	1	0	0	0	0	0	0	0
Grey Heron	4	5	3	2	7	4	5	3	1	3	6	3
Great White Egret	0	0	0	0	0	0	1	0	0	0	0	0
Little Egret	1	1	3	2	34	22	16	13	9	3	3	14
Cormorant	4	6	12	14	10	14	18	8	12	9	3	0
Water Rail	0	0	0	1	2	2	1	1	1	1	0	0
Moorhen	2	0	3	3	8	8	7	7	0	3	0	0
Coot	3	0	58	16	1	4	4	4	2	1	0	2
Crane	0	0	0	0	0	0	0	0	0	0	0	1
Oystercatcher	1	0	0	0	0	0	0	3	2	2	2	2

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Avocet	0	0	0	0	0	0	0	0	0	0	1	0
Lapwing	4	42	90	117	62	130	178	142	25	15	8	28
Golden Plover	1	0	95	0	12	2	35	95	0	4	0	0
Little Ringed Plover	1	0	0	0	0	0	0	0	0	1	3	1
Curlew	0	0	1	1	2	1	6	1	1	5	2	0
Dunlin	0	0	0	0	0	0	0	0	0	0	2	0
Woodcock	0	0	0	0	1	0	1	1	0	0	0	0
Snipe	0	18	1	3	1	12	1	3	0	1	0	0
Common Sandpiper	0	1	0	0	0	0	0	0	0	1	1	0
Green Sandpiper	1	0	1	2	0	0	0	0	1	1	0	1
Redshank	0	0	0	0	24	45	55	47	56	41	0	0
Spotted Redshank	0	0	0	1	0	1	0	0	0	0	0	0
Greenshank	0	0	1	0	0	0	0	0	0	0	0	0
Black-headed Gull	20	50	180	250	300	100	0	0	100	10	28	10
Common Gull	2	2	4	5	2000	20	0	0	2	90	2	1
Great Black-backed Gull	0	0	10	140	50	15	2	1	0	0	0	0
Herring Gull	0	0	4	1	42	3	9	8	2	3	0	0
Lesser Black-backed Gull	2	5	2	1	1	0	0	2	0	7	3	6
Common Tern	5	NA	0	0	0	0	0	0	0	0	2	3
Kingfisher	1	1	1	0	0	1	1	1	1	1	1	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Greylag Goose (British/Irish)	47 (JUL)	285 (JUL)	750 (AUG)	600 (SEP)	100 (SEP)	356
White-fronted Goose (European - albifrons)	16 (OCT)	0	0	0	0	3
Mute Swan	31 (OCT)	26 (AUG)	6 (AUG)	25 (SEP)	13 (OCT)	20
Whooper Swan	0	0	0	3 (OCT)	0	1
Gadwall	3 (JUL)	9 (SEP)	0	27 (OCT)	9 (OCT)	10
Wigeon	22 (OCT)	1 (SEP)	0	1 (OCT)	2 (OCT)	5
Mallard	89 (JUL)	152 (AUG)	120 (AUG)	171 (SEP)	13 (OCT)	109
Teal	12 (OCT)	1 (SEP)	5 (AUG)	16 (SEP)	5 (OCT)	8
Pochard	0	0	0	15 (SEP)	0	3
Tufted Duck	72 (OCT)	15 (SEP)	3 (AUG)	26 (OCT)	21 (OCT)	27
Goldeneye	1 (OCT)	0	0	0	0	0
Little Grebe	1 (OCT)	1 (AUG)	1 (AUG)	6 (OCT)	0	2
Great Crested Grebe	7 (OCT)	10 (AUG)	5 (AUG)	7 (JUL)	5 (OCT)	7
Grey Heron	4 (JUL)	5 (AUG)	1 (AUG)	3 (SEP)	2 (SEP)	3
Little Egret	1 (OCT)	1 (JUL)	1 (AUG)	3 (SEP)	2 (OCT)	2
Cormorant	13 (OCT)	7 (SEP)	6 (AUG)	12 (SEP)	14 (OCT)	10
Water Rail	0	0	0	0	1 (OCT)	0
Moorhen	2 (JUL)	0	0	3 (SEP)	3 (OCT)	2
Coot	16 (OCT)	20 (SEP)	0	58 (SEP)	0	19
Oystercatcher	1 (JUL)	0	0	1 (JUL)	0	0
Lapwing	4 (JUL)	20 (SEP)	42 (AUG)	117 (OCT)	10 (SEP)	39
Golden Plover	1 (JUL)	0	0	95 (SEP)	2 (SEP)	20
Little Ringed Plover	1 (JUL)	0	0	0	0	0
Curlew	1 (OCT)	0	0	1 (SEP)	0	0
Snipe	3 (OCT)	0	18 (AUG)	1 (SEP)	0	4
Common Sandpiper	0	1 (AUG)	0	0	0	0
Green Sandpiper	0	1 (JUL)	0	2 (OCT)	1 (OCT)	1
Spotted Redshank	0	0	0	0	1 (OCT)	0
Greenshank	0	0	0	1 (SEP)	0	0

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Black-headed Gull	10 (JUL)	25 (SEP)	50 (AUG)	180 (SEP)	250 (OCT)	103
Common Gull	2 (JUL)	2 (AUG)	0	5 (OCT)	3 (SEP)	2
Great Black-backed Gull	0	10 (SEP)	0	140 (OCT)	6 (SEP)	31
Herring Gull	0	1 (SEP)	0	4 (SEP)	2 (SEP)	1
Lesser Black-backed Gull	1 (JUL)	2 (AUG)	5 (AUG)	2 (JUL)	1 (OCT)	2
Common Tern	5 (JUL)	2 (JUL)	NA	4 (JUL)	0	3
Kingfisher	0	1 (JUL)	1 (AUG)	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Canada Goose	0	9 (JAN)	2 (MAR)	0	0	2
Greylag Goose (British/Irish)	400 (DEC)	100 (FEB)	200 (DEC)	100 (NOV)	230 (DEC)	206
Pink-footed Goose	0	112 (FEB)	200 (DEC)	0	25 (JAN)	67
White-fronted Goose (Greenland - flavirostris)	0	16 (FEB)	0	0	0	3
Mute Swan	33 (MAR)	53 (FEB)	113 (JAN)	43 (NOV)	76 (FEB)	64
Whooper Swan	0	18 (NOV)	0	0	4 (JAN)	4
Shelduck	1 (FEB)	0	2 (FEB)	0	3 (MAR)	1
Shoveler	0	1 (JAN)	8 (NOV)	6 (DEC)	7 (FEB)	4
Gadwall	6 (DEC)	11 (DEC)	26 (DEC)	51 (DEC)	187 (FEB)	56
Wigeon	130 (FEB)	400 (JAN)	679 (JAN)	420 (DEC)	2247 (FEB)	775
Mallard	50 (FEB)	247 (DEC)	202 (DEC)	79 (JAN)	212 (FEB)	158
Pintail	0	1 (DEC)	1 (JAN)	7 (DEC)	13 (FEB)	4
Teal	25 (FEB)	80 (JAN)	85 (JAN)	107 (JAN)	175 (FEB)	94
Pochard	100 (DEC)	5 (DEC)	2 (FEB)	9 (DEC)	2 (FEB)	24
Tufted Duck	230 (DEC)	52 (JAN)	75 (JAN)	165 (DEC)	62 (DEC)	117
Scaup	0	0	1 (DEC)	0	0	0
Goldeneye	42 (DEC)	56 (JAN)	13 (DEC)	16 (JAN)	13 (DEC)	28
Smew	1 (DEC)	0	0	0	0	0
Goosander	3 (MAR)	1 (DEC)	2 (JAN)	0	0	1
Little Grebe	18 (DEC)	17 (JAN)	18 (FEB)	8 (DEC)	7 (NOV)	14
Great Crested Grebe	3 (MAR)	8 (NOV)	3 (DEC)	4 (MAR)	4 (DEC)	4
Cattle Egret	0	0	0	0	1 (NOV)	0
Grey Heron	4 (DEC)	4 (NOV)	5 (JAN)	7 (NOV)	1 (DEC)	4
Great White Egret	0	0	1 (JAN)	0	0	0
Little Egret	21 (DEC)	32 (NOV)	34 (NOV)	2 (MAR)	22 (NOV)	22
Cormorant	11 (DEC)	16 (JAN)	7 (NOV)	12 (DEC)	18 (JAN)	13
Water Rail	2 (DEC)	2 (NOV)	1 (MAR)	2 (NOV)	0	1
Moorhen	8 (DEC)	7 (JAN)	0	4 (NOV)	8 (NOV)	5
Coot	4 (DEC)	4 (JAN)	0	2 (JAN)	4 (FEB)	3

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Oystercatcher	2 (MAR)	1 (FEB)	3 (FEB)	2 (MAR)	2 (MAR)	2
Lapwing	120 (DEC)	178 (JAN)	112 (DEC)	130 (DEC)	15 (MAR)	111
Golden Plover	1 (DEC)	95 (FEB)	2 (DEC)	0	1 (FEB)	20
Curlew	0	2 (NOV)	1 (MAR)	6 (JAN)	0	2
Woodcock	0	1 (NOV)	1 (JAN)	0	0	0
Snipe	1 (FEB)	12 (DEC)	0	0	3 (FEB)	3
Green Sandpiper	1 (MAR)	0	0	0	0	0
Redshank	43 (MAR)	55 (JAN)	30 (DEC)	56 (MAR)	4 (NOV)	38
Spotted Redshank	0	0	0	0	1 (DEC)	0
Black-headed Gull	0	0	0	100 (NOV)	300 (NOV)	80
Common Gull	0	0	0	20 (DEC)	2000 (NOV)	404
Great Black-backed Gull	2 (DEC)	15 (DEC)	40 (NOV)	50 (NOV)	0	21
Herring Gull	0	42 (NOV)	8 (FEB)	0	3 (DEC)	11
Lesser Black-backed Gull	0	0	2 (FEB)	0	0	0
Kingfisher	1 (MAR)	1 (DEC)	1 (JAN)	0	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2016/17	2017/18	2018/19	2019/20	Y5	Mean of Peaks
Canada Goose	12 (JUN)	1 (APR)	0	1 (APR)	NC	4
Greylag Goose (British/Irish)	25 (MAY)	25 (MAY)	47 (MAY)	35 (MAY)	NC	33
Pink-footed Goose	1 (APR)	1 (APR)	0	0	NC	0
Mute Swan	108 (APR)	63 (APR)	76 (APR)	0	NC	62
Whooper Swan	1 (APR)	0	0	0	NC	0
Shelduck	3 (APR)	1 (APR)	1 (MAY)	1 (APR)	NC	2
Shoveler	0	2 (APR)	1 (MAY)	0	NC	1
Gadwall	4 (JUN)	11 (JUN)	5 (APR)	5 (APR)	NC	6
Wigeon	3 (APR)	0	0	0	NC	1
Mallard	9 (JUN)	9 (JUN)	20 (APR)	0	NC	10
Teal	2 (APR)	23 (APR)	25 (APR)	100 (APR)	NC	38
Red-crested Pochard	2 (APR)	0	0	0	NC	0
Tufted Duck	18 (APR)	9 (APR)	3 (APR)	5 (APR)	NC	9
Goldeneye	2 (APR)	5 (APR)	7 (APR)	3 (APR)	NC	4
Goosander	0	1 (APR)	0	0	NC	0
Great Crested Grebe	6 (MAY)	8 (APR)	5 (MAY)	2 (MAY)	NC	5
Grey Heron	6 (MAY)	3 (JUN)	3 (APR)	3 (APR)	NC	4
Little Egret	2 (APR)	14 (JUN)	0	3 (APR)	NC	5
Cormorant	2 (APR)	9 (APR)	3 (APR)	8 (APR)	NC	6
Water Rail	0	0	0	1 (APR)	NC	0
Moorhen	0	3 (APR)	0	0	NC	1
Coot	0	2 (JUN)	0	1 (APR)	NC	1
Crane	0	1 (JUN)	0	0	NC	0
Oystercatcher	2 (MAY)	2 (APR)	2 (APR)	2 (APR)	NC	2
Avocet	0	0	0	1 (MAY)	NC	0
Lapwing	5 (JUN)	28 (JUN)	15 (APR)	(10)(JUN)	NC	16
Golden Plover	0	4 (APR)	0	0	NC	1
Little Ringed Plover	3 (MAY)	1 (APR)	1 (MAY)	1 (APR)	NC	2
Curlew	2 (MAY)	5 (APR)	1 (APR)	3 (APR)	NC	3

Species	2016/17	2017/18	2018/19	2019/20	Y5	Mean of Peaks
Dunlin	0	0	2 (MAY)	0	NC	0
Snipe	0	0	1 (APR)	0	NC	0
Common Sandpiper	1 (MAY)	0	1 (APR)	0	NC	0
Green Sandpiper	1 (APR)	0	0	0	NC	0
Redshank	11 (APR)	41 (APR)	2 (APR)	0	NC	14
Black-headed Gull	10 (JUN)	5 (MAY)	28 (MAY)	10 (APR)	NC	13
Common Gull	0	90 (APR)	2 (MAY)	1 (APR)	NC	23
Herring Gull	0	3 (APR)	2 (APR)	0	NC	1
Lesser Black-backed Gull	7 (APR)	6 (JUN)	3 (MAY)	7 (APR)	NC	6
Common Tern	3 (JUN)	2 (MAY)	2 (MAY)	2 (MAY)	NC	2
Kingfisher	1 (APR)	0	0	0	NC	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Canada Goose	12 (JUN)	9 (JAN)	2 (MAR)	1 (APR)	0	5
Greylag Goose (British/Irish)	400 (DEC)	285 (JUL)	750 (AUG)	600 (SEP)	230 (DEC)	453
Pink-footed Goose	1 (APR)	112 (FEB)	200 (DEC)	0	25 (JAN)	68
White-fronted Goose (Greenland - flavirostris)	0	16 (FEB)	0	0	0	3
White-fronted Goose (European - albifrons)	16 (OCT)	0	0	0	0	3
Mute Swan	108 (APR)	63 (APR)	113 (JAN)	43 (NOV)	76 (FEB)	81
Whooper Swan	1 (APR)	18 (NOV)	0	3 (OCT)	4 (JAN)	5
Shelduck	3 (APR)	1 (APR)	2 (FEB)	1 (APR)	3 (MAR)	2
Shoveler	0	2 (APR)	8 (NOV)	6 (DEC)	7 (FEB)	5
Gadwall	6 (DEC)	11 (DEC)	26 (DEC)	51 (DEC)	187 (FEB)	56
Wigeon	130 (FEB)	400 (JAN)	679 (JAN)	420 (DEC)	2247 (FEB)	775
Mallard	89 (JUL)	247 (DEC)	202 (DEC)	171 (SEP)	212 (FEB)	184
Pintail	0	1 (DEC)	1 (JAN)	7 (DEC)	13 (FEB)	4
Teal	25 (FEB)	80 (JAN)	85 (JAN)	107 (JAN)	175 (FEB)	94
Red-crested Pochard	2 (APR)	0	0	0	0	0
Pochard	100 (DEC)	5 (DEC)	2 (FEB)	15 (SEP)	2 (FEB)	25
Tufted Duck	230 (DEC)	52 (JAN)	75 (JAN)	165 (DEC)	62 (DEC)	117
Scaup	0	0	1 (DEC)	0	0	0
Goldeneye	42 (DEC)	56 (JAN)	13 (DEC)	16 (JAN)	13 (DEC)	28
Smew	1 (DEC)	0	0	0	0	0
Goosander	3 (MAR)	1 (DEC)	2 (JAN)	0	0	1
Little Grebe	18 (DEC)	17 (JAN)	18 (FEB)	8 (DEC)	7 (NOV)	14
Great Crested Grebe	7 (OCT)	10 (AUG)	5 (AUG)	7 (JUL)	5 (OCT)	7
Cattle Egret	0	0	0	0	1 (NOV)	0
Grey Heron	6 (MAY)	5 (AUG)	5 (JAN)	7 (NOV)	2 (SEP)	5
Great White Egret	0	0	1 (JAN)	0	0	0
Little Egret	21 (DEC)	32 (NOV)	34 (NOV)	3 (SEP)	22 (NOV)	22
Cormorant	13 (OCT)	16 (JAN)	7 (NOV)	12 (SEP)	18 (JAN)	13
Water Rail	2 (DEC)	2 (NOV)	1 (MAR)	2 (NOV)	1 (OCT)	2

Species	2016/17	2017/18	2018/19	2019/20	2020/21	Mean of Peaks
Moorhen	8 (DEC)	7 (JAN)	0	4 (NOV)	8 (NOV)	5
Coot	16 (OCT)	20 (SEP)	0	58 (SEP)	4 (FEB)	20
Crane	0	1 (JUN)	0	0	0	0
Oystercatcher	2 (MAR)	2 (APR)	3 (FEB)	2 (MAR)	2 (MAR)	2
Avocet	0	0	0	1 (MAY)	0	0
Lapwing	120 (DEC)	178 (JAN)	112 (DEC)	130 (DEC)	15 (MAR)	111
Golden Plover	1 (JUL)	95 (FEB)	2 (DEC)	95 (SEP)	2 (SEP)	39
Little Ringed Plover	3 (MAY)	1 (APR)	1 (MAY)	1 (APR)	0	1
Curlew	2 (MAY)	5 (APR)	1 (MAR)	6 (JAN)	0	3
Dunlin	0	0	2 (MAY)	0	0	0
Woodcock	0	1 (NOV)	1 (JAN)	0	0	0
Snipe	3 (OCT)	12 (DEC)	18 (AUG)	1 (SEP)	3 (FEB)	7
Common Sandpiper	1 (MAY)	1 (AUG)	1 (APR)	0	0	1
Green Sandpiper	1 (MAR)	1 (JUL)	0	2 (OCT)	1 (OCT)	1
Redshank	43 (MAR)	55 (JAN)	30 (DEC)	56 (MAR)	4 (NOV)	38
Spotted Redshank	0	0	0	0	1 (OCT)	0
Greenshank	0	0	0	1 (SEP)	0	0
Black-headed Gull	10 (JUL)	25 (SEP)	50 (AUG)	180 (SEP)	300 (NOV)	113
Common Gull	2 (JUL)	90 (APR)	2 (MAY)	20 (DEC)	2000 (NOV)	423
Great Black-backed Gull	2 (DEC)	15 (DEC)	40 (NOV)	140 (OCT)	6 (SEP)	41
Herring Gull	0	42 (NOV)	8 (FEB)	4 (SEP)	3 (DEC)	11
Lesser Black-backed Gull	7 (APR)	6 (JUN)	5 (AUG)	7 (APR)	1 (OCT)	5
Common Tern	5 (JUL)	2 (JUL)	2 (MAY)	4 (JUL)	0	3
Kingfisher	1 (MAR)	1 (JUL)	1 (AUG)	0	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	453	32%	NA
Pink-footed Goose	68	1%	1%
White-fronted Goose (Greenland - flavirostris)	3	2%	1%
White-fronted Goose (European - albifrons)	3	*6%	0%
Mute Swan	81	16%	16%
Whooper Swan	5	3%	1%
Shelduck	2	0%	0%
Shoveler	5	3%	1%
Gadwall	56	18%	4%
Wigeon	775	17%	6%
Mallard	184	3%	1%
Pintail	4	2%	1%
Teal	94	2%	1%
Pochard	25	11%	2%
Tufted Duck	117	9%	1%
Goldeneye	28	15%	0%
Goosander	1	1%	0%
Little Grebe	14	9%	0%
Great Crested Grebe	7	4%	0%
Grey Heron	5	1%	0%
Little Egret	22	20%	2%
Cormorant	13	2%	1%
Moorhen	5	0%	0%
Coot	20	1%	0%
Oystercatcher	2	0%	0%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Lapwing	111	2%	1%
Golden Plover	39	1%	0%
Curlew	3	0%	0%
Snipe	7	0%	0%
Common Sandpiper	1	*2%	0%
Green Sandpiper	1	*2%	0%
Redshank	38	4%	2%
Black-headed Gull	113	1%	1%
Common Gull	423	6%	3%
Great Black-backed Gull	41	5%	5%
Herring Gull	11	0%	0%
Lesser Black-backed Gull	5	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Pulfin Bog and High Eske Nature Reserve

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	356	206	33	25%	15%	2%	NA	NA	NA
Pink-footed Goose	0	67	0		1%			1%	
White-fronted Goose (Greenland - flavirostris)	0	3	0		2%			1%	
White-fronted Goose (European - albifrons)	3	0	0	*6%			0%		
Mute Swan	20	64	62	4%	13%	12%	4%	13%	12%
Whooper Swan	1	4	0	1%	2%		0%	1%	
Shelduck	0	1	2		0%	0%		0%	0%
Shoveler	0	4	1		2%	1%		1%	0%
Gadwall	10	56	6	3%	18%	2%	1%	4%	0%
Wigeon	5	775	1	0%	17%	0%	0%	6%	0%
Mallard	109	158	10	2%	2%	0%	1%	1%	0%
Pintail	0	4	0		2%			1%	
Teal	8	94	38	0%	2%	1%	0%	1%	1%
Pochard	3	24	0	1%	10%		0%	2%	
Tufted Duck	27	117	9	2%	9%	1%	0%	1%	0%
Goldeneye	0	28	4		15%	2%		0%	0%
Goosander	0	1	0		1%			0%	
Little Grebe	2	14	0	1%	9%		0%	0%	

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Great Crested Grebe	7	4	5	4%	2%	3%	0%	0%	0%
Grey Heron	3	4	4	1%	1%	1%	0%	0%	0%
Little Egret	2	22	5	2%	20%	5%	0%	2%	0%
Cormorant	10	13	6	2%	2%	1%	1%	1%	1%
Moorhen	2	5	1	0%	0%	0%	0%	0%	0%
Coot	19	3	1	1%	0%	0%	0%	0%	0%
Oystercatcher	0	2	2		0%	0%		0%	0%
Lapwing	39	111	16	1%	2%	0%	0%	1%	0%
Golden Plover	20	20	1	0%	0%	0%	0%	0%	0%
Curlew	0	2	3		0%	0%		0%	0%
Snipe	4	3	0	0%	0%		0%	0%	
Common Sandpiper	0	0	0						
Green Sandpiper	1	0	0	*2%			0%		
Redshank	0	38	14		4%	1%		2%	1%
Black-headed Gull	103	80	13	0%	0%	0%	1%	0%	0%
Common Gull	2	404	23	0%	6%	0%	0%	2%	0%
Great Black-backed Gull	31	21	0	4%	3%		4%	2%	
Herring Gull	1	11	1	0%	0%	0%	0%	0%	0%
Lesser Black-backed Gull	2	0	6	0%		0%	0%		0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

River Idle - Bawtry to Newington

Compiled on 27 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

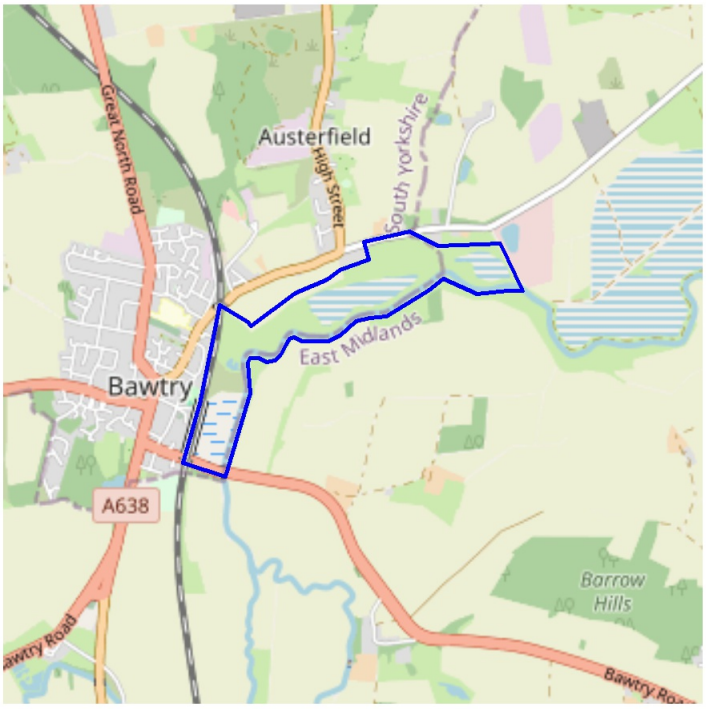
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors River Idle - Bawtry to Newington



LOC LABEL	NAME	GRIDREF	Web Link
37307	River Idle - Bawtry to Newington	SK661935	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC1037955

Five year summary for River Idle - Bawtry to Newington

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2019/20	1615	FEB	968	1787	190
2020/21	3214	JAN	994	4058	648
2021/22	1444	FEB	1410	2192	429
2022/23	3509	JAN	1124	4361	471
2023/24	2211	JAN	982	3599	666
MEAN	2399		1096	3199	481

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	6 (5,0)	4 (5,0)	9 (5,0)	30 (5,0)	32 (5,0)	21 (5,0)	150 (5,0)	29 (5,0)	10 (5,0)	4 (4,0)	3 (4,0)	1 (5,0)
Barnacle Goose	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Greylag Goose (British/Irish)	12 (5,0)	1 (5,0)	1 (5,0)	11 (5,0)	13 (5,0)	11 (5,0)	83 (5,0)	73 (5,0)	15 (5,0)	12 (4,0)	5 (4,0)	7 (5,0)
Pink-footed Goose	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	12 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Mute Swan	14 (5,0)	15 (5,0)	21 (5,0)	31 (5,0)	39 (5,0)	12 (5,0)	9 (5,0)	9 (5,0)	7 (5,0)	12 (4,0)	44 (4,0)	35 (5,0)
Whooper Swan	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	2 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Shelduck	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	2 (5,0)	3 (5,0)	4 (5,0)	13 (5,0)	5 (5,0)	12 (4,0)	3 (4,0)	3 (5,0)
Mandarin Duck	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Garganey	0 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Shoveler	7 (5,0)	21 (5,0)	18 (5,0)	9 (5,0)	18 (5,0)	6 (5,0)	7 (5,0)	11 (5,0)	40 (5,0)	12 (4,0)	10 (4,0)	7 (5,0)
Gadwall	56 (5,0)	24 (5,0)	64 (5,0)	41 (5,0)	58 (5,0)	31 (5,0)	66 (5,0)	37 (5,0)	52 (5,0)	71 (4,0)	49 (4,0)	58 (5,0)
Wigeon	0 (5,0)	0 (5,0)	24 (5,0)	122 (5,0)	346 (5,0)	640 (5,0)	1084 (5,0)	745 (5,0)	942 (5,0)	7 (4,0)	0 (4,0)	0 (5,0)
Mallard	61 (5,0)	37 (5,0)	128 (5,0)	80 (5,0)	95 (5,0)	80 (5,0)	172 (5,0)	77 (5,0)	102 (5,0)	52 (4,0)	55 (4,0)	61 (5,0)
Pintail	0 (5,0)	0 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	3 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Teal	5 (5,0)	24 (5,0)	144 (5,0)	114 (5,0)	230 (5,0)	298 (5,0)	315 (5,0)	288 (5,0)	234 (5,0)	42 (4,0)	0 (4,0)	3 (5,0)
Pochard	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Tufted Duck	10 (5,0)	4 (5,0)	4 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	5 (5,0)	8 (5,0)	18 (5,0)	12 (4,0)	6 (4,0)	4 (5,0)
Goldeneye	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Grebe	2 (5,0)	2 (5,0)	4 (5,0)	4 (5,0)	2 (5,0)	2 (5,0)	2 (5,0)	2 (5,0)	2 (5,0)	1 (4,0)	1 (4,0)	0 (5,0)
Great Crested Grebe	1 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	2 (5,0)	2 (4,0)	4 (4,0)	1 (5,0)
Cattle Egret	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Grey Heron	2 (5,0)	3 (5,0)	2 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	0 (4,0)	0 (4,0)	2 (5,0)
Great White Egret	0 (5,0)	2 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Egret	9 (5,0)	13 (5,0)	11 (5,0)	3 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	2 (5,0)	1 (5,0)	2 (4,0)	2 (4,0)	1 (5,0)
Cormorant	1 (5,0)	3 (5,0)	2 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	1 (5,0)	3 (4,0)	2 (4,0)	2 (5,0)
Moorhen	7 (5,0)	8 (5,0)	2 (5,0)	3 (5,0)	4 (5,0)	3 (5,0)	3 (5,0)	5 (5,0)	8 (5,0)	4 (4,0)	3 (4,0)	4 (5,0)
Coot	20 (5,0)	25 (5,0)	26 (5,0)	8 (5,0)	39 (5,0)	35 (5,0)	34 (5,0)	32 (5,0)	58 (5,0)	32 (4,0)	38 (4,0)	43 (5,0)
Oystercatcher	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	3 (5,0)	4 (5,0)	2 (4,0)	1 (4,0)	1 (5,0)
Avocet	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	20 (4,0)	8 (4,0)	1 (5,0)
Lapwing	58 (5,0)	67 (5,0)	24 (5,0)	117 (5,0)	35 (5,0)	99 (5,0)	50 (5,0)	193 (5,0)	128 (5,0)	17 (4,0)	14 (4,0)	19 (5,0)
Golden Plover	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	6 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Ringed Plover	0 (5,0)	0 (5,0)	3 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Little Ringed Plover	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (4,0)	0 (4,0)	0 (5,0)
Curlew	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	21 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Black-tailed Godwit	0 (5,0)	1 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (4,0)	0 (4,0)	0 (5,0)
Ruff	1 (5,0)	1 (5,0)	2 (5,0)	8 (5,0)	2 (5,0)	10 (5,0)	9 (5,0)	14 (5,0)	16 (5,0)	2 (4,0)	0 (4,0)	0 (5,0)
Curlew Sandpiper	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Dunlin	0 (5,0)	0 (5,0)	5 (5,0)	6 (5,0)	6 (5,0)	1 (5,0)	11 (5,0)	28 (5,0)	58 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Snipe	0 (5,0)	21 (5,0)	33 (5,0)	17 (5,0)	75 (5,0)	10 (5,0)	5 (5,0)	2 (5,0)	8 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Common Sandpiper	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Green Sandpiper	0 (5,0)	2 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Redshank	0 (5,0)	0 (5,0)	0 (5,0)	1 (5,0)	4 (5,0)	15 (5,0)	14 (5,0)	15 (5,0)	17 (5,0)	9 (4,0)	3 (4,0)	4 (5,0)
Wood Sandpiper	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Greenshank	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Black-headed Gull	41 (5,0)	10 (5,0)	41 (5,0)	35 (5,0)	53 (4,0)	49 (5,0)	65 (5,0)	82 (5,0)	70 (5,0)	38 (4,0)	8 (4,0)	14 (5,0)
Mediterranean Gull	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Common Gull	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	1 (5,0)	1 (5,0)	2 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Great Black-backed Gull	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Herring Gull	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Caspian Gull	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)
Lesser Black-backed Gull	0 (5,0)	0 (5,0)	1 (5,0)	1 (5,0)	0 (4,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	1 (4,0)	1 (4,0)	4 (5,0)
Common Tern	3 (5,0)	4 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (3,0)	0 (4,0)	0 (3,0)	0 (4,0)	2 (4,0)	2 (5,0)
Kingfisher	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (5,0)	0 (4,0)	0 (4,0)	0 (5,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	30	18	32	140	87	91	460	130	29	11	5	4
Barnacle Goose	0	0	0	1	0	0	0	0	1	0	0	0
Greylag Goose (British/Irish)	38	4	4	52	45	30	210	315	32	30	13	24
Pink-footed Goose	0	0	0	0	0	0	0	60	0	0	0	0
Mute Swan	32	28	32	76	142	47	22	30	14	25	120	77
Whooper Swan	0	0	0	0	2	2	0	10	0	0	0	0
Shelduck	4	4	1	2	8	10	8	42	8	22	6	6
Mandarin Duck	0	0	0	0	0	1	0	0	0	0	0	0
Garganey	1	4	0	0	0	0	0	0	0	1	0	0
Shoveler	25	52	44	17	28	18	14	42	162	31	21	12
Gadwall	140	70	139	72	192	51	144	74	96	85	108	132
Wigeon	0	1	53	213	570	1850	2300	960	1480	28	0	0
Mallard	140	125	425	178	315	162	560	110	142	84	112	148
Pintail	0	0	8	0	2	0	2	6	12	0	0	0
Teal	12	71	330	225	410	520	520	380	360	56	2	8
Pochard	0	0	0	0	0	0	1	1	0	0	0	0
Tufted Duck	18	17	10	6	2	4	14	17	37	31	14	12
Goldeneye	0	0	0	0	0	0	2	0	0	0	0	0
Little Grebe	6	9	8	12	3	4	5	4	3	2	2	2
Great Crested Grebe	4	2	2	0	0	2	1	1	3	6	11	4
Cattle Egret	0	1	1	0	0	0	0	0	0	0	0	0
Grey Heron	4	5	3	3	2	1	2	3	3	1	1	3
Great White Egret	1	5	4	3	2	1	2	2	1	0	2	2
Little Egret	24	25	42	7	4	1	1	5	2	3	3	3
Cormorant	2	7	8	4	2	4	3	2	4	6	6	4
Moorhen	25	21	5	9	10	7	6	7	15	5	4	6
Coot	48	65	65	15	170	160	140	96	74	45	52	75
Oystercatcher	2	0	0	0	1	0	0	6	10	4	2	3
Avocet	2	0	0	0	0	0	0	0	0	39	16	4
Lapwing	210	150	46	280	85	158	120	430	220	40	25	38
Golden Plover	0	0	0	0	1	0	0	28	0	0	0	0
Ringed Plover	1	0	11	0	0	0	0	0	0	1	1	0
Little Ringed Plover	4	0	0	0	0	0	0	0	0	3	2	1

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Curlew	0	0	0	0	0	0	0	103	0	0	0	0
Black-tailed Godwit	0	4	0	0	0	0	0	0	1	3	0	1
Ruff	4	3	4	26	8	17	18	35	31	8	0	0
Curlew Sandpiper	0	0	1	0	0	0	0	0	0	0	0	0
Dunlin	0	0	24	17	24	4	42	74	170	1	0	0
Snipe	2	100	128	36	240	38	22	6	28	0	0	0
Common Sandpiper	1	1	0	0	0	0	0	0	0	1	2	0
Green Sandpiper	1	7	1	1	0	0	1	0	0	1	0	1
Redshank	0	1	0	5	10	35	32	32	28	14	4	7
Wood Sandpiper	0	1	0	0	0	0	0	0	0	0	0	0
Greenshank	1	0	1	1	0	0	0	0	0	1	0	0
Black-headed Gull	86	27	95	85	110	64	220	300	120	48	26	43
Mediterranean Gull	1	0	0	0	0	0	0	0	1	0	0	0
Common Gull	0	0	0	0	0	1	6	3	8	0	1	0
Great Black-backed Gull	1	0	0	0	0	0	0	0	0	0	0	1
Herring Gull	0	0	1	0	1	1	2	1	0	0	0	0
Caspian Gull	0	0	0	0	0	0	0	0	0	0	0	1
Lesser Black-backed Gull	1	0	2	4	1	0	0	0	0	3	2	12
Common Tern	8	6	0	0	0	0	0	0	0	0	3	3
Kingfisher	0	0	1	1	0	0	0	0	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	140 (OCT)	18 (AUG)	0	30 (JUL)	32 (SEP)	44
Barnacle Goose	1 (OCT)	0	0	0	0	0
Greylag Goose (British/Irish)	52 (OCT)	4 (JUL)	38 (JUL)	6 (JUL)	5 (OCT)	21
Mute Swan	23 (JUL)	32 (JUL)	76 (OCT)	15 (SEP)	47 (OCT)	39
Shelduck	4 (JUL)	1 (SEP)	4 (AUG)	0	2 (OCT)	2
Garganey	0	3 (AUG)	4 (AUG)	0	1 (AUG)	2
Shoveler	6 (OCT)	52 (AUG)	38 (SEP)	8 (OCT)	44 (SEP)	30
Gadwall	140 (JUL)	22 (AUG)	95 (SEP)	86 (SEP)	139 (SEP)	96
Wigeon	82 (OCT)	64 (OCT)	190 (OCT)	62 (OCT)	213 (OCT)	122
Mallard	95 (OCT)	43 (JUL)	155 (SEP)	425 (SEP)	87 (OCT)	161
Pintail	0	0	8 (SEP)	0	0	2
Teal	35 (SEP)	194 (SEP)	330 (SEP)	145 (OCT)	115 (OCT)	164
Tufted Duck	16 (JUL)	6 (JUL)	18 (JUL)	0	10 (SEP)	10
Little Grebe	2 (JUL)	8 (SEP)	9 (AUG)	0	12 (OCT)	6
Great Crested Grebe	0	4 (JUL)	1 (JUL)	0	2 (SEP)	1
Cattle Egret	0	0	1 (AUG)	0	0	0
Grey Heron	4 (JUL)	3 (AUG)	5 (AUG)	2 (AUG)	5 (AUG)	4
Great White Egret	2 (OCT)	4 (SEP)	4 (AUG)	0	5 (AUG)	3
Little Egret	24 (JUL)	42 (SEP)	25 (AUG)	2 (SEP)	17 (AUG)	22
Cormorant	4 (AUG)	2 (JUL)	7 (AUG)	0	8 (SEP)	4
Moorhen	2 (JUL)	5 (AUG)	25 (JUL)	12 (AUG)	9 (OCT)	11
Coot	8 (JUL)	52 (SEP)	65 (AUG)	12 (SEP)	65 (SEP)	40
Oystercatcher	2 (JUL)	2 (JUL)	2 (JUL)	0	0	1
Avocet	0	2 (JUL)	0	0	0	0
Lapwing	210 (JUL)	280 (OCT)	75 (OCT)	172 (OCT)	104 (AUG)	168
Ringed Plover	6 (SEP)	11 (SEP)	0	1 (JUL)	0	4
Little Ringed Plover	0	0	0	4 (JUL)	0	1
Black-tailed Godwit	0	0	4 (AUG)	0	0	1
Ruff	4 (JUL)	6 (OCT)	26 (OCT)	4 (OCT)	2 (OCT)	8

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Curlew Sandpiper	0	1 (SEP)	0	0	0	0
Dunlin	2 (SEP)	24 (SEP)	2 (OCT)	10 (OCT)	2 (OCT)	8
Snipe	0	10 (OCT)	128 (SEP)	36 (OCT)	6 (OCT)	36
Common Sandpiper	1 (JUL)	0	0	0	0	0
Green Sandpiper	1 (SEP)	1 (AUG)	7 (AUG)	1 (OCT)	0	2
Redshank	0	5 (OCT)	1 (AUG)	1 (OCT)	0	1
Wood Sandpiper	0	0	1 (AUG)	0	0	0
Greenshank	0	0	1 (SEP)	1 (JUL)	0	0
Black-headed Gull	95 (SEP)	85 (OCT)	56 (JUL)	86 (JUL)	38 (OCT)	72
Mediterranean Gull	0	0	1 (JUL)	0	0	0
Great Black-backed Gull	0	0	0	0	1 (JUL)	0
Herring Gull	0	0	0	0	1 (SEP)	0
Lesser Black-backed Gull	1 (SEP)	2 (SEP)	0	1 (JUL)	4 (OCT)	2
Common Tern	5 (JUL)	6 (AUG)	8 (JUL)	1 (JUL)	6 (AUG)	5
Kingfisher	1 (OCT)	0	0	1 (SEP)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	2 (NOV)	130 (FEB)	10 (JAN)	210 (JAN)	460 (JAN)	162
Barnacle Goose	0	1 (MAR)	0	0	0	0
Greylag Goose (British/Irish)	8 (FEB)	315 (FEB)	31 (MAR)	85 (JAN)	210 (JAN)	130
Pink-footed Goose	0	0	0	0	60 (FEB)	12
Mute Swan	30 (FEB)	12 (JAN)	16 (NOV)	6 (NOV)	142 (NOV)	41
Whooper Swan	2 (DEC)	10 (FEB)	0	0	2 (NOV)	3
Shelduck	22 (FEB)	4 (JAN)	8 (MAR)	42 (FEB)	8 (JAN)	17
Mandarin Duck	0	1 (DEC)	0	0	0	0
Shoveler	0	18 (NOV)	28 (NOV)	18 (NOV)	162 (MAR)	45
Gadwall	23 (MAR)	42 (DEC)	72 (MAR)	140 (JAN)	192 (NOV)	94
Wigeon	960 (FEB)	2300 (JAN)	870 (FEB)	1750 (JAN)	730 (JAN)	1322
Mallard	52 (JAN)	104 (MAR)	128 (MAR)	560 (JAN)	315 (NOV)	232
Pintail	0	5 (MAR)	1 (JAN)	2 (NOV)	12 (MAR)	4
Teal	380 (FEB)	520 (DEC)	520 (DEC)	410 (NOV)	390 (NOV)	444
Pochard	0	1 (JAN)	0	0	0	0
Tufted Duck	25 (MAR)	26 (MAR)	6 (FEB)	0	37 (MAR)	19
Goldeneye	0	0	0	2 (JAN)	0	0
Little Grebe	4 (DEC)	4 (FEB)	2 (NOV)	3 (JAN)	5 (JAN)	4
Great Crested Grebe	2 (MAR)	3 (MAR)	2 (MAR)	0	2 (DEC)	2
Grey Heron	1 (DEC)	2 (JAN)	2 (NOV)	3 (MAR)	3 (FEB)	2
Great White Egret	0	1 (NOV)	1 (NOV)	2 (JAN)	2 (NOV)	1
Little Egret	1 (FEB)	1 (DEC)	2 (FEB)	1 (JAN)	5 (FEB)	2
Cormorant	2 (FEB)	2 (DEC)	2 (NOV)	4 (MAR)	4 (DEC)	3
Moorhen	6 (MAR)	4 (DEC)	13 (MAR)	15 (MAR)	7 (DEC)	9
Coot	28 (MAR)	74 (MAR)	72 (MAR)	45 (MAR)	170 (NOV)	78
Oystercatcher	3 (FEB)	1 (NOV)	2 (MAR)	10 (MAR)	7 (MAR)	5
Lapwing	120 (DEC)	210 (MAR)	115 (FEB)	340 (FEB)	430 (FEB)	243
Golden Plover	0	0	0	28 (FEB)	0	6
Curlew	0	103 (FEB)	0	0	0	21

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Black-tailed Godwit	0	0	0	1 (MAR)	0	0
Ruff	17 (DEC)	12 (DEC)	19 (MAR)	35 (FEB)	10 (DEC)	19
Dunlin	0	3 (MAR)	42 (JAN)	83 (MAR)	170 (MAR)	60
Snipe	5 (FEB)	3 (JAN)	135 (NOV)	240 (NOV)	6 (FEB)	78
Green Sandpiper	0	1 (JAN)	0	0	0	0
Redshank	35 (DEC)	22 (DEC)	18 (MAR)	18 (FEB)	18 (FEB)	22
Black-headed Gull	58 (MAR)	120 (MAR)	66 (FEB)	300 (FEB)	40 (DEC)	117
Mediterranean Gull	0	0	1 (MAR)	0	0	0
Common Gull	1 (DEC)	1 (FEB)	8 (MAR)	6 (JAN)	0	3
Herring Gull	0	1 (NOV)	0	2 (JAN)	0	1
Lesser Black-backed Gull	0	1 (NOV)	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	2 (JUN)	2 (APR)	5 (MAY)	2 (APR)	11 (APR)	4
Greylag Goose (British/Irish)	6 (JUN)	13 (APR)	8 (MAY)	4 (APR)	30 (APR)	12
Mute Swan	28 (JUN)	32 (MAY)	26 (JUN)	25 (APR)	120 (MAY)	46
Shelduck	6 (JUN)	19 (APR)	4 (APR)	22 (APR)	6 (JUN)	11
Garganey	0	0	1 (APR)	0	0	0
Shoveler	8 (JUN)	11 (APR)	4 (APR)	21 (MAY)	31 (APR)	15
Gadwall	32 (JUN)	132 (JUN)	85 (APR)	108 (MAY)	73 (JUN)	86
Wigeon	0	0	0	0	28 (APR)	6
Mallard	18 (JUN)	148 (JUN)	46 (APR)	112 (MAY)	84 (APR)	82
Teal	2 (JUN)	51 (APR)	54 (APR)	9 (APR)	56 (APR)	34
Tufted Duck	12 (JUN)	5 (MAY)	14 (MAY)	18 (APR)	31 (APR)	16
Little Grebe	0	1 (APR)	2 (MAY)	0	2 (APR)	1
Great Crested Grebe	2 (JUN)	1 (MAY)	0	2 (APR)	11 (MAY)	3
Grey Heron	1 (JUN)	3 (JUN)	2 (JUN)	1 (APR)	2 (JUN)	2
Great White Egret	0	2 (JUN)	0	0	2 (MAY)	1
Little Egret	0	3 (JUN)	1 (APR)	2 (APR)	3 (APR)	2
Cormorant	3 (JUN)	3 (JUN)	1 (JUN)	6 (MAY)	6 (APR)	4
Moorhen	3 (JUN)	4 (APR)	6 (JUN)	5 (JUN)	4 (MAY)	4
Coot	21 (JUN)	75 (JUN)	32 (APR)	52 (MAY)	69 (JUN)	50
Oystercatcher	3 (JUN)	4 (APR)	2 (JUN)	2 (APR)	4 (APR)	3
Avocet	4 (JUN)	39 (APR)	18 (APR)	22 (APR)	0	17
Lapwing	12 (JUN)	28 (JUN)	38 (JUN)	14 (MAY)	40 (APR)	26
Ringed Plover	0	1 (APR)	1 (MAY)	0	1 (MAY)	1
Little Ringed Plover	1 (JUN)	2 (APR)	3 (APR)	0	0	1
Black-tailed Godwit	0	0	3 (APR)	1 (JUN)	0	1
Ruff	0	2 (APR)	8 (APR)	0	0	2
Dunlin	0	0	1 (APR)	0	0	0
Common Sandpiper	0	0	2 (MAY)	0	1 (APR)	1
Green Sandpiper	0	1 (APR)	0	1 (JUN)	0	0

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Redshank	6 (JUN)	14 (APR)	10 (APR)	7 (JUN)	11 (APR)	10
Greenshank	0	0	0	0	1 (APR)	0
Black-headed Gull	6 (JUN)	46 (APR)	48 (APR)	30 (APR)	30 (APR)	32
Common Gull	0	0	0	0	1 (MAY)	0
Great Black-backed Gull	0	0	0	0	1 (JUN)	0
Caspian Gull	0	0	0	0	1 (JUN)	0
Lesser Black-backed Gull	12 (JUN)	3 (APR)	1 (JUN)	3 (JUN)	4 (JUN)	5
Common Tern	2 (JUN)	3 (JUN)	3 (MAY)	2 (MAY)	2 (MAY)	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Canada Goose	140 (OCT)	130 (FEB)	10 (JAN)	210 (JAN)	460 (JAN)	190
Barnacle Goose	1 (OCT)	1 (MAR)	0	0	0	0
Greylag Goose (British/Irish)	52 (OCT)	315 (FEB)	38 (JUL)	85 (JAN)	210 (JAN)	140
Pink-footed Goose	0	0	0	0	60 (FEB)	12
Mute Swan	30 (FEB)	32 (JUL)	76 (OCT)	25 (APR)	142 (NOV)	61
Whooper Swan	2 (DEC)	10 (FEB)	0	0	2 (NOV)	3
Shelduck	22 (FEB)	19 (APR)	8 (MAR)	42 (FEB)	8 (JAN)	20
Mandarin Duck	0	1 (DEC)	0	0	0	0
Garganey	0	3 (AUG)	4 (AUG)	0	1 (AUG)	2
Shoveler	8 (JUN)	52 (AUG)	38 (SEP)	21 (MAY)	162 (MAR)	56
Gadwall	140 (JUL)	132 (JUN)	95 (SEP)	140 (JAN)	192 (NOV)	140
Wigeon	960 (FEB)	2300 (JAN)	870 (FEB)	1750 (JAN)	730 (JAN)	1322
Mallard	95 (OCT)	148 (JUN)	155 (SEP)	560 (JAN)	315 (NOV)	255
Pintail	0	5 (MAR)	8 (SEP)	2 (NOV)	12 (MAR)	5
Teal	380 (FEB)	520 (DEC)	520 (DEC)	410 (NOV)	390 (NOV)	444
Pochard	0	1 (JAN)	0	0	0	0
Tufted Duck	25 (MAR)	26 (MAR)	18 (JUL)	18 (APR)	37 (MAR)	25
Goldeneye	0	0	0	2 (JAN)	0	0
Little Grebe	4 (DEC)	8 (SEP)	9 (AUG)	3 (JAN)	12 (OCT)	7
Great Crested Grebe	2 (MAR)	4 (JUL)	2 (MAR)	2 (APR)	11 (MAY)	4
Cattle Egret	0	0	1 (AUG)	0	0	0
Grey Heron	4 (JUL)	3 (AUG)	5 (AUG)	3 (MAR)	5 (AUG)	4
Great White Egret	2 (OCT)	4 (SEP)	4 (AUG)	2 (JAN)	5 (AUG)	3
Little Egret	24 (JUL)	42 (SEP)	25 (AUG)	2 (SEP)	17 (AUG)	22
Cormorant	4 (AUG)	3 (JUN)	7 (AUG)	6 (MAY)	8 (SEP)	6
Moorhen	6 (MAR)	5 (AUG)	25 (JUL)	15 (MAR)	9 (OCT)	12
Coot	28 (MAR)	75 (JUN)	72 (MAR)	52 (MAY)	170 (NOV)	79
Oystercatcher	3 (FEB)	4 (APR)	2 (JUL)	10 (MAR)	7 (MAR)	5
Avocet	4 (JUN)	39 (APR)	18 (APR)	22 (APR)	0	17

Species	2019/20	2020/21	2021/22	2022/23	2023/24	Mean of Peaks
Lapwing	210 (JUL)	280 (OCT)	115 (FEB)	340 (FEB)	430 (FEB)	275
Golden Plover	0	0	0	28 (FEB)	0	6
Ringed Plover	6 (SEP)	11 (SEP)	1 (MAY)	1 (JUL)	1 (MAY)	4
Little Ringed Plover	1 (JUN)	2 (APR)	3 (APR)	4 (JUL)	0	2
Curlew	0	103 (FEB)	0	0	0	21
Black-tailed Godwit	0	0	4 (AUG)	1 (MAR)	0	1
Ruff	17 (DEC)	12 (DEC)	26 (OCT)	35 (FEB)	10 (DEC)	20
Curlew Sandpiper	0	1 (SEP)	0	0	0	0
Dunlin	2 (SEP)	24 (SEP)	42 (JAN)	83 (MAR)	170 (MAR)	64
Snipe	5 (FEB)	10 (OCT)	135 (NOV)	240 (NOV)	6 (OCT)	79
Common Sandpiper	1 (JUL)	0	2 (MAY)	0	1 (APR)	1
Green Sandpiper	1 (SEP)	1 (AUG)	7 (AUG)	1 (OCT)	0	2
Redshank	35 (DEC)	22 (DEC)	18 (MAR)	18 (FEB)	18 (FEB)	22
Wood Sandpiper	0	0	1 (AUG)	0	0	0
Greenshank	0	0	1 (SEP)	1 (JUL)	1 (APR)	1
Black-headed Gull	95 (SEP)	120 (MAR)	66 (FEB)	300 (FEB)	40 (DEC)	124
Mediterranean Gull	0	0	1 (JUL)	0	0	0
Common Gull	1 (DEC)	1 (FEB)	8 (MAR)	6 (JAN)	1 (MAY)	3
Great Black-backed Gull	0	0	0	0	1 (JUL)	0
Herring Gull	0	1 (NOV)	0	2 (JAN)	1 (SEP)	1
Caspian Gull	0	0	0	0	1 (JUN)	0
Lesser Black-backed Gull	12 (JUN)	3 (APR)	1 (JUN)	3 (JUN)	4 (OCT)	5
Common Tern	5 (JUL)	6 (AUG)	8 (JUL)	2 (MAY)	6 (AUG)	5
Kingfisher	1 (OCT)	0	0	1 (SEP)	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	140	10%	NA
Pink-footed Goose	12	0%	0%
Mute Swan	61	12%	12%
Whooper Swan	3	2%	1%
Shelduck	20	4%	1%
Shoveler	56	29%	7%
Gadwall	140	45%	10%
Wigeon	1322	29%	9%
Mallard	255	4%	1%
Pintail	5	2%	1%
Teal	444	10%	7%
Tufted Duck	25	2%	0%
Little Grebe	7	5%	0%
Great Crested Grebe	4	2%	0%
Grey Heron	4	1%	0%
Great White Egret	3	*6%	0%
Little Egret	22	20%	2%
Cormorant	6	1%	1%
Moorhen	12	0%	0%
Coot	79	4%	1%
Oystercatcher	5	0%	0%
Avocet	17	20%	2%
Lapwing	275	4%	1%
Golden Plover	6	0%	0%
Ringed Plover	4	1%	1%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Curlew	21	2%	0%
Black-tailed Godwit	1	0%	0%
Ruff	20	*40%	0%
Dunlin	64	2%	0%
Snipe	79	1%	0%
Common Sandpiper	1	*2%	0%
Green Sandpiper	2	*4%	0%
Redshank	22	2%	1%
Greenshank	1	*2%	0%
Black-headed Gull	124	1%	1%
Common Gull	3	0%	0%
Herring Gull	1	0%	0%
Lesser Black-backed Gull	5	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Bawtry to Newington

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	21	130	12	2%	9%	1%	NA	NA	NA
Pink-footed Goose	0	12	0		0%			0%	
Mute Swan	39	41	46	8%	8%	9%	8%	8%	9%
Whooper Swan	0	3	0		2%			1%	
Shelduck	2	17	11	0%	4%	2%	0%	1%	0%
Shoveler	30	45	15	16%	24%	8%	4%	6%	2%
Gadwall	96	94	86	31%	30%	28%	7%	7%	6%
Wigeon	122	1322	6	3%	29%	0%	1%	9%	0%
Mallard	161	232	82	2%	3%	1%	1%	1%	0%
Pintail	2	4	0	1%	2%		0%	1%	
Teal	164	444	34	4%	10%	1%	2%	7%	1%
Tufted Duck	10	19	16	1%	1%	1%	0%	0%	0%
Little Grebe	6	4	1	4%	3%	1%	0%	0%	0%
Great Crested Grebe	1	2	3	1%	1%	2%	0%	0%	0%
Grey Heron	4	2	2	1%	0%	0%	0%	0%	0%
Great White Egret	3	1	1	*6%	*2%	*2%	0%	0%	0%
Little Egret	22	2	2	20%	2%	2%	2%	0%	0%
Cormorant	4	3	4	1%	0%	1%	0%	0%	0%
Moorhen	11	9	4	0%	0%	0%	0%	0%	0%

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Coot	40	78	50	2%	4%	2%	0%	1%	0%
Oystercatcher	1	5	3	0%	0%	0%	0%	0%	0%
Avocet	0	0	17			20%			2%
Lapwing	168	243	26	3%	4%	0%	1%	1%	0%
Golden Plover	0	6	0		0%			0%	
Ringed Plover	4	0	1	1%		0%	1%		0%
Curlew	0	21	0		2%			0%	
Black-tailed Godwit	1	0	1	0%		0%	0%		0%
Ruff	8	19	2	*16%	*38%	*4%	0%	0%	0%
Dunlin	8	60	0	0%	2%		0%	0%	
Snipe	36	78	0	0%	1%		0%	0%	
Common Sandpiper	0	0	1			*2%			0%
Green Sandpiper	2	0	0	*4%			0%		
Redshank	1	22	10	0%	2%	1%	0%	1%	0%
Greenshank	0	0	0						
Black-headed Gull	72	117	32	0%	1%	0%	0%	1%	0%
Common Gull	0	3	0		0%			0%	
Herring Gull	0	1	0		0%			0%	
Lesser Black-backed Gull	2	0	5	0%		0%	0%		0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

River Idle - Idle Stop

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors River Idle - Idle Stop



LOC LABEL	NAME	GRIDREF	Web Link
37309	River Idle - Idle Stop	SK719962	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC1037957

Five year summary for River Idle - Idle Stop

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2015/16	0	JUL	0	0	NC
2015/16	0	OCT	0	0	NC
2015/16	0	NOV	0	0	NC
2018/19	40	APR	NC	28	49
2019/20	1156	NOV	37	1171	49
MEAN	420		15	448	49
2021/22	1508	JAN	NC	1704	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	21 (3,0)	5 (3,0)	2 (4,0)	0 (1,0)	0 (1,0)	1 (2,0)
Mute Swan	4 (2,0)	NC	7 (1,0)	4 (2,0)	3 (3,0)	2 (3,0)	5 (3,0)	3 (3,0)	5 (4,0)	2 (1,0)	2 (1,0)	3 (2,0)
Whooper Swan	0 (2,0)	NC	0 (1,0)	0 (2,0)	12 (3,0)	0 (3,0)	0 (3,0)	1 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Garganey	6 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Shoveler	0 (2,0)	NC	0 (1,0)	0 (2,0)	10 (3,0)	3 (3,0)	0 (3,0)	2 (3,0)	5 (4,0)	0 (1,0)	1 (1,0)	0 (2,0)
Gadwall	4 (2,0)	NC	0 (1,0)	0 (2,0)	10 (3,0)	0 (3,0)	4 (3,0)	4 (3,0)	12 (4,0)	6 (1,0)	8 (1,0)	4 (2,0)
Wigeon	0 (2,0)	NC	0 (1,0)	0 (2,0)	100 (3,0)	67 (3,0)	118 (3,0)	18 (3,0)	20 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Mallard	0 (2,0)	NC	12 (1,0)	1 (2,0)	50 (3,0)	117 (3,0)	85 (3,0)	20 (3,0)	34 (4,0)	22 (1,0)	6 (1,0)	11 (2,0)
Pintail	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	3 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Teal	1 (2,0)	NC	3 (1,0)	0 (2,0)	200 (3,0)	69 (3,0)	277 (3,0)	72 (3,0)	70 (4,0)	8 (1,0)	0 (1,0)	0 (2,0)
Goosander	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Grey Heron	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	1 (3,0)	1 (3,0)	0 (3,0)	1 (4,0)	0 (1,0)	1 (1,0)	0 (2,0)
Cormorant	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Water Rail	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Moorhen	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	3 (3,0)	4 (3,0)	3 (3,0)	2 (4,0)	0 (1,0)	0 (1,0)	1 (2,0)
Coot	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	1 (3,0)	3 (4,0)	2 (1,0)	4 (1,0)	4 (2,0)
Lapwing	4 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	2 (3,0)	21 (3,0)	0 (4,0)	0 (1,0)	1 (1,0)	4 (2,0)
Snipe	1 (2,0)	NC	2 (1,0)	7 (2,0)	0 (3,0)	7 (3,0)	2 (3,0)	2 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Redshank	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	0 (1,0)	0 (2,0)
Common Tern	0 (1,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (1,0)	0 (2,0)
Kingfisher	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (1,0)	1 (1,0)	0 (2,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly

Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Greylag Goose (British/Irish)	0	NC	0	0	1	0	62	14	4	0	0	2
Mute Swan	7	NC	7	8	8	2	8	6	12	2	2	4
Whooper Swan	0	NC	0	0	35	0	0	2	0	0	0	0
Garganey	12	NC	0	0	0	0	0	0	0	0	0	0
Shoveler	0	NC	0	0	30	10	0	5	14	0	1	1
Gadwall	8	NC	0	0	30	0	12	12	28	6	8	8
Wigeon	0	NC	0	0	300	200	350	46	34	0	0	0
Mallard	0	NC	12	2	150	350	250	45	67	22	6	16
Pintail	0	NC	0	0	0	0	8	1	2	0	0	0
Teal	2	NC	3	0	600	200	800	180	125	8	0	0
Goosander	0	NC	0	0	0	1	0	0	0	0	0	0
Grey Heron	0	NC	0	0	0	2	1	1	2	0	1	1
Cormorant	0	NC	0	0	0	0	1	0	0	0	0	0
Water Rail	0	NC	0	0	1	1	1	0	0	0	0	1
Moorhen	0	NC	0	0	1	6	8	7	8	0	0	2
Coot	0	NC	0	0	0	0	0	2	12	2	4	5
Lapwing	8	NC	0	0	0	0	6	62	0	0	1	8
Snipe	2	NC	2	14	0	15	6	4	2	0	0	1
Redshank	0	NC	0	0	0	1	1	1	0	0	0	0
Common Tern	0	NC	0	0	0	0	0	0	0	0	0	1
Kingfisher	0	NC	0	0	0	0	0	0	0	0	1	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Idle Stop

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	Y2	2019/20	2020/21	Y5	Mean of Peaks
Mute Swan	0	NC	8 (OCT)	7 (JUL)	NC	5
Garganey	0	NC	0	12 (JUL)	NC	4
Gadwall	0	NC	0	8 (JUL)	NC	3
Mallard	0	NC	12 (SEP)	0	NC	4
Teal	0	NC	3 (SEP)	2 (JUL)	NC	2
Lapwing	0	NC	0	8 (JUL)	NC	3
Snipe	0	NC	14 (OCT)	2 (JUL)	NC	5

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Greylag Goose (British/Irish)	0	0	2 (MAR)	4 (MAR)	62 (JAN)	14
Mute Swan	0	2 (DEC)	12 (MAR)	2 (MAR)	8 (JAN)	5
Whooper Swan	0	0	35 (NOV)	0	2 (FEB)	7
Shoveler	0	0	30 (NOV)	14 (MAR)	10 (DEC)	11
Gadwall	0	0	30 (NOV)	28 (MAR)	12 (JAN)	14
Wigeon	0	3 (JAN)	300 (NOV)	12 (MAR)	350 (JAN)	133
Mallard	0	2 (FEB)	150 (NOV)	47 (MAR)	350 (DEC)	110
Pintail	0	0	2 (MAR)	0	8 (JAN)	2
Teal	0	15 (JAN)	600 (NOV)	125 (MAR)	800 (JAN)	308
Goosander	0	0	0	0	1 (DEC)	0
Grey Heron	0	2 (DEC)	1 (JAN)	2 (MAR)	1 (JAN)	1
Cormorant	0	0	0	0	1 (JAN)	0
Water Rail	0	1 (DEC)	1 (NOV)	0	1 (JAN)	1
Moorhen	0	3 (DEC)	2 (JAN)	0	8 (JAN)	3
Coot	0	0	0	0	12 (MAR)	2
Lapwing	0	0	0	0	62 (FEB)	12
Snipe	0	0	6 (DEC)	0	15 (DEC)	4
Redshank	0	0	0	0	1 (DEC)	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	Y4	Y5	Mean of Peaks
Greylag Goose (British/Irish)	NC	0	2 (JUN)	NC	NC	1
Mute Swan	NC	2 (APR)	4 (JUN)	NC	NC	3
Shoveler	NC	1 (MAY)	1 (JUN)	NC	NC	1
Gadwall	NC	8 (MAY)	8 (JUN)	NC	NC	8
Mallard	NC	22 (APR)	16 (JUN)	NC	NC	19
Teal	NC	8 (APR)	0	NC	NC	4
Grey Heron	NC	1 (MAY)	1 (JUN)	NC	NC	1
Water Rail	NC	0	1 (JUN)	NC	NC	0
Moorhen	NC	0	2 (JUN)	NC	NC	1
Coot	NC	4 (MAY)	5 (JUN)	NC	NC	4
Lapwing	NC	1 (MAY)	8 (JUN)	NC	NC	4
Snipe	NC	0	1 (JUN)	NC	NC	0
Common Tern	NC	1 (JUN)	0	NC	NC	0
Kingfisher	NC	1 (MAY)	0	NC	NC	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Greylag Goose (British/Irish)	0	0	2 (MAR)	4 (MAR)	62 (JAN)	14
Mute Swan	0	2 (DEC)	12 (MAR)	7 (JUL)	8 (JAN)	6
Whooper Swan	0	0	35 (NOV)	0	2 (FEB)	7
Garganey	0	0	0	12 (JUL)	0	2
Shoveler	0	1 (MAY)	30 (NOV)	14 (MAR)	10 (DEC)	11
Gadwall	0	8 (MAY)	30 (NOV)	28 (MAR)	12 (JAN)	16
Wigeon	0	3 (JAN)	300 (NOV)	12 (MAR)	350 (JAN)	133
Mallard	0	22 (APR)	150 (NOV)	47 (MAR)	350 (DEC)	114
Pintail	0	0	2 (MAR)	0	8 (JAN)	2
Teal	0	15 (JAN)	600 (NOV)	125 (MAR)	800 (JAN)	308
Goosander	0	0	0	0	1 (DEC)	0
Grey Heron	0	2 (DEC)	1 (JAN)	2 (MAR)	1 (JAN)	1
Cormorant	0	0	0	0	1 (JAN)	0
Water Rail	0	1 (DEC)	1 (NOV)	0	1 (JAN)	1
Moorhen	0	3 (DEC)	2 (JAN)	0	8 (JAN)	3
Coot	0	4 (MAY)	5 (JUN)	0	12 (MAR)	4
Lapwing	0	1 (MAY)	8 (JUN)	8 (JUL)	62 (FEB)	16
Snipe	0	0	14 (OCT)	2 (JUL)	15 (DEC)	6
Redshank	0	0	0	0	1 (DEC)	0
Common Tern	0	1 (JUN)	0	0	0	0
Kingfisher	0	1 (MAY)	0	0	0	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	14	1%	NA
Mute Swan	6	1%	1%
Whooper Swan	7	4%	2%
Shoveler	11	6%	1%
Gadwall	16	5%	1%
Wigeon	133	3%	1%
Mallard	114	2%	1%
Pintail	2	1%	0%
Teal	308	7%	5%
Grey Heron	1	0%	0%
Moorhen	3	0%	0%
Coot	4	0%	0%
Lapwing	16	0%	0%
Snipe	6	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Idle Stop

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	0	14	1		1%	0%		NA	NA
Mute Swan	5	5	3	1%	1%	1%	1%	1%	1%
Whooper Swan	0	7	0		4%			2%	
Shoveler	0	11	1		6%	1%		1%	0%
Gadwall	3	14	8	1%	5%	3%	0%	1%	1%
Wigeon	0	133	0		3%			1%	
Mallard	4	110	19	0%	2%	0%	0%	1%	0%
Pintail	0	2	0		1%			0%	
Teal	2	308	4	0%	7%	0%	0%	5%	0%
Grey Heron	0	1	1		0%	0%		0%	0%
Moorhen	0	3	1		0%	0%		0%	0%
Coot	0	2	4		0%	0%		0%	0%
Lapwing	3	12	4	0%	0%	0%	0%	0%	0%
Snipe	5	4	0	0%	0%		0%	0%	

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

River Idle - Mission East

Compiled on 26 January 2026



Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

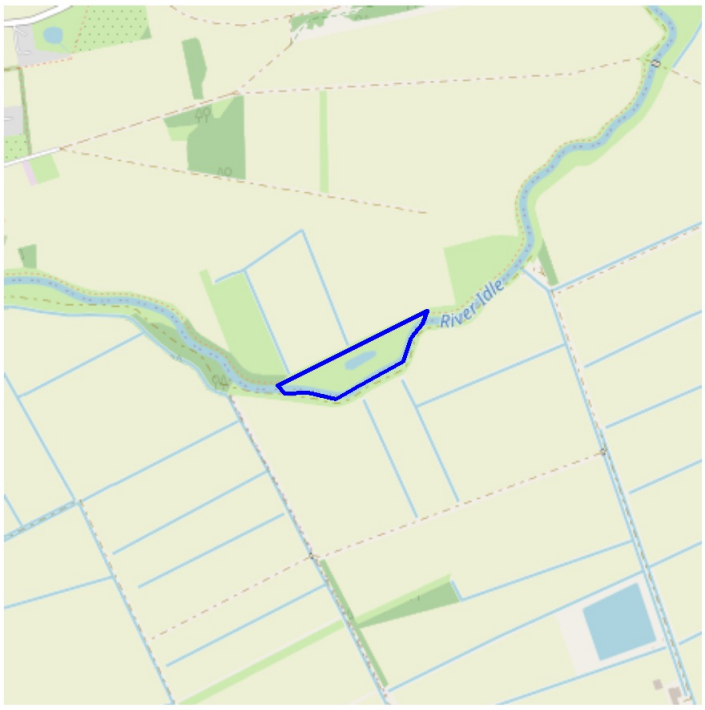
Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors River Idle - Mission East



LOC LABEL	NAME	GRIDREF	Web Link
37304	River Idle - Misson East	SK706945	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC913832

Five year summary for River Idle - Mission East

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2015/16	59	OCT	59	NC	NC
2018/19	26	DEC	NC	33	14
2019/20	62	MAR	35	78	52
2020/21	601	MAR	46	602	37
2021/22	181	FEB	NC	183	NC
MEAN	186		47	224	34

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Mission East

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	2 (4,0)	0 (2,0)	NC	0 (2,0)
Greylag Goose (British/Irish)	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	1 (3,0)	5 (4,0)	2 (2,0)	NC	0 (2,0)
Mute Swan	1 (2,0)	NC	0 (1,0)	0 (2,0)	1 (2,0)	2 (3,0)	1 (3,0)	2 (3,0)	5 (4,0)	2 (2,0)	NC	0 (2,0)
Bewick's Swan	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	1 (4,0)	0 (2,0)	NC	0 (2,0)
Whooper Swan	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	20 (4,0)	0 (2,0)	NC	0 (2,0)
Shelduck	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Shoveler	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	2 (3,0)	12 (4,0)	0 (2,0)	NC	0 (2,0)
Gadwall	3 (2,0)	NC	0 (1,0)	1 (2,0)	2 (2,0)	2 (3,0)	0 (3,0)	13 (3,0)	3 (4,0)	2 (2,0)	NC	3 (2,0)
Wigeon	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	11 (3,0)	4 (4,0)	0 (2,0)	NC	0 (2,0)
Mallard	20 (2,0)	NC	35 (1,0)	34 (2,0)	16 (2,0)	22 (3,0)	12 (3,0)	28 (3,0)	21 (4,0)	6 (2,0)	NC	18 (2,0)
Pintail	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	1 (3,0)	33 (4,0)	0 (2,0)	NC	0 (2,0)
Teal	2 (2,0)	NC	0 (1,0)	0 (2,0)	6 (2,0)	7 (3,0)	4 (3,0)	12 (3,0)	65 (4,0)	9 (2,0)	NC	1 (2,0)
Goldeneye	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Grey Heron	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Cormorant	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Water Rail	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Moorhen	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	1 (3,0)	0 (3,0)	0 (3,0)	1 (4,0)	0 (2,0)	NC	0 (2,0)
Coot	3 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	3 (3,0)	2 (3,0)	16 (3,0)	2 (4,0)	4 (2,0)	NC	4 (2,0)
Oystercatcher	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Black-tailed Godwit	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	0 (4,0)	0 (2,0)	NC	0 (2,0)
Dunlin	0 (2,0)	NC	0 (1,0)	0 (2,0)	0 (2,0)	0 (3,0)	0 (3,0)	0 (3,0)	1 (4,0)	0 (2,0)	NC	0 (2,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly

Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	0	NC	0	0	0	0	0	0	7	0	NC	0
Greylag Goose (British/Irish)	1	NC	0	0	0	0	0	2	19	4	NC	0
Mute Swan	2	NC	0	0	2	2	2	2	14	2	NC	0
Bewick's Swan	0	NC	0	0	0	0	0	0	3	0	NC	0
Whooper Swan	0	NC	0	0	0	0	0	0	79	0	NC	0
Shelduck	0	NC	0	0	0	0	0	0	2	0	NC	0
Shoveler	0	NC	0	0	0	0	0	6	47	0	NC	0
Gadwall	6	NC	0	2	4	5	0	34	4	2	NC	6
Wigeon	0	NC	0	0	0	0	0	25	12	0	NC	0
Mallard	28	NC	35	56	32	42	28	37	34	6	NC	36
Pintail	0	NC	0	0	0	0	0	2	132	0	NC	0
Teal	3	NC	0	0	12	9	12	35	244	18	NC	2
Goldeneye	0	NC	0	0	0	0	0	0	1	0	NC	0
Grey Heron	0	NC	0	0	0	1	0	1	0	1	NC	0
Cormorant	0	NC	0	0	0	0	1	0	0	0	NC	0
Water Rail	0	NC	0	1	0	0	0	0	1	0	NC	0
Moorhen	0	NC	0	0	1	3	0	0	2	1	NC	0
Coot	6	NC	0	0	0	4	4	44	5	4	NC	8
Oystercatcher	0	NC	0	0	0	0	0	0	2	0	NC	0
Black-tailed Godwit	0	NC	0	0	0	0	0	0	1	0	NC	0
Dunlin	0	NC	0	0	0	0	0	0	4	0	NC	0

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	Y2	2019/20	2020/21	Y5	Mean of Peaks
Greylag Goose (British/Irish)	0	NC	0	1 (JUL)	NC	0
Mute Swan	0	NC	0	2 (JUL)	NC	1
Gadwall	2 (OCT)	NC	0	6 (JUL)	NC	3
Mallard	56 (OCT)	NC	35 (SEP)	28 (JUL)	NC	40
Teal	0	NC	0	3 (JUL)	NC	1
Water Rail	1 (OCT)	NC	0	0	NC	0
Coot	0	NC	0	6 (JUL)	NC	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Canada Goose	NC	0	0	7 (MAR)	0	2
Greylag Goose (British/Irish)	NC	0	1 (FEB)	19 (MAR)	2 (FEB)	6
Mute Swan	NC	2 (DEC)	2 (DEC)	14 (MAR)	2 (DEC)	5
Bewick's Swan	NC	0	0	3 (MAR)	0	1
Whooper Swan	NC	0	0	79 (MAR)	0	20
Shelduck	NC	0	0	2 (MAR)	0	0
Shoveler	NC	0	0	47 (MAR)	6 (FEB)	13
Gadwall	NC	2 (DEC)	4 (FEB)	4 (NOV)	34 (FEB)	11
Wigeon	NC	0	12 (MAR)	3 (MAR)	25 (FEB)	10
Mallard	NC	16 (FEB)	42 (DEC)	34 (MAR)	30 (FEB)	30
Pintail	NC	0	0	132 (MAR)	2 (FEB)	34
Teal	NC	4 (DEC)	12 (JAN)	244 (MAR)	35 (FEB)	74
Goldeneye	NC	0	0	1 (MAR)	0	0
Grey Heron	NC	1 (DEC)	0	0	1 (FEB)	0
Cormorant	NC	1 (JAN)	0	0	0	0
Water Rail	NC	0	1 (MAR)	0	0	0
Moorhen	NC	3 (DEC)	0	1 (NOV)	2 (MAR)	2
Coot	NC	4 (FEB)	4 (JAN)	5 (MAR)	44 (FEB)	14
Oystercatcher	NC	0	0	2 (MAR)	0	0
Black-tailed Godwit	NC	0	0	1 (MAR)	0	0
Dunlin	NC	0	0	4 (MAR)	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for River Idle - Mission East

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	2020/21	Y5	Mean of Peaks
Greylag Goose (British/Irish)	NC	0	0	4 (APR)	NC	1
Mute Swan	NC	2 (APR)	0	2 (APR)	NC	1
Gadwall	NC	2 (APR)	6 (JUN)	2 (APR)	NC	3
Mallard	NC	6 (APR)	36 (JUN)	6 (APR)	NC	16
Teal	NC	0	2 (JUN)	18 (APR)	NC	7
Grey Heron	NC	0	0	1 (APR)	NC	0
Moorhen	NC	0	0	1 (APR)	NC	0
Coot	NC	4 (APR)	8 (JUN)	3 (APR)	NC	5

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2015/16	2018/19	2019/20	2020/21	2021/22	Mean of Peaks
Canada Goose	0	0	0	7 (MAR)	0	1
Greylag Goose (British/Irish)	0	0	1 (FEB)	19 (MAR)	2 (FEB)	4
Mute Swan	0	2 (DEC)	2 (DEC)	14 (MAR)	2 (DEC)	4
Bewick's Swan	0	0	0	3 (MAR)	0	1
Whooper Swan	0	0	0	79 (MAR)	0	16
Shelduck	0	0	0	2 (MAR)	0	0
Shoveler	0	0	0	47 (MAR)	6 (FEB)	11
Gadwall	2 (OCT)	2 (DEC)	6 (JUN)	6 (JUL)	34 (FEB)	10
Wigeon	0	0	12 (MAR)	3 (MAR)	25 (FEB)	8
Mallard	56 (OCT)	16 (FEB)	42 (DEC)	34 (MAR)	30 (FEB)	36
Pintail	0	0	0	132 (MAR)	2 (FEB)	27
Teal	0	4 (DEC)	12 (JAN)	244 (MAR)	35 (FEB)	59
Goldeneye	0	0	0	1 (MAR)	0	0
Grey Heron	0	1 (DEC)	0	1 (APR)	1 (FEB)	1
Cormorant	0	1 (JAN)	0	0	0	0
Water Rail	1 (OCT)	0	1 (MAR)	0	0	0
Moorhen	0	3 (DEC)	0	1 (NOV)	2 (MAR)	1
Coot	0	4 (FEB)	8 (JUN)	6 (JUL)	44 (FEB)	12
Oystercatcher	0	0	0	2 (MAR)	0	0
Black-tailed Godwit	0	0	0	1 (MAR)	0	0
Dunlin	0	0	0	4 (MAR)	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	4	0%	NA
Mute Swan	4	1%	1%
Bewick's Swan	1	*2%	0%
Whooper Swan	16	10%	5%
Shoveler	11	6%	1%
Gadwall	10	3%	1%
Wigeon	8	0%	0%
Mallard	36	1%	0%
Pintail	27	14%	4%
Teal	59	1%	1%
Grey Heron	1	0%	0%
Moorhen	1	0%	0%
Coot	12	1%	0%
Dunlin	1	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for River Idle - Mission East

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	0	6	1		0%	0%		NA	NA
Mute Swan	1	5	1	0%	1%	0%	0%	1%	0%
Bewick's Swan	0	1	0		*2%			0%	
Whooper Swan	0	20	0		12%			6%	
Shoveler	0	13	0		7%			2%	
Gadwall	3	11	3	1%	4%	1%	0%	1%	0%
Wigeon	0	10	0		0%			0%	
Mallard	40	30	16	1%	0%	0%	0%	0%	0%
Pintail	0	34	0		17%			5%	
Teal	1	74	7	0%	2%	0%	0%	1%	0%
Grey Heron	0	0	0						
Moorhen	0	2	0		0%			0%	
Coot	2	14	5	0%	1%	0%	0%	0%	0%
Dunlin	0	1	0		0%			0%	

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Slaynes South

Compiled on 26 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Slaynes South



LOC LABEL	NAME	GRIDREF	Web Link
37094	Slaynes South	SK684941	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC3577612

Five year summary for Slaynes South

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2022/23	1879	JUN	1284	1160	1950
2023/24	3955	NOV	3643	5336	1573
NA	NA	NA	NC	NC	NC
NA	NA	NA	NC	NC	NC
NA	NA	NA	NC	NC	NC
MEAN	2917		2464	3248	1762

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	34 (2,0)	154 (2,0)	0 (2,0)	27 (2,0)	88 (2,0)	22 (2,0)	46 (2,0)	27 (2,0)	15 (2,0)	6 (2,0)	9 (2,0)	52 (2,0)
Greylag Goose (British/Irish)	166 (2,0)	230 (2,0)	51 (2,0)	56 (2,0)	292 (2,0)	246 (2,0)	33 (2,0)	15 (2,0)	27 (2,0)	47 (2,0)	86 (2,0)	150 (2,0)
Mute Swan	70 (2,0)	67 (2,0)	66 (2,0)	59 (2,0)	32 (2,0)	38 (2,0)	20 (2,0)	44 (2,0)	10 (2,0)	11 (2,0)	74 (2,0)	134 (2,0)
Whooper Swan	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	24 (2,0)	24 (2,0)	48 (2,0)	75 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Egyptian Goose	4 (2,0)	4 (2,0)	2 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	6 (2,0)
Shelduck	4 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	2 (2,0)	0 (2,0)	6 (2,0)	6 (2,0)	4 (2,0)
Garganey	0 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	0 (2,0)
Shoveler	4 (2,0)	112 (2,0)	48 (2,0)	83 (2,0)	66 (2,0)	1 (2,0)	16 (2,0)	46 (2,0)	64 (2,0)	18 (2,0)	17 (2,0)	20 (2,0)
Gadwall	49 (2,0)	152 (2,0)	242 (2,0)	190 (2,0)	198 (2,0)	82 (2,0)	114 (2,0)	132 (2,0)	62 (2,0)	44 (2,0)	97 (2,0)	281 (2,0)
Wigeon	2 (2,0)	3 (2,0)	26 (2,0)	169 (2,0)	219 (2,0)	362 (2,0)	152 (2,0)	74 (2,0)	118 (2,0)	12 (2,0)	0 (2,0)	2 (2,0)
Mallard	155 (2,0)	144 (2,0)	124 (2,0)	198 (2,0)	300 (2,0)	85 (2,0)	86 (2,0)	87 (2,0)	68 (2,0)	40 (2,0)	69 (2,0)	173 (2,0)
Pintail	0 (2,0)	0 (2,0)	5 (2,0)	4 (2,0)	17 (2,0)	2 (2,0)	2 (2,0)	4 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Teal	3 (2,0)	103 (2,0)	56 (2,0)	72 (2,0)	242 (2,0)	25 (2,0)	210 (2,0)	61 (2,0)	52 (2,0)	12 (2,0)	2 (2,0)	7 (2,0)
Red-crested Pochard	0 (2,0)	0 (2,0)	0 (2,0)	3 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)
Pochard	4 (2,0)	16 (2,0)	10 (2,0)	10 (2,0)	96 (2,0)	98 (2,0)	288 (2,0)	222 (2,0)	248 (2,0)	0 (2,0)	2 (2,0)	20 (2,0)
Ferruginous Duck	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Tufted Duck	26 (2,0)	76 (2,0)	48 (2,0)	50 (2,0)	289 (2,0)	150 (2,0)	377 (2,0)	186 (2,0)	144 (2,0)	40 (2,0)	49 (2,0)	68 (2,0)
Scaup	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Aythya hybrid	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Goldeneye	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	5 (2,0)	5 (2,0)	5 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)
Goosander	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Red-throated Diver	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Little Grebe	0 (2,0)	2 (2,0)	4 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Great Crested Grebe	7 (2,0)	9 (2,0)	11 (2,0)	9 (2,0)	2 (2,0)	2 (2,0)	3 (2,0)	8 (2,0)	8 (2,0)	10 (2,0)	14 (2,0)	18 (2,0)
Black-necked Grebe	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Cattle Egret	0 (2,0)	0 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	7 (2,0)	0 (2,0)	7 (2,0)	1 (2,0)	1 (2,0)
Grey Heron	0 (2,0)	3 (2,0)	1 (2,0)	1 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	1 (2,0)
Great White Egret	0 (2,0)	6 (2,0)	3 (2,0)	6 (2,0)	3 (2,0)	1 (2,0)	1 (2,0)	4 (2,0)	2 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)
Little Egret	2 (2,0)	3 (2,0)	2 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	4 (2,0)
Cormorant	2 (2,0)	4 (2,0)	7 (2,0)	22 (2,0)	6 (2,0)	0 (2,0)	2 (2,0)	12 (2,0)	2 (2,0)	0 (2,0)	6 (2,0)	2 (2,0)
Water Rail	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Moorhen	10 (2,0)	14 (2,0)	10 (2,0)	2 (2,0)	2 (2,0)	1 (2,0)	2 (2,0)	2 (2,0)	3 (2,0)	2 (2,0)	5 (2,0)	11 (2,0)
Coot	272 (2,0)	377 (2,0)	337 (2,0)	412 (2,0)	275 (2,0)	258 (2,0)	114 (2,0)	116 (2,0)	88 (2,0)	58 (2,0)	107 (2,0)	318 (2,0)
Oystercatcher	4 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	4 (2,0)	2 (2,0)	3 (2,0)	7 (2,0)	3 (2,0)
Avocet	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	16 (2,0)	8 (2,0)
Lapwing	126 (2,0)	242 (2,0)	165 (2,0)	116 (2,0)	2 (2,0)	150 (2,0)	0 (2,0)	16 (2,0)	28 (2,0)	15 (2,0)	26 (2,0)	50 (2,0)
Golden Plover	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	8 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Ringed Plover	0 (2,0)	2 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	3 (2,0)	0 (2,0)
Little Ringed Plover	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	4 (2,0)	6 (2,0)	9 (2,0)
Curlew	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)
Black-tailed Godwit	0 (2,0)	10 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	3 (2,0)	0 (2,0)	0 (2,0)
Ruff	0 (2,0)	0 (2,0)	2 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Dunlin	0 (2,0)	0 (2,0)	2 (2,0)	3 (2,0)	0 (2,0)	52 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	3 (2,0)	0 (2,0)	0 (2,0)
Little Stint	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Snipe	0 (2,0)	3 (2,0)	0 (2,0)	3 (2,0)	3 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Common Sandpiper	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)
Green Sandpiper	0 (2,0)	2 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Redshank	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	8 (2,0)	6 (2,0)	3 (2,0)
Greenshank	0 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Black-headed Gull	85 (2,0)	14 (2,0)	0 (2,0)	46 (2,0)	16 (2,0)	4 (2,0)	40 (1,0)	47 (2,0)	108 (2,0)	68 (2,0)	88 (2,0)	278 (2,0)
Mediterranean Gull	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Herring Gull	0 (2,0)	0 (2,0)	2 (2,0)	4 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Yellow-legged Gull	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Lesser Black-backed Gull	25 (2,0)	6 (2,0)	20 (2,0)	69 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (2,0)	4 (2,0)	4 (2,0)	3 (2,0)	6 (2,0)
Common Tern	4 (2,0)	1 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (1,0)	0 (2,0)	0 (2,0)	2 (2,0)	6 (2,0)	6 (2,0)
Black Tern	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (1,0)	0 (1,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)
Kingfisher	0 (2,0)	0 (2,0)	0 (2,0)	2 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)	0 (2,0)

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Canada Goose	37	227	0	36	176	44	47	36	25	8	12	75
Greylag Goose (British/Irish)	179	338	71	108	578	493	62	16	43	82	103	168
Mute Swan	126	124	123	102	56	71	30	83	19	14	87	206
Whooper Swan	0	0	0	0	47	47	95	150	2	1	0	0
Egyptian Goose	8	5	3	0	2	0	8	0	1	2	0	12
Shelduck	4	0	0	2	0	0	2	3	1	9	10	9
Garganey	0	7	0	0	0	0	0	0	0	1	2	1
Shoveler	7	220	79	95	84	2	33	75	87	27	27	26
Gadwall	77	292	454	308	352	84	215	137	62	62	120	329
Wigeon	3	6	39	260	377	480	270	74	170	18	1	2
Mallard	188	144	172	255	486	97	166	100	74	54	92	216
Pintail	0	0	8	5	34	4	2	6	5	1	0	0
Teal	4	205	91	119	478	38	420	88	74	18	4	9
Red-crested Pochard	0	0	0	6	0	0	0	0	0	0	0	2
Pochard	9	33	19	21	192	196	575	445	496	0	3	40
Ferruginous Duck	0	0	0	0	0	0	0	1	0	0	0	0
Tufted Duck	40	121	86	90	565	284	754	337	257	80	74	107
Scaup	0	0	0	0	1	0	0	0	0	0	0	0
Aythya hybrid	0	0	0	0	0	0	0	2	0	0	0	0
Goldeneye	0	0	0	0	1	3	10	7	7	3	0	0
Goosander	0	0	0	0	0	0	0	0	0	1	0	0
Red-throated Diver	0	0	0	0	1	0	0	0	0	0	0	0
Little Grebe	0	2	5	2	0	0	0	0	2	0	0	0
Great Crested Grebe	11	15	20	13	4	3	6	12	11	20	20	23
Black-necked Grebe	0	0	0	0	0	0	0	0	0	0	0	1
Cattle Egret	0	0	8	0	0	0	0	14	0	14	1	2
Grey Heron	1	6	2	2	2	0	1	0	1	0	3	1
Great White Egret	1	7	3	6	4	2	2	6	4	1	2	0
Little Egret	4	3	3	6	0	0	0	1	0	0	1	4
Cormorant	5	9	8	33	9	0	5	19	5	0	9	3
Water Rail	0	0	0	1	0	0	0	0	0	0	0	0
Moorhen	13	14	13	4	4	2	3	4	5	4	6	20
Coot	453	695	665	817	540	506	190	125	90	97	134	338
Oystercatcher	4	0	0	0	0	0	0	4	2	4	11	4
Avocet	0	0	0	0	0	0	0	0	0	3	19	8

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Lapwing	219	263	210	211	4	225	0	32	40	24	37	52
Golden Plover	0	0	0	0	0	0	0	16	0	0	0	0
Ringed Plover	1	4	3	0	0	0	0	0	1	2	6	0
Little Ringed Plover	1	0	0	0	0	0	0	0	0	4	10	17
Curlew	0	0	0	0	0	0	0	0	0	3	0	1
Black-tailed Godwit	0	19	0	0	0	0	0	0	0	6	0	0
Ruff	1	1	4	2	0	0	0	0	0	0	0	0
Dunlin	0	0	4	6	0	68	0	1	0	6	0	0
Little Stint	0	0	1	0	0	0	0	0	0	0	0	0
Snipe	0	6	1	6	6	0	1	0	1	0	0	0
Common Sandpiper	1	1	0	0	0	0	0	0	0	1	0	0
Green Sandpiper	0	3	2	0	0	0	0	1	1	1	0	0
Redshank	0	0	0	2	0	0	0	0	0	15	11	4
Greenshank	0	3	0	0	0	0	0	0	0	2	0	0
Black-headed Gull	170	21	0	82	32	7	40	64	170	90	130	550
Mediterranean Gull	3	0	0	0	0	0	0	0	0	0	0	0
Herring Gull	0	0	3	9	0	0	0	0	0	0	0	0
Yellow-legged Gull	3	0	0	0	0	0	0	0	0	0	0	0
Lesser Black-backed Gull	46	7	40	106	0	0	0	0	5	5	4	9
Common Tern	7	2	0	0	0	0	0	0	0	3	13	12
Black Tern	0	0	0	1	0	0	0	0	0	0	0	0
Kingfisher	0	0	0	2	0	0	0	0	0	1	0	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Canada Goose	82 (AUG)	227 (AUG)	NC	NC	NC	154
Greylag Goose (British/Irish)	179 (JUL)	338 (AUG)	NC	NC	NC	258
Mute Swan	16 (OCT)	126 (JUL)	NC	NC	NC	71
Egyptian Goose	8 (JUL)	5 (AUG)	NC	NC	NC	6
Shelduck	3 (JUL)	4 (JUL)	NC	NC	NC	4
Garganey	0	7 (AUG)	NC	NC	NC	4
Shoveler	71 (OCT)	220 (AUG)	NC	NC	NC	146
Gadwall	72 (OCT)	454 (SEP)	NC	NC	NC	263
Wigeon	78 (OCT)	260 (OCT)	NC	NC	NC	169
Mallard	144 (AUG)	255 (OCT)	NC	NC	NC	200
Pintail	8 (SEP)	2 (SEP)	NC	NC	NC	5
Teal	24 (OCT)	205 (AUG)	NC	NC	NC	114
Red-crested Pochard	0	6 (OCT)	NC	NC	NC	3
Pochard	0	33 (AUG)	NC	NC	NC	16
Tufted Duck	30 (AUG)	121 (AUG)	NC	NC	NC	76
Little Grebe	2 (SEP)	5 (SEP)	NC	NC	NC	4
Great Crested Grebe	5 (OCT)	20 (SEP)	NC	NC	NC	12
Cattle Egret	0	8 (SEP)	NC	NC	NC	4
Grey Heron	2 (SEP)	6 (AUG)	NC	NC	NC	4
Great White Egret	6 (OCT)	7 (AUG)	NC	NC	NC	6
Little Egret	6 (OCT)	4 (JUL)	NC	NC	NC	5
Cormorant	33 (OCT)	11 (OCT)	NC	NC	NC	22
Water Rail	0	1 (OCT)	NC	NC	NC	0
Moorhen	14 (AUG)	14 (AUG)	NC	NC	NC	14
Coot	91 (JUL)	817 (OCT)	NC	NC	NC	454
Oystercatcher	3 (JUL)	4 (JUL)	NC	NC	NC	4
Lapwing	263 (AUG)	221 (AUG)	NC	NC	NC	242
Ringed Plover	1 (JUL)	4 (AUG)	NC	NC	NC	2
Little Ringed Plover	0	1 (JUL)	NC	NC	NC	0
Black-tailed Godwit	0	19 (AUG)	NC	NC	NC	10

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Ruff	0	4 (SEP)	NC	NC	NC	2
Dunlin	0	6 (OCT)	NC	NC	NC	3
Little Stint	0	1 (SEP)	NC	NC	NC	0
Snipe	6 (AUG)	6 (OCT)	NC	NC	NC	6
Common Sandpiper	1 (JUL)	1 (AUG)	NC	NC	NC	1
Green Sandpiper	3 (AUG)	0	NC	NC	NC	2
Redshank	0	2 (OCT)	NC	NC	NC	1
Greenshank	1 (AUG)	3 (AUG)	NC	NC	NC	2
Black-headed Gull	11 (OCT)	170 (JUL)	NC	NC	NC	90
Mediterranean Gull	0	3 (JUL)	NC	NC	NC	2
Herring Gull	9 (OCT)	0	NC	NC	NC	4
Yellow-legged Gull	3 (JUL)	0	NC	NC	NC	2
Lesser Black-backed Gull	106 (OCT)	32 (OCT)	NC	NC	NC	69
Common Tern	2 (JUL)	7 (JUL)	NC	NC	NC	4
Black Tern	0	1 (OCT)	NC	NC	NC	0
Kingfisher	1 (OCT)	2 (OCT)	NC	NC	NC	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Canada Goose	47 (JAN)	176 (NOV)	NC	NC	NC	112
Greylag Goose (British/Irish)	14 (FEB)	578 (NOV)	NC	NC	NC	296
Mute Swan	9 (NOV)	83 (FEB)	NC	NC	NC	46
Whooper Swan	95 (JAN)	150 (FEB)	NC	NC	NC	122
Egyptian Goose	0	8 (JAN)	NC	NC	NC	4
Shelduck	2 (JAN)	3 (FEB)	NC	NC	NC	2
Shoveler	84 (NOV)	87 (MAR)	NC	NC	NC	86
Gadwall	127 (FEB)	352 (NOV)	NC	NC	NC	240
Wigeon	245 (DEC)	480 (DEC)	NC	NC	NC	362
Mallard	115 (NOV)	486 (NOV)	NC	NC	NC	300
Pintail	6 (FEB)	34 (NOV)	NC	NC	NC	20
Teal	34 (FEB)	478 (NOV)	NC	NC	NC	256
Pochard	0	575 (JAN)	NC	NC	NC	288
Ferruginous Duck	0	1 (FEB)	NC	NC	NC	0
Tufted Duck	35 (FEB)	754 (JAN)	NC	NC	NC	394
Scaup	0	1 (NOV)	NC	NC	NC	0
Aythya hybrid	0	2 (FEB)	NC	NC	NC	1
Goldeneye	3 (DEC)	10 (JAN)	NC	NC	NC	6
Red-throated Diver	0	1 (NOV)	NC	NC	NC	0
Little Grebe	0	2 (MAR)	NC	NC	NC	1
Great Crested Grebe	4 (FEB)	12 (FEB)	NC	NC	NC	8
Cattle Egret	0	14 (FEB)	NC	NC	NC	7
Grey Heron	1 (MAR)	2 (NOV)	NC	NC	NC	2
Great White Egret	4 (NOV)	6 (FEB)	NC	NC	NC	5
Little Egret	1 (FEB)	0	NC	NC	NC	0
Cormorant	19 (FEB)	5 (JAN)	NC	NC	NC	12
Moorhen	5 (MAR)	4 (NOV)	NC	NC	NC	4
Coot	125 (FEB)	540 (NOV)	NC	NC	NC	332
Oystercatcher	3 (FEB)	4 (FEB)	NC	NC	NC	4
Lapwing	75 (DEC)	225 (DEC)	NC	NC	NC	150

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Golden Plover	0	16 (FEB)	NC	NC	NC	8
Ringed Plover	0	1 (MAR)	NC	NC	NC	0
Dunlin	37 (DEC)	68 (DEC)	NC	NC	NC	52
Snipe	0	6 (NOV)	NC	NC	NC	3
Green Sandpiper	1 (FEB)	0	NC	NC	NC	0
Black-headed Gull	64 (FEB)	170 (MAR)	NC	NC	NC	117
Lesser Black-backed Gull	5 (MAR)	2 (MAR)	NC	NC	NC	4

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Canada Goose	30 (JUN)	75 (JUN)	NC	NC	NC	52
Greylag Goose (British/Irish)	132 (JUN)	168 (JUN)	NC	NC	NC	150
Mute Swan	62 (MAY)	206 (JUN)	NC	NC	NC	134
Whooper Swan	0	1 (APR)	NC	NC	NC	0
Egyptian Goose	12 (JUN)	1 (JUN)	NC	NC	NC	6
Shelduck	9 (APR)	10 (MAY)	NC	NC	NC	10
Garganey	1 (APR)	2 (MAY)	NC	NC	NC	2
Shoveler	27 (MAY)	27 (APR)	NC	NC	NC	27
Gadwall	329 (JUN)	233 (JUN)	NC	NC	NC	281
Wigeon	5 (APR)	18 (APR)	NC	NC	NC	12
Mallard	216 (JUN)	130 (JUN)	NC	NC	NC	173
Pintail	1 (APR)	0	NC	NC	NC	0
Teal	18 (APR)	7 (APR)	NC	NC	NC	12
Red-crested Pochard	0	2 (JUN)	NC	NC	NC	1
Pochard	0	40 (JUN)	NC	NC	NC	20
Tufted Duck	28 (JUN)	107 (JUN)	NC	NC	NC	68
Goldeneye	0	3 (APR)	NC	NC	NC	2
Goosander	0	1 (APR)	NC	NC	NC	0
Great Crested Grebe	12 (JUN)	23 (JUN)	NC	NC	NC	18
Black-necked Grebe	0	1 (JUN)	NC	NC	NC	0
Cattle Egret	2 (JUN)	14 (APR)	NC	NC	NC	8
Grey Heron	3 (MAY)	1 (MAY)	NC	NC	NC	2
Great White Egret	0	2 (MAY)	NC	NC	NC	1
Little Egret	3 (JUN)	4 (JUN)	NC	NC	NC	4
Cormorant	9 (MAY)	3 (MAY)	NC	NC	NC	6
Moorhen	20 (JUN)	6 (MAY)	NC	NC	NC	13
Coot	338 (JUN)	298 (JUN)	NC	NC	NC	318
Oystercatcher	4 (APR)	11 (MAY)	NC	NC	NC	8
Avocet	19 (MAY)	14 (MAY)	NC	NC	NC	16
Lapwing	49 (JUN)	52 (JUN)	NC	NC	NC	50

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Ringed Plover	6 (MAY)	0	NC	NC	NC	3
Little Ringed Plover	17 (JUN)	4 (APR)	NC	NC	NC	10
Curlew	1 (JUN)	3 (APR)	NC	NC	NC	2
Black-tailed Godwit	0	6 (APR)	NC	NC	NC	3
Dunlin	6 (APR)	0	NC	NC	NC	3
Common Sandpiper	1 (APR)	1 (APR)	NC	NC	NC	1
Green Sandpiper	0	1 (APR)	NC	NC	NC	0
Redshank	15 (APR)	2 (JUN)	NC	NC	NC	8
Greenshank	2 (APR)	0	NC	NC	NC	1
Black-headed Gull	550 (JUN)	90 (APR)	NC	NC	NC	320
Lesser Black-backed Gull	9 (JUN)	4 (APR)	NC	NC	NC	6
Common Tern	13 (MAY)	1 (JUN)	NC	NC	NC	7
Kingfisher	1 (JUN)	1 (APR)	NC	NC	NC	1

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Canada Goose	82 (AUG)	227 (AUG)	NC	NC	NC	154
Greylag Goose (British/Irish)	179 (JUL)	578 (NOV)	NC	NC	NC	378
Mute Swan	62 (MAY)	206 (JUN)	NC	NC	NC	134
Whooper Swan	95 (JAN)	150 (FEB)	NC	NC	NC	122
Egyptian Goose	12 (JUN)	8 (JAN)	NC	NC	NC	10
Shelduck	9 (APR)	10 (MAY)	NC	NC	NC	10
Garganey	1 (APR)	7 (AUG)	NC	NC	NC	4
Shoveler	84 (NOV)	220 (AUG)	NC	NC	NC	152
Gadwall	329 (JUN)	454 (SEP)	NC	NC	NC	392
Wigeon	245 (DEC)	480 (DEC)	NC	NC	NC	362
Mallard	216 (JUN)	486 (NOV)	NC	NC	NC	351
Pintail	8 (SEP)	34 (NOV)	NC	NC	NC	21
Teal	34 (FEB)	478 (NOV)	NC	NC	NC	256
Red-crested Pochard	0	6 (OCT)	NC	NC	NC	3
Pochard	0	575 (JAN)	NC	NC	NC	288
Ferruginous Duck	0	1 (FEB)	NC	NC	NC	0
Tufted Duck	35 (FEB)	754 (JAN)	NC	NC	NC	394
Scaup	0	1 (NOV)	NC	NC	NC	0
Aythya hybrid	0	2 (FEB)	NC	NC	NC	1
Goldeneye	3 (DEC)	10 (JAN)	NC	NC	NC	6
Goosander	0	1 (APR)	NC	NC	NC	0
Red-throated Diver	0	1 (NOV)	NC	NC	NC	0
Little Grebe	2 (SEP)	5 (SEP)	NC	NC	NC	4
Great Crested Grebe	12 (JUN)	23 (JUN)	NC	NC	NC	18
Black-necked Grebe	0	1 (JUN)	NC	NC	NC	0
Cattle Egret	2 (JUN)	14 (FEB)	NC	NC	NC	8
Grey Heron	3 (MAY)	6 (AUG)	NC	NC	NC	4
Great White Egret	6 (OCT)	7 (AUG)	NC	NC	NC	6
Little Egret	6 (OCT)	4 (JUL)	NC	NC	NC	5
Cormorant	33 (OCT)	11 (OCT)	NC	NC	NC	22

Species	2022/23	2023/24	Y3	Y4	Y5	Mean of Peaks
Water Rail	0	1 (OCT)	NC	NC	NC	0
Moorhen	20 (JUN)	14 (AUG)	NC	NC	NC	17
Coot	338 (JUN)	817 (OCT)	NC	NC	NC	578
Oystercatcher	4 (APR)	11 (MAY)	NC	NC	NC	8
Avocet	19 (MAY)	14 (MAY)	NC	NC	NC	16
Lapwing	263 (AUG)	225 (DEC)	NC	NC	NC	244
Golden Plover	0	16 (FEB)	NC	NC	NC	8
Ringed Plover	6 (MAY)	4 (AUG)	NC	NC	NC	5
Little Ringed Plover	17 (JUN)	4 (APR)	NC	NC	NC	10
Curlew	1 (JUN)	3 (APR)	NC	NC	NC	2
Black-tailed Godwit	0	19 (AUG)	NC	NC	NC	10
Ruff	0	4 (SEP)	NC	NC	NC	2
Dunlin	37 (DEC)	68 (DEC)	NC	NC	NC	52
Little Stint	0	1 (SEP)	NC	NC	NC	0
Snipe	6 (AUG)	6 (OCT)	NC	NC	NC	6
Common Sandpiper	1 (JUL)	1 (AUG)	NC	NC	NC	1
Green Sandpiper	3 (AUG)	1 (APR)	NC	NC	NC	2
Redshank	15 (APR)	2 (OCT)	NC	NC	NC	8
Greenshank	2 (APR)	3 (AUG)	NC	NC	NC	2
Black-headed Gull	550 (JUN)	170 (JUL)	NC	NC	NC	360
Mediterranean Gull	0	3 (JUL)	NC	NC	NC	2
Herring Gull	9 (OCT)	0	NC	NC	NC	4
Yellow-legged Gull	3 (JUL)	0	NC	NC	NC	2
Lesser Black-backed Gull	106 (OCT)	32 (OCT)	NC	NC	NC	69
Common Tern	13 (MAY)	7 (JUL)	NC	NC	NC	10
Black Tern	0	1 (OCT)	NC	NC	NC	0
Kingfisher	1 (OCT)	2 (OCT)	NC	NC	NC	2

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Greylag Goose (British/Irish)	378	27%	NA
Mute Swan	134	27%	27%
Whooper Swan	122	76%	36%
Shelduck	10	2%	0%
Shoveler	152	80%	20%
Gadwall	**392**	**126%**	**28%**
Wigeon	362	8%	3%
Mallard	351	5%	2%
Pintail	21	10%	3%
Teal	256	6%	4%
Pochard	**288**	**125%**	**19%**
Tufted Duck	394	30%	4%
Goldeneye	6	3%	0%
Little Grebe	4	3%	0%
Great Crested Grebe	18	11%	0%
Cattle Egret	8	*16%	0%
Grey Heron	4	1%	0%
Great White Egret	6	*12%	1%
Little Egret	5	5%	0%
Cormorant	22	4%	2%
Moorhen	17	1%	0%
Coot	578	29%	4%
Oystercatcher	8	0%	0%
Avocet	16	18%	2%
Lapwing	244	4%	1%
Golden Plover	8	0%	0%

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Ringed Plover	5	1%	1%
Curlew	2	0%	0%
Black-tailed Godwit	10	3%	1%
Ruff	2	*4%	0%
Dunlin	52	2%	0%
Snipe	6	0%	0%
Common Sandpiper	1	*2%	0%
Green Sandpiper	2	*4%	0%
Redshank	8	1%	0%
Greenshank	2	*4%	0%
Black-headed Gull	360	2%	2%
Mediterranean Gull	2	*4%	0%
Herring Gull	4	0%	0%
Yellow-legged Gull	2	*4%	0%
Lesser Black-backed Gull	69	6%	1%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Slaynes South

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Greylag Goose (British/Irish)	258	296	150	18%	21%	11%	NA	NA	NA
Mute Swan	71	46	134	14%	9%	27%	14%	9%	27%
Whooper Swan	0	122	0		76%			36%	
Shelduck	4	2	10	1%	0%	2%	0%	0%	0%
Shoveler	146	86	27	77%	45%	14%	19%	11%	4%
Gadwall	263	240	281	85%	77%	91%	19%	17%	20%
Wigeon	169	362	12	4%	8%	0%	1%	3%	0%
Mallard	200	300	173	3%	4%	3%	1%	2%	1%
Pintail	5	20	0	2%	10%		1%	3%	
Teal	114	256	12	3%	6%	0%	2%	4%	0%
Pochard	**16**	**288**	**20**	**7%**	**125%**	**9%**	**1%**	**19%**	**1%**
Tufted Duck	76	394	68	6%	30%	5%	1%	4%	1%
Goldeneye	0	6	2		3%	1%		0%	0%
Little Grebe	4	1	0	3%	1%		0%	0%	
Great Crested Grebe	12	8	18	7%	5%	11%	0%	0%	0%
Cattle Egret	4	7	8	*8%	*14%	*16%	0%	0%	0%
Grey Heron	4	2	2	1%	0%	0%	0%	0%	0%
Great White Egret	6	5	1	*12%	*10%	*2%	1%	1%	0%
Little Egret	5	0	4	5%		4%	0%		0%
Cormorant	22	12	6	4%	2%	1%	2%	1%	1%
Moorhen	14	4	13	0%	0%	0%	0%	0%	0%
Coot	454	332	318	23%	17%	16%	3%	2%	2%

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Oystercatcher	4	4	8	0%	0%	0%	0%	0%	0%
Avocet	0	0	16			18%			2%
Lapwing	242	150	50	4%	2%	1%	1%	1%	0%
Golden Plover	0	8	0		0%			0%	
Ringed Plover	2	0	3	0%		1%	0%		1%
Curlew	0	0	2			0%			0%
Black-tailed Godwit	10	0	3	3%		1%	1%		0%
Ruff	2	0	0	*4%			0%		
Dunlin	3	52	3	0%	2%	0%	0%	0%	0%
Snipe	6	3	0	0%	0%		0%	0%	
Common Sandpiper	1	0	1	*2%		*2%	0%		0%
Green Sandpiper	2	0	0	*4%			0%		
Redshank	1	0	8	0%		1%	0%		0%
Greenshank	2	0	1	*4%		*2%	0%		0%
Black-headed Gull	90	117	320	0%	1%	1%	0%	1%	2%
Mediterranean Gull	2	0	0	*4%			0%		
Herring Gull	4	0	0	0%			0%		
Yellow-legged Gull	2	0	0	*4%			0%		
Lesser Black-backed Gull	69	4	6	6%	0%	0%	1%	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

WeBS data for

Weel Borrow Pit

Compiled on 26 January 2026









Introduction

This data request provides a tabulated five-year synopsis using WeBS Core Count data from five consecutive years for each species in each month. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. WeBS Partners recommend that data are requested in this format when undertaking site assessments.

General Information about WeBS

The Wetland Bird Survey is a partnership jointly funded by the British Trust for Ornithology, Royal Society for the Protection of Birds and Joint Nature Conservation Committee (the last on behalf of the statutory nature conservation bodies: Natural England, Natural Resources Wales, NatureScot and Department of Agriculture, Environment and Rural Affairs, Northern Ireland) with fieldwork conducted by volunteers and previous support from Wildfowl and Wetlands Trust.

WeBS aims to provide a scientific basis for the conservation of waterbird populations with the key objectives being to estimate UK population sizes, monitor trends in numbers and distribution, and identify nationally and internationally important sites.

WeBS Core Counts

Core Counts are conducted at a wide variety of wetlands throughout the UK, both coastal and inland. Around 3,000 sites are covered annually. Details of sites counted are available from [https://app.bto.org/websonline/sites/data/sites-data.jsp]. Counts are made once monthly, normally on pre-selected dates, concentrating on the winter period, although counts from all months are available for some sites. Counts on estuaries are usually made at high tide when birds are most easily counted at roosts.

Large sites that require more than one counter to cover the site in a reasonable time (3-4 hours) are divided into smaller counting areas or sectors. This allows a team of counters to make a synchronous count of all sectors. For many large sites, data are available for individual sectors. Sector data can be summed to provide site totals, although the completeness of the coverage must be taken into account when doing so.

WeBS Low Tide Counts

Low Tide Counts are conducted at most large estuaries in at least one winter every six years, with up to four counts being made through the period November - February. The exposed substrate at low tide is divided into small count areas (sectors) enabling the distribution birds to be determined in fine detail.

Low Tide Counts are designed to complement estuarine Core Counts, and are principally concerned with illustrating bird distributions. In this way it is possible to ascertain which parts of estuaries, inlets or bays are important for birds. Count data are usually averaged across the winter, to produce relative density maps. Data are provided at two spatial scales – the whole estuary level and the individual sector level. Peak and mean counts for each winter are then produced as part of a standard data request.

Interpretation of WeBS Data and contents of the Appendices.

Caution is necessary regarding the interpretation and application of waterbird counts and hence the interpretation of

the data presented in Tables 1 to 5. Data users are advised to consult the summary of interpretative considerations provided in Appendix 1. This summary is provided to prevent, as far as possible, incorrect inferences or inappropriate analyses which may occur due to misunderstanding of possible limitations of the data.

Appendix 2 provides further information relating to the format of the data and the methodology used to calculate the data presented in the tables.

Appendix 3 provides information about the classification of species of geese for which sub-populations cannot be reliably separated in the field by appearance.

Conditions of Use.

Please note that this summary report has been supplied as a WeBS data request and is subject to the Terms and Conditions agreed by the signatory of the Data Request Form. Full details of the WeBS data request terms and conditions of use can be viewed at https://app.bto.org/data-request/bto_datarequest_tc_webs.pdf

Site Map and List of WeBS sectors Weel Borrow Pit



LOC LABEL	NAME	GRIDREF	Web Link
38286	Weel Borrow Pit	TA066390	https://app.bto.org/websonline/sites/data/sites-data.jsp#locId=LOC648996

Five year summary for Weel Borrow Pit

Table 1: Total Counts - All Species Combined

Peak monthly total = maximum of the sum of the counts of all species within each month
Seasonal peaks = sum of the maximum counts of each species within each Season

Year	Peak Monthly Total	Month	Autumn Peak	Winter Peak	Spring Peak
2004/05	55	JAN	NC	55	NC
2005/06	85	JAN	NC	85	NC
2006/07	68	JAN	NC	68	NC
2007/08	143	JAN	NC	143	NC
2008/09	81	JAN	NC	81	NC
MEAN	86		NC	86	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Weel Borrow Pit

Table 2: Five-year average monthly counts of each species

Figures in parentheses give the number of complete and incomplete counts upon which the average is based. Incomplete counts are excluded from calculations where, if included, they would depress the mean.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mute Swan	NC	NC	NC	NC	NC	NC	2 (5,0)	NC	NC	NC	NC	NC
Shoveler	NC	NC	NC	NC	NC	NC	1 (5,0)	NC	NC	NC	NC	NC
Gadwall	NC	NC	NC	NC	NC	NC	0 (5,0)	NC	NC	NC	NC	NC
Wigeon	NC	NC	NC	NC	NC	NC	35 (5,0)	NC	NC	NC	NC	NC
Mallard	NC	NC	NC	NC	NC	NC	16 (5,0)	NC	NC	NC	NC	NC
Pochard	NC	NC	NC	NC	NC	NC	1 (5,0)	NC	NC	NC	NC	NC
Tufted Duck	NC	NC	NC	NC	NC	NC	12 (5,0)	NC	NC	NC	NC	NC
Little Grebe	NC	NC	NC	NC	NC	NC	3 (5,0)	NC	NC	NC	NC	NC
Cormorant	NC	NC	NC	NC	NC	NC	0 (5,0)	NC	NC	NC	NC	NC
Moorhen	NC	NC	NC	NC	NC	NC	1 (5,0)	NC	NC	NC	NC	NC
Coot	NC	NC	NC	NC	NC	NC	11 (5,0)	NC	NC	NC	NC	NC
Common Gull	NC	NC	NC	NC	NC	NC	6 (4,0)	NC	NC	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Weel Borrow Pit

Table 3: Five-year peak monthly counts of each species

The value reported represents the highest count obtained over the five-year period during the month in question and the species in question.

Species	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Mute Swan	NC	NC	NC	NC	NC	NC	6	NC	NC	NC	NC	NC
Shoveler	NC	NC	NC	NC	NC	NC	5	NC	NC	NC	NC	NC
Gadwall	NC	NC	NC	NC	NC	NC	2	NC	NC	NC	NC	NC
Wigeon	NC	NC	NC	NC	NC	NC	56	NC	NC	NC	NC	NC
Mallard	NC	NC	NC	NC	NC	NC	32	NC	NC	NC	NC	NC
Pochard	NC	NC	NC	NC	NC	NC	3	NC	NC	NC	NC	NC
Tufted Duck	NC	NC	NC	NC	NC	NC	26	NC	NC	NC	NC	NC
Little Grebe	NC	NC	NC	NC	NC	NC	5	NC	NC	NC	NC	NC
Cormorant	NC	NC	NC	NC	NC	NC	1	NC	NC	NC	NC	NC
Moorhen	NC	NC	NC	NC	NC	NC	1	NC	NC	NC	NC	NC
Coot	NC	NC	NC	NC	NC	NC	22	NC	NC	NC	NC	NC
Common Gull	NC	NC	NC	NC	NC	NC	12	NC	NC	NC	NC	NC

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Weel Borrow Pit

Table 4a: Five-year autumn peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and October for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in autumn

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Weel Borrow Pit

Table 4b: Five-year winter peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between November and March for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2004/05	2005/06	2006/07	2007/08	2008/09	Mean of Peaks
Mute Swan	2 (JAN)	6 (JAN)	2 (JAN)	0	0	2
Shoveler	0	0	0	5 (JAN)	0	1
Gadwall	0	0	2 (JAN)	0	0	0
Wigeon	6 (JAN)	30 (JAN)	26 (JAN)	56 (JAN)	56 (JAN)	35
Mallard	30 (JAN)	6 (JAN)	10 (JAN)	32 (JAN)	4 (JAN)	16
Pochard	0	0	0	3 (JAN)	0	1
Tufted Duck	10 (JAN)	4 (JAN)	16 (JAN)	26 (JAN)	2 (JAN)	12
Little Grebe	0	5 (JAN)	5 (JAN)	4 (JAN)	0	3
Cormorant	0	1 (JAN)	0	0	0	0
Moorhen	1 (JAN)	1 (JAN)	1 (JAN)	1 (JAN)	0	1
Coot	6 (JAN)	22 (JAN)	6 (JAN)	16 (JAN)	7 (JAN)	11
Common Gull	0	10 (JAN)	NA	0	12 (JAN)	6

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Weel Borrow Pit

Table 4c: Five-year spring peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between April and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete
i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

No birds recorded in Spring

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Weel Borrow Pit

Table 4d: Five-year annual peak counts, and month in which this was recorded, of each species

The value reported represents the highest count obtained between July and June for the year in question and the species in question.
Where a count is enclosed by parentheses this indicates that it was considered incomplete i.e. those parts of the site not visited typically holds at least 25% of the species in question.
Incomplete counts are excluded from calculation where, if included, they would depress the mean. When all counts are considered to be incomplete the maximum replaces the mean.

Species	2004/05	2005/06	2006/07	2007/08	2008/09	Mean of Peaks
Mute Swan	2 (JAN)	6 (JAN)	2 (JAN)	0	0	2
Shoveler	0	0	0	5 (JAN)	0	1
Gadwall	0	0	2 (JAN)	0	0	0
Wigeon	6 (JAN)	30 (JAN)	26 (JAN)	56 (JAN)	56 (JAN)	35
Mallard	30 (JAN)	6 (JAN)	10 (JAN)	32 (JAN)	4 (JAN)	16
Pochard	0	0	0	3 (JAN)	0	1
Tufted Duck	10 (JAN)	4 (JAN)	16 (JAN)	26 (JAN)	2 (JAN)	12
Little Grebe	0	5 (JAN)	5 (JAN)	4 (JAN)	0	3
Cormorant	0	1 (JAN)	0	0	0	0
Moorhen	1 (JAN)	1 (JAN)	1 (JAN)	1 (JAN)	0	1
Coot	6 (JAN)	22 (JAN)	6 (JAN)	16 (JAN)	7 (JAN)	11
Common Gull	0	10 (JAN)	NA	0	12 (JAN)	6

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Five year summary for Weel Borrow Pit

Table 5a: National and International Importance (Annual Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Annual 5yr mean of peaks	Percent of National Threshold	Percent of International Threshold
Mute Swan	2	0%	0%
Shoveler	1	1%	0%
Wigeon	35	1%	0%
Mallard	16	0%	0%
Pochard	1	0%	0%
Tufted Duck	12	1%	0%
Little Grebe	3	2%	0%
Moorhen	1	0%	0%
Coot	11	1%	0%
Common Gull	6	0%	0%

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.
Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

WeBS
The Wetland Bird Survey

Five year summary for Weel Borrow Pit

Table 5b: National and International Importance (Seasonal Peak counts)

Figures given indicate the percentage of the relevant threshold level in operation during 2023 represented by the five-winter mean of peak counts for the species and season in question. Species are excluded if they did not have an importance threshold in 2023 (typically non-native or occasional species).
e.g. 50% would indicate that the five-winter mean of peak counts is half the threshold level. It follows that values of 100% or higher indicate nationally or internationally important numbers of a given species occur on the site. Species which have recorded nationally or internationally important numbers in one or more seasons are highlighted in red
Where a count is enclosed by parentheses this indicates that it was considered incomplete
(i.e. those parts of the site not visited typically hold at least 25% of the species in question)
(an asterisk indicates that a 50-bird minimum (typically used for designation) has been used rather than 1% of National population)

Species	Autumn 5yr mean of peaks	Winter 5yr mean of peaks	Spring 5yr mean of peaks	Autumn Percent of National Threshold	Winter Percent of National Threshold	Spring Percent of National Threshold	Autumn Percent of International Threshold	Winter Percent of International Threshold	Spring Percent of International Threshold
Mute Swan	NA	2	NA	NA	0%	NA	NA	0%	NA
Shoveler	NA	1	NA	NA	1%	NA	NA	0%	NA
Wigeon	NA	35	NA	NA	1%	NA	NA	0%	NA
Mallard	NA	16	NA	NA	0%	NA	NA	0%	NA
Pochard	NA	1	NA	NA	0%	NA	NA	0%	NA
Tufted Duck	NA	12	NA	NA	1%	NA	NA	0%	NA
Little Grebe	NA	3	NA	NA	2%	NA	NA	0%	NA
Moorhen	NA	1	NA	NA	0%	NA	NA	0%	NA
Coot	NA	11	NA	NA	1%	NA	NA	0%	NA
Common Gull	NA	6	NA	NA	0%	NA	NA	0%	NA

Data provided by the British Trust for Ornithology on behalf of The Wetland Bird Survey. These tabulations are based exclusively on data collected as part of the monthly Core Counts. For some species (e.g. wintering geese) data collected by other surveys may be more appropriate for the purpose of site assessment.

Missing or unexpectedly low counts for gulls and terns should be treated with caution - counting these groups is optional and determination of count effort is not always possible.

Appendix 1: WeBS Core Count Data Requests: Interpretative Considerations

The following notes are provided to aid in the use and interpretation of WeBS data and to provide guidelines for their presentation. Further notes on interpretation and a national overview of non-breeding waterbirds in the UK are provided in the annual report *Waterbirds in the UK*, which summarises the results from WeBS. The WeBS Report Online also includes national totals, long-term indices, species accounts with numbers at key sites and 1% levels for national and international populations (https://app.bto.org/webs-reporting/numbers.jsp). A summary report is available to download free from the [BTO website] (https://www.bto.org/volunteer-surveys/webs/publications), alternatively if you wish to receive a paper copy please contact BTO.

Interpretation

Caution is necessary regarding the interpretation and application of waterbird counts. The following notes are designed to prevent, as far as possible, incorrect inferences or inappropriate analyses due to ignorance or misunderstanding of possible limitations of the data. However, since general guidelines cannot cover every possible use of the data, please contact the WeBS Office at BTO should you have any further queries.

WeBS Partners cannot accept responsibility for any misuse or misinterpretation of WeBS data.

1% Levels for National and International importance

A wetland is considered important in a national (Great Britain or all-Ireland) context if it regularly holds 1% or more of one waterbird species, sub-species or population (in Great Britain or the island of Ireland respectively), and of international importance if it regularly supports the same proportion of the relevant international population. Normally this is measured by calculating the five-year peak mean for each species and expressing this as a percentage of the national/international population estimates. Where 1% of the national population is less than 50 birds, 50 is normally used as the minimum qualifying level for the designation of sites. 1% levels have not been derived for introduced or escaped species since these are not included in the legislation regarding site designation. Sites may also be of importance if, while not supporting important concentrations of individual species, they hold large numbers of total waterbirds, e.g. sites regularly holding 20,000 or more are considered internationally important by virtue of absolute numbers.

It is necessary to bear in mind the distinction between sites that *regularly* hold wintering numbers of national/international importance and those which may happen to exceed the appropriate qualifying levels only in occasional winters. This follows the recommendations of the Ramsar Convention, which states that key sites are identified because they support such numbers on a regular basis (usually calculated as the mean winter maximum from the last five winters). The proportion of national/international populations is thus given in the *Tabulated five-year synopses*, where the proportion exceeds 0.01% of the relevant biogeographical population. However, sites which only irregularly support nationally/internationally important numbers may be important at certain times, e.g. when numbers in the UK are high, during the main migratory periods or during cold weather, when they may act as refuges for birds away from traditionally used sites. Further, sites not of international or national importance may nevertheless be of regional importance, especially in areas with relatively small waterbird populations. Sites which support significant numbers of only one species may be of critical importance to that population and therefore of very high conservation value.

Coverage

Ideally, peak counts from several years should be used to assess the importance of a site, as counts in any one year may be unrepresentative due to gaps in coverage, disturbance or weather induced effects on numbers and distribution. The short-term movement of birds between closely adjacent sites may lead to altered assessments of a

site's apparent importance. This is particularly true when considering individual sectors within a large site, as considerable movement is likely to occur. It is not possible to estimate the total number of individuals frequenting a site in any one period of time from count data alone.

More frequent counts than the normal once-monthly WeBS visits are necessary to assess more accurately the rapid turnover of waterbirds that occurs during times of migration or cold weather movements.

WeBS sites can include any open water habitat within the UK. However, coverage varies considerably with respect to both region and habitat. Many of the more remote parts of the UK where human populations are small consequently suffer from a lack of coverage. Coverage of habitat is also uneven, with two habitats in particular, rivers and open coast, being poorly represented. Consequences of these biases include under-recording of certain species, such as Goosander, Red-breasted Merganser and Turnstone, when considering national or regional totals of waterbirds. Further, whilst most species of waterbirds are usually obvious and easily counted, secretive species, such as Snipe, will normally also be poorly represented in both site counts and national totals.

The timing of the count can also affect the numbers of birds present at a site. This is particularly true of estuaries where, in particular, the distribution of birds will vary according to the time of the tidal cycle. Most WeBS Core Counts at estuarine sites are conducted at high tide when birds are generally found at just a few locations. This usually represents the best opportunity for obtaining an accurate total of birds at the site. However, this underestimates the importance of other areas of the site used, for example, as feeding areas at other times in the tidal cycle. Low Tide Counts, therefore, are crucial in establishing key areas for waterbirds within tidal sites.

Several species of waterbirds, notably geese, often feed away from wetlands during the day, returning there to roost in the evening. Most WeBS counts are made during mid-morning, when the importance of the site for such species will not be recorded. Roost counts made at dawn or dusk are conducted at most UK goose roost sites. Roost counts are also effective for monitoring the numbers of other species also, e.g. Goosanders returning from rivers to roost on adjacent reservoirs.

Data Summation

Care is needed when consolidating data at different scales, especially that provided in a Tabulated five-year synopsis. It is first necessary to calculate the monthly totals by summing "raw" data, i.e. monthly counts, for the individual parts within the area being considered, whether it is sectors of a large site or sites within a country. It is important to take into account missing counts, which may not always be self-evident. Only from the summed "raw" data should peak counts and mean peaks be calculated. Summing the mean peaks for the constituent parts gives a falsely elevated total for the whole area for the reason that the peak counts used for calculating the means on the individual areas will almost inevitably have occurred on different dates as birds move between adjacent areas of large complexes.

For example, for two adjacent reservoirs A and B, if 1,100 Coot occur on Reservoir A between September and December, with none on adjacent Reservoir B, and then switch to use Reservoir B between January and March, both reservoirs, individually, will have a peak 1,100 (1% of the GB population). Adding the peaks will give a value of 2,200 (seemingly 2%), yet only 1,100 were ever present on the whole consolidated "site" at any one time. Individually, each area is as important as the 1% levels suggest, but the values for the whole site must be calculated from raw data for the whole site.

Data Presentation

WeBS Partners encourage the use of WeBS data for conservation and research. Where the use of WeBS data results in a publication, report, paper, display etc. that includes presentation of WeBS data, please bear in mind that others will then have access to these data. WeBS Partners are keen to see that the same data provided to the applicant cannot be gleaned directly from the reports etc. in which they are presented as it prevents WeBS from monitoring the use of data and also from imposing the terms and conditions of use. This may result in the use of data by other parties contrary to the terms and conditions of the release of WeBS data, particularly where large amounts of data are presented.

Please consider presenting data in summary format, or providing only the minimum data relevant to the use. The need to present data in such a way will vary according to the audience and in some cases, very few modifications will be necessary. WeBS Partners recognise, however, that there will be cases where presentation of a significant amount of data may be desirable or necessary. Please contact the WeBS Partners before sensitive datasets are published. It

is a condition of the use of WeBS data that Monthly counts are not given verbatim without prior written permission from WeBS Partners.

Appendix 2: WeBS Core Count Data Requests: Format and Interpretation of Provided Data

Standard Tabulated five-year synopsis

General Information

Period covered by tabulations

Tabulated five-year synopses are produced using WeBS count data for one site or amalgamation of several sites for a five-year period. The WeBS counting year runs from July to June (so year 22/23 includes data from July 2022 to June 2023 inclusive). The year is divided into three functional counting seasons: Autumn (July to October inclusive to describe autumn passage); Winter (November to March inclusive to describe the wintering population) and Spring (April to June inclusive to describe spring passage).

Count quality

Complete counts are regarded as reliable estimates of the numbers present whereas incomplete counts are treated as under-estimates and are used selectively throughout these tabulations. Whether or not a count is complete is based both on whether or not all parts of the site were counted (large sites are routinely counted section by section) and whether or not the observer considered that factors such as weather conditions or disturbance may have affected the counts. This is assessed separately for each species to allow for different parts of a site being important to different species.

A completeness flag is assigned when counts are added together to give a species count for a complex site (made up of two or more count sectors). It must be borne in mind that for some large sites (such as the Forth, Severn, Thames) these counts might have been done under very different conditions and even on different days of the same weekend, by unconnected counters. Consequently the visit qualities assigned to the various counted sectors contributing to a consolidation may be quite different. Additionally a variable amount of the overall site may well have gone uncounted.

Thus in order to construct the species tables for the annual report, and summary statistics produced for data requests, it is necessary to compute completeness of coverage taking into account the confidence attached to individual counts contributing to the consolidation of a complex site and whether or not any parts of the complex were uncounted. The importance of the contribution of each count sector within a complex is assessed based on its average species-specific contribution to the consolidated total. Counts for individual count sectors will have been assigned as good, poor or flagged as uncounted. When these are added together the overall total is assigned a completeness of coverage flag as

good: count sections counted with high confidence typically hold >= 75% of overall total for the species in question;

poor: count sections counted with high confidence typically hold < 75% of overall total for the species in question;

The contribution of each count sector to a complex is estimated by looking at the average count for that count sector as a proportion of the sum of the average counts for all count sectors for the complex. These proportions are calculated on a species-specific basis to control for the situation where different count sectors are important for different species. The estimate of numbers usually found on a specific sector is based on typical numbers at the same time of year and in recent years. Consequently, in order to control for long-term trends at sites the average count for each count sector on a given date is based on the 15 counts, nearest in time to the date in question, while controlling for seasonal trends by restricting those counts to the previous, current and following calendar months. For example, the importance of a part of a site during February will be assessed by considering the proportion of the population it has held on average during January, February and March. This controls for both long term trends and seasonal variation when assessing count completeness.

Incorporating incomplete counts

In order to make maximum use of count data, the following procedure is adopted throughout the *Tabulated five-year synopsis*. Averages are initially calculated using only complete counts. Averages are then recalculated with incomplete counts that exceed the previously calculated average also included. This ensures that while low incomplete counts do not depress the average high incomplete counts are allowed to increase the average (as in fact the true average would be even higher if complete counts had been available in these cases). If all counts were incomplete the highest incomplete count is used as an estimate of the average.

Tabulations

Table 1 This table provides information on the total waterbird community (all species combined) in each of the years summarised. Summing the counts of all species from each month and selecting the highest provides the "peak monthly total". The month of the peak is indicated; and an average of the peaks over five years is provided. Where the peaks from all years are incomplete, the maximum peak is used.

For each included year, the "seasonal peak species totals" are calculated by listing the highest count for each species in each season and then summing these counts. Averages of the peak species totals for each season are provided. Where the peak counts from all years are incomplete, the maximum peak count is used. 'NC' indicates that no counts were made during the particular season in any of the included years.

Table 2 Average counts calculated across the included years are provided for each species. The number of complete/incomplete counts during the five years are given in parentheses. The latter are species specific. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete.

Table 3 The highest counts made over the included years are given for each month for each species. The number of complete/incomplete counts can be found from Table 2.

Table 4a-4d Tables 4a, 4b and 4c give the peak seasonal count of each species in each of the included years, for Autumn, Winter and Spring respectively, and Table 4d gives the annual peak count for each WeBS year. The month of the peak is given in each case. Where tabulated values are enclosed in parentheses this indicates they are based on incomplete counts. Where a particular species only occurs very rarely on a site and there are insufficient data to assess the quality of a visit, these counts are also treated as if incomplete. 'NC' indicates that no counts were made during the particular season for which it is shown.

Table 5a-5b Average peak season counts as tabulated in 4a-4d are compared to qualifying levels used to assess whether or not a site holds nationally or internationally important numbers of a given species. Table 5a makes the assessment using the annual peak counts as tabulated in 4d and Table 5b uses the seasonal peak counts (4a-4c). The qualifying levels are published in the Wetland Bird Survey / Goose & Swan Monitoring Programme - *Waterbirds in the UK* - published by BTO, RSPB, JNCC and NatureScot. Qualifying levels are updated at approximately six-year intervals. The latest qualifying levels are used for all data requests even if count data refer to earlier years. The tabulated value is the percent of the relevant qualifying level that the mean peak count for the site represents. For some species separate national qualifying levels are defined for Britain and Northern Ireland (i.e. all-Ireland for the latter). In such cases the appropriate national qualifying level is used. Note that for some species (e.g. Ringed Plover), different qualifying levels are used for assessment of wintering and passage (spring & autumn) populations. For some species (e.g. Common Sandpiper), qualifying levels have not been set. When this is the case N/A replaces the estimate of importance in the table. Where tabulated values are enclosed in parentheses this indicates that 1% of the British wintering population (the normal qualifying level criterion for British National importance) is less than 50 birds. In such cases 50 is used as the minimum qualifying level for British national importance. Species rows are highlighted in red if the site reaches the national threshold during one or more season (i.e. if the percent of national threshold is equal to or greater than 100%)

Report tables in Excel format

The data provided in the standard five-year synopsis are also available in an excel file which can be provided on request. This file includes sheets for each of the tables included in the synopsis which contain data matching the format of the synopsis.

To enable easier reformatting of the data and use of the data in analyses, Table 2 and Tables 4a-4d are also provided in 'long' format, with the values in each cell in the table being split across multiple rows ('Table 2 split', 'Table 4a split' etc). Note that Tables 4a-4d include an additional column in the Excel file which does not appear in the five-year synopsis report 'Completeness'. This variable indicates whether or not the count is considered complete (1=complete; 2=incomplete). Hence, records with a completeness value of 2 are equivalent to values shown in parentheses in the synopsis report.

Historic Site Data in csv format

Where more than five years worth of data have been requested, the full data for the period requested will be provided

in csv format. The csv file will contain seven variables: Site; Species; Year; Month; Count; Completeness; WeBS_Sort_Order. The Year and Month variables in this file refer to the calendar year and calendar month (rather than the WeBS year and month). The Completeness variable indicates whether the count quality is considered ‘Good’ or ‘Poor’ (see the ‘Count quality’ section under ‘Standard Tabulated five-year synopsis’ above for further details about this assessment).

Appendix 3: Classification of Goose Populations

Within the WeBS database several goose populations are identified according to location (and totals derived by summing counts from particular WeBS regions) where they cannot be separated in the field by appearance. The following goose populations are defined according to location as detailed below. Details about specific surveys covering goose populations can be found at https://www.bto.org/our-science/projects/goose-and-swan-monitoring-programme and further information about the classification of goose populations can be found in chapter 3.6 of the WeBS Methods document (www.bto.org/sites/default/files/webs_methods.pdf)



Images: Wigeon, Redshank and Grey Heron: Edmund Fellowes/BTO; Great Crested Grebe: Tom Streeter/BTO; Black-tailed Godwit: Liz Cutting/BTO

The UK hosts internationally important numbers of wintering waterbirds. One of the principal aims of WeBS is to provide data to facilitate their conservation. As part of the WeBS Core Count scheme over 3,000 wetlands are counted annually, many on a monthly basis.

Tabulated five-year synopses provide the average count from five consecutive years for each species in each month on a given site, or sector of a large site. Also given are the winter peaks for each species, the mean peak counts, and the proportion of national/international populations present. These data will take into account any variation of coverage of each of the sectors.

WeBS Office
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

Email: websdata@bto.org

WeBS

BTO RSPB JNCC

WeBS is a partnership jointly funded by the British Trust for Ornithology, the Royal Society for the Protection of Birds and the Joint Nature Conservation Committee, with fieldwork conducted by volunteers.

Annex E
BTO Data Report

nationalgrid

BTO DATA REPORT

North Humber to High Marnham

Compiled on 03 February 2026



SUMMARY

Background

The BTO Data Report collates and analyses comprehensive (2007–2011) and contemporary (2022-2026) bird data relating to the grid squares spanned by the site: 595 1-km squares, 183 tetrads and 18 10-km squares. For contextual analyses, data from these relevant squares are related to equivalent data from four vice-counties, three counties, two regions, one country and the UK to assess species' importance in the vicinity of the site to help inform delivery of habitat mitigation, enhancement and biodiversity net gain.

Data used

Coverage of relevant squares spanned by the site from 2007–2011 is complete at the 10-km resolution and there is very good coverage of the site by timed visits and very good coverage from casual recording in the breeding season (very good and very good respectively in winter). Contemporary information for the period 2022-2026 is available from BirdTrack for 31% of tetrads (100% of 10-km squares) in the breeding season and from 11 BBS squares.

Results

During 2007–2011, 133 species with breeding evidence and 173 species in winter were recorded in the vicinity of the site at various spatial scales. Breeding season figures include 22 Schedule 1 species, 15 Annex 1 species and 31 BoCC Red list species. The following rare breeding birds were recorded in the same 20-km or 50-km squares as the site during 2007–2011: Crane, Honey-buzzard, Montagu's Harrier. For confidentiality reasons we cannot reveal fine-scale association with the site: further details may be available from the Rare Breeding Birds Panel.

During the breeding seasons of 2022-2026, 186 species were recorded in the vicinity of the site at various spatial scales. These included 47 Schedule 1 species, 35 Annex 1 species and 49 BoCC Red list species.

In a UK context, the 10-km squares spanned by the site held 17 notable breeding species (where the site and vicinity accounted for at least 2% of the species' geographic range in the UK). In a regional context, the site's 10-km squares accounted for up to 100% of regional population size. Ninety-three species were notable in at least one region or season. In a county context, the site's 10-km squares accounted for up to 100% of county population size. One hundred two species were notable in at least one county or season. In a vice-county context, the site's 10-km squares accounted for up to 100% of vice-county population size. One hundred twenty-seven species were notable in at least one vice-county or season. Full details of notable species and those showing more positive population trends in the vicinity of the site compared to the wider context are given in the Report.

1. INTRODUCTION

The purpose of the BTO Data Report is to provide information on bird species associated with potential development sites at a range of spatial scales to inform desk studies for ecological impact assessments. The Report uses BTO's long-term ornithological datasets, providing high quality comprehensive and contemporary information. BTO is grateful to the volunteers who collected all the data, and to the funders and scheme partners, who are listed in Section 3 under the relevant data sources.

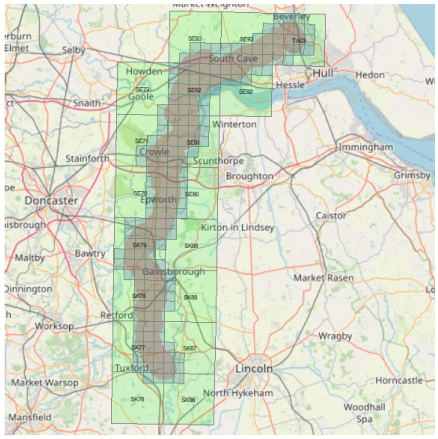
The species list in this report can guide the need for detailed field surveys in conjunction with Bird Survey Guidelines advice. This Report highlights the legal and conservation status assigned to each species in the relevant country. Beyond simple species lists, BTO data are uniquely able to provide context to help quantify the importance of a site and its surroundings in conservation terms. This includes assessments of the percentage of county, regional and national geographic range and population size associated with the site, plus recent population changes, offering the potential to highlight priorities for delivering habitat mitigation, enhancement and biodiversity net gain.

All maps in this report use the maptiles R package (Giraud 2023) with basemap data copyright OpenStreetMap contributors.

2. SITE, SQUARES, REGIONS AND FEATURES

2.1 Relevant grid squares

Systematic bird recording in Britain and Ireland typically involves the collection of records for 1-km, 2-km ('tetrad') or 10-km squares, or using the boundaries of user-defined sites, nature reserves and other 'popular places'. Rarely can records be definitively attributed within the boundary of proposed development sites, especially small ones.



Unless otherwise stated, all species detailed in the BTO Data Report concern species present in grid squares *intersected* by the site boundary, rather than species that are definitively *within* the site boundary. Grid squares with at least 1ha overlapping the site are referred to as 'relevant' squares.

For example 'relevant tetrads' are all 2-km squares with at least 1ha overlapping the site. Data are summarised at the finest spatial scale possible, subject to the size of the site and the availability and spatial precision of BTO datasets in the vicinity of the site.

The number of relevant 1-km squares, tetrads and 10-km squares for the site are listed below. The map above shows the site in relation to relevant tetrads and relevant 10-km squares (for an equivalent map for 1-km squares, and for full lists of relevant 1-km squares, tetrads and 10-km squares, see Appendix 1).

- 595 relevant 1-km squares
- 183 relevant tetrads
- 18 relevant 10-km squareses

For reasons of confidentiality the precise locations of certain rare breeding and wintering birds (typically those reported on by the Rare Breeding Birds Panel) cannot be revealed precisely in BTO Data Reports. For these species we follow the treatment introduced by *Bird Atlas 2007–11* where records were summarised for 20-km and 50-km squares. If any such rare breeding species have been recorded in the same 20-km or 50-km squares as the site, lists and maps of relevant 20-km and/or 50-km squares are included in Appendix 1.

All results in the BTO Data Report, especially those for larger grid resolutions, should be interpreted with respect to the habitats present on the site as some species listed may not occur within the site boundary.

2.2 Relevant county, regional and national contexts

The BTO Data Report contains contextual 'site importance' analyses that aim to highlight species for which the site and its relevant grid squares are important in local, regional, national and UK contexts. For example, does the site and its surroundings support a regionally significant population of a protected species?

National context concerns the site relative to the country it falls within. In addition to the UK (here combined with the Isle of Man and Channel Islands), the site also falls within one country: *England*.

Regional context concerns the site relative to the regions it falls within. For sites in England, regions are defined using the NUTS (Nomenclature of territorial units for statistics) level 1 regions. The following regions are relevant for this site: *East Midlands and Yorkshire and the Humber*.

County context concerns the site relative to counties. The following counties are relevant for this site: *East Riding of Yorkshire, Lincolnshire and Nottinghamshire*.

Vice-county context concerns the site relative to vice-counties. For sites in Great Britain, the Report uses Watsonian Vice-counties. The following vice-counties are relevant for this site: *North Lincolnshire, Nottinghamshire, South-east Yorkshire and South-west Yorkshire*.

Maps of all these areas can be found in Appendix 1. The grid squares associated with each of these area are used to determine overall range size and abundance at county, regional and national scales with which range size and abundance for the site's relevant grid squares can be calculated. Note that some individual grid squares may be associated with more than one geographical area. For more information see Section 5.

2.3 Relevant features

The BTO Data Report summarises species occurrence and abundance for species of conservation and statutory importance. In addition to the lists of species important across the UK, certain lists are of relevance in the UK's devolved administrations. The table below lists all species lists relevant for UK, Isle of Man and Channel Islands and England. Section 4 summarises the number of species recorded at or around the site for each of these feature lists.

Feature	Description
Schedule 1 UK	Species listed on Schedule 1 of the Wildlife and Countryside Act 1981
BoCC Red	Species on the Red list according to Birds of Conservation Concern 5 (Stanbury et al. 2021)
BoCC Amber	Species on the Amber list, according to Birds of Conservation Concern 5 (Stanbury et al. 2021)
Annex 1	Species on Annex 1 of the EU Birds Directive
IUCN2 Critically Endangered	Species listed as Critically endangered in Great Britain (Stanbury et al. 2021)
IUCN2 Endangered	Species listed as Endangered in Great Britain (Stanbury et al. 2021)
IUCN2 Near Threatened	Species listed as Near Threatened in Great Britain (Stanbury et al. 2021)
IUCN2 Vulnerable	Species listed as Vulnerable in Great Britain (Stanbury et al. 2021)
RBBP	Rare and scarce species considered by the Rare Breeding Birds Panel
Section 41 England	Species listed in Section 41 of the Natural Environment and Rural Communities Act 2006 (England only)
Schedule ZA1 England & Wales	Species listed on Schedule ZA1 of the Wildlife and Countryside Act (England & Wales only)

3. DATA SOURCES AND COVERAGE

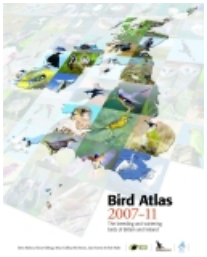
The BTO Data Report uses comprehensive atlas distribution data from 2007–11 to give a baseline of high-quality information about species status at and around the site and in the wider context. This is supplemented by the latest records from current schemes, including BirdTrack and BBS. The report considers **269 species** that regularly occur in Britain and Ireland. These include **221 breeding species** and **226 wintering species**. The report includes BOU Category C established non-native species but excludes exotic non-native species (i.e. those without self-sustaining populations). Breeding species are defined as those that were recorded with confirmed breeding evidence in at least one 10-km square in Britain or Ireland in *Bird Atlas 2007–11*. Wintering species are defined as those recorded in at least fifty 10-km squares in *Bird Atlas 2007–11*, plus six rare residents that the 50-square rule excluded (e.g. Cirl Bunting). Species on statutory and conservation status lists, such as Schedule 1, Birds of Conservation Concern 5, or Section 7 (Wales) are highlighted. Some lists consider subspecies or populations (e.g. Greenland White-fronted Goose, Hebridean Song Thrush) for which BTO data are not ideally suited. We therefore include the parent species in these analyses to ensure appropriate warnings are raised and dedicated surveys may be required.

Systematic bird recording often involves the assignment of 'breeding evidence' to records. Breeding evidence is hierarchical, having three levels: possible breeding, probable breeding and confirmed breeding. These are directly inferred from field observations and indicate the certainty that can be ascribed to the record that breeding is taking place at a location. For example, a bird singing in suitable territory is assigned possible breeding evidence, a bird carrying nesting material is assigned probable breeding evidence, whereas recently fledged young amounts to confirmed breeding evidence. Lack of breeding evidence (i.e. simple presence) can reflect either that the observer did not witness appropriate behaviours indicative of breeding, or that submission of breeding evidence was not mandatory for that particular data source.

Lack of breeding evidence in the data should not be assumed to indicate lack of breeding.

See below for details about each dataset and an assessment of the quantity of data relating to the site and its relevant grid squares.

3.1 Comprehensive species assessment 2007–2011

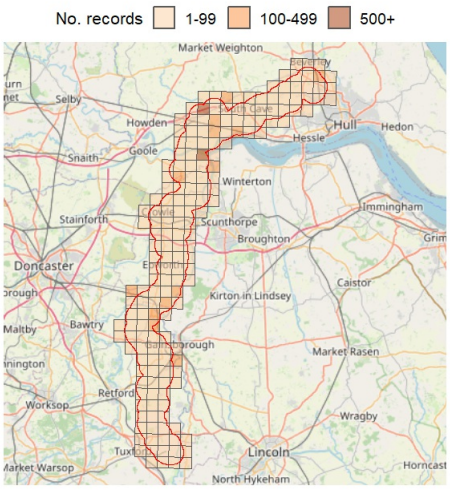


Bird Atlas 2007–11 (BTO, BirdWatch Ireland and the Scottish Ornithologists' Club) provides data at two resolutions: complete 10-km distribution datasets and sample 2-km distribution and relative abundance datasets. Although the Bird Atlas data are now 15 years old, they still provide the most recent and comprehensive assessment of bird distributions available. **All 18 relevant 10-km squares** that the site spans will have been surveyed in winter and the breeding season to provide 10-km resolution distribution information. Unstructured data (i.e. casual records) at tetrad resolution were provided for **144 relevant tetrads** in the breeding season and for **109 relevant tetrads** in winter. The total numbers of records submitted across this set of tetrads in the breeding season and winter were **6736 records** and **3357 records** respectively.

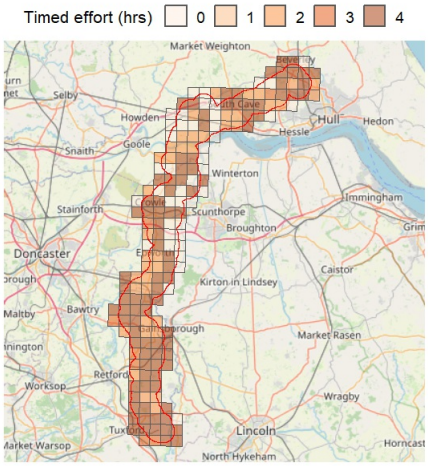
Additionally, at least 32% of tetrads in each 10-km square received timed visits, amounting to structured data for 50089 tetrads across Britain and Ireland. Of the 183 relevant tetrads that the site spans, **141** (77%) received Timed Tetrad Visits in the breeding season (477 hours of recording effort). Similarly, **145 tetrads** (77%) were visited in winter (485 hours).

Data quality control: All records have been manually verified prior to use.

Distribution of casual records (breeding)



Distribution of timed effort (breeding)



3.2 Contemporary species assessment 2022-2026

The current species assessment is based on the following data sources.

3.2.1 Breeding Bird Survey

The UK *Breeding Bird Survey* (BBS hereafter; BTO, JNCC, RSPB) is an annual survey of over 4000 randomly selected 1-km squares across the UK. Each square is surveyed twice per breeding season, providing up to date records of bird occurrence in this c.3% sample of the UK. The BBS does not require observers to provide breeding evidence information. Consequently, all records relate to presence information; *it should not be assumed that lack of breeding evidence means species were not breeding at or near the site*. This Report queries data from the 5057 1-km squares surveyed for the BBS during 2021–2024. In total, **11 relevant 1-km squares** (SK7291, SE9932, SE9329, SE8726, TA0036, SK7398, SK7576, SK7872, SK7675, SK7677, SK7588) were also BBS squares, providing 34 square*years of data, with the most recent data being from **2024**.

Data quality control: All records have been manually verified prior to use.

3.2.2 BirdTrack

BirdTrack (BTO, RSPB, BirdWatch Ireland, Scottish Ornithologists' Club and Welsh Ornithological Society) provides information on recent sightings of birds throughout Britain and Ireland. Unlike *Bird Atlas*, which has a structured component ensuring complete coverage of 10-km squares, *BirdTrack* is unstructured and coverage is strongly associated with the distribution and birdwatching preferences of observers. The consequent variation in recording effort means that for some areas there be less information to generate a report. A further difference from *Bird Atlas* is that observers are not required to provide breeding evidence information. Consequently, some searches may yield only presence information; it should not be assumed that lack of breeding evidence means species were not breeding at or near the site. Observers are free to birdwatch where they choose, and can provide records with varying levels of spatial precision, from pin-pointed records, to large polygons that may span multiple grid squares. The assessment includes data for the breeding season (March–July inclusive) and non-breeding season (August–February inclusive) for the last five years and is summarised with respect to the relevant grid squares, summarising records to the finest spatial precision that the records permit.

BirdTrack data were available for **31%** of the site's relevant tetrads in the breeding season (100% of 10-km squares), including data from **2025**. Data were available for **29%** of the site's relevant tetrads in winter (100% of 10-km squares), including data from **2026**.

Data quality control: Observers are warned of 'threshold breaking' records at the point of data entry (unusual place or date for a species; unusually high count) and given the opportunity to correct mistakes. Further manual verification occurs but as BirdTrack data are 'live', the verification status of individual records varies. Rejected records and any in an active state of query are excluded from the Report.

4. SPECIES LISTS

4.1 Species assessment 2007–2011

This section summarises comprehensive *Bird Atlas 2007–11* distribution data for the 183 relevant tetrads and 18 relevant 10-km squares the site spans. It also considers data from the nine relevant 20-km squares and three relevant 50-km squares for any confidential RBBP species records.

4.1.1 Breeding season

Bird Atlas 2007–11 indicate **133 species** with breeding evidence in the vicinity of the site at a range of spatial resolutions (Table 1). At the highest level of spatial resolution achievable with Bird Atlas data, 106 species were recorded with breeding evidence in the site's relevant tetrads. The following confidential species were recorded with breeding evidence during 2007–11 in the same 50-km square(s) as the site: Crane, Honey-buzzard, Montagu's Harrier. See Appendix 3 for the full list of species with breeding evidence recorded in the vicinity of the site.

Table 1. Numbers of species in the breeding season recorded during 2007–11 at different spatial resolutions relative to the site. Rows give figures for all species, and according to various lists of important features. Columns indicate status in relevant grid squares of different sizes.

Species category	2-km	10-km	20-km	50-km
All species	106	24	0	3
Annex 1	3	9	0	3
BoCC Amber	33	8	0	2
BoCC Red	26	4	0	1
IUCN2 Critically Endangered	1	2	0	1
IUCN2 Endangered	9	4	0	1
IUCN2 Near Threatened	13	3	0	0
IUCN2 Vulnerable	21	2	0	1
RBBP	10	14	0	3
Schedule 1 UK	8	12	0	2
Schedule ZA1 England & Wales	0	0	0	0
Section 41 England	23	5	0	0

4.1.2 Winter

Bird Atlas 2007–11 indicates **173 species** were recorded in the vicinity of the site in winter at a range of spatial resolutions (Table 2). At the highest level of spatial resolution achievable with Bird Atlas data, 137 species were recorded in winter in the site's relevant tetrads. No confidential species were recorded in winter in any of the site's relevant 20-km or 50-km squares. See Appendix 3 for the full list of species recorded in the vicinity of the site.

Table 2. Numbers of species in winter during 2007–11 at different spatial resolutions relative to the site. Rows give figures for all species, and according to various lists of important features. Columns indicate status in relevant grid squares of different sizes.

Species category	2-km	10-km	20-km	50-km
All species	137	36	0	0
Annex 1	19	7	0	0
BoCC Amber	50	14	0	0
BoCC Red	31	11	0	0
IUCN2 Critically Endangered	7	5	0	0
IUCN2 Endangered	21	7	0	0
IUCN2 Near Threatened	10	5	0	0
IUCN2 Vulnerable	26	7	0	0
RBBP	38	22	0	0
Schedule 1 UK	26	14	0	0
Schedule ZA1 England & Wales	0	0	0	0
Section 41 England	26	2	0	0

4.2 Species assessment 2022-2026

4.2.1 Breeding season

The assessment of current species associated with the site in the breeding season is based on BBS and BirdTrack. This information summarises species with and without breeding evidence as (unlike Bird Atlas data) these data sources do not require evidence to be submitted. These sources indicate **186 species** recorded in the vicinity of the site in the breeding season at a range of spatial resolutions (Table 3). At the highest level of spatial resolution achievable with these data, 77 species were recorded in the same 1-km square(s) as the site. Some BirdTrack sites spanned 10-km square boundaries; any species associated with these BirdTrack sites and not present at a finer resolution are summarised in the '>10-km' column. Particular care should be taken with such records as the species could have been recorded some distance from the site. See Appendix 4 for the full list of species recorded in the vicinity of the site during 2022-2026.

Table 3. Numbers of species in the breeding season during 2022-2026 at different spatial resolutions relative to the site. Rows give figures for all species, and according to various lists of important features. Columns indicate status in relevant grid squares of different sizes.

Species category	1-km	2-km	10-km	>10-km
All species	77	76	21	12
Annex 1	0	16	11	8
BoCC Amber	24	34	6	5
BoCC Red	16	23	6	4
IUCN2 Critically Endangered	1	6	4	0
IUCN2 Endangered	6	16	3	3
IUCN2 Near Threatened	9	10	2	1
IUCN2 Vulnerable	14	13	1	4
RBBP	1	33	17	8
Schedule 1 UK	3	24	14	6
Schedule ZA1 England & Wales	0	1	1	0
Section 41 England	15	11	6	3

4.2.2 Non-breeding season

The assessment of current species associated with the site is based on BirdTrack and indicate **186 species** recorded in the vicinity of the site in the non-breeding season at a range of spatial resolutions (Table 4). Some BirdTrack sites spanned 10-km square boundaries; any species associated with these BirdTrack sites and not present at a finer resolution are summarised in the '>10-km' column. Particular care should be taken with such records as the species could have been recorded some distance from the site. See Appendix 4 for the full list of species recorded in the vicinity of the site during 2022-2026.

Table 4. Numbers of species in the non-breeding season during 2022-2026 at different spatial resolutions relative to the site. Rows give figures for all species, and according to various lists of important features. Columns indicate status in relevant grid squares of different sizes.

Species category	1-km	2-km	10-km	>10-km
All species	0	153	23	10
Annex 1	0	24	6	0
BoCC Amber	0	61	8	4
BoCC Red	0	32	8	3
IUCN2 Critically Endangered	0	9	2	2
IUCN2 Endangered	0	24	5	2
IUCN2 Near Threatened	0	11	4	0
IUCN2 Vulnerable	0	29	4	1
RBBP	0	44	16	3
Schedule 1 UK	0	31	7	2
Schedule ZA1 England & Wales	0	1	0	0
Section 41 England	0	23	5	0

5. SITE IMPORTANCE

A site may be important if it supports a high proportion of a species' local, regional or national population, or if its population trends are more positive at the site compared to elsewhere. Whilst data are not available at sufficiently fine scales to assess the site itself (see Section 2), here we used *Bird Atlas 2007–11* distribution and relative abundance data for relevant 10-km squares to assess the area in which the site falls.

For each species we express its range and population size in the vicinity of the site relative to the total range size and population size in different geographic contexts, ranging from vice-counties and counties, through regions, to countries. This requires determining how many of the relevant 10-km squares spanned by the site are occupied (e.g. one) and how many 10-km squares in the larger region are occupied (e.g. 20); in this case the site and its vicinity account for 5% (= 1/20) of the species' range in the region. As large sites will tend to account for a higher percentage of range than small sites, such figures need to be bench-marked to allow comparability across sites. This requires knowing how many of the site's relevant 10-km squares fall in the region (e.g. one) and the total number of 10-km squares in the region (e.g. 100); in this case the site's 'percentage size' is 1% (= 1/100). We define **Notable species** as those for which the percentage range is at least twice the site's percentage size. In the above examples the percentage range (5%) is more than double the site's percentage size (1%) so the species would be highlighted as Notable. The exception to this rule is at the scale of United Kingdom where we mark species as **Notable** if the site and vicinity account for 2% or more of the species' UK range.

Distribution data are available for all species for the above analysis. However, distribution data ignore the fact that some species vary widely in abundance within their range. Therefore, to supplement the results above, we undertake a similar exercise using relative abundance data which can help to highlight species for which the site and its vicinity is a particular hot-spot of locally, regionally or nationally high density. *Bird Atlas 2007–11* data give a relative density measure for each terrestrial species in each 10-km square (**colonial seabirds are excluded**). These can be summarised in the same way as distribution data to estimate the percentage of the region's population size found at the site and its vicinity. Calculations of percentages and derivation of Notable species are as above.

Lastly, breeding season relative abundance data are available for two periods, 1988–91 and 2008–11, allowing for an assessment of relative abundance change for terrestrial bird species over this interval for the site and its vicinity (**colonial seabirds are excluded**). By comparing such values with corresponding change measures for the wider region we can identify species for which the site and its vicinity has had more positive population trends (i.e. increasing more than elsewhere, or declining less). This may indicate that the 10-km squares in which the site falls are an important refuge for these species in a local, regional or national context. When interpreted alongside the species lists in Section 4 and the result of any commissioned field surveys, these results can help to identify species for which the site may be particularly important. For very small sites spanning only a single 10-km square these results should be interpreted with caution.

It is important to remember that all these calculations use 10-km resolution data so relate to the site and its vicinity, not strictly to the site alone.

5.1 Country: UK, Isle of Man and Channel Islands

Overall, 18 of the 10-km squares that include the site fall in UK, Isle of Man and Channel Islands, accounting for 0.59% of 10-km squares in UK, Isle of Man and Channel Islands. According to *Bird Atlas* data, these squares support between 0.1% and 6.1% of the geographic range in UK, Isle of Man and Channel Islands of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0% and 16.3% of the total population size in UK, Isle of Man and Channel Islands. In the context of the United Kingdom, **notable species** are defined as those for which the site's relevant 10-km squares account for at least 2% of geographic range in the UK. If any species qualify they are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 17 species: Shoveler, Pochard, Ruddy Duck, Golden Pheasant, Turtle Dove, Spotted Crake, Black-necked Grebe, Avocet, Little Ringed Plover, Bittern, Marsh Harrier, Willow Tit, Bearded Tit, Woodlark, Savi's Warbler, Yellow Wagtail, Corn Bunting
- Winter range, 11 species: Egyptian Goose, Garganey, Green-winged Teal, Little Stint, Marsh Harrier, Rough-legged Buzzard, Willow Tit, Bearded Tit, Woodlark, Common Redpoll, Corn Bunting
- Breeding abundance, 24 species: Garganey, Shoveler, Pochard, Ruddy Duck, Grey Partridge, Golden Pheasant, Stock Dove, Turtle Dove, Avocet, Little Ringed Plover, Marsh Harrier, Barn Owl, Long-eared Owl, Lesser Spotted Woodpecker, Willow Tit, Bearded Tit, Woodlark, Sedge Warbler, Reed Warbler, Lesser Whitethroat, Tree Sparrow, Yellow Wagtail, Corn Bunting, Reed Bunting
- Winter abundance, 24 species: Shoveler, Gadwall, Teal, Pochard, Grey Partridge, Stock Dove, Moorhen, Red-necked Grebe, Golden Plover, Ruff, Common Sandpiper, Spotted Redshank, Bittern, Marsh Harrier, Barn Owl, Long-eared Owl, Short-eared Owl, Willow Tit, Bearded Tit, Tree Sparrow, Water Pipit, Corn Bunting, Yellowhammer, Reed Bunting

Between 1988–91 and 2008–11, there were 65 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of UK, Isle of Man and Channel Islands. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.1 in Appendix 5.

- Stock Dove, Curlew, Carrion Crow, Marsh Tit, Chiffchaff, Tree Sparrow, Yellow Wagtail, Grey Wagtail, Pied/White Wagtail, Goldfinch

There were 53 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of UK, Isle of Man and Channel Islands. The ten species with the most negative difference in trend between site and region were:

- Red-legged Partridge, Nightjar, Cuckoo, Turtle Dove, Great Crested Grebe, Black-tailed Godwit, Red Kite, Willow Warbler, Nightingale, Lesser Redpoll

5.2 Country: England

Overall, 18 of the 10-km squares that include the site fall in England, accounting for 1.2% of 10-km squares in England. According to *Bird Atlas* data, these squares support between 0.2% and 9.5% of the geographic range in England of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0% and 24.4% of the total population size in England. **Notable species** for England are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 17 species: Shoveler, Pochard, Ruddy Duck, Golden Pheasant, Turtle Dove, Water Rail, Spotted Crake, Black-necked Grebe, Avocet, Bittern, Marsh Harrier, Long-eared Owl, Willow Tit, Bearded Tit, Woodlark, Savi's Warbler, Tree Sparrow
- Winter range, 12 species: Pink-footed Goose, Whooper Swan, Green-winged Teal, Little Stint, Marsh Harrier, Rough-legged Buzzard, Long-eared Owl, Willow Tit, Bearded Tit, Woodlark, Twite, Common Redpoll
- Breeding abundance, 30 species: Greylag Goose, Garganey, Shoveler, Mallard, Teal, Pochard, Ruddy Duck, Grey Partridge, Golden Pheasant, Turtle Dove, Water Rail, Avocet, Little Ringed Plover, Woodcock, Marsh Harrier, Barn Owl, Long-eared Owl, Lesser Spotted Woodpecker, Willow Tit, Bearded Tit, Woodlark, Sand Martin, Sedge Warbler, Reed Warbler, Grasshopper Warbler, Whitethroat, Tree Sparrow, Yellow Wagtail, Corn Bunting, Reed Bunting
- Winter abundance, 31 species: Greylag Goose, Shoveler, Gadwall, Teal, Pochard, Tufted Duck, Goldeneye,

Grey Partridge, Stock Dove, Water Rail, Moorhen, Red-necked Grebe, Golden Plover, Ruff, Snipe, Common Sandpiper, Spotted Redshank, Bittern, Marsh Harrier, Barn Owl, Long-eared Owl, Short-eared Owl, Waxwing, Willow Tit, Bearded Tit, Tree Sparrow, Water Pipit, Lesser Redpoll, Corn Bunting, Yellowhammer, Reed Bunting

Between 1988–91 and 2008–11, there were 72 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of England. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.2 in Appendix 5.

- Stock Dove, Lesser Spotted Woodpecker, Carrion Crow, Marsh Tit, Chiffchaff, Mistle Thrush, Tree Sparrow, Yellow Wagtail, Pied/White Wagtail, Goldfinch

There were 46 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of England. The ten species with the most negative difference in trend between site and region were:

- Shelduck, Red-legged Partridge, Nightjar, Cuckoo, Turtle Dove, Water Rail, Great Crested Grebe, Black-tailed Godwit, Red Kite, Nightingale

5.3 Region: East Midlands

Overall, 10 of the 10-km squares that include the site fall in East Midlands, accounting for 4.9% of 10-km squares in East Midlands. According to *Bird Atlas* data, these squares support between 1.4% and 100% of the geographic range in East Midlands of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0% and 100% of the total population size in East Midlands. **Notable species** for East Midlands are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 11 species: Shoveler, Golden Pheasant, Water Rail, Spotted Crake, Black-necked Grebe, Avocet, Woodcock, Bittern, Marsh Harrier, Long-eared Owl, Woodlark
- Winter range, 13 species: Green-winged Teal, Crane, Whimbrel, Little Stint, Greenshank, Marsh Harrier, Long-eared Owl, Woodlark, Cetti's Warbler, Wheatear, Twite, Common Redpoll, Common/Lesser Redpoll
- Breeding abundance, 22 species: Garganey, Shoveler, Gadwall, Teal, Pochard, Grey Partridge, Golden Pheasant, Cuckoo, Turtle Dove, Water Rail, Little Ringed Plover, Snipe, Barn Owl, Long-eared Owl, Kingfisher, Lesser Spotted Woodpecker, Willow Tit, Woodlark, Sand Martin, Sedge Warbler, Grasshopper Warbler, Tree Sparrow
- Winter abundance, 20 species: White-fronted Goose, Whooper Swan, Shoveler, Wigeon, Teal, Goldeneye, Red-breasted Merganser, Grey Partridge, Red-necked Grebe, Jack Snipe, Snipe, Common Sandpiper, Green Sandpiper, Yellow-legged Gull, Long-eared Owl, Short-eared Owl, Tawny Owl, Willow Tit, Lesser Redpoll, Reed Bunting

Between 1988–91 and 2008–11, there were 60 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of East Midlands. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.3 in Appendix 5.

- Garganey, Pheasant, Stock Dove, Little Grebe, Lapwing, Tawny Owl, Carrion Crow, Garden Warbler, Wheatear, Tree Sparrow

There were 47 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of East Midlands. The ten species with the most negative difference in trend between site and region were:

- Wigeon, Nightjar, Great Crested Grebe, Redshank, Marsh Harrier, Buzzard, Magpie, Jackdaw, Whitethroat, Corn Bunting

5.4 Region: Yorkshire and the Humber

Overall, 12 of the 10-km squares that include the site fall in Yorkshire and the Humber, accounting for 6.1% of 10-km squares in Yorkshire and the Humber. According to *Bird Atlas* data, these squares support between 1.1% and 50% of the geographic range in Yorkshire and the Humber of all the species considered (breeding and winter combined). In

terms of abundance, these squares represent between 0.1% and 100% of the total population size in Yorkshire and the Humber. **Notable species** for Yorkshire and the Humber are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 21 species: Egyptian Goose, Shoveler, Gadwall, Pochard, Turtle Dove, Water Rail, Spotted Crake, Black-necked Grebe, Avocet, Mediterranean Gull, Common Tern, Bittern, Marsh Harrier, Lesser Spotted Woodpecker, Hobby, Bearded Tit, Woodlark, Cetti's Warbler, Reed Warbler, Savi's Warbler, Nightingale
- Winter range, 23 species: Brent Goose, Egyptian Goose, Garganey, Green-winged Teal, Crane, Red-necked Grebe, Black-necked Grebe, Avocet, Bar-tailed Godwit, Black-tailed Godwit, Little Stint, Spotted Redshank, Greenshank, Caspian Gull, Little Egret, Marsh Harrier, Rough-legged Buzzard, Bearded Tit, Woodlark, House Martin, Cetti's Warbler, Wheatear, Water Pipit
- Breeding abundance, 30 species: Shelduck, Garganey, Shoveler, Mallard, Grey Partridge, Stock Dove, Turtle Dove, Little Grebe, Avocet, Woodcock, Sparrowhawk, Marsh Harrier, Barn Owl, Long-eared Owl, Lesser Spotted Woodpecker, Green Woodpecker, Hobby, Marsh Tit, Willow Tit, Bearded Tit, Woodlark, Cetti's Warbler, Sedge Warbler, Reed Warbler, Grasshopper Warbler, Lesser Whitethroat, Whitethroat, Yellow Wagtail, Corn Bunting, Reed Bunting
- Winter abundance, 38 species: Barnacle Goose, White-fronted Goose, Mute Swan, Bewick's Swan, Shelduck, Gadwall, Wigeon, Teal, Pochard, Scaup, Stock Dove, Water Rail, Moorhen, Avocet, Lapwing, Golden Plover, Ruff, Snipe, Spotted Redshank, Greenshank, Bittern, Marsh Harrier, Barn Owl, Long-eared Owl, Kingfisher, Green Woodpecker, Waxwing, Willow Tit, Bearded Tit, Skylark, Cetti's Warbler, Stonechat, Water Pipit, Brambling, Linnet, Lesser Redpoll, Corn Bunting, Reed Bunting

Between 1988–91 and 2008–11, there were 55 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of Yorkshire and the Humber. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.4 in Appendix 5.

- Stock Dove, Redshank, Lesser Spotted Woodpecker, Green Woodpecker, Carrion Crow, Marsh Tit, Yellow Wagtail, Grey Wagtail, Pied/White Wagtail, Corn Bunting

There were 60 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of Yorkshire and the Humber. The ten species with the most negative difference in trend between site and region were:

- Shelduck, Quail, Red-legged Partridge, Nightjar, Turtle Dove, Water Rail, Great Crested Grebe, Red Kite, Bearded Tit, Nuthatch

5.5 County: East Riding of Yorkshire

Overall, eight of the 10-km squares that include the site fall in East Riding of Yorkshire, accounting for 17% of 10-km squares in East Riding of Yorkshire. According to *Bird Atlas* data, these squares support between 7.1% and 100% of the geographic range in East Riding of Yorkshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.2% and 100% of the total population size in East Riding of Yorkshire. **Notable species** for East Riding of Yorkshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 17 species: Shoveler, Pochard, Water Rail, Avocet, Ringed Plover, Mediterranean Gull, Bittern, Marsh Harrier, Long-eared Owl, Lesser Spotted Woodpecker, Bearded Tit, Woodlark, Cetti's Warbler, Savi's Warbler, Nuthatch, Nightingale, Common Crossbill
- Winter range, 12 species: Egyptian Goose, Garganey, Green-winged Teal, Little Stint, Common Sandpiper, Greenshank, Caspian Gull, Rough-legged Buzzard, Lesser Spotted Woodpecker, Bearded Tit, Nuthatch, Water Pipit
- Breeding abundance, 16 species: Garganey, Turtle Dove, Avocet, Woodcock, Marsh Harrier, Lesser Spotted Woodpecker, Green Woodpecker, Hobby, Marsh Tit, Bearded Tit, Woodlark, Cetti's Warbler, Reed Warbler, Spotted Flycatcher, Tree Pipit, Lesser Redpoll
- Winter abundance, 18 species: Barnacle Goose, White-fronted Goose, Water Rail, Avocet, Ruff, Spotted Redshank, Greenshank, Marsh Harrier, Green Woodpecker, Waxwing, Marsh Tit, Willow Tit, Bearded Tit, Cetti's Warbler, Nuthatch, Water Pipit, Siskin, Reed Bunting

Between 1988–91 and 2008–11, there were 42 species for which relative abundance increased more (or decreased

less) at/near the site compared to the relative abundance changes apparent across the rest of East Riding of Yorkshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.5 in Appendix 5.

- Ruddy Duck, Grey Partridge, Woodcock, Redshank, Rook, Carrion Crow, Marsh Tit, House Martin, Siskin, Corn Bunting

There were 66 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of East Riding of Yorkshire. The ten species with the most negative difference in trend between site and region were:

- Pheasant, Quail, Red-legged Partridge, Turtle Dove, Lapwing, Marsh Harrier, Willow Tit, Stonechat, Tree Pipit, Bullfinch

5.6 County: Lincolnshire

Overall, 11 of the 10-km squares that include the site fall in Lincolnshire, accounting for 12% of 10-km squares in Lincolnshire. According to *Bird Atlas* data, these squares support between 4.5% and 100% of the geographic range in Lincolnshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.1% and 100% of the total population size in Lincolnshire. **Notable species** for Lincolnshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 21 species: Shoveler, Wigeon, Ruddy Duck, Water Rail, Spotted Crake, Black-necked Grebe, Little Ringed Plover, Woodcock, Bittern, Goshawk, Long-eared Owl, Lesser Spotted Woodpecker, Peregrine, Willow Tit, Bearded Tit, Woodlark, Savi's Warbler, Redstart, Stonechat, Wheatear, Tree Pipit
- Winter range, 11 species: Green-winged Teal, Crane, Red-necked Grebe, Little Stint, Glaucous Gull, Iceland Gull, Long-eared Owl, Woodlark, Cetti's Warbler, Wheatear, Common/Lesser Redpoll
- Breeding abundance, 28 species: Garganey, Shoveler, Gadwall, Wigeon, Teal, Pochard, Ruddy Duck, Turtle Dove, Water Rail, Avocet, Little Ringed Plover, Woodcock, Snipe, Marsh Harrier, Long-eared Owl, Kingfisher, Lesser Spotted Woodpecker, Coal Tit, Willow Tit, Bearded Tit, Woodlark, Sand Martin, Cetti's Warbler, Sedge Warbler, Grasshopper Warbler, Stonechat, Tree Pipit, Siskin
- Winter abundance, 32 species: Barnacle Goose, White-fronted Goose, Shoveler, Wigeon, Teal, Pochard, Scaup, Goldeneye, Smew, Water Rail, Red-necked Grebe, Avocet, Ruff, Jack Snipe, Snipe, Common Sandpiper, Spotted Redshank, Bittern, Marsh Harrier, Long-eared Owl, Tawny Owl, Willow Tit, Bearded Tit, Cetti's Warbler, Chiffchaff, Goldcrest, Redwing, Stonechat, Water Pipit, Lesser Redpoll, Common/Lesser Redpoll, Reed Bunting

Between 1988–91 and 2008–11, there were 53 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of Lincolnshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.6 in Appendix 5.

- Garganey, Pheasant, Cuckoo, Stock Dove, Long-eared Owl, Lesser Spotted Woodpecker, Grasshopper Warbler, Meadow Pipit, Goldfinch, Siskin

There were 61 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of Lincolnshire. The ten species with the most negative difference in trend between site and region were:

- Nightjar, Swift, Magpie, Rook, Carrion Crow, Whitethroat, Mistle Thrush, Nightingale, Whinchat, Reed Bunting

5.7 County: Nottinghamshire

Overall, nine of the 10-km squares that include the site fall in Nottinghamshire, accounting for 25% of 10-km squares in Nottinghamshire. According to *Bird Atlas* data, these squares support between 9.5% and 100% of the geographic range in Nottinghamshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.8% and 100% of the total population size in Nottinghamshire. **Notable species** for Nottinghamshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, nine species: Golden Pheasant, Water Rail, Spotted Crake, Avocet, Curlew, Bittern, Little

Egret, Marsh Harrier, Wheatear

- Winter range, 13 species: Green-winged Teal, Crane, Slavonian Grebe, Black-necked Grebe, Whimbrel, Purple Sandpiper, Little Stint, Marsh Harrier, Rough-legged Buzzard, Cetti's Warbler, Wheatear, Twite, Snow Bunting
- Breeding abundance, 15 species: Shelduck, Garganey, Shoveler, Golden Pheasant, Turtle Dove, Water Rail, Avocet, Ringed Plover, Curlew, Snipe, Marsh Harrier, Barn Owl, Cetti's Warbler, Wheatear, Tree Sparrow
- Winter abundance, 29 species: Pink-footed Goose, White-fronted Goose, Bewick's Swan, Whooper Swan, Shoveler, Pintail, Teal, Red-breasted Merganser, Grey Partridge, Red-necked Grebe, Golden Plover, Curlew, Knot, Dunlin, Jack Snipe, Snipe, Common Sandpiper, Green Sandpiper, Redshank, Common Gull, Yellow-legged Gull, Little Egret, Hen Harrier, Barn Owl, Long-eared Owl, Short-eared Owl, Merlin, Twite, Corn Bunting

Between 1988–91 and 2008–11, there were 57 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of Nottinghamshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.7 in Appendix 5.

- Swift, Stock Dove, Coot, Little Grebe, Lapwing, Swallow, Blackcap, Wheatear, Tree Sparrow, House Sparrow

There were 47 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of Nottinghamshire. The ten species with the most negative difference in trend between site and region were:

- Nightjar, Woodcock, Redshank, Grey Heron, Buzzard, Kestrel, Magpie, Whitethroat, Dunnock, Corn Bunting

5.8 Vice-county: North Lincolnshire

Overall, 11 of the 10-km squares that include the site fall in North Lincolnshire, accounting for 18% of 10-km squares in North Lincolnshire. According to *Bird Atlas* data, these squares support between 5.9% and 100% of the geographic range in North Lincolnshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0% and 100% of the total population size in North Lincolnshire. **Notable species** for North Lincolnshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 15 species: Mandarin Duck, Water Rail, Spotted Crake, Black-necked Grebe, Woodcock, Bittern, Goshawk, Long-eared Owl, Lesser Spotted Woodpecker, Peregrine, Bearded Tit, Woodlark, Savi's Warbler, Redstart, Tree Pipit
- Winter range, 10 species: Green-winged Teal, Crane, Little Stint, Common Sandpiper, Long-eared Owl, Great Grey Shrike, Marsh Tit, Woodlark, Cetti's Warbler, Common/Lesser Redpoll
- Breeding abundance, 25 species: Garganey, Shoveler, Gadwall, Teal, Pochard, Turtle Dove, Water Rail, Avocet, Little Ringed Plover, Woodcock, Snipe, Marsh Harrier, Long-eared Owl, Kingfisher, Lesser Spotted Woodpecker, Green Woodpecker, Willow Tit, Bearded Tit, Woodlark, Sand Martin, Cetti's Warbler, Grasshopper Warbler, Tree Pipit, Lesser Redpoll, Siskin
- Winter abundance, 31 species: Barnacle Goose, White-fronted Goose, Whooper Swan, Shoveler, Gadwall, Wigeon, Teal, Pochard, Scaup, Goldeneye, Smew, Water Rail, Avocet, Ruff, Common Sandpiper, Spotted Redshank, Yellow-legged Gull, Bittern, Marsh Harrier, Long-eared Owl, Tawny Owl, Marsh Tit, Willow Tit, Bearded Tit, Cetti's Warbler, Chiffchaff, Stonechat, Lesser Redpoll, Common/Lesser Redpoll, Corn Bunting, Reed Bunting

Between 1988–91 and 2008–11, there were 49 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of North Lincolnshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.8 in Appendix 5.

- Garganey, Stock Dove, Marsh Harrier, Long-eared Owl, Green Woodpecker, Woodlark, Garden Warbler, Meadow Pipit, Goldfinch, Siskin

There were 64 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of North Lincolnshire. The ten species with the most negative difference in trend between site and region were:

- Ruddy Duck, Quail, Nightjar, Short-eared Owl, Magpie, Rook, Whitethroat, Mistle Thrush, Nightingale, Whinchat

5.9 Vice-county: Nottinghamshire

Overall, nine of the 10-km squares that include the site fall in Nottinghamshire, accounting for 24% of 10-km squares in Nottinghamshire. According to *Bird Atlas* data, these squares support between 9.1% and 100% of the geographic range in Nottinghamshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.8% and 100% of the total population size in Nottinghamshire. **Notable species** for Nottinghamshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, five species: Golden Pheasant, Spotted Crake, Little Egret, Marsh Harrier, Wheatear
- Winter range, 11 species: Green-winged Teal, Crane, Slavonian Grebe, Black-necked Grebe, Whimbrel, Purple Sandpiper, Little Stint, Marsh Harrier, Wheatear, Twite, Snow Bunting
- Breeding abundance, 15 species: Shelduck, Garganey, Shoveler, Golden Pheasant, Turtle Dove, Water Rail, Avocet, Ringed Plover, Curlew, Snipe, Marsh Harrier, Barn Owl, Cetti's Warbler, Wheatear, Tree Sparrow
- Winter abundance, 29 species: Pink-footed Goose, White-fronted Goose, Bewick's Swan, Whooper Swan, Shoveler, Pintail, Teal, Red-breasted Merganser, Grey Partridge, Red-necked Grebe, Golden Plover, Knot, Dunlin, Woodcock, Jack Snipe, Snipe, Common Sandpiper, Green Sandpiper, Redshank, Common Gull, Yellow-legged Gull, Little Egret, Hen Harrier, Barn Owl, Long-eared Owl, Short-eared Owl, Merlin, Twite, Corn Bunting

Between 1988–91 and 2008–11, there were 55 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of Nottinghamshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.9 in Appendix 5.

- Pheasant, Swift, Stock Dove, Little Grebe, Lapwing, Swallow, Blackcap, Wheatear, Tree Sparrow, House Sparrow

There were 50 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of Nottinghamshire. The ten species with the most negative difference in trend between site and region were:

- Wigeon, Nightjar, Redshank, Buzzard, Kestrel, Magpie, Whitethroat, Dunnock, Goldfinch, Corn Bunting

5.10 Vice-county: South-east Yorkshire

Overall, six of the 10-km squares that include the site fall in South-east Yorkshire, accounting for 12% of 10-km squares in South-east Yorkshire. According to *Bird Atlas* data, these squares support between 5% and 100% of the geographic range in South-east Yorkshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.1% and 100% of the total population size in South-east Yorkshire. **Notable species** for South-east Yorkshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 19 species: Shoveler, Pochard, Water Rail, Spotted Crake, Avocet, Ringed Plover, Black-headed Gull, Mediterranean Gull, Common Tern, Bittern, Marsh Harrier, Red Kite, Short-eared Owl, Lesser Spotted Woodpecker, Bearded Tit, Woodlark, Cetti's Warbler, Savi's Warbler, Common Crossbill
- Winter range, 18 species: Egyptian Goose, Garganey, Green-winged Teal, Scaup, Ruddy Duck, Black-necked Grebe, Avocet, Little Stint, Common Sandpiper, Spotted Redshank, Greenshank, Mediterranean Gull, Caspian Gull, Marsh Harrier, Rough-legged Buzzard, Bearded Tit, House Martin, Water Pipit
- Breeding abundance, 17 species: Shelduck, Garganey, Wigeon, Mallard, Great Crested Grebe, Avocet, Woodcock, Grey Heron, Marsh Harrier, Green Woodpecker, Hobby, Marsh Tit, Bearded Tit, Woodlark, Sedge Warbler, Reed Warbler, Lesser Redpoll
- Winter abundance, 26 species: Barnacle Goose, Pink-footed Goose, White-fronted Goose, Gadwall, Pochard, Scaup, Water Rail, Avocet, Ruff, Spotted Redshank, Greenshank, Bittern, Grey Heron, Marsh Harrier, Kingfisher, Lesser Spotted Woodpecker, Green Woodpecker, Waxwing, Marsh Tit, Willow Tit, Bearded Tit, Cetti's Warbler, Stonechat, Water Pipit, Brambling, Siskin

Between 1988–91 and 2008–11, there were 43 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of South-east Yorkshire.

The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.10 in Appendix 5.

- Grey Partridge, Collared Dove, Woodcock, Redshank, Grey Heron, Carrion Crow, Marsh Tit, Chiffchaff, Treecreeper, Pied/White Wagtail

There were 61 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of South-east Yorkshire. The ten species with the most negative difference in trend between site and region were:

- Canada Goose, Shelduck, Pheasant, Red-legged Partridge, Turtle Dove, Water Rail, Great Crested Grebe, Lapwing, Marsh Harrier, Reed Bunting

5.11 Vice-county: South-west Yorkshire

Overall, five of the 10-km squares that include the site fall in South-west Yorkshire, accounting for 9.6% of 10-km squares in South-west Yorkshire. According to *Bird Atlas* data, these squares support between 2.2% and 100% of the geographic range in South-west Yorkshire of all the species considered (breeding and winter combined). In terms of abundance, these squares represent between 0.3% and 100% of the total population size in South-west Yorkshire. **Notable species** for South-west Yorkshire are listed below, with those on the BoCC Red List and BoCC Amber List highlighted in corresponding colour:

- Breeding range, 16 species: Shelduck, Shoveler, Gadwall, Quail, Turtle Dove, Spotted Crake, Black-necked Grebe, Bittern, Marsh Harrier, Hobby, Bearded Tit, Woodlark, Cetti's Warbler, Savi's Warbler, Nightingale, Corn Bunting
- Winter range, 29 species: Taiga/Tundra Bean Goose, Egyptian Goose, Green-winged Teal, Velvet Scoter, Long-tailed Duck, Crane, Red-necked Grebe, Avocet, Bar-tailed Godwit, Black-tailed Godwit, Turnstone, Ruff, Little Stint, Common Sandpiper, Spotted Redshank, Greenshank, Kittiwake, Marsh Harrier, Rough-legged Buzzard, Bearded Tit, Woodlark, House Martin, Cetti's Warbler, Firecrest, Wheatear, Water Pipit, Lapland Bunting, Snow Bunting, Corn Bunting
- Breeding abundance, 27 species: Greylag Goose, Shelduck, Garganey, Ruddy Duck, Cuckoo, Stock Dove, Turtle Dove, Avocet, Redshank, Marsh Harrier, Barn Owl, Lesser Spotted Woodpecker, Hobby, Rook, Bearded Tit, Skylark, Cetti's Warbler, Sedge Warbler, Reed Warbler, Grasshopper Warbler, Lesser Whitethroat, Whitethroat, Tree Sparrow, Yellow Wagtail, Linnet, Corn Bunting, Reed Bunting
- Winter abundance, 40 species: Barnacle Goose, Pink-footed Goose, Bewick's Swan, Whooper Swan, Shelduck, Gadwall, Wigeon, Teal, Stock Dove, Water Rail, Avocet, Lapwing, Golden Plover, Curlew, Black-tailed Godwit, Turnstone, Ruff, Dunlin, Snipe, Redshank, Spotted Redshank, Common Gull, Bittern, Little Egret, Marsh Harrier, Barn Owl, Merlin, Willow Tit, Bearded Tit, Skylark, Cetti's Warbler, Chiffchaff, Stonechat, Tree Sparrow, Meadow Pipit, Water Pipit, Linnet, Corn Bunting, Yellowhammer, Reed Bunting

Between 1988–91 and 2008–11, there were 41 species for which relative abundance increased more (or decreased less) at/near the site compared to the relative abundance changes apparent across the rest of South-west Yorkshire. The ten species with the most positive difference in trend between site and region are listed below and all species can be seen in Figure 5.11 in Appendix 5.

- Stock Dove, Avocet, Barn Owl, Lesser Spotted Woodpecker, Skylark, Blackcap, Tree Sparrow, Yellow Wagtail, Grey Wagtail, Corn Bunting

There were 63 species for which the opposite was the case, i.e. that they were declining more (or increasing less) at/near the site compared to the rest of South-west Yorkshire. The ten species with the most negative difference in trend between site and region were:

- Shelduck, Gadwall, Red-legged Partridge, Turtle Dove, Water Rail, Great Crested Grebe, Tawny Owl, Willow Tit, Willow Warbler, Bullfinch

APPENDICES

Appendix 1. Contextual maps

Maps of the site with reference to geographical context areas at different scales, and for different sized grids used for data extraction. Note that for some of the larger context areas the site may be too small to see on the map.

Country

Country = UK, Isle of Man and Channel Islands, England



Region

Region = East Midlands, Yorkshire and the Humber



County

County = East Riding of Yorkshire, Lincolnshire, Nottinghamshire



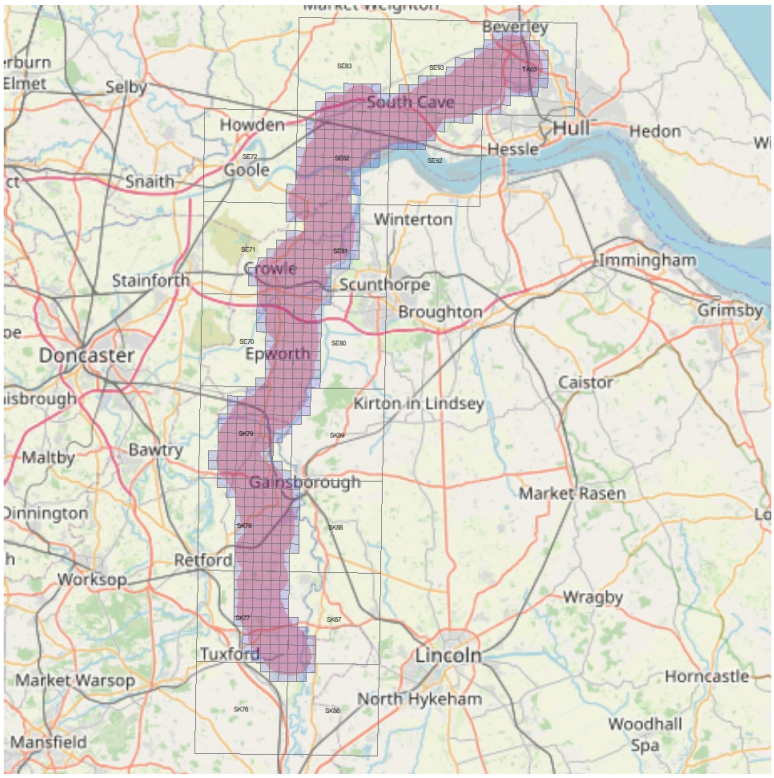
Vice-county

Vice-county = North Lincolnshire, Nottinghamshire, South-east Yorkshire, South-west Yorkshire



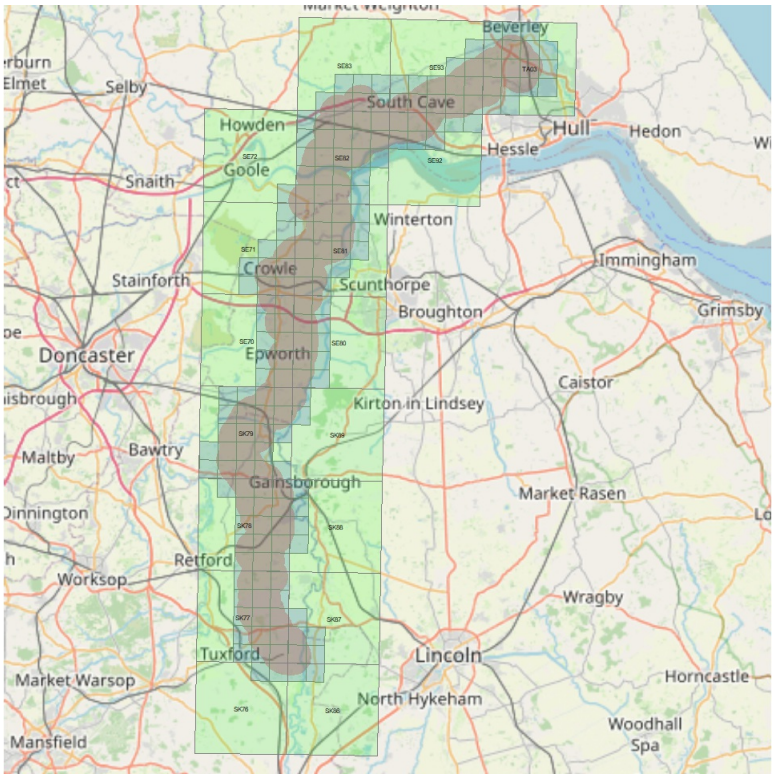
Site with 1-km squares

Five hundred ninety-five relevant 1-km squares (too many to list).



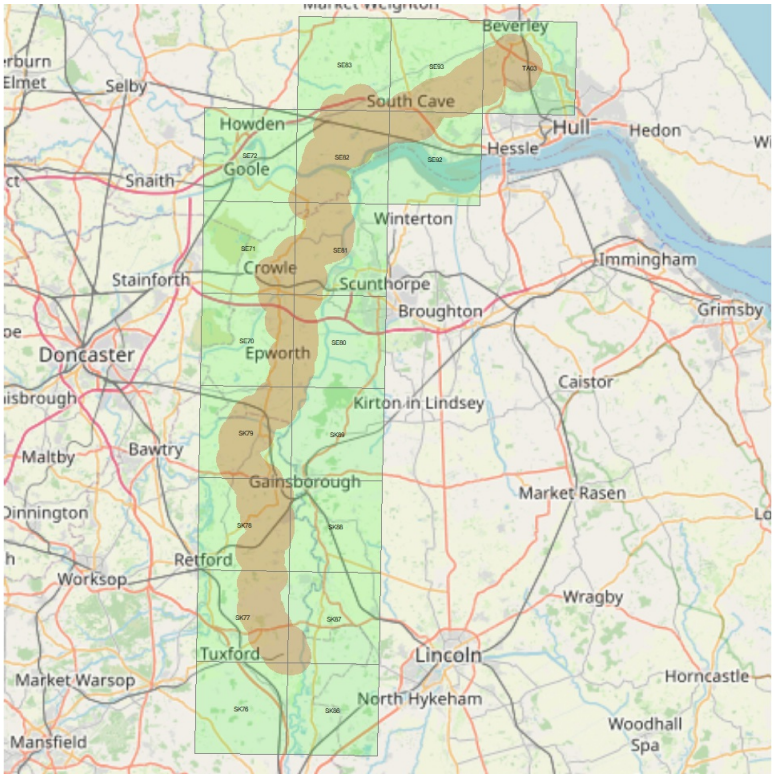
Site with tetrads

One hundred eighty-three relevant tetrads (too many to list).



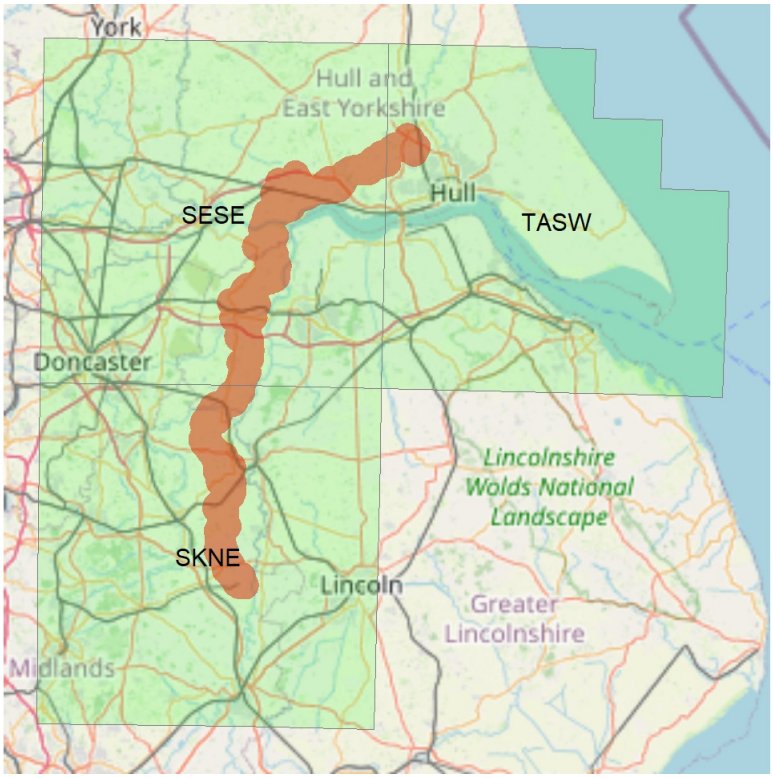
Site with 10-km squares

Eighteen relevant 10-km squares : SE70, SE71, SE72, SE80, SE81, SE82, SE83, SE92, SE93, SK76, SK77, SK78, SK79, SK86, SK87, SK88, SK89, TA03



Site with 50-km squares

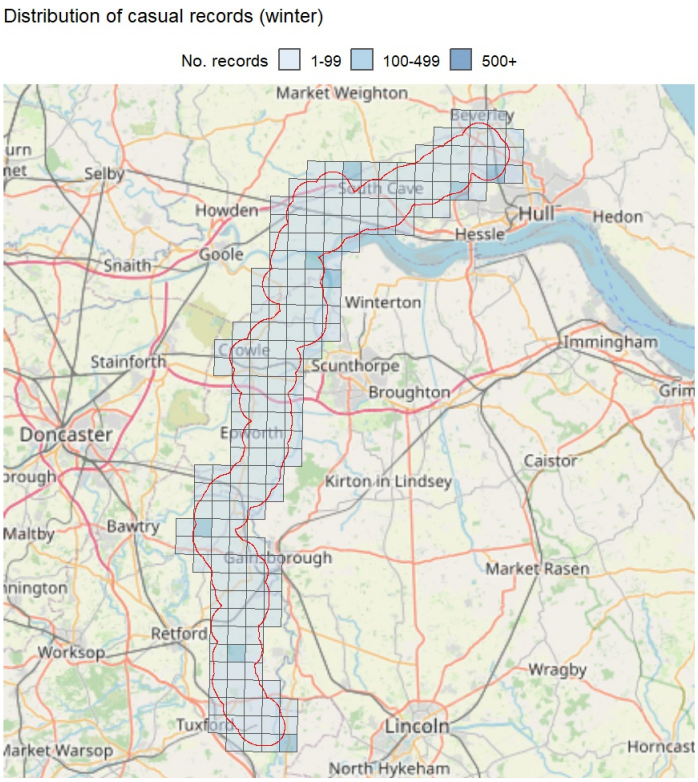
Three relevant 50-km squares : SESE, SKNE, TASW



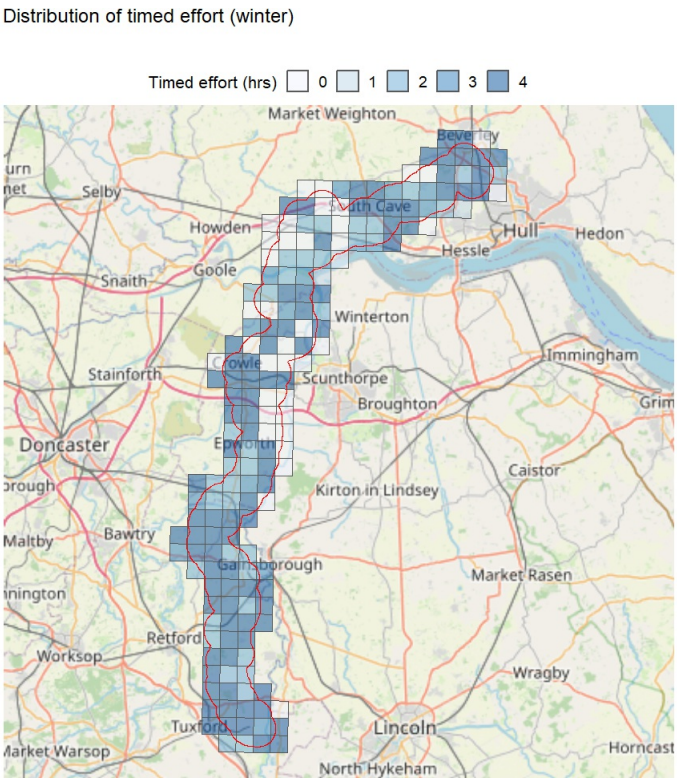
Appendix 2. Additional coverage maps

Atlas winter coverage

Map of unstructured Bird Atlas coverage in winter



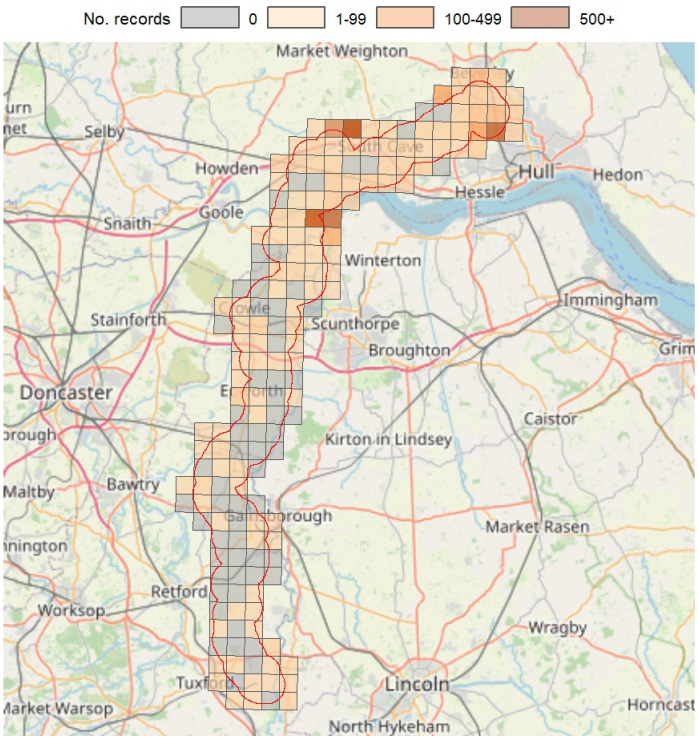
Map of structured Bird Atlas coverage in winter



BirdTrack coverage

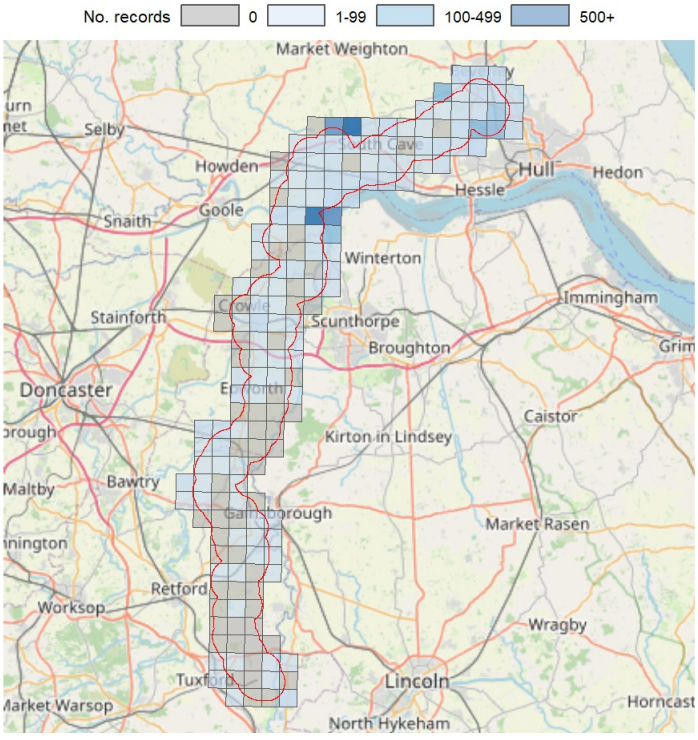
Map of BirdTrack recording effort in the breeding season. Grey shading indicates no sites centred in the tetrad, although sites from bordering tetrads may have extended into the tetrad.

Distribution of BirdTrack records (breeding)



Map of BirdTrack recording effort in the non-breeding season. Grey shading indicates no sites centred in the tetrad, although sites from bordering tetrads may have extended into the tetrad.

Distribution of BirdTrack records (non-breeding)



Appendix 3. Species list 2007–11

Feature column heading abbreviations: S1 = Schedule 1 UK; A1 = Annex 1; Amber, Red = BoCC5 Amber and Red list; CR, EN, NT, VU = GB IUCN2 Critically Endangered, Endangered, Near Threatened and Vulnerable; S41E = Section 41 England; SZA1EW = Schedule ZA1 England & Wales; S1AS = Schedule 1A Scotland; SA1S = Schedule A1 Scotland; SBL = Scottish Biodiversity List; S7W = Section 7 Wales.

Breeding season

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
CG	Canada Goose												Confirmed	Confirmed
GJ	Greylag Goose			Y									Confirmed	Confirmed
MS	Mute Swan												Confirmed	Confirmed
EG	Egyptian Goose													Confirmed
SU	Shelduck			Y		Y							Confirmed	Confirmed
MN	Mandarin Duck													Confirmed
GY	Garganey	Y		Y		Y				Y			Probable	Confirmed
SV	Shoveler			Y						Y			Confirmed	Confirmed
GA	Gadwall			Y									Confirmed	Confirmed
WN	Wigeon			Y				Y		Y			Possible	Possible
MA	Mallard			Y				Y					Confirmed	Confirmed
T.	Teal			Y									Probable	Confirmed
PO	Pochard		Y			Y				Y			Confirmed	Confirmed
TU	Tufted Duck							Y					Confirmed	Confirmed
RY	Ruddy Duck												Confirmed	Confirmed
P.	Grey Partridge		Y					Y			Y		Confirmed	Confirmed
GF	Golden Pheasant													Possible
PH	Pheasant												Confirmed	Confirmed
Q.	Quail	Y		Y		Y				Y			Possible	Confirmed
RL	Red-legged Partridge												Confirmed	Confirmed
SI	Swift		Y			Y							Confirmed	Confirmed
CK	Cuckoo		Y								Y		Probable	Confirmed
DV	Rock Dove												Confirmed	Confirmed
SD	Stock Dove			Y									Confirmed	Confirmed
WP	Woodpigeon			Y									Confirmed	Confirmed
TD	Turtle Dove		Y		Y					Y	Y		Confirmed	Confirmed
CD	Collared Dove						Y						Confirmed	Confirmed
WA	Water Rail												Confirmed	Confirmed
AK	Spotted Crake	Y		Y	Y				Y	Y				Probable
MH	Moorhen			Y				Y					Confirmed	Confirmed
CO	Coot							Y					Confirmed	Confirmed
AN	Crane			Y				Y	Y	Y				Confirmed (50-km)
LG	Little Grebe												Confirmed	Confirmed
GG	Great Crested Grebe												Confirmed	Confirmed
BN	Black-necked Grebe	Y		Y		Y				Y				Confirmed
OC	Oystercatcher			Y				Y					Confirmed	Confirmed
AV	Avocet	Y		Y					Y	Y			Confirmed	Confirmed
RP	Ringed Plover		Y					Y					Probable	Confirmed
LP	Little Ringed Plover	Y								Y			Confirmed	Confirmed
L.	Lapwing		Y					Y			Y		Confirmed	Confirmed

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
CU	Curlew		Y			Y					Y		Confirmed	Confirmed
WK	Woodcock		Y					Y					Confirmed	Confirmed
SN	Snipe			Y				Y					Probable	Probable
RK	Redshank			Y				Y					Confirmed	Confirmed
CN	Common Tern			Y			Y		Y				Confirmed	Confirmed
BH	Black-headed Gull			Y				Y					Confirmed	Confirmed
MU	Mediterranean Gull	Y		Y					Y	Y				Probable
LB	Lesser Black-backed Gull			Y									Possible	Confirmed
CA	Cormorant						Y							Confirmed
BI	Bittern	Y		Y				Y	Y	Y	Y			Confirmed
ET	Little Egret								Y	Y				Possible
H.	Grey Heron							Y					Confirmed	Confirmed
HZ	Honey-buzzard	Y		Y		Y			Y	Y				Confirmed (50-km)
SH	Sparrowhawk			Y				Y					Confirmed	Confirmed
GI	Goshawk	Y					Y			Y				Confirmed
MR	Marsh Harrier	Y		Y					Y	Y				Confirmed
MO	Montagu's Harrier	Y	Y		Y				Y	Y				Probable (50-km)
KT	Red Kite	Y							Y					Confirmed
BZ	Buzzard												Confirmed	Confirmed
BO	Barn Owl	Y											Confirmed	Confirmed
LO	Little Owl												Confirmed	Confirmed
LE	Long-eared Owl									Y				Confirmed
SE	Short-eared Owl			Y		Y			Y	Y				Possible
TO	Tawny Owl			Y			Y						Confirmed	Confirmed
KF	Kingfisher	Y						Y	Y				Confirmed	Confirmed
LS	Lesser Spotted Woodpecker		Y			Y				Y	Y			Confirmed
GS	Great Spotted Woodpecker												Confirmed	Confirmed
G.	Green Woodpecker						Y						Confirmed	Confirmed
K.	Kestrel			Y				Y					Confirmed	Confirmed
HY	Hobby	Y					Y			Y				Confirmed
PE	Peregrine	Y							Y	Y				Confirmed
J.	Jay												Confirmed	Confirmed
MG	Magpie												Confirmed	Confirmed
JD	Jackdaw												Confirmed	Confirmed
RO	Rook			Y			Y						Confirmed	Confirmed
C.	Carrion Crow												Confirmed	Confirmed
CT	Coal Tit												Confirmed	Confirmed
MT	Marsh Tit		Y				Y				Y		Confirmed	Confirmed
WT	Willow Tit		Y			Y				Y	Y		Confirmed	Confirmed
BT	Blue Tit												Confirmed	Confirmed
GT	Great Tit												Confirmed	Confirmed
BR	Bearded Tit	Y								Y			Confirmed	Confirmed
WL	Woodlark	Y							Y	Y	Y			Confirmed
S.	Skylark		Y								Y		Confirmed	Confirmed
SM	Sand Martin												Confirmed	Confirmed
SL	Swallow							Y					Confirmed	Confirmed
HM	House Martin		Y				Y						Confirmed	Confirmed
CW	Cetti's Warbler	Y											Probable	Probable
LT	Long-tailed Tit												Confirmed	Confirmed
WO	Wood Warbler		Y					Y			Y		Possible	Possible

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
WW	Willow Warbler			Y									Confirmed	Confirmed
CC	Chiffchaff												Confirmed	Confirmed
SW	Sedge Warbler			Y			Y						Confirmed	Confirmed
RW	Reed Warbler												Confirmed	Confirmed
VI	Savi's Warbler	Y	Y		Y					Y	Y			Probable
GH	Grasshopper Warbler		Y								Y		Confirmed	Confirmed
BC	Blackcap												Confirmed	Confirmed
GW	Garden Warbler												Probable	Confirmed
LW	Lesser Whitethroat												Confirmed	Confirmed
WH	Whitethroat			Y									Confirmed	Confirmed
GC	Goldcrest												Confirmed	Confirmed
WR	Wren			Y									Confirmed	Confirmed
NH	Nuthatch												Confirmed	Confirmed
TC	Treecreeper												Confirmed	Confirmed
SG	Starling		Y					Y			Y		Confirmed	Confirmed
ST	Song Thrush			Y							Y		Confirmed	Confirmed
M.	Mistle Thrush		Y				Y						Confirmed	Confirmed
B.	Blackbird												Confirmed	Confirmed
SF	Spotted Flycatcher		Y				Y				Y		Confirmed	Confirmed
R.	Robin												Confirmed	Confirmed
N.	Nightingale		Y					Y						Probable
RT	Redstart			Y										Possible
SC	Stonechat												Probable	Confirmed
W.	Wheatear			Y		Y								Probable
TS	Tree Sparrow		Y					Y			Y		Confirmed	Confirmed
HS	House Sparrow		Y								Y		Confirmed	Confirmed
D.	Dunnock			Y							Y		Confirmed	Confirmed
YW	Yellow Wagtail		Y				Y				Y		Confirmed	Confirmed
GL	Grey Wagtail			Y			Y						Probable	Confirmed
PW	Pied Wagtail												Confirmed	Confirmed
MP	Meadow Pipit			Y									Confirmed	Confirmed
TP	Tree Pipit		Y								Y		Possible	Confirmed
CH	Chaffinch					Y							Confirmed	Confirmed
BF	Bullfinch			Y							Y		Confirmed	Confirmed
GR	Greenfinch		Y			Y							Confirmed	Confirmed
LI	Linnet		Y								Y		Confirmed	Confirmed
LR	Lesser Redpoll		Y								Y			Probable
CR	Common Crossbill	Y												Confirmed
GO	Goldfinch												Confirmed	Confirmed
SK	Siskin												Possible	Probable
CB	Corn Bunting		Y				Y				Y		Confirmed	Confirmed
Y.	Yellowhammer		Y								Y		Confirmed	Confirmed
RB	Reed Bunting			Y							Y		Confirmed	Confirmed

Winter

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
BG	Brent Goose			Y							Y		Present	Present
CG	Canada Goose												Present	Present
BY	Barnacle Goose			Y					Y				Present	Present
GJ	Greylag Goose			Y									Present	Present
PG	Pink-footed Goose			Y						Y			Present	Present
BE	Taiga/Tundra Bean Goose			Y		Y								Present
WG	White-fronted Goose		Y			Y					Y		Present	Present
MS	Mute Swan												Present	Present
BS	Bewick's Swan	Y	Y		Y				Y	Y	Y		Present	Present
WS	Whooper Swan	Y		Y		Y			Y	Y			Present	Present
EG	Egyptian Goose													Present
SU	Shelduck			Y		Y							Present	Present
MN	Mandarin Duck												Present	Present
GY	Garganey	Y		Y		Y				Y				Present
SV	Shoveler			Y						Y			Present	Present
GA	Gadwall			Y									Present	Present
WN	Wigeon			Y				Y		Y			Present	Present
MA	Mallard			Y				Y					Present	Present
PT	Pintail			Y	Y					Y			Present	Present
T.	Teal			Y									Present	Present
TA	Green-winged Teal									Y			Present	Present
PO	Pochard		Y			Y				Y			Present	Present
TU	Tufted Duck							Y					Present	Present
SP	Scaup	Y	Y			Y				Y	Y		Present	Present
VS	Velvet Scoter	Y	Y					Y		Y				Present
CX	Common Scoter	Y	Y		Y					Y	Y			Present
LN	Long-tailed Duck	Y	Y				Y			Y				Present
GN	Goldeneye		Y					Y		Y			Present	Present
SY	Smew		Y		Y				Y	Y			Present	Present
GD	Goosander												Present	Present
RM	Red-breasted Merganser			Y				Y		Y				Present
RY	Ruddy Duck												Present	Present
P.	Grey Partridge		Y					Y			Y		Present	Present
PH	Pheasant												Present	Present
RL	Red-legged Partridge												Present	Present
DV	Rock Dove												Present	Present
SD	Stock Dove			Y									Present	Present
WP	Woodpigeon			Y									Present	Present
CD	Collared Dove						Y						Present	Present
WA	Water Rail												Present	Present
MH	Moorhen			Y				Y					Present	Present
CO	Coot							Y					Present	Present
AN	Crane			Y				Y	Y	Y				Present
LG	Little Grebe												Present	Present
RX	Red-necked Grebe		Y		Y					Y				Present
GG	Great Crested Grebe												Present	Present
SZ	Slavonian Grebe	Y	Y		Y				Y	Y				Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
BN	Black-necked Grebe	Y		Y		Y				Y			Present	Present
OC	Oystercatcher			Y				Y					Present	Present
AV	Avocet	Y		Y					Y	Y			Present	Present
GV	Grey Plover			Y				Y					Present	Present
GP	Golden Plover								Y				Present	Present
RP	Ringed Plover		Y					Y					Present	Present
L.	Lapwing		Y					Y			Y		Present	Present
WM	Whimbrel	Y	Y			Y				Y				Present
CU	Curlew		Y			Y					Y		Present	Present
BA	Bar-tailed Godwit			Y				Y	Y	Y			Present	Present
BW	Black-tailed Godwit	Y	Y			Y				Y			Present	Present
JS	Jack Snipe									Y			Present	Present
WK	Woodcock		Y					Y					Present	Present
SN	Snipe			Y				Y					Present	Present
CS	Common Sandpiper			Y			Y						Present	Present
GE	Green Sandpiper	Y		Y	Y					Y			Present	Present
RK	Redshank			Y				Y					Present	Present
DR	Spotted Redshank			Y		Y							Present	Present
GK	Greenshank	Y		Y						Y			Present	Present
TT	Turnstone			Y				Y		Y			Present	Present
KN	Knot			Y										Present
RU	Ruff	Y	Y		Y				Y	Y			Present	Present
DN	Dunlin		Y					Y	Y				Present	Present
PS	Purple Sandpiper	Y	Y		Y					Y				Present
LX	Little Stint												Present	Present
KI	Kittiwake		Y		Y									Present
BH	Black-headed Gull			Y				Y					Present	Present
MU	Mediterranean Gull	Y		Y					Y	Y			Present	Present
CM	Common Gull			Y									Present	Present
YC	Caspian Gull			Y				Y						Present
HG	Herring Gull		Y			Y					Y		Present	Present
YG	Yellow-legged Gull			Y		Y				Y			Present	Present
GB	Great Black-backed Gull			Y		Y							Present	Present
GZ	Glaucous Gull			Y				Y		Y				Present
LB	Lesser Black-backed Gull			Y									Present	Present
IG	Iceland Gull			Y			Y							Present
LK	Little Auk													Present
RH	Red-throated Diver	Y					Y		Y	Y				Present
BV	Black-throated Diver	Y		Y				Y	Y	Y				Present
ND	Great Northern Diver	Y		Y					Y	Y				Present
CA	Cormorant						Y						Present	Present
SA	Shag		Y			Y								Present
BI	Bittern	Y		Y				Y	Y	Y	Y		Present	Present
ET	Little Egret								Y	Y			Present	Present
HW	Great White Egret			Y		Y			Y	Y				Present
H.	Grey Heron							Y					Present	Present
SH	Sparrowhawk			Y				Y					Present	Present
GI	Goshawk	Y					Y			Y				Present
MR	Marsh Harrier	Y		Y					Y	Y				Present
HH	Hen Harrier	Y	Y			Y			Y	Y	Y		Present	Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
KT	Red Kite	Y							Y				Present	Present
RF	Rough-legged Buzzard									Y				Present
BZ	Buzzard												Present	Present
BO	Barn Owl	Y											Present	Present
LO	Little Owl												Present	Present
LE	Long-eared Owl									Y				Present
SE	Short-eared Owl			Y		Y			Y	Y			Present	Present
TO	Tawny Owl			Y			Y						Present	Present
KF	Kingfisher	Y						Y	Y				Present	Present
LS	Lesser Spotted Woodpecker		Y			Y				Y	Y			Present
GS	Great Spotted Woodpecker												Present	Present
G.	Green Woodpecker						Y						Present	Present
K.	Kestrel			Y				Y					Present	Present
ML	Merlin	Y	Y			Y			Y	Y			Present	Present
PE	Peregrine	Y							Y	Y			Present	Present
SR	Great Grey Shrike									Y				Present
J.	Jay												Present	Present
MG	Magpie												Present	Present
JD	Jackdaw												Present	Present
RO	Rook			Y			Y						Present	Present
C.	Carrion Crow												Present	Present
RN	Raven													Present
WX	Waxwing									Y			Present	Present
CT	Coal Tit												Present	Present
MT	Marsh Tit		Y				Y				Y		Present	Present
WT	Willow Tit		Y			Y				Y	Y		Present	Present
BT	Blue Tit												Present	Present
GT	Great Tit												Present	Present
BR	Bearded Tit	Y								Y			Present	Present
WL	Woodlark	Y							Y	Y	Y		Present	Present
S.	Skylark		Y								Y		Present	Present
HM	House Martin		Y				Y							Present
CW	Cetti's Warbler	Y											Present	Present
LT	Long-tailed Tit												Present	Present
CC	Chiffchaff												Present	Present
BC	Blackcap												Present	Present
FC	Firecrest	Y												Present
GC	Goldcrest												Present	Present
WR	Wren			Y									Present	Present
NH	Nuthatch												Present	Present
TC	Treecreeper												Present	Present
SG	Starling		Y					Y			Y		Present	Present
ST	Song Thrush			Y							Y		Present	Present
M.	Mistle Thrush		Y				Y						Present	Present
RE	Redwing	Y		Y	Y					Y			Present	Present
B.	Blackbird												Present	Present
FF	Fieldfare	Y	Y		Y					Y			Present	Present
R.	Robin												Present	Present
BX	Black Redstart	Y		Y				Y		Y			Present	Present
SC	Stonechat												Present	Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	Tetrad	10-km/20-km/50-km
W.	Wheatear			Y		Y								Present
TS	Tree Sparrow		Y					Y			Y		Present	Present
HS	House Sparrow		Y								Y		Present	Present
D.	Dunnock			Y							Y		Present	Present
GL	Grey Wagtail			Y			Y						Present	Present
PW	Pied Wagtail												Present	Present
MP	Meadow Pipit			Y									Present	Present
WI	Water Pipit			Y		Y							Present	Present
RC	Rock Pipit													Present
CH	Chaffinch					Y							Present	Present
BL	Brambling	Y								Y			Present	Present
BF	Bullfinch			Y							Y		Present	Present
GR	Greenfinch		Y			Y							Present	Present
TW	Twite		Y			Y					Y		Present	Present
LI	Linnet		Y								Y		Present	Present
FR	Common Redpoll									Y			Present	Present
LR	Lesser Redpoll		Y								Y		Present	Present
FQ	Common/Lesser Redpoll													Present
CR	Common Crossbill	Y											Present	Present
GO	Goldfinch												Present	Present
SK	Siskin												Present	Present
LA	Lapland Bunting	Y		Y				Y		Y				Present
SB	Snow Bunting	Y		Y		Y				Y			Present	Present
CB	Corn Bunting		Y				Y				Y		Present	Present
Y.	Yellowhammer		Y								Y		Present	Present
RB	Reed Bunting			Y							Y		Present	Present

Appendix 4. Species list 2022-2026

Feature column heading abbreviations: S1 = Schedule 1 UK; A1 = Annex 1; Amber, Red = BoCC5 Amber and Red list; CR, EN, NT, VU = GB IUCN2 Critically Endangered, Endangered, Near Threatened and Vulnerable; S41E = Section 41 England; SZA1EW = Schedule ZA1 England & Wales; S1AS = Schedule 1A Scotland; SA1S = Schedule A1 Scotland; SBL = Scottish Biodiversity List; S7W = Section 7 Wales.

Breeding season

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
CG	Canada Goose												Present	Confirmed	Confirmed	Probable
GJ	Greylag Goose			Y									Present	Confirmed	Confirmed	Probable
PG	Pink-footed Goose			Y						Y				Present	Present	Present
MS	Mute Swan												Present	Confirmed	Confirmed	Confirmed
WS	Whooper Swan	Y		Y		Y			Y	Y				Present	Present	Present
EG	Egyptian Goose													Present	Confirmed	Probable
SU	Shelduck			Y		Y							Present	Confirmed	Confirmed	Confirmed
MN	Mandarin Duck														Present	Present
GY	Garganey	Y		Y		Y				Y				Probable	Probable	Present
SV	Shoveler			Y						Y				Confirmed	Confirmed	Probable
GA	Gadwall			Y										Confirmed	Confirmed	Confirmed
WN	Wigeon			Y				Y		Y				Possible	Probable	Possible
MA	Mallard			Y				Y					Present	Confirmed	Confirmed	Confirmed
PT	Pintail			Y	Y					Y				Present	Present	Present
T.	Teal			Y										Probable	Probable	Probable
PO	Pochard		Y			Y				Y				Confirmed	Confirmed	Probable
TU	Tufted Duck							Y					Present	Confirmed	Confirmed	Confirmed
CX	Common Scoter	Y	Y		Y					Y	Y			Present	Present	Possible
GN	Goldeneye		Y					Y		Y				Present	Present	Present
GD	Goosander													Present	Probable	Present
RM	Red-breasted Merganser			Y				Y		Y						Present
P.	Grey Partridge		Y					Y			Y		Present	Confirmed	Confirmed	Confirmed
PH	Pheasant												Present	Confirmed	Confirmed	Confirmed
Q.	Quail	Y		Y		Y				Y				Possible	Possible	Possible
RL	Red-legged Partridge												Present	Probable	Confirmed	Probable
NJ	Nightjar			Y					Y		Y					Probable
SI	Swift		Y			Y							Present	Probable	Confirmed	Confirmed
CK	Cuckoo		Y								Y		Present	Possible	Confirmed	Confirmed
DV	Rock Dove													Probable	Confirmed	Present
SD	Stock Dove			Y									Present	Confirmed	Confirmed	Possible
WP	Woodpigeon			Y									Present	Confirmed	Confirmed	Probable
TD	Turtle Dove		Y		Y					Y	Y			Present	Probable	Possible
CD	Collared Dove						Y						Present	Probable	Confirmed	Confirmed
WA	Water Rail													Confirmed	Confirmed	Possible
MH	Moorhen			Y				Y					Present	Confirmed	Confirmed	Confirmed
CO	Coot							Y					Present	Confirmed	Confirmed	Confirmed
AN	Crane			Y				Y	Y	Y						Probable
LG	Little Grebe												Present	Confirmed	Confirmed	Probable
GG	Great Crested Grebe													Confirmed	Confirmed	Probable
SZ	Slavonian Grebe	Y	Y		Y				Y	Y					Present	

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
BN	Black-necked Grebe	Y		Y		Y				Y				Present	Present	
OC	Oystercatcher			Y				Y					Present	Confirmed	Confirmed	Confirmed
IT	Black-winged Stilt	Y		Y					Y	Y						Present
AV	Avocet	Y		Y					Y	Y				Confirmed	Confirmed	Confirmed
GP	Golden Plover								Y					Present	Present	Present
DO	Dotterel	Y	Y					Y	Y	Y						Present
RP	Ringed Plover		Y					Y						Present	Present	Confirmed
LP	Little Ringed Plover	Y								Y				Confirmed	Confirmed	Confirmed
L.	Lapwing		Y					Y			Y		Present	Confirmed	Confirmed	Confirmed
WM	Whimbrel	Y	Y			Y				Y				Present	Present	Present
CU	Curlew		Y			Y					Y			Present	Probable	Probable
BW	Black-tailed Godwit	Y	Y			Y				Y				Present		Confirmed
WK	Woodcock		Y					Y						Present	Probable	Probable
SN	Snipe			Y				Y						Probable	Probable	Probable
NK	Red-necked Phalarope	Y	Y			Y			Y	Y						Present
CS	Common Sandpiper			Y			Y							Present	Possible	Present
GE	Green Sandpiper	Y		Y	Y					Y				Present		Probable
OD	Wood Sandpiper	Y		Y		Y			Y	Y				Present	Present	Present
RK	Redshank			Y				Y						Probable	Probable	Confirmed
GK	Greenshank	Y		Y						Y					Probable	Present
DN	Dunlin		Y					Y	Y					Present	Present	Present
AF	Little Tern	Y		Y				Y	Y	Y				Present	Present	Present
AE	Arctic Tern			Y				Y	Y					Present	Present	Present
CN	Common Tern			Y			Y		Y					Confirmed	Confirmed	Confirmed
RS	Roseate Tern	Y	Y			Y			Y	Y	Y					Present
TE	Sandwich Tern			Y					Y					Present	Present	Present
KI	Kittiwake		Y		Y									Present	Present	Present
BH	Black-headed Gull			Y				Y					Present	Confirmed	Confirmed	Confirmed
MU	Mediterranean Gull	Y		Y					Y	Y					Confirmed	Present
CM	Common Gull			Y									Present	Possible	Possible	Present
HG	Herring Gull		Y			Y					Y		Present	Probable	Confirmed	Present
YG	Yellow-legged Gull			Y		Y				Y				Present	Present	Present
GB	Great Black-backed Gull			Y		Y							Present	Present	Present	Present
LB	Lesser Black-backed Gull			Y									Present	Probable	Confirmed	Present
PU	Puffin		Y											Present	Present	
RA	Razorbill			Y										Present	Present	Present
GU	Guillemot			Y										Present	Present	Present
RH	Red-throated Diver	Y					Y		Y	Y						Present
F.	Fulmar			Y										Present	Present	
GX	Gannet			Y										Present	Present	
CA	Cormorant						Y						Present	Probable	Confirmed	Probable
NB	Spoonbill	Y		Y				Y	Y	Y				Present	Present	Present
BI	Bittern	Y		Y				Y	Y	Y	Y				Confirmed	Confirmed
ET	Little Egret								Y	Y					Probable	Possible
EC	Cattle Egret			Y				Y		Y				Present		Possible
H.	Grey Heron							Y					Present	Confirmed	Confirmed	Confirmed
UR	Purple Heron	Y							Y	Y					Present	Present
OP	Osprey	Y		Y			Y		Y	Y		Y		Present	Present	Present
HZ	Honey-buzzard	Y		Y		Y			Y	Y						Present
SH	Sparrowhawk			Y				Y					Present	Confirmed	Confirmed	Probable

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
GI	Goshawk	Y					Y			Y					Present	Present
MR	Marsh Harrier	Y		Y					Y	Y					Confirmed	Present
HH	Hen Harrier	Y	Y			Y			Y	Y	Y			Present	Present	Present
MO	Montagu's Harrier	Y	Y		Y				Y	Y					Present	Present
KT	Red Kite	Y							Y						Probable	Possible
WE	White-tailed Eagle	Y		Y		Y			Y	Y		Y			Present	Present
BZ	Buzzard												Present	Confirmed	Confirmed	Confirmed
BO	Barn Owl	Y											Present	Confirmed	Confirmed	Probable
LO	Little Owl												Present	Confirmed	Confirmed	Present
LE	Long-eared Owl									Y					Confirmed	Confirmed
SE	Short-eared Owl			Y		Y			Y	Y				Present	Present	Present
TO	Tawny Owl			Y			Y							Confirmed	Confirmed	Probable
KF	Kingfisher	Y						Y	Y					Present	Confirmed	Present
LS	Lesser Spotted Woodpecker		Y			Y				Y	Y				Possible	
GS	Great Spotted Woodpecker												Present	Confirmed	Confirmed	Confirmed
G.	Green Woodpecker						Y						Present	Confirmed	Confirmed	Probable
K.	Kestrel			Y				Y					Present	Confirmed	Confirmed	Confirmed
ML	Merlin	Y	Y			Y			Y	Y				Present	Present	Present
HY	Hobby	Y					Y			Y				Present	Probable	Probable
PE	Peregrine	Y							Y	Y					Confirmed	Possible
RI	Ring-necked Parakeet														Possible	
OL	Golden Oriole	Y								Y				Present	Present	Present
ED	Red-backed Shrike	Y	Y		Y				Y	Y				Present	Present	Present
J.	Jay													Probable	Confirmed	Possible
MG	Magpie												Present	Confirmed	Confirmed	Confirmed
JD	Jackdaw												Present	Confirmed	Confirmed	Possible
RO	Rook			Y			Y						Present	Confirmed	Confirmed	Confirmed
C.	Carrion Crow												Present	Confirmed	Confirmed	Probable
HC	Hooded Crow															Present
RN	Raven													Confirmed	Confirmed	Probable
CT	Coal Tit												Present	Confirmed	Confirmed	Probable
MT	Marsh Tit		Y				Y				Y			Possible	Confirmed	Probable
WT	Willow Tit		Y			Y				Y	Y				Possible	Present
BT	Blue Tit												Present	Confirmed	Confirmed	Confirmed
GT	Great Tit												Present	Confirmed	Confirmed	Confirmed
BR	Bearded Tit	Y								Y				Confirmed	Confirmed	Possible
WL	Woodlark	Y							Y	Y	Y				Possible	Probable
S.	Skylark		Y								Y		Present	Probable	Confirmed	Probable
SM	Sand Martin													Confirmed	Confirmed	Probable
SL	Swallow							Y					Present	Confirmed	Confirmed	Probable
HM	House Martin		Y				Y						Present	Confirmed	Confirmed	Confirmed
CW	Cetti's Warbler	Y											Present	Confirmed	Confirmed	Possible
LT	Long-tailed Tit												Present	Confirmed	Confirmed	Confirmed
WO	Wood Warbler		Y					Y			Y					Present
WW	Willow Warbler			Y									Present	Confirmed	Confirmed	Possible
CC	Chiffchaff												Present	Confirmed	Confirmed	Probable
SW	Sedge Warbler			Y			Y						Present	Confirmed	Confirmed	Confirmed
RW	Reed Warbler												Present	Confirmed	Confirmed	Confirmed
IC	Icterine Warbler									Y				Present	Present	
VI	Savi's Warbler	Y	Y		Y					Y	Y				Possible	Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
GH	Grasshopper Warbler		Y								Y			Present	Possible	Possible
BC	Blackcap												Present	Confirmed	Confirmed	Confirmed
GW	Garden Warbler												Present	Possible	Probable	Possible
LW	Lesser Whitethroat												Present	Confirmed	Confirmed	Confirmed
WH	Whitethroat			Y									Present	Confirmed	Confirmed	Confirmed
FC	Firecrest	Y												Present	Present	
GC	Goldcrest												Present	Possible	Confirmed	Confirmed
WR	Wren			Y									Present	Confirmed	Confirmed	Confirmed
NH	Nuthatch													Possible	Probable	Probable
TC	Treecreeper												Present	Confirmed	Confirmed	Present
SG	Starling		Y					Y			Y		Present	Confirmed	Confirmed	Confirmed
ST	Song Thrush			Y							Y		Present	Confirmed	Confirmed	Confirmed
M.	Mistle Thrush		Y				Y						Present	Confirmed	Confirmed	Confirmed
RE	Redwing	Y		Y	Y					Y					Possible	Present
B.	Blackbird												Present	Confirmed	Confirmed	Confirmed
FF	Fieldfare	Y	Y		Y					Y			Present	Present	Confirmed	Present
RZ	Ring Ouzel		Y				Y				Y				Present	Present
SF	Spotted Flycatcher		Y				Y				Y			Present	Probable	Probable
R.	Robin												Present	Confirmed	Confirmed	Confirmed
PF	Pied Flycatcher			Y			Y							Present	Present	
BX	Black Redstart	Y		Y				Y		Y				Present	Possible	Present
RT	Redstart			Y										Probable	Probable	Present
WC	Whinchat		Y				Y							Present	Present	Present
SC	Stonechat													Present	Confirmed	Confirmed
W.	Wheatear			Y		Y								Present	Present	Present
TS	Tree Sparrow		Y					Y			Y		Present	Confirmed	Confirmed	Possible
HS	House Sparrow		Y								Y		Present	Confirmed	Confirmed	Confirmed
D.	Dunnock			Y							Y		Present	Confirmed	Confirmed	Confirmed
YW	Yellow Wagtail		Y				Y				Y		Present	Probable	Confirmed	Confirmed
GL	Grey Wagtail			Y			Y						Present	Present	Confirmed	Probable
PW	Pied Wagtail												Present	Confirmed	Confirmed	Probable
MP	Meadow Pipit			Y									Present	Confirmed	Confirmed	Confirmed
TP	Tree Pipit		Y								Y			Present	Probable	Present
RC	Rock Pipit															Present
CH	Chaffinch					Y							Present	Probable	Confirmed	Probable
HF	Hawfinch		Y			Y				Y	Y			Present	Present	Present
BF	Bullfinch			Y							Y		Present	Confirmed	Confirmed	Probable
GR	Greenfinch		Y			Y							Present	Probable	Confirmed	Probable
TW	Twite		Y			Y					Y			Present	Present	Present
LI	Linnet		Y								Y		Present	Confirmed	Confirmed	Probable
CR	Common Crossbill	Y												Present	Present	Present
GO	Goldfinch												Present	Confirmed	Confirmed	Confirmed
SK	Siskin												Present	Possible	Probable	Possible
CB	Corn Bunting		Y				Y				Y			Probable	Probable	Possible
Y.	Yellowhammer		Y								Y		Present	Probable	Probable	Probable
RB	Reed Bunting			Y							Y		Present	Probable	Confirmed	Confirmed

Non-breeding season

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
BG	Brent Goose			Y							Y			Present	Present	Present
CG	Canada Goose													Present	Present	Present
BY	Barnacle Goose			Y					Y					Present	Present	Present
GJ	Greylag Goose			Y										Present	Present	Present
PG	Pink-footed Goose			Y						Y				Present	Present	Present
WG	White-fronted Goose		Y			Y					Y			Present	Present	Present
MS	Mute Swan													Present	Present	Present
BS	Bewick's Swan	Y	Y		Y				Y	Y	Y			Present	Present	Present
WS	Whooper Swan	Y		Y		Y			Y	Y				Present	Present	Present
EG	Egyptian Goose													Present	Present	Present
SU	Shelduck			Y		Y								Present	Present	Present
MN	Mandarin Duck													Present	Present	Present
GY	Garganey	Y		Y		Y				Y				Present	Present	Present
SV	Shoveler			Y						Y				Present	Present	Present
GA	Gadwall			Y										Present	Present	Present
WN	Wigeon			Y				Y		Y				Present	Present	Present
MA	Mallard			Y				Y						Present	Present	Present
PT	Pintail			Y	Y					Y				Present	Present	Present
T.	Teal			Y										Present	Present	Present
TA	Green-winged Teal									Y				Present	Present	Present
PO	Pochard		Y			Y				Y				Present	Present	Present
NG	Ring-necked Duck									Y					Present	Present
TU	Tufted Duck							Y						Present	Present	Present
SP	Scaup	Y	Y			Y				Y	Y				Present	Present
CX	Common Scoter	Y	Y		Y					Y	Y			Present	Present	Present
LN	Long-tailed Duck	Y	Y				Y			Y					Present	Present
GN	Goldeneye		Y					Y		Y				Present	Present	Present
SY	Smew		Y		Y				Y	Y					Present	Present
GD	Goosander													Present	Present	Present
RM	Red-breasted Merganser			Y				Y		Y				Present	Present	Present
P.	Grey Partridge		Y					Y			Y			Present	Present	Present
PH	Pheasant													Present	Present	Present
RL	Red-legged Partridge													Present	Present	Present
DV	Rock Dove													Present	Present	Present
SD	Stock Dove			Y										Present	Present	Present
WP	Woodpigeon			Y										Present	Present	Present
CD	Collared Dove						Y							Present	Present	Present
WA	Water Rail													Present	Present	Present
MH	Moorhen			Y				Y						Present	Present	Present
CO	Coot							Y						Present	Present	Present
AN	Crane			Y				Y	Y	Y				Present	Present	Present
LG	Little Grebe													Present	Present	Present
RX	Red-necked Grebe		Y		Y					Y					Present	Present
GG	Great Crested Grebe													Present	Present	Present
SZ	Slavonian Grebe	Y	Y		Y				Y	Y				Present	Present	Present
BN	Black-necked Grebe	Y		Y		Y				Y				Present	Present	Present
OC	Oystercatcher			Y				Y						Present	Present	Present
AV	Avocet	Y		Y					Y	Y				Present	Present	Present
GV	Grey Plover			Y				Y						Present	Present	Present
GP	Golden Plover								Y					Present	Present	Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
RP	Ringed Plover		Y					Y						Present	Present	Present
L.	Lapwing		Y					Y			Y			Present	Present	Present
WM	Whimbrel	Y	Y			Y				Y				Present	Present	Present
CU	Curlew		Y			Y					Y			Present	Present	Present
BA	Bar-tailed Godwit			Y				Y	Y	Y				Present	Present	Present
BW	Black-tailed Godwit	Y	Y			Y				Y				Present	Present	Present
JS	Jack Snipe									Y				Present	Present	Present
WK	Woodcock		Y					Y						Present	Present	Present
SN	Snipe			Y				Y						Present	Present	Present
PL	Grey Phalarope														Present	Present
CS	Common Sandpiper			Y			Y							Present	Present	Present
GE	Green Sandpiper	Y		Y	Y					Y				Present	Present	Present
RK	Redshank			Y				Y						Present	Present	Present
DR	Spotted Redshank			Y		Y								Present	Present	Present
GK	Greenshank	Y		Y						Y				Present	Present	Present
TT	Turnstone			Y				Y		Y					Present	Present
KN	Knot			Y										Present	Present	Present
RU	Ruff	Y	Y		Y				Y	Y				Present	Present	Present
CV	Curlew Sandpiper			Y										Present	Present	Present
SS	Sanderling			Y						Y					Present	Present
DN	Dunlin		Y					Y	Y					Present	Present	Present
PS	Purple Sandpiper	Y	Y		Y					Y				Present	Present	Present
LX	Little Stint													Present	Present	Present
AE	Arctic Tern			Y				Y	Y						Present	Present
TE	Sandwich Tern			Y					Y					Present	Present	Present
LU	Little Gull	Y							Y	Y					Present	Present
KI	Kittiwake		Y		Y											Present
BH	Black-headed Gull			Y				Y						Present	Present	Present
MU	Mediterranean Gull	Y		Y					Y	Y					Present	Present
CM	Common Gull			Y										Present	Present	Present
YC	Caspian Gull			Y				Y							Present	Present
HG	Herring Gull		Y			Y					Y			Present	Present	Present
YG	Yellow-legged Gull			Y		Y				Y				Present	Present	Present
GB	Great Black-backed Gull			Y		Y								Present	Present	Present
GZ	Glaucous Gull			Y				Y		Y						Present
LB	Lesser Black-backed Gull			Y										Present	Present	Present
AC	Arctic Skua		Y		Y					Y						Present
RA	Razorbill			Y												Present
LK	Little Auk															Present
GU	Guillemot			Y										Present	Present	Present
RH	Red-throated Diver	Y					Y		Y	Y					Present	Present
BV	Black-throated Diver	Y		Y				Y	Y	Y					Present	Present
ND	Great Northern Diver	Y		Y					Y	Y				Present	Present	Present
F.	Fulmar			Y												Present
GX	Gannet			Y											Present	Present
CA	Cormorant						Y							Present	Present	Present
SA	Shag		Y			Y										Present
NB	Spoonbill	Y		Y				Y	Y	Y				Present	Present	Present
BI	Bittern	Y		Y				Y	Y	Y	Y			Present	Present	Present
ET	Little Egret								Y	Y				Present	Present	Present

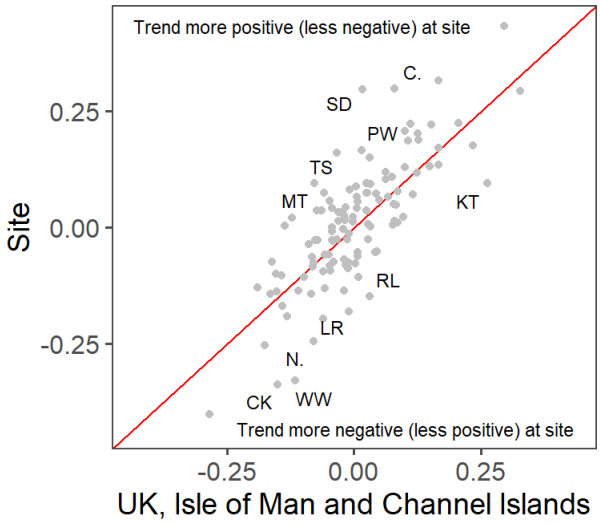
Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
HW	Great White Egret			Y		Y			Y	Y				Present	Present	Present
EC	Cattle Egret			Y				Y		Y				Present	Present	Present
H.	Grey Heron							Y						Present	Present	Present
SH	Sparrowhawk			Y				Y						Present	Present	Present
GI	Goshawk	Y					Y			Y					Present	Present
MR	Marsh Harrier	Y		Y					Y	Y				Present	Present	Present
HH	Hen Harrier	Y	Y			Y			Y	Y	Y			Present	Present	Present
KT	Red Kite	Y							Y					Present	Present	Present
WE	White-tailed Eagle	Y		Y		Y			Y	Y		Y		Present	Present	Present
BZ	Buzzard													Present	Present	Present
BO	Barn Owl	Y												Present	Present	Present
LO	Little Owl													Present	Present	Present
LE	Long-eared Owl									Y					Present	
SE	Short-eared Owl			Y		Y			Y	Y				Present	Present	Present
TO	Tawny Owl			Y			Y							Present	Present	Present
KF	Kingfisher	Y						Y	Y					Present	Present	Present
LS	Lesser Spotted Woodpecker		Y			Y				Y	Y				Present	Present
GS	Great Spotted Woodpecker													Present	Present	Present
G.	Green Woodpecker						Y							Present	Present	Present
K.	Kestrel			Y				Y						Present	Present	Present
ML	Merlin	Y	Y			Y			Y	Y				Present	Present	Present
PE	Peregrine	Y							Y	Y				Present	Present	Present
RI	Ring-necked Parakeet													Present	Present	Present
SR	Great Grey Shrike									Y				Present	Present	Present
J.	Jay													Present	Present	Present
MG	Magpie													Present	Present	Present
JD	Jackdaw													Present	Present	Present
RO	Rook			Y			Y							Present	Present	Present
C.	Carrion Crow													Present	Present	Present
HC	Hooded Crow														Present	Present
RN	Raven													Present	Present	Present
WX	Waxwing									Y				Present	Present	Present
CT	Coal Tit													Present	Present	Present
MT	Marsh Tit		Y				Y				Y			Present	Present	Present
WT	Willow Tit		Y			Y				Y	Y				Present	
BT	Blue Tit													Present	Present	Present
GT	Great Tit													Present	Present	Present
BR	Bearded Tit	Y								Y				Present	Present	Present
S.	Skylark		Y								Y			Present	Present	Present
SX	Shore Lark	Y		Y		Y				Y						Present
SL	Swallow							Y						Present	Present	Present
HM	House Martin		Y				Y							Present	Present	Present
CW	Cetti's Warbler	Y												Present	Present	Present
LT	Long-tailed Tit													Present	Present	Present
YB	Yellow-browed Warbler			Y		Y									Present	Present
CC	Chiffchaff													Present	Present	Present
BC	Blackcap													Present	Present	Present
LW	Lesser Whitethroat													Present	Present	Present
FC	Firecrest	Y														Present
GC	Goldcrest													Present	Present	Present

Code	Species	S1	Red	Amber	CR	EN	NT	VU	A1	RBBP	S41E	SZA1EW	1-km	2-km	10-km	>10-km
WR	Wren			Y										Present	Present	Present
NH	Nuthatch													Present	Present	Present
TC	Treecreeper													Present	Present	Present
SG	Starling		Y					Y			Y			Present	Present	Present
ST	Song Thrush			Y							Y			Present	Present	Present
M.	Mistle Thrush		Y				Y							Present	Present	Present
RE	Redwing	Y		Y	Y					Y				Present	Present	Present
B.	Blackbird													Present	Present	Present
FF	Fieldfare	Y	Y		Y					Y				Present	Present	Present
RZ	Ring Ouzel		Y				Y				Y				Present	Present
R.	Robin													Present	Present	Present
SC	Stonechat													Present	Present	Present
W.	Wheatear			Y		Y								Present	Present	Present
TS	Tree Sparrow		Y					Y			Y			Present	Present	Present
HS	House Sparrow		Y								Y			Present	Present	Present
D.	Dunnock			Y							Y			Present	Present	Present
GL	Grey Wagtail			Y			Y							Present	Present	Present
PW	Pied Wagtail													Present	Present	Present
PR	Richard's Pipit															Present
MP	Meadow Pipit			Y										Present	Present	Present
WI	Water Pipit			Y		Y								Present	Present	Present
RC	Rock Pipit													Present	Present	Present
CH	Chaffinch					Y								Present	Present	Present
BL	Brambling	Y								Y				Present	Present	Present
HF	Hawfinch		Y			Y				Y	Y				Present	Present
BF	Bullfinch			Y							Y			Present	Present	Present
GR	Greenfinch		Y			Y								Present	Present	Present
TW	Twite		Y			Y					Y			Present	Present	Present
LI	Linnet		Y								Y			Present	Present	Present
CR	Common Crossbill	Y												Present	Present	Present
GO	Goldfinch													Present	Present	Present
SK	Siskin													Present	Present	Present
SB	Snow Bunting	Y		Y		Y				Y				Present	Present	
CB	Corn Bunting		Y				Y				Y			Present	Present	Present
Y.	Yellowhammer		Y								Y			Present	Present	Present
RB	Reed Bunting			Y							Y			Present	Present	Present

Appendix 5. Abundance change figures

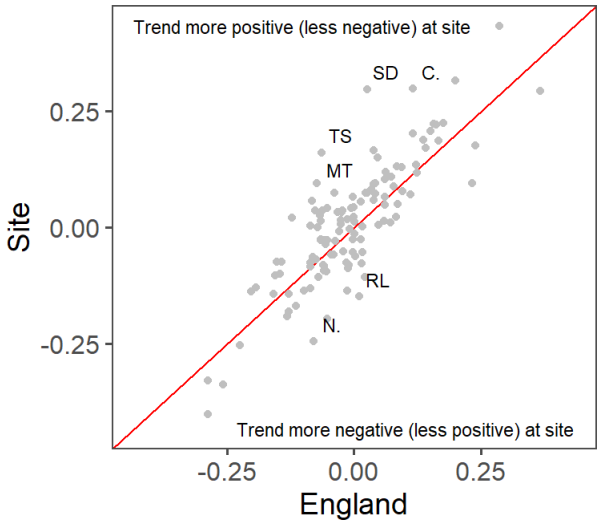
5.1 Country: UK, Isle of Man and Channel Islands

Relative abundance changes for the site and its vicinity compared to the rest of UK, Isle of Man and Channel Islands. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



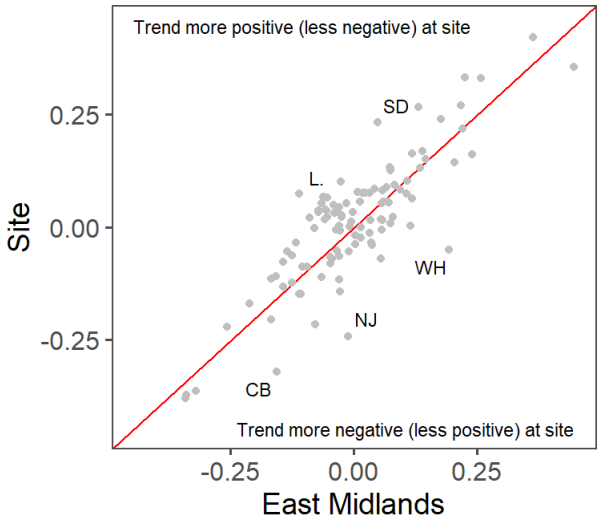
5.2 Country: England

Relative abundance changes for the site and its vicinity compared to the rest of England. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



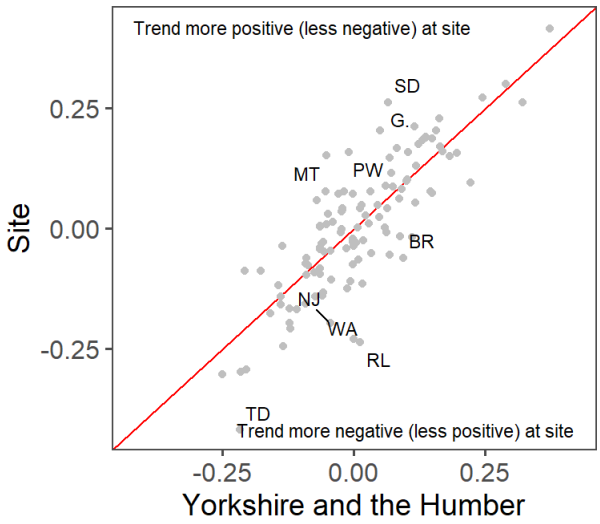
5.3 Region: East Midlands

Relative abundance changes for the site and its vicinity compared to the rest of East Midlands. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



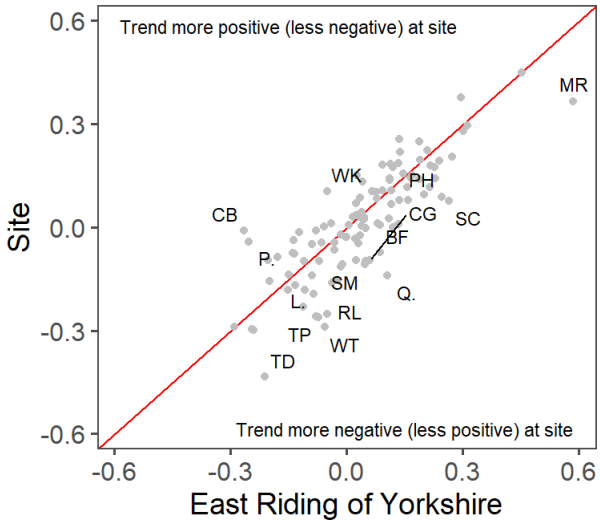
5.4 Region: Yorkshire and the Humber

Relative abundance changes for the site and its vicinity compared to the rest of Yorkshire and the Humber. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



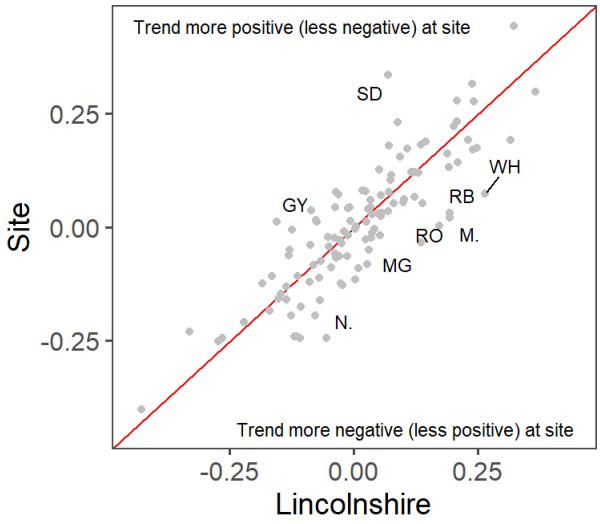
5.5 County: East Riding of Yorkshire

Relative abundance changes for the site and its vicinity compared to the rest of East Riding of Yorkshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



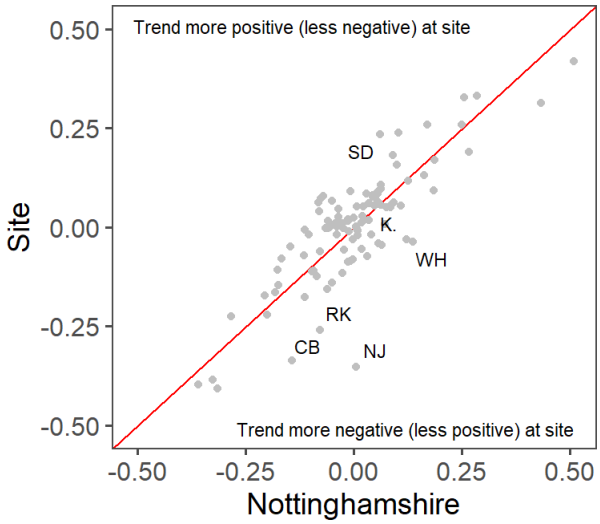
5.6 County: Lincolnshire

Relative abundance changes for the site and its vicinity compared to the rest of Lincolnshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



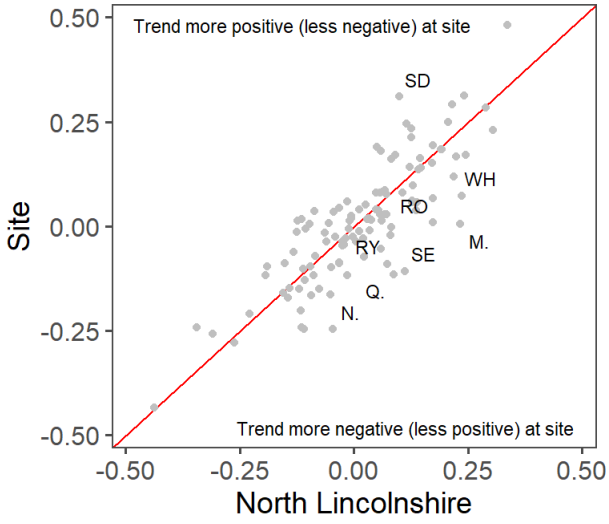
5.7 County: Nottinghamshire

Relative abundance changes for the site and its vicinity compared to the rest of Nottinghamshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



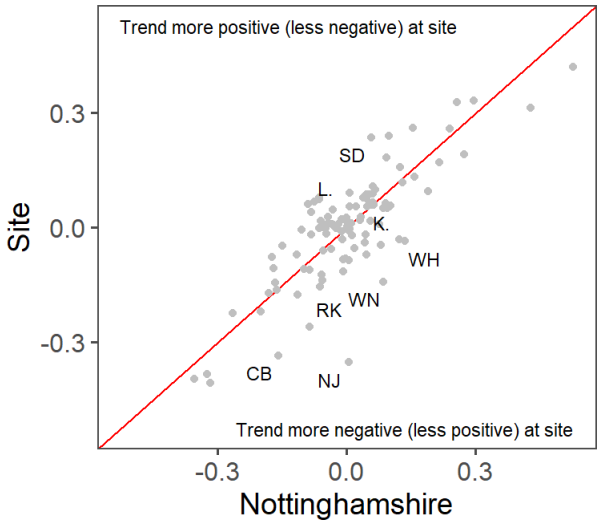
5.8 Vice-county: North Lincolnshire

Relative abundance changes for the site and its vicinity compared to the rest of North Lincolnshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



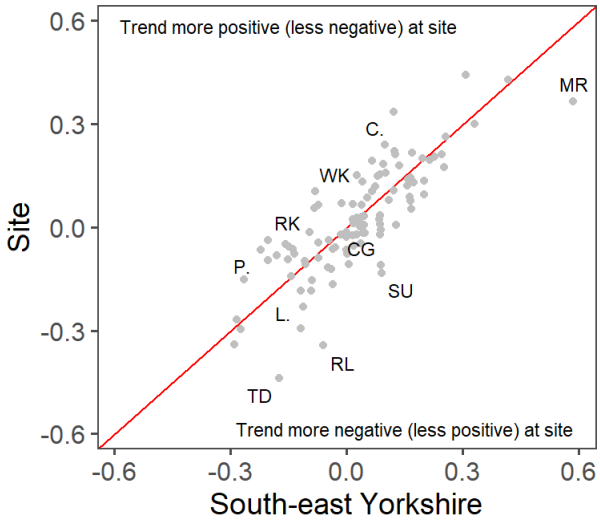
5.9 Vice-county: Nottinghamshire

Relative abundance changes for the site and its vicinity compared to the rest of Nottinghamshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



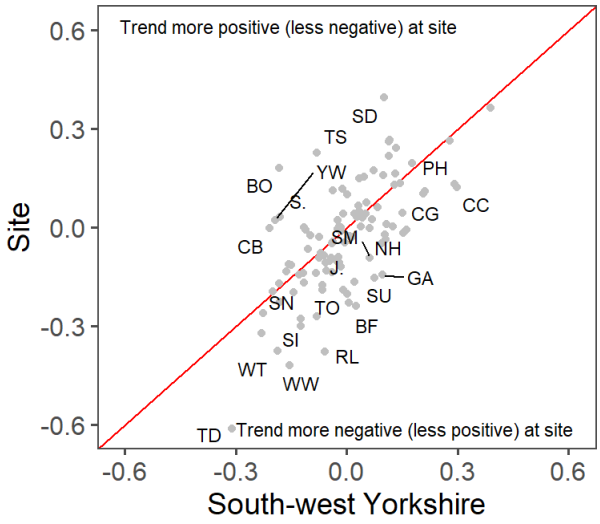
5.10 Vice-county: South-east Yorkshire

Relative abundance changes for the site and its vicinity compared to the rest of South-east Yorkshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).



5.11 Vice-county: South-west Yorkshire

Relative abundance changes for the site and its vicinity compared to the rest of South-west Yorkshire. Species above the line of equality have more positive/less negative trends at/near the site compared to the country (see Appendix 4 for species codes).





Images: Landscape, Simon Gillings; Barn Owl, Liz Cutting

BTO Data Report

BTO Data Reports provide rigorous scientific information to inform desk studies for ecological impact assessment of proposed development sites. Reports collate comprehensive and contemporary bird distribution and abundance data from the BTO's ornithological datasets. As most biological data are collected in grid squares, spatial analyses identify which grid squares can be associated with the site and its vicinity at different spatial scales. Reports lists all species present at or near the site in the breeding season and in winter, highlighting those of statutory or conservation importance (e.g. Schedule 1, Red List). They also assess the potential importance of the site across a local, regional and national context, listing species for which the site and vicinity account for a high proportion of local, regional or national geographical range and population size.

BTO Data Reports provide unique insights into the bird community present in the vicinity of potential development sites, helping to guide the need for detailed field surveys and highlighting potential priorities for delivering habitat mitigation, enhancement and biodiversity net gain.

BTO Services Ltd
The Nunnery
Thetford
Norfolk
United Kingdom
IP24 2PU

BTO Services Ltd

Registered in England and Wales: 2907282

Annex F Common Birds Census Summary Tables

nationalgrid

Table F.1 – Breeding bird survey results for Birkhill Wood, breeding bird survey area 1

Species	Latin Name	BoCC Status[1]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	7	5	2	6	9	Confirmed	4	0	Two individuals seen entering suitable nesting habitat with food during visit 4 and two chicks seen during visit 5
Blackcap	*Sylvia atricapilla*		☐	☐	☐	3		3	2	2	Probable	2	0	Multiple males singing in suitable breeding habitat during visit 1
Blue Tit	*Cyanistes caeruleus*		☐	☐	☐	3	5		7	2	Confirmed	2	0	Four chicks observed at western end of footpath into site during visit 4
Bullfinch	*Pyrrhula pyrrhula*		☐	☒	☐		2	1			Possible			Pair observed in suitable breeding habitat during visit 2
Carrion Crow	*Corvus corone*		☐	☐	☐	9	1		4		Possible			Pair seen in suitable breeding habitat during visit 4

[1] Green = Status on BoCC5 Green List | Amber = Status on BoCC5 Amber List | Red = Status on BoCC5 Red List

Species	Latin Name	BoCC Status[1]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Chaffinch	*Fringilla coelebs*		☐	☐	☐	5	5	9	4		Confirmed	3	0	Female observed on nest at TA 03012 35027 during visit 1
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	3	5	4	6	4	Probable	3	0	Multiple male singing in suitable breeding habitat during visit 1
Coal Tit	*Periparus ater*		☒	☐	☐		1				Possible			Single male singing from suitable breeding habitat during visit 2
Dunnock	*Prunella modularis*		☐	☒	☐	2			2		Confirmed	1	0	Individuals with worn plumage seen entering suitable nesting habitat with food during visit 4
Garden Warbler	*Sylvia borin*		☐	☐	☐		1				Possible			Single male singing in suitable breeding habitat during visit 2.
Goldcrest	*Regulus regulus*		☐	☐	☐			1			Possible			Single male singing from suitable breeding habitat during visit 3.
Goldfinch	*Carduelis carduelis*		☐	☐	☐					3	Probable	2	0	Two males singing during visit 5
Great Spotted Woodpecker	*Dendrocopos major*		☐	☐	☐	1		1			Possible			"Male drumming in suitable breeding habitat during visit 1.

Species	Latin Name	BoCC Status[1]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Great Tit	*Parus major*		☐	☐	☐	5	2		2	1	Probable	2	0	Bird calling from suitable habitat during visit 3."
Greylag Goose	*Anser anser*		☐	☐	☐		1				Not breeding			Multiple males singing from suitable breeding habitat during visit 2.
Lesser Whitethroat	*Curruca curruca*		☐	☐	☐		1				Possible			Bird observed flying over site during visit 2
Linnet	*Linaria cannabina*		☐	☒	☐	2		3			Probable	1	0	Single male singing in suitable breeding habitat during visit 2.
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐			6	2		Confirmed	1	0	Pair seen in same area of suitable breeding habitat during visit 1 and 3
Magpie	*Pica pica*		☐	☐	☐		1			1	Possible			Pair observed with two chicks during visit 3
Mallard	*Anas platyrhynchos*		☐	☐	☐		2				Possible			Bird observed flying from suitable breeding habitat during visit 2
Moorhen	*Gallinula chloropus*		☐	☐	☐			1			Possible			Pair observed in suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status[1]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Oystercatcher	*Haematopus ostralegus*		☐	☐	☐		2				Not breeding			Individual seen near suitable breeding habitat during visit 3
Pheasant	*Phasianus colchicus*		☐	☐	☐		4				Possible			Pair observed foraging in flooded arable during visit 2 but not seen again
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐	1		2	1		Probable	1	0	V2: males calling near boundaries.
Robin	*Erithacus rubecula*		☐	☐	☐	4	4	3	2	2	Confirmed	2	0	Multiple males singing from suitable breeding habitat during visit 3
Skylark	*Alauda arvensis*		☐	☒	☐	5	5		1		Probable	3	0	One young recorded during visit 5.
Song Thrush	*Turdus philomelos*		☐	☒	☐	3	3	2	4	2	Probable	3	0	Multiple males singing from suitable breeding habitat during visit 1
Stock Dove	*Columba oenas*		☐	☐	☐		1				Possible			Multiple males singing from suitable breeding habitat during visit 2
Swallow	*Hirundo rustica*		☐	☐	☒					5	Possible			Bird observed flying from mature boundary/suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status[1]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Tree Sparrow	*Passer montanus*		☐	☒	☐					4	Confirmed	1	0	Birds seen foraging and passing suitable nesting habitat during visit 5
Whitethroat	*Curruca communis*		☐	☐	☐		1	2	3	3	Confirmed	2	0	Two young seen with adults during visit 5
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐	1					Possible			Two young seen with adults during visit 6
Woodpigeon	*Columba palumbus*		☐	☐	☐	2	10	1	3	7	Probable	1	0	Single male singing in suitable breeding habitat during visit 1
Wren	*Troglodytes troglodytes*		☐	☐	☐	4	4	4	8	8	Confirmed	4	0	Multiple males singing in suitable breeding habitat during visit 1
Yellowhammer	*Emberiza citrinella*		☐	☒	☒		1	3	1	2	Confirmed	1	0	Adult seen entering suitable nesting habitat with food during visit 4 and chicks observed during visit 5
Total		**35**												
BoCC 5 Red List		**4**												
BoCC 5 Amber List		**13**												
BoCC 5 Green List		**17**												
Schedule 1 Species		**0**												
NERC Section 41		**8**												
Annex 1 Species		**0**												

Table F.2 – Breeding bird survey results for Socken Wood, breeding bird survey area 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	2	2	3	7	2	Confirmed	4	0	Multiple adults seen entering suitable nesting habitat with food during visit 4
Blackcap	*Sylvia atricapilla*		☐	☐	☐	3	2		1		Confirmed	1	0	Pair seen together with male observed with nesting material during visit 2.
Black Redstart	*Phoenicurus ochruros*		☒	☐	☐					1	Non-breeding			Female recorded in hedge during visit 5
Blue Tit	*Cyanistes caeruleus*		☐	☐	☐	3	2			1	Confirmed	1	0	Adult bird seen entering suitable breeding habitat with food during visit 5
Buzzard	*Buteo buteo*		☐	☐	☐	2			1		Possible			Pair observed in suitable breeding habitat during visit 1
Carrion Crow	*Corvus corone*		☐	☐	☐	1	6		43		Confirmed	4	0	"Four nests recorded during visit 2 and chicks observed foraging during visit 4"
Chaffinch	*Fringilla coelebs*		☐	☐	☒	7	6	1	9	7	Probable	4	0	Multiple males singing in suitable breeding habitat during visit 1
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	3	4			2	Probable	2	0	Multiple males singing in suitable breeding habitat during visit 1
Corn Bunting	*Emberiza calandra*		☐	☒	☐		2			2	Probable	1	0	Multiple males observed singing in suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Dunnock	*Prunella modularis*		☐	☒	☐	1	1				Possible			Individual seen in suitable breeding habitat during visit 1
Goldfinch	*Carduelis carduelis*		☐	☐	☐	1		2	3	5	Confirmed	1	0	Adult seen entering suitable nesting habitat with food during visit 5 and pair seen with three chicks during visit 5
Great Spotted Woodpecker	*Dendrocopos major*		☐	☐	☐		1		2		Probable	1	0	"Male calling from boundary hedgerow with trees during visit 2 and male calling from trees and old woodpecker nests recorded during visit 4. Individual foraging on PRoW also during visit 4."
Great Tit	*Parus major*		☐	☐	☐	1	2				Probable	2	0	Multiple males calling from suitable breeding habitat during visit 2
Herring Gull	*Larus argentatus*		☐	☒	☐		11				Non-breeding			11 birds flew over site during visit 2
Kestrel	*Falco tinnunculus*		☐	☐	☐	1					Non-breeding			Individual seen foraging and resting in hedge at site during visit 1
Linnet	*Linaria cannabina*		☐	☒	☐				2	2	Probable	1	0	Pair seen in same area of suitable breeding habitat during visits 4 and 5
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐	2	1				Possible			Single birds observed foraging in suitable breeding habitat during visit 1

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Magpie	*Pica pica*		☐	☐	☐	2					Non-breeding			Pair flew over site during visit 1
Pheasant	*Phasianus colchicus*		☐	☐	☐		3		1		Probable	1	0	Visit 2: multiple male birds calling near hedgerows
Red-legged Partridge	*Alectoris rufa*		☐	☐	☐				1		Possible			Individual flushed from suitable breeding habitat during visit 4
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐				2		Possible			Pair seen in suitable breeding habitat during visit 4
Robin	*Erithacus rubecula*		☐	☐	☐	1	1	3	1		Probable	1	0	Multiple male birds singing from suitable breeding habitat and foraging during visit 3
Rook	*Corvus frugilegus*		☐	☐	☐				24		Possible			Young birds observed foraging at site during visit 4 but may have
Skylark	*Alauda arvensis*		☐	☒	☐	9	7	2	14	3	Probable	8	0	Multiple males singing from suitable breeding habitat during visit 4
Song Thrush	*Turdus philomelos*		☐	☒	☐	1	3			1	Probable	1	0	Multiple males singing from suitable breeding habitat during visit 2
Stock Dove	*Columba oenas*		☐	☐	☐					1	Non-breeding			Individual flew over site during visit 5
Swallow	*Hirundo rustica*		☐	☐	☐				3		Possible			Three birds seen foraging during visit 4 and may be nesting at property at SE 97954 32235

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Whitethroat	*Curruca communis*		☐	☐	☐		1		3	2	Probable	2	0	Multiple males singing from suitable breeding habitat during visit 4
Woodpigeon	*Columba palumbus*		☐	☐	☐		2		1	4	Probable	1	0	Multiple males calling from suitable breeding habitat during visit 2
Wren	*Troglodytes troglodytes*		☐	☐	☐	2	1	5	8	4	Confirmed	3	0	Adult seen with food entering suitable nesting habitat during visit 4
Yellow Wagtail	*Motacilla flava*		☐	☒	☐					1	Possible			Individual seen entering suitable breeding habitat during visit 5
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	1	4	1	5	6	Confirmed	1	0	Adult seen with chick during visit 4
Total						**32**								
BoCC 5 Red List						**6**								
BoCC 5 Amber List						**10**								
BoCC 5 Green List						**14**								
Schedule 1 Species						**1**								
NERC Section 41						**9**								
Annex 1 Species						**0**								

Table F.3 – Breeding bird survey results for Brantingham Dale, breeding bird survey area 3

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	7	5	4	10	5	Confirmed	6	0	Males seen foraging and entering suitable nesting habitat with food. Also, two chicks seen during visit 3.
Blackcap	*Sylvia atricapilla*		☐	☐	☒	1	6	3	5	4	Confirmed	3	0	A worn female was flushed from suitable nesting habitat during visit 3. Male was seen entering suitable nesting habitat with food during visit 5.
Blue Tit	*Cyanistes caeruleus*		☐	☐	☐	7	6	2		2	Confirmed	4	0	Adult seen entering suitable nesting habitat with food during visit 5
Bullfinch	*Pyrrhula pyrrhula*		☐	☒	☐			1	1	1	Confirmed	1	0	Male seen entering nest in conifer with food during visit 4
Buzzard	*Buteo buteo*		☐	☐	☐				2	1	Possible			Individuals seen in suitable breeding habitat during visit 4
Chaffinch	*Fringilla coelebs*		☐	☐	☐	16	10	3	7	2	Probable	6	0	Multiple males singing in suitable breeding habitat during visit 1
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	3	5	3	5		Probable	3	0	Multiple males singing in suitable breeding habitat during visit 1
Coal Tit	*Periparus ater*		☐	☐	☐	3	3		3	1	Confirmed	1	0	Two young observed foraging during visit 4

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Dunnock	*Prunella modularis*		☐	☒	☐	1	1		5		Confirmed	3	0	Fledgling recorded and adults seen entering suitable nesting habitat with food during visit 4
Garden Warbler	*Slyvia borin*		☐	☐	☐		1		2	1	Probable	1	1	Multiple males singing in suitable breeding habitat during visit 4
Goldcrest	*Regulus regulus*		☐	☐	☐	5	2	3	3	2	Probable	4	0	Multiple males singing in suitable breeding habitat during visit 1
Goldfinch	*Carduelis carduelis*		☐	☐	☐	1	1				Possible			Male singing in suitable breeding habitat during visit 1
Great Spotted Woodpecker	*Dendrocopos major*		☐	☐	☐	2	3				Probable			Multiple males drumming in suitable breeding habitat during visit 1
Great Tit	*Parus major*		☐	☐	☐	8	7	2	7	2	Confirmed	4	0	Pair seen with a fledgling and adults seen carrying multiple food items in beak during visit 4
Green Woodpecker	*Picus viridis*		☐	☐	☐	2	1	1	2		Probable	1	0	Multiple birds calling from suitable breeding habitat during visit 1
Greenfinch	*Chloris chloris*		☐	☐	☐				1		Possible			Male singing from dead ash at head of valley during visit 4
Jackdaw	*Corvus monedula*		☐	☐	☐	3	1				Possible			Pair seen foraging in arable fields during visit 1
Jay	*Garrulus glandarius*		☐	☐	☐	2	1			4	Probable	2	0	Pair in suitable breeding habitat and calling during visit 1
Linnet	*Linaria cannabina*		☐	☐	☐					4	Possible			Single male singing from suitable breeding habitat during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐	3		1			Possible			Pair seen in suitable breeding habitat during visit 1
Magpie	*Pica pica*		☐	☐	☐				1		Possible			Individual calling from suitable breeding habitat during visit 4
Marsh Harrier	*Circus aeruginosus*		☒	☐	☒		1				Non-breeder			Male hunting over arable fields during visit 2
Marsh Tit	*Poecile palustris*		☐	☐	☐	1			1		Probable	1	0	One seen in suitable breeding habitat during visit 1 and a male was singing from same area during visit 4
Meadow Pipit	*Anthus pratensis*		☐	☐	☐	1					Possible			Male singing in suitable breeding habitat during visit 1
Mistle Thrush	*Turdus viscivorus*		☐	☐	☐				2		Possible			Multiple males singing in suitable breeding habitat during visit 4
Pheasant	*Phasianus colchicus*		☐	☐	☐	7	2		3		Probable	1	0	Pairs seen in suitable breeding habitat during visit 1
Robin	*Erithacus rubecula*		☐	☐	☐	4	4	3	2		Confirmed	2	0	Adult observed enetring suitable nesting habitat with food during visit 2
Siskin	*Carduelis spinus*		☐	☐	☐		1				Possible			Male singing in suitable breeding habitat during visit 2
Skylark	*Alauda arvensis*		☐	☐	☐	5	4		3		Probable	3	0	Multiple males singing in suitable breeding habitat during visit 1
Song Thrush	*Turdus philomelos*		☐	☐	☐	10	9	6	6	4	Confirmed	5	0	Fledgling recorded during visit 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Sparrowhawk	*Accipiter nisus*		☐	☒	☐				1	1	Possible			Individuals seen flying over site and suitable breeding habitat during visits 4 and 5.
Stock Dove	*Columba oenas*		☐	☐	☐	1	4				Probable	1	0	Male singing in suitable breeding habitat in same area during visit 1 and 2
Treecreeper	*Certhia familiaris*		☐	☐	☐	2	1	1	1	1	Confirmed	1	0	Pair seen in suitable breeding habitat and a male singing from suitable breeding habitat during visit 1. Adult bird seen with large amount of food in beak during visit 5
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐		6	2	3	1	Probable	3		Multiple males singing in suitable breeding habitat during visit 2
Woodcock	*Scolopax rusticola*		☐	☐	☐		1				Non-breeding			Individual spooked from arable field margin and flew east during visit 2
Woodpigeon	*Columba palumbus*		☐	☐	☐	1	7	3	7	4	Confirmed	1	0	Occupied nest recorded during visit 4
Wren	*Troglodytes troglodytes*		☐	☒	☐	10	9	6	11	5	Confirmed	6	0	Adults seen entering suitable nesting habitat with food during visit 4
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	8	4	**4**	**5**		Probable	**3**	0	Multiple males singing in suitable breeding habitat during visit 1
Total						**38**								
BoCC 5 Red List						**7**								

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
BoCC 5 Amber List						**10**								
BoCC 5 Green List						**20**								
Schedule 1 Species						**0**								
NERC Section 41						**7**								
Annex 1 Species						**0**								

Table F.4 – Breeding bird survey results for Ings Lane, breeding bird survey area 4

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐		1	1	1		Possible			Male in suitable breeding habitat
Blackcap	*Sylvia atricapilla*		☐	☐	☐			1	2	1	Probable	1	0	Two singing males in suitable breeding habitat during visit 4
Black-headed Gull	*Chroicocephalus ridibundus*		☐	☐	☐			1			Non-breeding			Adult flew over site during visit 3
Blue Tit	*Cyanistes caeruleus*		☐	☐	☐		3	1	1 family		Confirmed	1		Family recorded during visit 4
Carrion Crow	*Corvus corone*		☐	☐	☐	4		4	1	1 family	Possible			Family recorded during visit 5 but may have hatched offsite
Cetti's Warbler	*Cettia cetti*		☒	☐	☐		1	1	1		Probable	1		Male singing in same area of suitable breeding habitat during visits 2, 3 and 4
Chaffinch	*Fringilla coelebs*		☐	☐	☐	3	2	2	5	1	Probable	3		Multiple male birds singing during visit 1
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐			1			Possible			Male singing in suitable breeding habitat during visit 3
Dunnock	*Prunella modularis*		☐	☒	☐	1	1		1		Probable	1		Singing males present in suitable breeding habitat during visits 1, 2 and 4

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Gadwall	*Mareca strepera*		☐	☐	☐	1					Possible			Recorded close to a minor drain during visit 1
Goldfinch	*Carduelis carduelis*		☐	☐	☐		4	1	4	1 family	Confirmed	1		Family recorded during visit 5
Great Tit	*Parus major*		☐	☐	☐		2		1 family		Confirmed	1		Family recorded during visit 4
Greylag Goose	*Anser anser*		☐	☐	☐		4				Possible			Two pairs recorded in suitable breeding habitat during visit 2
House Martin	*Delichon urbicum*		☐	☐	☐					2	Non-breeding			Adults foraging over the site during visit 5
Kestrel	*Falco tinnunculus*		☐	☐	☐		1			1	Possible			Adults foraging over the site during visit 2
Lapwing	*Vanellus vanellus*		☐	☒	☒	1	1				Possible		2	Displaying adult outside survey area during visit 1 and 2
Linnet	*Linaria cannabina*		☐	☒	☐		2		2		Probable	1		Pair seen in suitable breeding habitat during visit 2, male seen in same area during visit 4
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐			1		1 family	Confirmed	1		Family recorded during visit 5
Mallard	*Anas platyrhynchos*		☐	☐	☐	4					Possible			2 pairs present on minor drains on visit 1

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Marsh Harrier	*Circus aeruginosus*		☒	☐	☒					1	Non-breeding			Hunting male during visit 5
Mediterranean Gull	*Ichthyaetus melanocephalus*		☒	☐	☒					2	Non-breeding			Adult foraging during visit 5
Oystercatcher	*Haematopus ostralegus*		☐	☐	☐	4					Possible			Four adults on farmland to north during visit 1
Pheasant	*Phasianus colchicus*		☐	☐	☐	2					Possible			Pair present feeding on open arable farmland during visit 1.
Pied Wagtail	*Motacilla alba*		☐	☐	☐			1			Possible			Individual in suitable breeding habitat during visit 3
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐	1	1			1	Probable	1		Adult calling from reedbed during visit 1, 2 and 5
Robin	*Erithacus rubecula*		☐	☐	☐		2	1			Probable	1		Two males singing from suitable breeding habitat during visit 2
Skylark	*Alauda arvensis*		☐	☒	☐	3	4	3	3		Probable	2	2	Multiple male birds singing during visit 1
Song Thrush	*Turdus philomelos*		☐	☒	☐					1	Possible			Adult in suitable breeding habitat during visit 5
Stock Dove	*Columba oenas*		☐	☐	☐			2			Possible			Pair in suitable breeding habitat during visit 3
Swallow	*Hirundo rustica*		☐	☐	☐			2			Non-breeding			Adults foraging at site during visit 3

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Swift	*Apus apus*		☐	☐	☐				1		Non-breeding			Adult foraging at site during visit 3
Tree Sparrow	*Passer montanus*		☐	☐	☐				2		Possible			Two alarm calling during visit 4.
Whitethroat	*Curruca communis*		☐	☐	☐		2	1	1	2	Probable	1		Multiple male birds singing during visit 2
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐		1	1			Probable	1		Male singing from same area of suitable breeding habitat during visit 2 and 3
Woodpigeon	*Columba palumbus*		☐	☐	☐	11	2+	2+	1		Possible			Present in suitable breeding habitat during visit 1
Wren	*Troglodytes troglodytes*		☐	☐	☐	6	4	3	2	2	Probable	4		Multiple singing males during visit 1
Yellow Wagtail	*Motacilla flava*		☐	☒	☐		1				Possible			Visit 1: Adult present in suitable breeding habitat
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	2	1	1	2	1	Probable	1		Male singing from same area of suitable breeding habitat during visit 2, 3, 4 and 5
Total						**38**								
BoCC 5 Red List						**8**								
BoCC 5 Amber List						**16**								
BoCC 5 Green List						**13**								
Schedule 1 Species						**3**								
NERC Section 41						**8**								
Annex 1 Species						**2**								

Table F.5 – Breeding bird survey results for the River Ouse north bank, breeding bird survey area 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	1	3	1	1		Probable	1		Alarm calling adult in suitable breeding habitat during visit 2
Blackcap	*Sylvia atricapilla*		☐	☐	☐			1			Possible			Male singing from suitable breeding habitat during visit 3
Blue Tit	*Parus caeruleus*		☐	☐	☐		3		1+		Confirmed	0	1	Family recorded during visit 4
Bullfinch	*Pyrrhula pyrrhula*		☐	☒	☐	1					Possible			Soaring over suitable breeding habitat but no indication of breeding during visit 1
Buzzard	*Buteo buteo*		☐	☐	☐		1		1		Possible			Individual alarm calling from suitable breeding habitat during visit 2
Carrion Crow	*Corvus corone*		☐	☐	☐	10	2	2	2		Possible			Adults present in suitable breeding habitat during visit 1.
Cetti's Warbler	*Cettia cetti*		☒	☐	☐	2	4	3	2		Probable	1	1	Multiple singing males in suitable breeding habitat during visit 1
Chaffinch	*Fringilla coelebs*		☐	☐	☐	9	4	1	3	1	Probable	1	1	Multiple singing males present during visit 1.

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	2	1	2	2		Probable	1	0	Two singing males in suitable breeding habitat during visit 1
Coal Tit	*Periparus ater*		☐	☐	☐	1					Possible			Singing male in possible breeding habitat during visit 1. May be on edge of a territory, most suitable breeding habitat occurs around Yokefleet Hall
Dunnock	*Prunella modularis*		☐	☒	☐	1	1		1	2	Probable	1	0	Singing male recorded in area during visit 1,2 and 5.
Fieldfare	*Turdus pilaris*		☒	☐	☐	3					Not breeding			Recorded winter migrants late to leave the UK during visit 1.
Goldfinch	*Carduelis carduelis*		☐	☐	☐	5	1	1	1	1	Probable	1	0	Male singing from same area during visits 2 and 5.
Great Tit	*Parus major*		☐	☐	☐		2	1	2+		Confirmed	1	1	Family recorded during visit 4
Grey Heron	*Ardea cinerea*		☐	☐	☐					1	Non-breeding			Adult flying over site during visit 5
Greylag Goose	*Anser anser*		☐	☐	☐			1 family	2	1 family	Confirmed	1	0	Family recorded on river Ouse during visits 3 and 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Jackdaw	*Corvus mondedula*		☐	☐	☐	1					Possible			Adult present in/close to suitable breeding habitat during visit 1
Linnet	*Linaria cannabina*		☐	☒	☐			2		1	Probable	1	0	Pair seen in suitable breeding habitat during visit 3. Male singing from same area in visit 5
Little Egret	*Egretta garzetta*		☐	☐	☒			1		1	Non-breeding			Flying over site during survey 3 and 5
Magpie	*Pica pica*		☐	☐	☐		1				Possible			Adult in suitable breeding habitat during visit 2
Mallard	*Anas platyrhynchos*		☐	☐	☐		1 family	3	1	40	Confirmed	1	0	On family on Ouse during visit 2
Meadow Pipit	*Anthus pratensis*		☐	☐	☐	2	4		1	1	Probable	2	0	Alarm calling and parachuting adults on floodplain grassland during visit 1 and 2
Pheasant	*Phasianus colchicus*		☐	☐	☐	1	1	1	3		Possible			Calling male on farmland near or in woodland
Pied Wagtail	*Motacilla alba*		☐	☐	☐		1				Possible			Adult in suitable breeding habitat during visit 2
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐	5	3	2	3	1	Probable	2	0	Singing and calling males in suitable

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
														breeding habitat during visit 1
Reed Warbler	*Acrocephalus scirpaceus*		☐	☐	☐		2	1	5	3	Probable	3	0	Two singing males in suitable breeding habitat during visit 2
Robin	*Erithacus rubecula*		☐	☐	☐	3	1	1	1		Probable	0	1	Multiple singing males in suitable breeding habitat during visit 1
Rook	*Corvus frugilegus*		☐	☐	☐		3				Not breeding			Three adults feeding in arable field during visit 2
Sedge Warbler	*Acrocephalus schoenobaenus*		☐	☐	☐		2	2	1	1	Probable	1		Multiple males singing in suitable breeding habitat during visit 1
Shelduck	*Tadorna tadorna*		☐	☐	☐			1 pair	2		Possible			Pair flew north during visit 3
Skylark	*Alauda arvensis*		☐	☒	☐	1	1		2	1	Probable		1	Singing male on arable field during visit 1
Stock Dove	*Columba oenas*		☐	☐	☐	1	3	1	2		Possible			Single adult flying northwest through survey area toward Hall Farm during visit 1
Stonechat	*Saxicola rubicola*		☐	☐	☐		1				Possible			Singing male in suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Whitethroat	*Curruca communis*		☐	☐	☐			2		1	Probable	1		Multiple singing males in suitable breeding habitat during visit 3
Woodpigeon	*Columba palumbus*		☐	☐	☐	29	2	2	8	1	Possible			Present in suitable breeding habitat, some display flights during visit 1.
Wren	*Troglodytes troglodytes*		☐	☐	☐	5	5	4	2	1 active nest	Confirmed	1	1	Active nest recorded during visit 5
Yellow Wagtail	*Motacilla flava*		☐	☒	☐					1	Possible (arable land adjacent to BBS)			Adult in suitable breeding habitat during visit 1
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	1			1		Possible			Singing male in suitable breeding habitat during visit 1
Total						**38**								
BoCC 5 Red List						**5**								
BoCC 5 Amber List						**13**								
BoCC 5 Green List						**19**								
Schedule 1 Species						**2**								
NERC Section 41						**7**								
Annex 1 Species						**1**								

Table F.6 – Breeding bird survey results for Keadby Ash Tip, breeding bird survey area 6

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	4	4	4						Pair observed in suitable breeding habitat visit 1, singing males
Blackcap	*Sylvia atricapilla*		☐	☐	☐		3	1						Multiple males singing in suitable breeding habitat during visit 2
Blue Tit	*Cyanistes caeruleus*		☐	☐	☐	3		6			Confirmed			Singing males in suitable breeding habitat visit 1, chicks present visit 3
Buzzard	*Buteo buteo*							1	1					
Carrion Crow	*Corvus corone*		☐	☐	☐		8	3						
Chaffinch	*Fringilla coelebs*		☐	☐	☐	3	5	1						Multiple males singing in suitable breeding habitat during visit 2
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	10	4	3	1					Multiple males singing in suitable breeding habitat during visits 1-3
Dunnock	*Prunella modularis*		☐	☒	☐	4	2	3	1					
Fieldfare	*Turdus pilaris*		☒	☐	☐	5								

[2] Green = Status on BoCC5 Green List | Amber = Status on BoCC5 Amber List | Red = Status on BoCC5 Red List

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Goldfinch	*Carduelis carduelis*		☐	☐	☐	14		21	1					
Great Tit	*Parus major*		☐	☐	☐	2	1							
Green Woodpecker	*Picus viridis*		☐	☐	☐	1	1		1					
Jackdaw	*Coloeus monedula*		☐	☐	☐		2	2						
Kestrel	*Falco tinnunculus*		☐	☐	☐	1	1		3					
Lesser Whitethroat	*Curruca curruca*		☐	☐	☐		1							
Linnet	*Linaria cannabina*		☐	☒	☐	9	7	43	6					
Little Egret			☐	☐	☒			1						
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐		2	6						
Magpie	*Pica pica*		☐	☐	☐	2	1	2	1					
Meadow Pipit	*Anthus pratensis*		☐	☐	☐	4	1	1						
Mistle Thrush	*Turdus viscivorus*		☐	☐	☐	1	2	1						
Pied Wagtail	*Motacilla alba*		☐	☐	☐	1	1	1						
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐		1							
Reed Warbler	*Acrocephalus scirpaceus*		☐	☐	☐			2						
Robin	*Erithacus rubecula*		☐	☐	☐	5	6	1						
Sand Martin	*Riparia riparia*		☐	☐	☐	3	10	12	20					
Sedge Warbler	*Acrocephalus schoenobaenus*		☐	☐	☐		2	2						

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Skylark	*Alauda arvensis*		☐	☒	☐				1					
Song Thrush	*Turdus philomelos*		☐	☒	☐	1	3	2	2					
Stock Dove	*Columba oenas*		☐	☐	☐	1								
Swallow	*Hirundo rustica*		☐	☐	☐		2							
Whitethroat	*Curruca communis*		☐	☐	☐		11	6						
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐		12	11						
Woodcock	*Scolopax rusticola*					1								
Woodpigeon	*Columba palumbus*		☐	☐	☐	2	3	1	2					
Wren	*Troglodytes troglodytes*		☐	☐	☐	4	6	5	3					
Yellow Wagtail	*Motacilla flava*		☐	☒	☐		1							
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	6	3	5	1					
Total		**38**												
BoCC 5 Red List		**7**												
BoCC 5 Amber List		**11**												
BoCC 5 Green List		**20**												
Schedule 1 Species		**1**												
NERC Section 41		**7**												
Annex 1 Species		**1**												

Table F.7 – Breeding bird survey results for Owston Ferry, breeding bird survey area 7

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	1	2	1	8		Confirmed	3	0	Two young observed and 3 adults seen entering suitable nesting habitat with food during visit 4
Blackcap	*Sylvia atricapilla*		☐	☐	☐	2	3	1	2		Probable	1	0	Male sing from same patch of suitable breeding habitat during multiple surveys
Black-headed Gull	*Chroicocephalus ridibundus*		☐	☐	☐	1	1				Possible			Bird calling from suitable breeding habitat during visit 1
Blue Tit	*Parus caeruleus*		☐	☐	☐		3		2 family		Confirmed	2	0	Families recorded during visit 4
Bullfinch	*Pyrrhula pyrrhula*		☐	☒	☐		1		5		Confirmed	1	0	Fledgling seen at southern woodland of site during visit 4
Buzzard	*Buteo buteo*		☐	☐	☐				1		Possible			Individual seen in suitable breeding habitat during visit 5
Canada Goose	*Branta canadensis*		☐	☐	☐				1		Non-breeding			One over the site during visit 4
Carrion crow	*Corvus corone*		☐	☐	☐	1	1	1	5		Possible			Bird calling from suitable breeding habitat during visit 1

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Cetti's Warbler	*Cettia cetti*		☒	☐	☐	1	1	2			Probable	1		Male sing from same patch of suitable breeding habitat during visits 1, 2 and 3
Chaffinch	*Fringilla coelebs*		☐	☐	☐	3	3		2		Probable	0	1	Male singing in same area of suitable habitat during visits 1 and 2
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	4	3	1	9	1	Confirmed	3	0	Adult seen entering suitable nesting habitat with food during visit 4
Collared Dove	*Streptopelia decaocto*		☐	☐	☐	1	1	1		1	Possible			Bird calling from suitable breeding habitat during visit 1
Coot	*Fulica atra*		☐	☐	☐	1		1	10	1	Confirmed	3	0	Three adults, one seen with 4 chicks, the other 3 chicks, one no chicks during visit 4
Dunnock	*Prunella modularis*		☐	☒	☐	1	2	2	4		Confirmed	2	0	Adults seen entering suitable nesting habitat with food during visit 4
Garden Warbler	*Sylvia borin*		☐	☐	☐		1				Possible			Male singing from suitable breeding habitat during visit 2
Goldfinch	*Carduelis carduelis*		☐	☐	☐	1	1	1	9	1 family	Confirmed	1	1	Family recorded during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Great Tit	*Parus major*		☐	☐	☐		2	1		1 family	Confirmed	1	0	Family recorded during visit 5
Greenfinch	*Chloris chloris*		☐	☐	☐		1		1		Possible			Male calling from suitable breeding habitat during visit 2
Green Woodpecker	*Picus viridis*		☐	☐	☐				3	1	Probable	1	0	Individual alarm calling in SW of site and a pair flushed from suitable breeding habitat on southern edge of quarry during visit 4
Grey Partridge	*Perdix perdix*		☐	☒	☐				2		Possible			Pair in suitable breeding habitat during visit 4
Greylag Goose	*Anser anser*		☐	☐	☐		1				Possible			Bird flying over site during visit 2
House Martin	*Delichon urbicum*		☐	☐	☐			8+		2	Non-breeding			Birds foraging over site during visit 3
Jackdaw	*Coloeus monedula*		☐	☐	☐		1		10		Probable	1		Adult seen with food during visit 2. Adult seen on tree with suitable nest cavities at SE 80272 01991 during visit 4
Kestrel	*Falco tinnunculus*		☐	☐	☐		1	1	1	1	Possible			Adult hunting along roadside during visit 2
Lesser Whitethroat	*Sylvia curruca*		☐	☐	☐		1				Possible			Male calling from boundary during visit 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Linnet	*Linaria cannabina*		☐	☒	☐	1	3	1	8		Probable	1+	0	Multiple singing males during visit 2
Little Grebe	*Tachybaptus ruficollis*		☐	☐	☐	1		1	1	1	Possible			Bird calling from suitable breeding habitat during visit 1
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐				8		Confirmed	1	0	Family recorded during visit 4
Magpie	*Pica pica*		☐	☐	☐	1		2			Possible			V1: calling bird from boundary hedgerow.
Mallard	*Anas platyrhynchos*		☐	☐	☐				6		Possible			Pair in suitable breeding habitat during visit 4
Mistle Thrush	*Turdus viscivorus*		☐	☐	☐		1				Possible			Male singing from suitable breeding habitat during visit 2
Moorhen	*Gallinula chloropus*		☐	☐	☐	1					Possible			Bird calling from suitable breeding habitat during visit 1
Pied Wagtail	*Motacilla alba*		☐	☐	☐	1			1		Confirmed	1	0	Adult seen entering suitable nesting habitat with food during visit 4
Reed Warbler	*Acrocephalus scirpaceus*		☐	☐	☐			1	7		Probable			Multiple males singing from suitable breeding habitat during visit 4
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐			1	1		Confirmed	1	0	Male seen entering suitable breeding habitat with food during visit 4

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Robin	*Erithacus rubecula*		☐	☐	☐	4	6		5		Confirmed	2	3	1 young observed during visit 4
Rook	*Corvus frugilegus*		☐	☐	☐				1		Possible			Individual calling from suitable breeding habitat during visit 4
Sedge Warbler	*Acrocephalus schoenobaenus*		☐	☐	☐		2		4		Probable	1	0	Two males singing from scrub during visit 2
Skylark	*Alauda arvensis*		☐	☒	☐	1			13		Probable	1+	0	Singing male over arable field during visits 1 and 4
Song Thrush	*Turdus philomelos*		☐	☒	☐	1			3	1	Probable	1	0	Male sing from same area of suitable habitat during visits 1 and 4
Sparrowhawk	*Accipiter nisus*		☐	☐	☐				1		Non-breeding			Male flew over site during visit 4
Starling	*Sturnus vulgaris*		☐	☒	☐				1		Possible			Individual foraging at site during visit 4
Stock Dove	*Columba oenas*		☐	☐	☐	1					Possible			Bird calling from suitable breeding habitat during visit 1
Swallow	*Hirundo rustica*		☐	☐	☐		2	10+			Possible			Two birds foraging over site during visit 2
Swift	*Apus apus*		☐	☒	☐			10+	4		Non-breeding			Ten birds foraging over site during visit 3
Treecreeper	*Certhia familiaris*		☐	☐	☐				1		Probable	1	0	Bird observed foraging and contact calling in

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
														suitable breeding habitat during visit 4
Tufted Duck	*Aythya fuligula*		☐	☐	☐	4	4	1	8		Possible			Two pairs seen in suitable breeding habitat during visit 4
Whitethroat	*Curruca communis*		☐	☐	☐		8	2	14	2	Confirmed	2	2	Adult seen feeding chick during visit 4
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐	1	5	1	5		Probable	1	0	Male singing from same area of suitable habitat during visits 2 and 4
Woodpigeon	*Columba palumbus*		☐	☐	☐	1	6	2	6	1	Possible			Multiples males calling during visit 2
Wren	*Troglodytes troglodytes*		☐	☐	☐	6	1	2	10	3	Probable	2	0	Six males calling from scrub/ hedgerows during visit 1
Yellow Wagtail	*Motacilla flava*		☐	☒	☐				2		Confirmed	1	0	Two adults seen flying into suitable nesting habitat with food during visit 4
Yellowhammer	*Emberiza citrinella*		☐	☒	☐		1		7		Confirmed	3	0	Males singing from suitable breeding habitat and adults foraging and flying into suitable breeding habitat during visit 4
Total						**53**								

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
BoCC 5 Red List						10								
BoCC 5 Amber List						17								
BoCC 5 Green List						24								
Schedule 1 Species						1								
NERC 41 Species						11								
Annex 1 Species						0								

Table F.8 – Breeding bird survey results for Graizelound, breeding bird survey area 8

Species	Latin Name	BoCC Status[5]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Barn Owl	*Tyto alba*		☒	☐	☐	1					Non-breeding			Individual flew north through site during visit 1
Blackbird	*Turdus merula*		☐	☐	☐	2	1			1	Probable	1	0	Multiple males singing from suitable breeding habitat during visit 1
Blackcap	*Sylvia atricapilla*		☐	☐	☐		2	1		2	Possible			Multiple males singing from suitable breeding habitat during visit 2
Black-headed Gull	*Chroicocephalus ridibundus*		☐	☐	☐					1	Non-breeding			Bird foraging on arable field during visit 5
Blue Tit	*Parus caeruleus*		☐	☐	☐	2	1		1 family	1 family	Confirmed	1	1	Family recorded during visit 4
Carrion Crow	*Corvus corone*		☐	☐	☐		1	1		73	Possible			Individual in suitable breeding habitat during visit 2
Chaffinch	*Fringilla coelebs*		☐	☐	☐		2			2	Confirmed	1	0	Young recorded during visit 5
Cetti's Warbler	*Cettia cetti*		☒	☐	☐						Possible			Male singing from suitable breeding habitat during visit 3
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	6	3	2			Probable	2	0	Multiple males singing from suitable breeding habitat during visit 1

Species	Latin Name	BoCC Status[5]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Dunnock	*Prunella modularis*		☐	☒	☐	2	1	2			Probable	1	0	Pair in suitable breeding habitat during visit 1
Goldfinch	*Carduelis carduelis*		☐	☐	☐	5	7	3			Probable	2	0	Pair in suitable breeding habitat during visit 1
Great Tit	*Parus major*		☐	☐	☐			1		4	Confirmed	1	0	Family recorded during visit 5
Greenfinch	*Chloris chloris*		☐	☐	☐				1		Possible			Adult seen in suitable habitat during visit 4
Kestrel	*Falco tinnunculus*		☐	☐	☐		1				Confirmed		1	Nest in box just outside of RLB at SK 79075 98057 found during visit 2
Linnet	*Linaria cannabina*		☐	☒	☐	2	17	1		2	Probable	1	0	Male singing from suitable breeding habitat during visit 1 and bird seen in same area during visit 5
Mallard	*Anas platyrhynchos*		☐	☐	☐		4	2		7	Confirmed	1	0	7 chicks seen visit 5
Pheasant	*Phasianus colchicus*		☐	☐	☐	1	1	1			Confirmed	1	0	Chicks heard calling at SK 79072 97971 during visit 2
Pied Wagtail	*Motacilla alba*		☐	☐	☐				1		Possible			Adult seen in suitable breeding habitat during visit 4

Species	Latin Name	BoCC Status[5]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Reed Warbler	*Acrocephalus scirpaceus*		☐	☐	☐			1	1		Possible			Male singing in suitable breeding habitat during visit 4
Robin	*Erithacus rubecula*		☐	☒	☐	3	1	1			Probable	1	0	Multiple males singing in suitable breeding habitat during visit 1
Sedge Warbler	*Acrocephalus schoenobaenus*		☐	☐	☐		1			1	Possible			Male singing in suitable breeding habitat during visit 2
Skylark	*Alauda arvensis*		☐	☒	☐	13	8	4	3	2	Probable	6	0	Multiple males singing in suitable breeding habitat during visit 1
Stock Dove	*Columba oenas*		☐	☐	☐		1				Possible			Male calling in suitable breeding habitat during visit 2
Whitethroat	*Curruca communis*		☐	☐	☐		7	1		5	Probable	2	0	Multiple males singing in suitable breeding habitat during visit 2
Woodpigeon	*Columba palumbus*		☐	☐	☐	2	1	27		8	Probable	1		Male calling in suitable breeding habitat during visit 1
Wren	*Troglodytes troglodytes*		☐	☐	☐	3	2	1		4	Probable	3		Multiple males singing in suitable breeding habitat during visit 1

Species	Latin Name	BoCC Status[5]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Yellow Wagtail	*Motacilla flava*		☐	☒	☐				1		Possible			Adult seen in suitable breeding habitat during visit 4
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	4	3	1		3	Probable	2	1	Multiple males singing in suitable breeding habitat during visit 1
Total						**28**								
BoCC 5 Red List						**5**								
BoCC 5 Amber List						**9**								
BoCC 5 Green List						**13**								
Schedule 1 Species						**2**								
NERC Section 41						**5**								
Annex 1 Species						**0**								

Table F.9 – Breeding bird survey results for the River Idle, breeding bird survey area 9

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	1	2	3	4	2	Confirmed	2	0	Adults seen entering suitable nesting habitat with food during visit 5
Blackcap	*Sylvia atricapilla*		☐	☐	☐	2	1	2	1	3	Probable	2	0	Two males singing from suitable breeding habitat during visit 1
Blue Tit	*Parus caeruleus*		☐	☐	☐	5	2		1	5	Confirmed	1	0	Family recorded during visit 5
Carrion Crow	*Corvus corone*		☐	☐	☐	5	2	3+			Confirmed	1	0	Family recorded during visit 3
Chaffinch	*Fringilla coelebs*		☐	☐	☐	7	8	2	18	4	Confirmed	2	1	Young recorded during visit 5
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	4	5	2	3		Probable	2	0	Multiple males singing from suitable breeding habitat during visit 1
Collared Dove	*Streptopelia decaocto*		☐	☐	☐					1	Possible			One calling during visit 5
Cuckoo	*Cuculus canorus*		☐	☐	☐		1				Possible			Male calling from outside survey area at SK 74746 97407 during visit 2
Dunnock	*Prunella modularis*		☐	☒	☐		1	2	3	1	Confirmed	2	0	Adult seen enetering suitable nesting habitat with food during visit 5

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Gadwall	*Mareca strepera*		☐	☐	☐		1				Non-breeding			Single male on river during visit 5
Goldfinch	*Carduelis carduelis*		☐	☐	☐	4	11	7	1		Probable	2	0	Multiple males singing from suitable breeding habitat during visit 1
Grasshopper Warbler	*Locustella naevia*		☐	☐	☐			1			Possible			Male singing from suitable breeding habitat during visit 3
Great Spotted Woodpecker	*Dendrocopos major*		☐	☐	☐	1	1				Possible			Individual recorded in suitable breeding habitat during visit 2
Great Tit	*Parus major*		☐	☐	☐	1		1+	1	3	Confirmed	1	0	Young recorded during visit 5
Green Woodpecker	*Picus viridis*		☐	☐	☐					1	Possible			Adult recorded in suitable breeding habitat during visit 5
Greenfinch	*Chloris chloris*		☐	☐	☐	1					Possible			Male singing from suitable breeding habitat during visit 1
Jackdaw	*Corvus monedula*		☐	☐	☐	2		2			Probable	1	0	Pair nest prospecting in suitable breeding habitat during visit 1
Kestrel	*Falco tinnunculus*		☐	☐	☐	1					Non-breeding			Adult hunting at site during visit 1

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Kingfisher	*Alcedo atthis*		☒	☐	☒			1		2	Confirmed	1	0	Two chicks recorded on river Idle during visit 5
Lesser Whitethroat	*Sylvia curruca*		☐	☐	☐		1				Possible			Male singing from north of redline boundary during visit 2
Linnet	*Linaria cannabina*		☐	☒	☐	4	3	3	1	2	Probable	1	0	Pair in suitable breeding habitat during visit 1
Little Egret	*Egretta garzetta*		☐	☐	☒				1		Non-breeding			Adult flew east over site during visit 4
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐	3			1 fam	1 fam	Confirmed	2	0	Family recorded during visits 4 and 5
Magpie	*Pica pica*		☐	☐	☐					1	Possible			Adult in suitable breeding habitat during visit 5
Mallard	*Anas platyrhynchos*		☐	☐	☐	3	12				Possible			Two pairs foraging in suitable breeding habitat during visit 2
Moorhen	*Gallinula chloropus*		☐	☐	☐	1	2				Probable	1	0	Pair recorded in suitable breeding habitat during visit 2
Mute Swan	*Cygnus olor*		☐	☐	☐				1 Ad		Possible			Adult recorded during visit 4
Oystercatcher	*Haematopus ostralegus*		☐	☐	☐	2	1		1		Possible			Pair foraging in arable field during visit 1
Red-legged Partridge	*Alectoris rufa*		☐	☐	☐		4				Possible			Two pairs recorded in suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐	5	2	1	2		Probable	1	0	Multiple males singing from suitable breeding habitat during visit 1
Reed Warbler	*Acrocephalus scirpaceus*		☐	☐	☐			3	2		Probable	1	0	Male singing from same area of suitable breeding habitat during visits 3 and 4
Robin	*Erithacus rubecula*		☐	☐	☐	2	2	3	1	4	Probable	2	0	Two males singing from suitable breeding habitat during visit 1
Sedge Warbler	*Acrocephalus schoenobaenus*		☐	☐	☐		1	1	1	1	Probable	1	0	Male singing from suitable breeding habitat during visit 3, 4 and 5
Shoveler	*Anas clypeata*		☐	☐	☐	2	2				Probable	1	0	Pair in suitable breeding habitat during visit 1 and 2
Skylark	*Alauda arvensis*		☐	☒	☐	17	10	5	4	2	Confirmed	8	0	Adult seen entering suitable nesting habitat with food during visit 5
Song Thrush	*Turdus philomelos*		☐	☒	☐				1		Possible			Male singing from suitable breeding habitat during visit 4
Starling	*Sturnus vulgaris*		☐	☒	☐					1	Possible			Adult recorded in suitable breeding habitat during visit 5
Stock Dove	*Columba oenas*		☐	☐	☐	2				1	Probable	1	0	Pair in suitable breeding habitat during visit 2

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Swallow	*Hirundo rustica*		☐	☐	☐		1				Non-breeding			Adult foraging over site during visit 2
Tree Sparrow	*Passer montanus*		☐	☒	☐	4	4				Possible			Two pairs foraging in suitable breeding habitat during visit 1 and 2
Whitethroat	*Curruca communis*		☐	☐	☐		4	5	3	3	Confirmed	3	0	Adults seen entering suitable nesting habitat with food during visit 5
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐	2	2	1			Probable	1	0	Two males singing from suitable breeding habitat during visit 1
Woodpigeon	*Columba palumbus*		☐	☐	☐	3	5	5	7	3	Probable	3	0	Multiple males calling from suitable breeding habitat during visit 1
Wren	*Troglodytes troglodytes*		☐	☐	☐	9	8	6	6	4	Probable	4		Multiple males singing in suitable breeding habitat during visit 1
Yellow Wagtail	*Motacilla flava*		☐	☒	☐				2	1	Possible			Adult seen in suitable breeding habitat during visit 4 and 5
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	7	5	1	3	2	Probable	3	0	Males fighting and singing from suitable breeding habitat during visit 1
Total						**46**								
BoCC 5 Red List						**9**								
BoCC 5 Amber List						**15**								

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
BoCC 5 Green List						21								
Schedule 1 Species						1								
NERC Section 41						9								
Annex 1 Species						2								

Table F.10 – Breeding bird survey results for Gringley on the Hill, breeding bird survey area 10

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	1			5	1	Confirmed	2		Adult entering suitbale breeding habitat with food during visit 5
Blackcap	*Sylvia atricapilla*		☐	☐	☐	1	1		1		Probable	0	1	Male singing from same area of suitable breeding habitat during visits 1 and 2
Blue Tit	*Parus caeruleus*		☐	☐	☐			3	2 (1 family group)		Confirmed	1	0	Family recorded during visit 4
Buzzard	*Buteo buteo*		☐	☐	☐				1		Non-breeding			Adult seen flying north to the northwest of the site during visit 4
Carrion Crow	*Corvus corone*		☐	☐	☐	2	1				Confirmed	1	0	Nest recorded during visit 2
Chaffinch	*Fringilla coelebs*		☐	☐	☐	4	3	11	5	1	Probable	1	3	Males singing and calling from same patches of suitable habitat during visits 1 and 2. Possible nest recorded during visit 3
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	2	1	3	2	2	Probable	1	0	Male singing from same area of suitable breeding habitat during visits 1 and 2
Corn Bunting	*Emberiza calandra*		☐	☒	☐					1	Possible			Adult in suitable breeding habitat during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Dunnock	*Prunella modularis*		☐	☒	☐	1					Possible			Male singing from suitable breeding habitat during visit 1
Goldfinch	*Carduelis carduelis*		☐	☐	☐			4		3	Possible			Pair in suitable breeding habitat during visit 3
Great Tit	*Parus major*		☐	☐	☐	1	1	2		1	Probable	1	0	Male singing from suitable breeding habitat during visit 1 and adult recorded in same area during visit 3
Greenfinch	*Chloris chloris*		☐	☐	☐				1		Possible			Calling in suitable breeding habitat during visit 3
House Martin	*Delichon urbicum*		☐	☐	☐			4	6	1	Non-breeding			Non-breeding in RLB but probable breeding in houses adjacent to site. Recorded during visit 3
Jackdaw	*Coloeus monedula*		☐	☐	☐				1		Possible			Adult in suitable breeding habitat during visit 3
Lesser Whitethroat	*Sylvia curruca*		☐	☐	☐		3	3		1	Probable	0	3	Three males singing from suitable breeding habitat during visit 2 and 3
Linnet	*Linaria cannabina*		☐	☒	☐			6	3	4	Probable	2	0	Adult in same area of suitable breeding habitat during visits 3 and 4. Pair in suitable breeding habitat during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐			1			Possible			One calling from suitbale breeding habitat during visit 3
Pheasant	*Phasianus colchicus*		☐	☐	☐	1	1				Possible			One calling from suitbale breeding habitat during visit 1
Pied Wagtail	*Motacilla alba*		☐	☐	☐			2		1	Possible			One flew west over the site during visit 3. One recorded on nearby properties during visit 3 and 5
Red-legged Partridge	*Alectoris rufa*		☐	☐	☐			1			Possible			Adult in suitable breeding habitat during visit 3
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐			2			Possible			One singing male in suitable breeding habitat during visit 3
Robin	*Erithacus rubecula*		☐	☐	☐	1	1	2	4		Probable	0	1	Male singing from same area of suitable breeding habitat during visits 1, 2, 3 and 4
Skylark	*Alauda arvensis*		☐	☒	☐	2	3	10	11		Confirmed			Bird flushed off nest during visit 3
Song Thrush	*Turdus philomelos*		☐	☒	☐					2	Probable	2	0	Two males singing from suitable breeding habitat during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Sparrowhawk	*Accipiter nisus*		☐	☐	☐					1	Possible			Male recorded in suitable breeding habitat during visit 5
Swallow	*Hirundo rustica*		☐	☐	☐				1		Non-breeding			Likely breeding off site in suitable open buildings observed to west. Recorded during visit 4
Swift	*Apus apus*		☐	☐	☐			3			Non-breeding			Likely breeding off site in suitable open buildings observed to west. Recorded during visit 3
Whitethroat	*Curruca communis*		☐	☐	☐		1	6	5		Probable	4	0	Six males singing from suitable breeding habitat during visit 3
Woodpigeon	*Columba palumbus*		☐	☐	☐	4+	2	5	5	5	Probable	3	0	Five males singing from suitable breeding habitat during visit 4
Wren	*Troglodytes troglodytes*		☐	☐	☐	2	2	3	7	3	Probable	2	2	Two singing males singing from suitable breeding habitat during visit 1
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	1	2	4	5	2	Probable	1	1	Two singing males singing from suitable breeding habitat during visit 3
Total						**31**								
BoCC 5 Red List						**7**								
BoCC 5 Amber List						**7**								

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
BoCC 5 Green List						15								
Schedule 1 Species						0								
NERC Section 41						7								
Annex 1 Species						0								

Table F.11 – Breeding bird survey results for Beckingham Wood, breeding bird survey area 11

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	1	1	2	4+ family		Confirmed	1	0	Family recorded during visit 5
Blackcap	*Sylvia atricapilla*		☐	☐	☐		1	1	1		Probable	1	0	Male recorded singing from same area of suitable breeding habitat during visits 2, 3 and 4
Blue Tit	*Parus caeruleus*		☐	☐	☐	4			2		Possible			Adults observed in suitable breeding habitat during visit 1 and 4
Bullfinch	*Pyrrhula pyrrhula*		☐	☒	☐		1				Possible			Adult in suitable breeding habitat during visit 2
Buzzard	*Buteo buteo*		☐	☐	☐		1				Possible			Adult calling from suitable breeding habitat during visit 2
Carrion Crow	*Corvus corone*		☐	☐	☐	1	5+	1	1	2	Possible			Adults calling from suitable breeding habitat during visit 1
Chaffinch	*Fringilla coelebs*		☐	☐	☐	3	2	6	3	2	Probable	2	1	Three males singing from suitable breeding habitat during visit 1
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	1	1		2		Probable	1	0	Male singing from same area of suitable breeding habitat during visits 1 and 2

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Coal Tit	*Periparus ater*		☐	☐	☐				1		Possible			Adult calling from suitable breeding habitat during visit 4
Dunnock	*Prunella modularis*		☐	☒	☐	1			1		Probable	1	0	Male singing from same area of suitable breeding habitat during visits 1 and 4
Goldcrest	*Regulus regulus*		☐	☐	☐			1	1		Probable	1	0	Male singing from same area of suitable breeding habitat during visits 3 and 4
Goldfinch	*Carduelis carduelis*		☐	☐	☐			2			Possible			Pair seen in suitable breeding habitat during visit 3
Jackdaw	*Corvus corone*		☐	☐	☐	1			3		Possible			Adult seen in suitable breeding habitat during visit 3
Kestrel	*Falco tinnunculus*		☐	☐	☐		1				Possible			Adult foraging at site during visit 2
Linnet	*Linaria cannabina*		☐	☒	☐	4	2		3		Possible			Adults recorded in suitable breeding during visit 1
Meadow Pipit	*Anthus pratensis*		☐	☐	☐		1				Possible			Adult seen in suitable breeding habitat during visit 2
Pheasant	*Phasianus colchicus*		☐	☐	☐	1	1		1		Possible			Adult seen in suitable breeding habitat during visit 1

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Pied Wagtail	*Motacilla alba*		☐	☐	☐	1			1 family		Confirmed	1	0	Juveniles recorded during visit 4
Red-legged Partridge	*Alectoris rufa*		☐	☐	☐	1	1	1			Probable	1	0	Pair seen in suitable breeding habitat during visit 1
Reed Bunting	*Emberiza schoeniclus*		☐	☐	☐				1		Possible			Male singing from suitable breeding habitat during visit 4
Robin	*Erithacus rubecula*		☐	☐	☐	2	1	2	2		Probable	2	0	Two males singing from suitable breeding habitat during visit 1
Skylark	*Alauda arvensis*		☐	☐	☐	2	4	3	4	1	Probable	2	1	Two males singing from suitable breeding habitat during visit 1
Song Thrush	*Turdus philomelos*		☐	☐	☐			1	1	1	Probable	1	0	Male singing in suitable breeding habitat during visits 3 and 4
Stock Dove	*Columba oenas*		☐	☐	☐	2	2	1 out of BO box			Confirmed	1	0	Adult flew out of nest box during visit 3
Swallow	*Hirundo rustica*		☐	☐	☐			6	2		Non-breeding			Adults foraging over site during visit 3

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Whitethroat	*Curruca communis*		☐	☐	☐	1	1	9	4	1	Probable	3	1	Multiple males singing from suitable breeding habitat during visit 3
Woodpigeon	*Columba palumbus*		☐	☐	☐	1	2	3	3		Possible			Adult in suitable breeding habitat during visit 1
Wren	*Troglodytes troglodytes*		☐	☐	☐	3	4	8	5	2	Probable	2	1	Multiple males singing from suitable breeding habitat during visit 1
Yellow Wagtail	*Motacilla flava*		☐	☐	☐		1		1		Confirmed	1	0	Observed entering suitable breeding habitat with food during visit 4
Yellowhammer	*Emberiza citrinella*		☐	☐	☐	1	3	3	4	1	Probable	0	1	Males singing from same area of suitable breeding habitat during visit 2, 3,4 and 5
Total						**30**								
BoCC 5 Red List						**4**								
BoCC 5 Amber List						**10**								
BoCC 5 Green List						**14**								
Schedule 1 Species						**0**								
NERC Section 41						**8**								
Annex 1 Species						**0**								

Table F.12 – Breeding bird survey results for West Burton, breeding bird survey area 12

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	3	8	6	10	3	Confirmed	6	0	Adult recorded feeding young during visit 3
Blackcap	*Sylvia atricapilla*		☐	☐	☐	3	5	5	2	2	Probable	3	0	Multiple males singing from suitable breeding habitat during visit 1
Blue Tit	*Parus caeruleus*		☐	☐	☐	3	4	5	8	1	Confirmed	4	0	Family recorded during visit 5
Buzzard	*Buteo buteo*		☐	☐	☐			1			Possible			Adult recorded in suitable breeding habitat during visit 3
Carrion Crow	*Corvus corone*		☐	☐	☐	1	1	3	34	11	Confirmed	1	0	Nest recorded during visit 4
Chaffinch	*Fringilla coelebs*		☐	☐	☐	6	3	7	3	3	Confirmed	1	0	Adult observed feeding young during visit 3
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	5	5	5	2	2	Probable	3	0	Multiple males singing from same areas of suitable breeding habitat during visit 1 and 2
Dunnock	*Prunella modularis*		☐	☒	☐		4		1		Probable	1	0	Male singing from same area of suitable breeding habitat during visits 2 and 4
Goldfinch	*Carduelis carduelis*		☐	☐	☐	1					Possible			Adult seen in suitable breeding habitat during visit 1
Great Tit	*Parus major*		☐	☐	☐		2		2		Confirmed	1	0	Family recorded during visit 4
Greenfinch	*Chloris chloris*		☐	☐	☐					1	Confirmed	1	0	Family recorded during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Jackdaw	*Coloeus monedula*		☐	☐	☐		1	1	7	1	Confirmed	1	0	Adult observed leaving nest hole during visit 4
Lesser Whitethroat	*Sylvia curruca*		☐	☐	☐		1				Possible			Male singing from suitable breeding habitat during visit 2
Magpie	*Pica pica*		☐	☐	☐	2			1		Possible			Pair seen in suitable breeding habitat during visit 1
Mallard	*Anas platyrhynchos*		☐	☐	☐			1			Non-breeding			Adult in ditch during visit 3
Moorhen	*Gallinula chloropus*		☐	☐	☐	1					Possible			Adult in suitable breeding habitat during visit 1
Pheasant	*Phasianus colchicus*		☐	☐	☐		2			1	Possible			Male calling from suitable breeding habitat during visit 2
Robin	*Erithacus rubecula*		☐	☐	☐	4	5			2	Probable	2	1	Multiple males singing from same areas of suitable breeding habitat during multiple visits
Skylark	*Alauda arvensis*		☐	☒	☐	9	7	4	4		Probable	5	0	Multiple males singing from suitable breeding habitat during visit 1
Song Thrush	*Turdus philomelos*		☐	☒	☐	3	4	3	2	1	Probable	0	2	Multiple males singing from suitable breeding habitat during visit 1
Stock Dove	*Columba oenas*		☐	☐	☐	1					Possible			Male singing from suitable breeding habitat during visit 1
Treecreeper	*Certhia familiaris*		☐	☐	☐					1	Possible			Male calling from suitable breeding habitat during visit 5

Species	Latin Name	BoCC Status[2]	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Whitethroat	*Curruca communis*		☐	☐	☐			3	2	1	Probable	2	0	Males singing from same area of suitable breeding habitat during visit 1 and 3
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐	1	2	1	2		Probable	1	0	Males singing from same area of suitable breeding habitat during visit 2 and 4
Woodpigeon	*Columba palumbus*		☐	☐	☐	4	19	5	4	1	Probable	1	0	Males singing from same area suitable breeding habitat during visit 1 and 3
Wren	*Troglodytes troglodytes*		☐	☐	☐	10	9	10	7	5	Probable	7		Multiple males singing from suitable breeding habitat during multiple visits
Yellowhammer	*Emberiza citrinella*		☐	☒	☐			1			Possible			Adult seen in suitable breeding habitat during visit 3
Total						**27**								
BoCC 5 Red List						**3**								
BoCC 5 Amber List						**9**								
BoCC 5 Green List						**14**								
Schedule 1 Species						**0**								
NERC Section 41						**4**								
Annex 1 Species						**0**								

Table F.13 – Breeding bird survey results for Fledborough, breeding bird survey area 13

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Blackbird	*Turdus merula*		☐	☐	☐	2	3	6	11	2	Confirmed	5	1	Adults seen with food entering suitable nesting habitat and two young recorded during visit 4
Blackcap	*Sylvia atricapilla*		☐	☐	☐		1			1	Probable	1	0	Male singing in same area of suitable breeding habitat during multiple visits
Blue Tit	*Parus caeruleus*		☐	☐	☐		1		7	2	Confirmed	1	0	Family recorded during visit 4
Buzzard	*Buteo buteo*		☐	☐	☐	1					Non-breeder			Flew over site to west during visit 2
Carrion Crow	*Corvus corone*		☐	☐	☐	5	3		1	6	Confirmed	1	0	Nest recorded during visit 5
Chaffinch	*Fringilla coelebs*		☐	☐	☐	8	6	4	5		Probable		0	Multiple males singing from suitable breeding habitat during multiple visits
Chiffchaff	*Phylloscopus collybita*		☐	☐	☐	2	2	1			Probable	0	1	Male singing from suitable breeding habitat during multiple visits
Dunnock	*Prunella modularis*		☐	☒	☐	2	1	3	1	2	Confirmed	1	0	Adult seen entering suitable nesting habitat with food
Goldfinch	*Carduelis carduelis*		☐	☐	☐	4		6	1	1	Possible			Three pairs recorded suitable breeding habitat during visit 3

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Great Tit	*Parus major*		☐	☐	☐	1	3	1	9		Confirmed	1	0	Family recorded during visit 4
Green Woodpecker	*Picus viridis*		☒	☐	☐	1			1		Probable	1	0	Calling from suitable breeding habitat during multiple visits
Greenfinch	*Chloris chloris*		☐	☐	☐					1	Possible			Calling from suitable breeding habitat during visit 5
Grey Partridge	*Perdix perdix*		☐	☒	☐			2			Possible			Adults seen in suitable breeding habitat during visit 3
Greylag Goose	*Anser anser*		☐	☐	☐	2	1	16	1	11	Confirmed	1	0	Family recorded during visit 3
House Sparrow	*Passer domesticus*		☐	☒	☐	12			7		Probable	1	0	Colony recorded during visit 1
Kestrel	*Falco tinnunculus*		☐	☐	☐	1			1		Non-breeder			Individual foraging over site during visits 1 and 4
Lesser Whitethroat	*Sylvia curruca*		☐	☐	☐		1				Possible			Male singing from suitable breeding habitat during visit 2
Linnet	*Linaria cannabina*		☐	☒	☐	7	4	6	6	9	Confirmed	1	0	Family recorded during visit 4
Little Owl	*Athene noctua*		☐	☐	☐		1			1	Probable	1	0	Adults observed in suitable breeding habitat during visit 2 and 5

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
Long-tailed Tit	*Aegithalos caudatus*		☐	☐	☐				3		Confirmed	1	0	Family recorded during visit 4
Mallard	*Anas platyrhynchos*		☐	☐	☐	4	2	2	4		Possible			Two pairs recorded in suitable breeding habitat during visit 1
Pied Wagtail	*Motacilla alba*		☐	☐	☐	1					Possible			Adult in suitable breeding habitat during visit 1
Red-legged Partridge	*Alectoris rufa*		☐	☐	☐					1	Possible			Adult in suitable breeding habitat during visit 5
Reed Bunting	*Emberiza schoeniclus*		☐	☒	☐				1		Possible			Male singing in suitable breeding habitat during visit 4
Robin	*Erithacus rubecula*		☐	☐	☐		3		2	1	Confirmed	1	0	Family recorded during visit 4
Skylark	*Alauda arvensis*		☐	☒	☐	20	10	15	19	6	Confirmed	10	0	Family recorded during visit 4
Song Thrush	*Turdus philomelos*		☐	☒	☐	2					Possible			Adults seen in suitable breeding habitat during visit 1
Stock Dove	*Columba oenas*		☐	☐	☐				4		Possible			Two pairs foraging on site during visit 4
Swallow	*Hirundo rustica*		☐	☐	☐		2	2			Probable	1	0	Birds foraging over site during visit 2. Old nest found in farm building during visit 3
Whitethroat	*Curruca communis*		☐	☐	☐		3	5	1	2	Probable	1	1	Multiple males singing from same areas of suitable

Species	Latin Name	BoCC Status2	Schedule 1	NERC Section 41	Annex 1	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Breeding Status	Number of Territory	Edge Territories	Comments
														breeding habitat during multiple visits
Willow Warbler	*Phylloscopus trochilus*		☐	☐	☐				1		Possible			Male singing from suitable breeding habitat during visit 4
Woodpigeon	*Columba palumbus*		☐	☐	☐		3	1			Possible			Adults in suitable breeding habitat during visit 2
Wren	*Troglodytes troglodytes*		☐	☐	☐	2	5	3	2	2	Probable	2	1	Multiple males singing from same areas of suitable breeding habitat during multiple visits
Yellowhammer	*Emberiza citrinella*		☐	☒	☐	4	5	4	3	3	Probable	1	1	Multiple males singing from same area of suitable breeding habitat multiple visits and pair seen in suitable breeding habitat during multiple visits
Total						**34**								
BoCC 5 Red List						**6**								
BoCC 5 Amber List						**11**								
BoCC 5 Green List						**15**								
Schedule 1 Species						**0**								
NERC Section 41						**8**								
Annex 1 Species						**0**								

National Grid plc
National Grid House,
Warwick Technology Park,
Gallows Hill, Warwick.
CV34 6DA United Kingdom

Registered in England and Wales
No. 4031152
nationalgrid.com