



**East Pye Solar  
Environmental Statement  
Volume 3: Appendix 8.2 – Invertebrate Survey Report**

**Revision 1  
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## Non-Technical Summary

The survey work is intended to provide a broad, or 'high-level' understanding of the value of the Order Limits for invertebrates, in particular the invertebrates of field verges and margins potentially disturbed by works or otherwise in proximity to solar arrays during operation and maintenance. In this regard the objectives are to characterise the assemblages of invertebrates in terms of taxonomic composition, the main habitat and microhabitat associations, the presence of specialist species and also the presence of rare, scarce or otherwise significant species.

The data search provided 318 individual post-1990 records for seventy species. Fifty of these are widespread but declining moth species with priority species status and are mostly habitat generalists. The twenty rare and scarce species include four specialists: two species associated with scrub edge, one species with rich flower resources, and one species of bare sand and chalk.

The field surveys were undertaken in August-September 2024 and August-September 2025. A total of 462 species of invertebrate were recorded across the Order Limits.

A total of twelve rare and scarce species were recorded from fifteen survey stations. In general terms, the rare and scarce species were of two kinds: those that are likely to be under-recorded because they come from taxonomic groups that are difficult for non-specialists to identify, and those that have undergone recent range expansions and whose status may justify revision.

A relatively low proportion of recorded invertebrates have specialist habitat requirements. Of 462 species recorded, only 39 are specialists. The specialist habitat requirements are mostly those of open habitats.

Overall, adopting a precautionary approach, and considering the information provided above, it is assessed that the Order Limits is of Local importance for invertebrates.

### Disclaimer

**This Executive Summary contains an overview of the key findings and conclusions. However, no reliance should be placed on any part of the executive summary until the whole of the report has been read.**

# 1 Introduction

## 1.1 Overview

- 1.1.1 Stantec was commissioned by East Pye Solar Limited to undertake Invertebrate surveys in relation to an application to be made to the Secretary of State under Section 37 of the Planning Act 2008 (as amended), seeking a DCO for the Scheme on land located south of Norwich and north of Harleston (the Order Limits), see further details below. The “Survey Area” includes habitats within Sites 1-10 and the BESS Site.
- 1.1.2 This report provides detailed baseline ecological information regarding invertebrates gathered to inform the Environmental Impact Assessment (EIA) process. Baseline data has been compiled from an ecological desk study, as well as from terrestrial invertebrate surveys. Surveys commenced in 2024 and continued in 2025.

### Scope of report

- 1.1.3 The survey work is intended to provide a broad, or ‘high-level’ understanding of the value of the Order Limits for invertebrate assemblages, in particular the invertebrates of field verges and margins potentially disturbed by proposed construction and decommissioning phases and/or in proximity to arrays during the operational and maintenance phase. In this regard the objectives are to characterise the assemblage of invertebrates in terms of taxonomic composition, the main habitat and microhabitat associations, the presence of specialist species and also the presence of rare, scarce or otherwise significant species.

## 1.2 Order Limits Context and Scheme Description

- 1.2.1 The Order Limits are located within the administrative areas of Norfolk County Council (NNC) and South Norfolk Council (SNC). Order Limits are the maximum extent of land anticipated to be acquired and/or used for the construction, operation and maintenance, and decommissioning phases of the Scheme. A description of the Order Limits can be found in **ES: Chapter 3 The Order Limits [EN0110014/APP/6.1.3]**.
- 1.2.2 The Order Limits are not within an area identified by Buglife (2025) as an ‘Important Invertebrate Area’. *Invertebrates and Their Habitats in Natural Areas. Volume 1 – Midlands and Northern Areas* (Drake *et al.*, 1998) identifies the Site as being positioned within the ‘East Anglian Plain Natural Area’, and within this Natural Area the more important invertebrate assemblages are associated with: ancient coppice woodlands, hay meadows, hedgerows, valley fens, parks and pasture-woodlands, and sand pits. Arable farmland is not listed as supporting important assemblages, but the associated features present within the wider agricultural landscape are identified within the Natural Area as being of potentially greater value are conservation headlands, hedgerows, buffer zones by watercourses, disturbed soils by wayside and species associated with annual plants
- 1.2.3 The location of the Order Limits and surrounding landscape is shown in **Figure 1**.

## The Scheme

- 1.2.4 The Scheme comprises the construction, operation and maintenance, and decommissioning of a solar photovoltaic (PV) electricity generating station with a total capacity exceeding 100 megawatts (MW) and associated development including a Battery Energy Storage System (BESS), up to three 132 kV Project Substations and up to three 400kV Project Substations, Grid Connection Infrastructure and a new National Grid Substation.

## 1.3 Legislation and Policy Context

### Overview

- 1.3.1 The following key pieces of overlapping nature conservation legislation are relevant to invertebrates in a planning context (Hopkins and Thacker, 2016):
- The Conservation of Habitats and Species Regulations 2017 (as amended).
  - Natural Environment and Rural Communities Act 2006 (NERC 2006).
  - The Wildlife and Countryside Act, 1981 (as amended) (WCA 1981).
- 1.3.2 With respect to planning policies, the National Planning Policy Framework, the National Policy Statement (NPS) for Energy (EN-1) 2025<sup>1</sup>, the NPS for Renewable Energy Infrastructure (EN-3) 2025<sup>2</sup> and the NPS for electricity networks infrastructure (EN-5) 2025<sup>3</sup> re-iterate the value assigned to protected priority species as identified by legislation.
- 1.3.3 Within this report 'species of conservation concern' is used as an umbrella term for any legally protected species, those identified as priority species, and other species that are considered to be rare or scarce. In broad terms these fall into the following categories:
- Any species listed in The Conservation of Habitats and Species Regulations 2017 (as amended) or fully protected via WCA 1981.
  - Priority Species of Principal Importance (SPI) listed on Section 41 of the NERC Act 2006 that are rare or scarce.
  - Priority SPIs listed on the on Section 41 of the NERC Act 2006 that are widespread but declining, such as many moth species. These are referred to as 'research only'<sup>4</sup>.
  - Other rare or scarce species<sup>5</sup> that are not listed by name within legislation or policy, but which are part of the wider invertebrate biodiversity.

<sup>1</sup> <https://www.gov.uk/government/publications/overarching-national-policy-statement-for-energy-en-1-2025>

<sup>2</sup> <https://www.gov.uk/government/publications/national-policy-statement-for-renewable-energy-infrastructure-en-3-2025>

<sup>3</sup> <https://www.gov.uk/government/publications/national-policy-statement-for-electricity-networks-infrastructure-en-5-2025>

<sup>4</sup> The 'research only' species are taken from a list of Biodiversity Action Plan species presented by Butterfly Conservation (2007) to encourage research into their ecology and the drivers for decline, but with these species are ultimately listed as SPI without being distinguished from rare or scarce species.

<sup>5</sup> Species on the Red data list (Wells, S.M., Pyle, R.M. and Collins, N.M. (compilers). 1983. The IUCN Invertebrate Red Data Book. IUCN, Gland, Switzerland and Cambridge, UK.) or beetles, butterflies and dragonflies listed on the Norfolk Biodiversity Partnership local biodiversity action plan (<https://www.norfolkbiodiversity.org/habitats-and-species/>)

## Legislation

- 1.3.4 Based on the survey findings, no legally protected species listed under the Conservation of Habitats and Species Regulations 2017 and WCA 1981 were recorded, and therefore, are not considered to be relevant. Therefore, the relevant national legislation considered is NERC 2006. This identifies a substantial number of invertebrates as priority SPIs within Section 41 and requires statutory bodies to have regard for their conservation.

## Planning Policy

- 1.3.5 The National Planning Policy Framework, the NPS for Energy (EN-1), the NPS for Renewable Energy Infrastructure (EN-3) and the NPS for electricity networks infrastructure (EN-5) re-iterate the value assigned to protected priority species as identified by legislation. re-iterates the importance of these priority species and local planning authorities are required to promote their “*protection and recovery*” via planning and development control.
- 1.3.6 Although the NPPF has an overarching aim of minimising impacts to biodiversity, the majority of rare or scarce species are not specifically recognised by legislation or planning policy. The level of protection afforded to these is undefined and should be considered within the overall aim of minimising impacts on biodiversity.

## Local Biodiversity Strategies

- 1.3.7 The Norfolk Biodiversity Action Plan (BAP)<sup>6</sup> lists only a few invertebrates, of which there are three species of ground beetle (*Carabidae*) listed. These are associated with disturbed ground including arable margins, but mostly on sandy or stony substrates, and the Site is outside of their reported ranges. It is therefore unlikely that species from the Norfolk BAP are of relevance here.

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<sup>6</sup> <https://www.norfolkbiodiversity.org/habitats-and-species/beetle/>

## 2 Methodology

### 2.1 Overview

2.1.1 The methods comprise standardised surveys of individual sampling stations, using timed surveys and a range of field techniques. With a large number of land parcels within the Order Limits the broad rationale was to maximise the spatial spread of survey stations but off-setting with a reduced duration of sampling on each occasion. At each station the sampling is equivalent to 40-minutes, divided between August and September.

### 2.2 Study Area

2.2.1 The Study Area incorporated all of the Order Limits, with at least one station per Site, see **Figure 1** for sampling station locations. The survey station locations are listed below:

- Sub-Site 1A;
- Sub-Site 2A;
- Sub-Site 2B;
- Sub-Site 2C;
- Site 3;
- Sub-Site 4A;
- Sub-Site 4B;
- Sub-Site 5A;
- Sub-Site 5B;
- Site 6;
- Sub-Site 7A;
- Sub-Site 7B;
- Sub-Site 7D;
- Sub-Site 7E;
- Sub-Site 7H;
- Sub-Site 7J;
- Sub-Site 7L;
- Sub-Site 8A;
- Site 9;
- Sub-Site 10C; and
- Sub-Site 10E.

2.2.2 Due to the temporary nature of impacts within the CRC route and Highway Works Areas these were not included within the survey effort.

### 2.3 Desk Study

2.3.1 A desk study was conducted to obtain data relating to GCN within the Order Limits and a 2km radius. Records were acquired from Norfolk Biodiversity Information Service (NBIS).

- 2.3.2 Additional contextual information was compiled from publicly available data sources:
- MAGIC (<http://www.magic.gov.uk>) – the Government’s on-line mapping service; and
  - Ordnance Survey mapping and publicly available Twenty-three survey stations aerial photography.

## 2.4 Survey Methods

- 2.4.1 Survey station locations across the Site were selected by inspection of aerial photography and during initial reconnaissance visits. Surveys took place on two occasions at each survey station. Surveys took place on 2<sup>nd</sup>, 7<sup>th</sup> and 8<sup>th</sup> August 2024, 17<sup>th</sup>, 18<sup>th</sup> and 19<sup>th</sup> of September 2024. Following from these 2024 surveys, Sub-Sites 2A, 2B and 2C (survey stations 18, 19, and 20) were surveyed on 20<sup>th</sup> August 2025 and 25<sup>th</sup> September 2025 due to these areas being included within the Order Limits at a later date. In addition, survey station 7 is no longer located within the Order Limits, and therefore will not be considered within this report. Survey stations are shown in **Figure 1** and further information is provided in **Table 2.1**.
- 2.4.2 The broad protocol for sampling follows that developed for *the Invertebrate Species-habitat Information System (ISIS)* (Webb and Lott, 2006; Drake *et al.*, 2007). Survey methods employed were sweep and spot netting, hand searching and vacuum sampling. Surveys were equivalent to one standard ISIS-compliant sample per station. Additionally, pitfall traps were installed for one week from 18<sup>th</sup> September 2024 at stations 1, 4a, 8, 12, and 15b and on 25<sup>th</sup> September 2025 at station 19. Five traps were deployed at each location.
- 2.4.3 To standardise terminology for habitat descriptions and associations, reference is made to the classification of habitats, microhabitat and specialist species (Specific Assemblage Types) as contained within the Pantheon database (Webb *et al.*, 2018).
- 2.4.4 The survey effort and methods are appropriate for the size of the Order Limits, the habitats present and likely quality of the Order Limits, following Natural England (*loc. cit.*) and English Nature (2005).
- 2.4.5 The taxonomic coverage of sampling was broad. For *Coleoptera*, the only exclusions were obscure subfamilies with poorly known statuses and ecologies (i.e. a subset of taxa not included in ISIS/Pantheon, for example *Staphylinidae: Aleocharinae* and the genus *Meligethes* in subfamily *Meligethinae* of family *Nitidulidae*). For *Diptera*, the vast majority of specimens were taken to species, a few to genus only and a very small number to family only (such as small ‘midges’ *Nematocera*). All the families considered by Webb *et al.* (*op. cit.*) to be ‘essential for a realistic evaluation’ or to ‘add noticeably’ to the evaluation were included. All spiders were included, except where unidentifiable as immatures. True bugs and *Auchenorrhyncha* were included. Some taxa excluded from Pantheon were recorded for inventory purposes, e.g. some flies from obscure families and sawflies. Parasitic *Hymenoptera* were excluded as many are difficult to identify and they have not been reviewed to assign conservation statuses.

**Table 2.1. Survey locations and habitat types sampled.**

Survey station	Site/Sub-Site	Grid reference	Habitat type
1	1A	616460,289070	Shady track, grassland and ditch north of woodland block.
2a	4A	620370,294730	Track with ephemeral vegetation.
2b	4B	620740,294630	Hedgerow and field verges.
3	7A	620940,295450	Tall ruderal vegetation on field edge.
4a	5A	622110,293660	Set aside near small woodland block.
4b	5B	622890,293480	Hedgerow and narrow verge.
5	6	624950,293890	Hedgerow and verge.
6	3	624600,292040	Field margin.
8	7B	623100,294830	Permanent grassland sloping down to a tributary of the River Tas.
9a	7D	623610,296390	A block of set aside north of woodland.
9b	7E	623890,295560	Hedgerow and field verge.
10	7H	625470,295100	Hedgerow, verge, bank and ditch.
11	7J	626120,295580	Set aside southeast of road.
12	8B	625790,296690	Tall grassland with some disturbed areas.
13	9	628270,297780	Field of apparent bumble/bird mix, hedgerow, verge and ditch.
14	10E	631270,296100	Narrow verge and tall ruderal vegetation.
15a	10C	629520,295780	Hedgerows, field margins.
15b	10D	630840,295570	Small triangle of permanent grassland with an abundance of fleabane.
17	7L	627430,295810	Narrow verge, hedgerow.
18	2A	618540,287750	Narrow verge, hedgerow.
19	2B	618960,288910	Verge, dry ditch, outgrown hedgerow with moribund ash.
20	2C	619100,289320	Verge and hedgerow.

## 2.5 Data Analysis

2.5.1 Species were classified into broad biotope, habitat and Specific Assemblage Type associations within the Natural England's Pantheon package (Webb *et al.*, loc. cit.). This standardises the descriptions of species' habitat and resource requirements and allows for the rapid identification of generalist and specialist species.

2.5.2 The formal evaluation of the survey areas is based on the numbers of species of conservation concern as defined below. Thus, species of conservation concern are broadly defined as Red Data Book<sup>7</sup> species (recorded in <30 tetrads on the national grid reference and in danger of extinction), Nationally Scarce<sup>8</sup> species (recorded in between 30 and 100 tetrads), and priority species defined as those listed in Section 41 of the NERC Act 2006 (**Table 2.2**); and Local species are considered to be of restricted

<sup>7</sup> Wells, S.M., Pyle, R.M. and Collins, N.M. (compilers). 1983. *The IUCN Invertebrate Red Data Book*. IUCN, Gland, Switzerland and Cambridge, UK.

<sup>8</sup> Wells, S.M., Pyle, R.M. and Collins, N.M. (compilers). 1983. *The IUCN Invertebrate Red Data Book*. IUCN, Gland, Switzerland and Cambridge, UK.

occurrence but do not justify listing in a category of greater rarity. Species that do not fall into these categories are 'common' or of 'least concern'.

2.5.3 Most of the conservation statuses listed below are not specifically identified or recognised within legislation or planning policies, the exceptions being Priority Species, protected species, and Habitats Directive: Annex II species. The other categories of conservation status are used to identify species of wider 'biodiversity value'.

**Table 2.2. Definitions and criteria to classify the conservation statuses of invertebrates.**

Conservation Status		Definition
IUCN	GB	
Critically Endangered (CR)	-	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered.
Endangered (EN)	-	A taxon is Endangered when the best available evidence indicates that it meets any of the Criteria A to E for Endangered.
Vulnerable (VU)	-	A taxon is Vulnerable when the best available evidence indicates that it meets any of the Criteria A to E for Vulnerable.
Near Threatened (NT)	-	A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.
-	Nationally Rare (NR) (covering the former categories of Red Data Book (RDB) including RDB 1, RDB 2 and RDB 3)	A species (not including introduced taxa) recorded from between 1 and 15 hectads of the Ordnance Survey national grid in Great Britain since 1990 and there is reasonable confidence that exhaustive recording would not find them in more than 15.
-	Nationally Scarce / Notable	Species which are estimated to occur in 16 to 100 10 km squares in Great Britain. The subdividing of this category into Nationally Scarce A and Nationally Scarce B has not been attempted for some species because of either the degree of recording that has been carried out in the group to which the species belongs, or because there is some other reason why it is not sensible to be so exact.
-	Nationally Scarce / Notable-A	Taxa which do not fall within RDB categories, but which are none-the-less uncommon in Great Britain occur in 30 or fewer 10 km squares of the National Grid.
-	Nationally Scarce / Notable-B	Taxa which do not fall within RDB categories, but which are none-the-less uncommon in Great Britain and thought to occur in between 31 and 100 10 km squares of the National Grid.
Least Concern (LC)		A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.
-	Local	Not rigidly defined, loosely referring to species confined to a particular habitat type or species that are too widespread to warrant Nationally Scarce status but are nevertheless infrequently encountered.
-	Priority Species	Species listed as Species of Principal; Importance via their inclusion on Schedule 41 of the NERC Act. Many Priority Species also have RDB or Nationally Scarce status, but a substantial number are widespread but declining moths and do not otherwise have a conservation status. These moths are typically habitat generalists and at least a few species would be expected at most sites.
-	Protected species	Defined here as species with legal protection via The Conservation of Habitats and Species Regulations 2017 (as amended), or the Wildlife and Countryside Act 1981 (as amended).

Conservation Status		Definition
IUCN	GB	
-	Habitats Directive: Annex II species	Those species for which Special Areas of Conservation (SAC) are designated, although in most cases only a sub-set of sites with these species are designated as SACs.

## 2.6 Evaluation

2.6.1 Evaluation of the fauna follows the criteria presented by Colin Plant Associates (2006) to define the significance of invertebrate habitats (with modifications to allow for the inclusion of Priority Species) (**Table 2.3**). A level of professional judgement is used in applying the criteria, taking into account the overall assemblages of species present and in particular whether individual habitats or resources support substantial numbers of specialist species, as informed by the Pantheon output.

**Table 2.3. The criteria used to define significance of invertebrate habitats.**

Geographical Significance	Description	Minimum qualifying criteria
International / European (Habitats Directive)	European important site	Internationally important invertebrate populations present, defined as: Designated as an SAC and/or Ramsar site for invertebrates or supporting part of a population for which an SAC/Ramsar is designated or containing habitats that are threatened or rare at the European level (including, but not exclusively so, habitats listed on the EU Habitats & Species Directive).
National	UK important site.	Achieving SSSI invertebrate criteria (Curzon <i>et al.</i> , 2019), or supporting sustainable populations of species that are listed as being RDB critically endangered, or supporting sustainable populations of species listed in Annex II of the Habitats Directive but not functionally linked to a population for which an SAC is designated, or supporting sustainable populations of species listed in and generally held to have RDB (endangered) status, or supporting sustainable populations of any species protected under the UK Wildlife and Countryside Act, as amended or containing important invertebrate habitats that are actively threatened nationally (Great Britain).
Regional	Site with populations of invertebrates or invertebrate habitats considered scarce or rare or threatened in midland England.	Habitat that is scarce or threatened in the region, or which is well-represented in the region but is rare or absent outside the region, and which has, or is reasonably expected to have, an assemblage of invertebrates that includes a combination of RDB and Nationally Scarce species amounting to at least ten such species in total or supporting sustainable populations of at least six Priority Species (excluding the widespread but declining moths).
County	Site with populations of invertebrates or invertebrate habitats considered scarce or rare or threatened in the county in question.	Habitat that is scarce or threatened in the county and contains or is reasonably expected to contain an assemblage of invertebrates including a combination of RDB or Nationally Scarce species, amounting at least five such species in total.
District	Site with populations of invertebrates or invertebrate habitats considered scarce or rare or threatened in the administrative District.	A rather vague definition of habitats falling below county significance level, but which may be of greater significance than merely Local. They include sites for which Nationally Scarce species in the range from 1 to 4 examples are reasonably expected, but not yet necessarily recorded, sites that have 1 to 4 Priority Species that also have RDB or Nationally Scarce status, and sites that have an outstanding assemblage of widespread but declining Priority Species moths.
Local	Site with populations of invertebrates or invertebrate habitats considered scarce or rare or threatened in the	Habitats or species unique or of some other significance within the local area.

Geographical Significance	Description	Minimum qualifying criteria
	affected and neighbouring Parishes.	
Site	–	Although almost no area is completely without significance these are the areas with nothing more than expected “background” populations of common species and the occasional Nationally Scarce species.

## 2.7 Survey Limitations

2.7.1 The surveys were compressed into August - September 2024 and August – September 2025, and therefore species will activity periods in spring and early-summer only will not have been included within the results. However, this is not considered to represent a significant constraint to providing a broad, or ‘high-level’ understanding of the value of the Order Limits for invertebrate assemblages.

## 2.8 Report Qualification

2.8.1 The above surveys have been completed in accordance with best practice guidance and with any modification consistent with the professional opinion of the surveyors.

2.8.2 The survey described here was undertaken in accordance with the best practice methodologies current at the time of commissioning, and with some modifications as described. Site circumstances, scientific knowledge or methodological requirements can change during the course of a project, and these external factors may impact on the scope of subsequent work requirements.

2.8.3 All survey work, identification and appraisal was undertaken by qualified and experienced entomologists, in accordance with the Code of Professional Conduct of the Chartered Institute of Ecology and Environmental Management (CIEEM).

2.8.4 All ecological surveys have an expected validity period owing to the tendency of the natural environment to change over time. This validity period varies from receptor to receptor and is also dependent on the degree of change in a site's management and overall landscape ecology. Where the potential for change is considered to be relevant to the Site, this is highlighted in the appropriate section.

2.8.5 This report does not purport to provide detailed, specialist legal advice. Where legislation is referenced, the reader should consult the original legal text, and/or the advice of a qualified environmental lawyer.

## 3 Results

### 3.1 Overview

3.1.1 This section presents the results of the data search and field surveys, with the raw field data provided in **Annex 1**.

### 3.2 Desk Study Results

3.2.1 The data search showed no designated sites within 2km of the Order Limits are designated for invertebrates or otherwise have invertebrates listed on the citations.

3.2.2 The data search provided 318 individual post-1990 records for 70 species:

- There are 50 species of moth with priority species status, based on national declines whilst remaining widespread (Butterfly Conservation, 2007). These are characterised as habitat generalists and often with a wide range of caterpillar foodplants.
- The 20 rare and scarce species comprise 16 that can be classified by Pantheon, and these comprise six species of open habitats and three associated with trees, plus two wetland species and one presumed coastal vagrant. The specialist terrestrial species (defined as species belonging to a Specific Assemblage Type) are associated with scrub edge (two species), rich flower resources (one species) and one of bare sand and chalk.

3.2.3 The spatial precision of some of the records is low. There are no particular concentrations of records suggesting higher value habitat locally, and the aggregations of moth records are associated with amateur naturalist trapping locations rather than particular habitat types/designated sites.

### 3.3 Field Survey Results

3.3.1 The large majority of the Study Area is intensively farmed agricultural land with negligible invertebrate interest. Semi-natural habitat at the survey locations was mostly restricted to field margins, hedgerows and ditches and areas of set-aside; the latter is not considered as permanent or semi-permanent habitat. Ponds and wet ditches are a minor features of the survey area, at low density and none of those were considered likely to support rare and scarce species, and none were surveyed.

3.3.2 A total of 462 species of invertebrate were recorded across the Study Area, the large majority of which were analysed by Pantheon. The recorded taxa that did not have information in the database were mostly flies from obscure families, and a few beetles and sawflies.

3.3.3 A total of twelve rare and scarce species were recorded from fifteen survey stations. The ecologies and known UK distribution of the rare and scarce species are summarised in **Table 3.1**. In general terms, the rare and scarce species were of two kinds: those that are likely to be under-recorded because they come from taxonomic groups that are difficult for non-specialists to identify, and those that have undergone

recent range expansions and whose status may justify revision. Around half of the rare and scarce species were specialists of open habitats or flower-rich areas.

**Table 3.1. Rare and scarce species\* recorded and their habitat associations.**

Order: family	Species	Designation	Survey station	Specific assemblage type	Notes
<i>Coleoptera: Coccinellidae</i>	<i>Hippodamia variegata</i>	Nb	13	-	Recorded from a range of habitats, where it feeds on aphids (Roy et al., 2011). More abundant than in the past. Mainly southern in the UK.
<i>Coleoptera: Staphylinidae</i>	<i>Tachinus flavipes</i>	Notable, NS	15b	-	A staphylinid beetle often found in association with dung. Its stronghold is East Anglia, and it is likely to be significantly under-recorded (Lane, 2019). Collected by pitfall trapping.
<i>Diptera: Sarcophagidae</i>	<i>Blaesoxipha plumicornis</i>	pNS; pNT	11	-	A parasitoid of grasshoppers, with a UK distribution largely southeast of The Wash (Falk and Pont, 2017).
<i>Diptera: Sarcophagidae</i>	<i>Sarcophaga arcipes</i>	Notable; pNS	5, 14	-	A carrion-associated flesh fly with a scattered distribution in the UK but mainly southern (Falk and Pont, op cit).
<i>Diptera: Tephritidae</i>	<i>Merzomyia westermanni</i>	Notable	15b	-	A fly whose larvae are found in the capitula of ragwort. A scattered mostly southern distribution (Nature Spot, 2025).
<i>Heteroptera: Lygaeida</i>	<i>Nysius graminicola</i>	RDB3	15b	F111	A seed-eating bug from a poorly known genus, which is possibly under-recorded as a consequence. Recorded in the UK from Kent and Dorset.
<i>Heteroptera: Miridae</i>	<i>Lygus pratensis</i>	RDB3	Throughout	F003	A plant-feeding mirid bug that is now common and no longer justifies an RDB designation. With a mostly southern distribution in the UK.
<i>Homoptera: Cicadellidae</i>	<i>Psammotettix albomarginatus</i>	Nb	5, 14	-	A grass-feeding leafhopper from dry habitats that is likely highly under-recorded owing to the difficulty of identification. Records are scattered across the south of the UK (NBN, 2025b).
<i>Homoptera: Delphacidae</i>	<i>Asiraca clavicornis</i>	Nb	11	F112	A distinctive planthopper frequently found on brownfield and other dry sites, apparently polyphagous. In the UK, mostly found in East Anglia, Kent and London, where there are numerous records (NBN, 2025c).

Order: family	Species	Designation	Survey station	Specific assemblage type	Notes
<i>Homoptera: Delphacidae</i>	<i>Xanthodelphax flaveola</i>	Na	9a	F003	A planthopper feeding on <i>Poa pratensis</i> in dry habitats (British Bugs, 2025). With a scattered distribution in the UK, and probably under-recorded.
<i>Hymenoptera: Halictidae</i>	<i>Lasioglossum malachurum</i>	Nb	12, 14	F002	Sharp-collared furrow bee. Nests on paths and tracks and sparsely vegetated south-facing slopes. Widespread in southern England and East Anglia (Falk, 2015). Polylectic.
<i>Hymenoptera: Halictidae</i>	<i>Lasioglossum pauxillum</i>	Na	3, 4a, 5, 9b	F002	Lobe-spurred furrow bee. Nesting in bare or sparsely vegetated habitats on light soils. Polylectic. Formerly scarce, but now one of the most frequently encountered <i>Lasioglossum</i> in southern England (Falk, op. cit.).
*The species considered scarce are those with the status of: Na, Nb, Notable or NS. The pre-fix 'p' means provisional.					
<b>Key</b>					
pNS Provisional Nationally Scarce					
pNT Provisional Near Threatened					
Na Nationally Notable A (occurring within 16-30 hectads)					
Nb Nationally Notable B (occurring within 31 to 100 hectads)					
NS Nationally Scarce					
RDB3 Red Data Book species					

3.3.4 A relatively low proportion of recorded invertebrates have specialist habitat requirements. Of 462 species recorded, only 39 were specialists. The specialist habitat requirements were mostly those of open habitats (**Table 3.2**).

**Table 3.2. Number of species and their habitat associations at different levels of habitat specificity.**

Biotope	No. of species	Broad habitat	No. of species	Specific assemblage type	No. of species
Open habitats	244	Tall sward & scrub	202	-	-
		Short sward & bare ground	40	F111 Bare sand & chalk	7
				F112 Open short sward	5
		Rich flower resource	1	-	-
		Upland	1	-	-
		-	-	F001 Scrub edge	8
				F002 Rich flower resource	10
F003 Scrub-heath & moorland	4				
Wetland	57	Acid & sedge peats	32	-	-
		Marshland	28	-	-
		Running water	7	-	-
		Wet woodland	4	-	-
	50	Shaded woodland floor	36	-	-

Biotope	No. of species	Broad habitat	No. of species	Specific assemblage type	No. of species
Tree-associated		Arboreal	7	-	-
		Decaying wood	8	A211 Heartwood decay	1
				A212 Bark & sapwood decay	3
Wet woodland	4	-	-		
Coastal	1	Saltmarsh	1	M311 Saltmarsh & transitional brackish marsh	1

3.3.5 **Table 3.3** provides a summary of the specialist species and their ecological associations.

**Table 3.3. The specialist species and their ecologies.**

Specific assemblage type (reference)	Species	Ecological associations
Heartwood decay (A211)	<ul style="list-style-type: none"> <li>▪ <i>Phloeophagus lignarius</i> (Coleoptera: Curculionidae)</li> </ul>	A small weevil found in the dead wood of broadleaved trees.
Bark and sapwood decay (A212)	<ul style="list-style-type: none"> <li>▪ <i>Anobium punctatum</i> (Coleoptera: Ptinidae)</li> <li>▪ <i>Anaspis regimbarti</i> (Coleoptera: Scraptiidae)</li> <li>▪ <i>Xylota sylvarum</i> (Diptera: Syrphidae)</li> </ul>	Two beetles and a hoverfly dependent on decaying wood for their larval habitat but usually found on flowers as adults.
Scrub edge (F001)	<ul style="list-style-type: none"> <li>▪ <i>Heliophanus cupreus</i> (Araneae: Salticidae)</li> <li>▪ <i>Heliophanus flavipes</i> (Araneae: Salticidae)</li> <li>▪ <i>Batophila aerata</i> (Coleoptera: Chrysomelidae)</li> <li>▪ <i>Allygus mixtus</i> (Homoptera: Cicadellidae)</li> <li>▪ <i>Eysarcoris venustissima</i> (Heteroptera: Pentatomidae)</li> <li>▪ <i>Pyronia tithonus</i> (Lepidoptera: Tettigoniidae)</li> <li>▪ <i>Leptophyes punctatissima</i> (Orthoptera: Phaneropteridae)</li> <li>▪ <i>Pholidoptera griseoaptera</i> (Orthoptera: Tettigoniidae)</li> </ul>	A diverse mix of species dependent on the range of conditions present in the mosaic habitats at the edge of scrub, including sheltered microclimates, flowers and perennial grasses. <i>Eysarcoris venustissima</i> is found on woundwort, and <i>Batophila aerata</i> is often found on brambles. The nymphs of <i>Allygus mixtus</i> are found on grasses, while the adults are often found on oaks.
Rich flower resource (F002)	<ul style="list-style-type: none"> <li>▪ <i>Andrena minutula</i> (Hymenoptera: Andrenidae)</li> <li>▪ <i>Bombus lapidarius</i> (Hymenoptera: Apidae)</li> <li>▪ <i>Bombus pascuorum</i> (Hymenoptera: Apidae)</li> <li>▪ <i>Bombus pratorum</i> (Hymenoptera: Apidae)</li> <li>▪ <i>Bombus terrestris</i> (Hymenoptera: Apidae)</li> <li>▪ <i>Hylaeus communis</i> (Hymenoptera: Colletidae)</li> <li>▪ <i>Lasioglossum albipes</i> (Hymenoptera: Halictidae)</li> <li>▪ <i>Lasioglossum malachurum</i> (Hymenoptera: Halictidae)</li> <li>▪ <i>Lasioglossum morio</i> (Hymenoptera: Halictidae)</li> <li>▪ <i>Lasioglossum pauxillum</i> (Hymenoptera: Halictidae)</li> </ul>	Bees requiring a continuity and abundance of blossom for nectar and / or pollen.
Scrub-heath & moorland (F003)	<ul style="list-style-type: none"> <li>▪ <i>Agalenatea redii</i> (Araneae: Araneidae)</li> <li>▪ <i>Bembidion mannerheimi</i> (Coleoptera: Carabidae)</li> <li>▪ <i>Lygus pratensis</i> (Heteroptera: Miridae)</li> <li>▪ <i>Xanthodelphax flaveola</i> (Homoptera: Delphacidae)</li> </ul>	Species with a range of lifestyles, including an orb-web spider, a ground beetle, and two herbivorous bugs. <i>Xanthodelphax</i> is found on <i>Poa pratensis</i> .
Bare sand & chalk (F111)	<ul style="list-style-type: none"> <li>▪ <i>Porrhomma microphthalmum</i> (Araneae: Linyphiidae)</li> <li>▪ <i>Ophonus ardosiacus</i> (Coleoptera: Carabidae)</li> <li>▪ <i>Machimus cingulatus</i> (Diptera: Asilidae)</li> </ul>	Species of open and disturbed habitats with a range of lifestyles. <i>Ophonus ardosiacus</i> is an herbivorous beetle often found on carrot umbels. <i>Porrhomma microphthalmum</i> frequently

Specific assemblage type (reference)	Species	Ecological associations
	<ul style="list-style-type: none"> <li>▪ <i>Tomosvaryella sylvatica</i> (Diptera: Pipunculidae)</li> <li>▪ <i>Nysius graminicola</i> (Heteroptera: Lygaeidae)</li> <li>▪ <i>Stictopleurus punctatonervosus</i> (Heteroptera: Rhopalidae)</li> <li>▪ <i>Entomognathus brevis</i> (Hymenoptera: Crabronidae)</li> </ul>	disperses by ballooning. <i>Machimus cingulatus</i> is a predator of other flies.
Open short sward (F112)	<ul style="list-style-type: none"> <li>▪ <i>Charagochilus gyllenhalii</i> (Heteroptera: Miridae)</li> <li>▪ <i>Orthocephalus saltator</i> (Heteroptera: Miridae)</li> <li>▪ <i>Asiraca clavicornis</i> (Homoptera: Delphacidae)</li> <li>▪ <i>Candidula intersecta</i> (Mollusca: Hygromiidae)</li> <li>▪ <i>Cermea virgata</i> (Mollusca: Hygromiidae)</li> </ul>	Herbivorous snails and bugs associated with various host plants ( <i>Asiraca</i> ), bedstraws ( <i>Charagochilus</i> ) and composites ( <i>Orthocephalus</i> ).
Saltmarsh & transitional brackish marsh (M311)	<ul style="list-style-type: none"> <li>▪ <i>Anthicus antherinus</i> (Coleoptera: Anthicidae)</li> </ul>	A species of dry decaying vegetation, including flood refuse.

3.3.6 The rare and scarce species were generally evenly distributed across the survey area, without evident hotspots. The presence of invertebrate taxa with specialist habitat requirements was also relatively evenly distributed, as was the overall species richness. See **Table 3.4** below for further details.

**Table 3.4. Invertebrate Distribution (including rare, scarce and specialist taxa) across the Site.**

Survey station	Site/ sub-site	Number of species recorded	Rare and scarce taxa	Specialist taxa	Specific assemblage types present
1	1A	77	0	5	F001, F002, F003, F112
2a	4A	56	1	8	F001, F002, F003, F111, F112
2b	4B	44	0	2	F003, F111
3	7A	51	2	4	F002, F003, F111
4a	5A	58	2	7	A212, F002, F003, F111
4b	5B	50	1	2	F003
5	6	54	4	7	A212, F002, F003, M311
6	3	63	1	6	A212, F002, F003, F111
8	7B	72	0	3	A212, F002
9a	7D	52	2	2	F003
9b	7E	70	2	6	F001, F002, F003
10	7H	51	0	4	A212, F002, F003
11	7J	56	3	6	F001, F002, F003, F111, F112
12	8B	77	2	7	F001, F002, F003, F111
13	9	39	2	4	A212, F001, F003
14	10E	48	3	4	F001, F002, F003, F112
15a	10C	43	0	4	F001, F003, F111
15b	10D	69	4	7	F001, F002, F003, F111
17	7L	66	1	5	A212, F002, F003, M311
18	2A	64	2	9	F001, F002, F003, F111, F112
19	2B	59	2	5	A211, F001, F002, F003, F112
20	2C	40	1	2	F112, M311

## 4 Evaluation and Conclusion

### 4.1 Summary

- 4.1.1 The large majority of the Study Area consists of intensive farmland, with negligible value for invertebrates. Semi-natural habitats are small scale and heavily fragmented by intensive agriculture. The permanent semi-natural areas of habitats are often narrow and linear features along the margins of fields, while areas of set-aside are by their nature temporary habitats. There are also small pockets of longer-term semi-natural grassland, for example at station 8 (Sub-Site 7B) running down to the margin of Hempnall Beck, a tributary of the Tas, and station 15b (Sub-Site 10D) where a small triangle of grassland had been uncultivated for some time. Nevertheless, these areas were not noticeably more diverse for invertebrate assemblages than elsewhere.
- 4.1.2 Invertebrate species are generally quite mobile, although there are exceptions. The rare and scarce species recorded in these surveys are not tied to particular areas of habitats but are spatially structured populations, able to exploit temporary habitats and disperse elsewhere through the landscape before those habitats disappear. They are often under-recorded, and it is likely that surveys of surrounding off-site areas of broadly similar habitat would result in additional records of these taxa.

### 4.2 Geographic Evaluation

- 4.2.1 Based on the recording of twelve rare or scarce species, the Order Limits are broadly assessed to be of Local level of importance for invertebrate assemblages. However, the Order Limits covers a very large and geographically extensive area, and as such, based on scale alone, it is more likely that a rare and scarce species would be encountered, compared to on a smaller site. It is also considered that this geographical evaluation likely overstates the importance of the Order Limits, since the rare and scarce species are mostly either under-recorded (and therefore likely to be widespread) or have recently significantly increased in range, and as such, their status is an underestimate.
- 4.2.2 Overall, adopting a precautionary approach, and considering the information provided above, it is assessed that the Order Limits are of **Local importance for invertebrates**.

### 4.3 Potential Impact Pathways

- 4.3.1 The Scheme will have a net beneficial effect on invertebrate diversity. This is because most of the existing habitat currently has negligible value for invertebrates, and the replacement dominant habitat, although likely of low diversity on an absolute scale, will be relatively more diverse, and free from regular insecticide/herbicide application. However, it is likely that some assemblage types may be displaced from the development area, in particular those relying on bare ground and short swards (however, the potential for grazing grassland management would limit this impact).

Because of the nutrient-rich soils, the replacement habitat beneath the solar panels will be modified grasslands with small amounts of bare ground and low floristic diversity.

- 4.3.2 The more important areas for invertebrates are predominantly those on the margins of fields. Field margins of 10m will be sympathetically maintained between hedgerows/ditches and solar compartments, and will be managed to encourage greater structural variety and a more diverse flowering species assemblage. Further information is provided within the **outline Landscape and Ecological Management Plan (OLEMP)** submitted with the DCO submission. It is within these managed areas that the most diverse invertebrate assemblages will likely be present during the operational period. Hedgerows throughout the Order Limits will be sympathetically managed to benefit invertebrates (and wider biodiversity), in order to create an ecotone from tall mature woody vegetation to short sward habitat.

## 4.4 Mitigation and Avoidance Measures

- 4.4.1 Polarized light reflected from solar photovoltaic panels can attract aquatic insects, which confuse the panels for the water surface (e.g. Száz *et al.*, 2016). Given the location of the Order Limits within a large arable landscape with relatively few areas of wetland habitats, this is considered likely to be at most a minor and highly-localised occurrence. An appropriate gap of at least 30m will be left between the final solar footprint and the Fritton Grange Meadows County Wildlife Site (which includes Hempnall Beck and lowland fen habitats). Other watercourses and ditches will include 10m buffers applied within the final Scheme designs; thereby reducing the non-significant risk of wetland insects being attracted to panels by polarized light. Further information is provided within the **Outline Landscape and Ecology Management Plan (LEMP) [EN0110014/APP/7.4]** submitted with the DCO submission.
- 4.4.2 Arrays of photovoltaic panels can create a heat island (e.g. Barron-Gafford *et al.*, 2016). However, other studies have found opposite (cool island) or inconsistent effects, *i.e.* effects of opposite sign by day and night. In an urban setting, Fassbender *et al.*, 2023 found that the air was warmer above a photovoltaic array during the day, and cooler at night. Conversely, the ground beneath panels was cooler by day, and warmer by night. Many invertebrates in the UK are dependent on warm microclimates, but it is unclear how the inconsistent local climate effects of photovoltaic arrays would affect particular species. In the absence of empirical data on invertebrate populations in similar habitats within and nearby solar farms, and taking account of the current negligible suitability of arable fields for invertebrate populations, it may be assumed that the effect of the Scheme would be neutral on the microclimatic suitability of the location for invertebrates. The impacts of any such effects would be negated by the provision of extensive habitat improvements beneath and surrounding panels when compared to the existing intensively-farmed baseline.
- 4.4.3 Potential construction phase lighting impacts will be avoided through the avoidance of extensive night-time working adopting an 07:00 to 18:00 maximum working hours pattern, and sensitive design of construction/decommissioning phase lighting (**ES: Appendix 7.11 Lighting Strategy [EN0110014/APP/6.3.7.11]**). Lighting would be designed to avoid the illumination of retained semi-natural habitats.

4.4.4 No permanent external artificial lighting is expected to be used within the Scheme once operational, other than motion sensing lighting which will be implemented around infrastructure to be used only for maintenance and security purposes only. No lighting (permanent or temporary) lighting will be attached to the perimeter fencing. The operational lighting will be designed to meet the requirements of the standards and design guides set out in **ES: Appendix 7.11 Lighting Strategy [EN0110014/APP/6.3.7.11]**. A detailed lighting design will be developed at the detailed design stage. This will include details of sensitive lighting design to limit the impacts upon wildlife including invertebrates (Bolliger *et al.*, 2022).

## 4.5 Conclusions

- 4.5.1 Overall, it is assessed that the Order Limits as a whole is of **Local level importance** for invertebrate assemblages.
- 4.5.2 The habitat provisions (through enhancement or additional habitat creation) detailed within the **Outline LEMP [EN0110014/APP/7.4]** are considered likely to be beneficial for invertebrate assemblages with an increase of grassland habitat (albeit with a likely reduction in some habitats such as bare ground and the associated species), hedgerows, woodland, scrub, and ponds. The residual impact is likely to be positive for invertebrate populations throughout the operational and maintenance period.

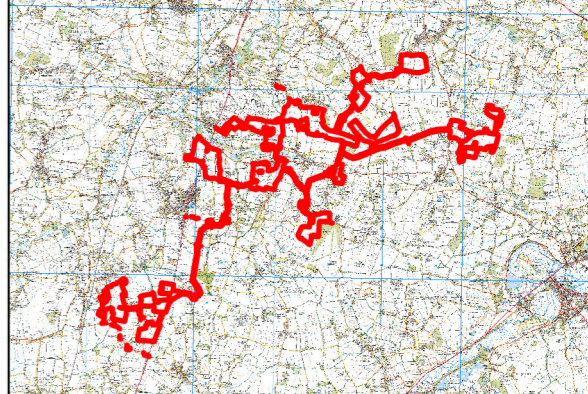
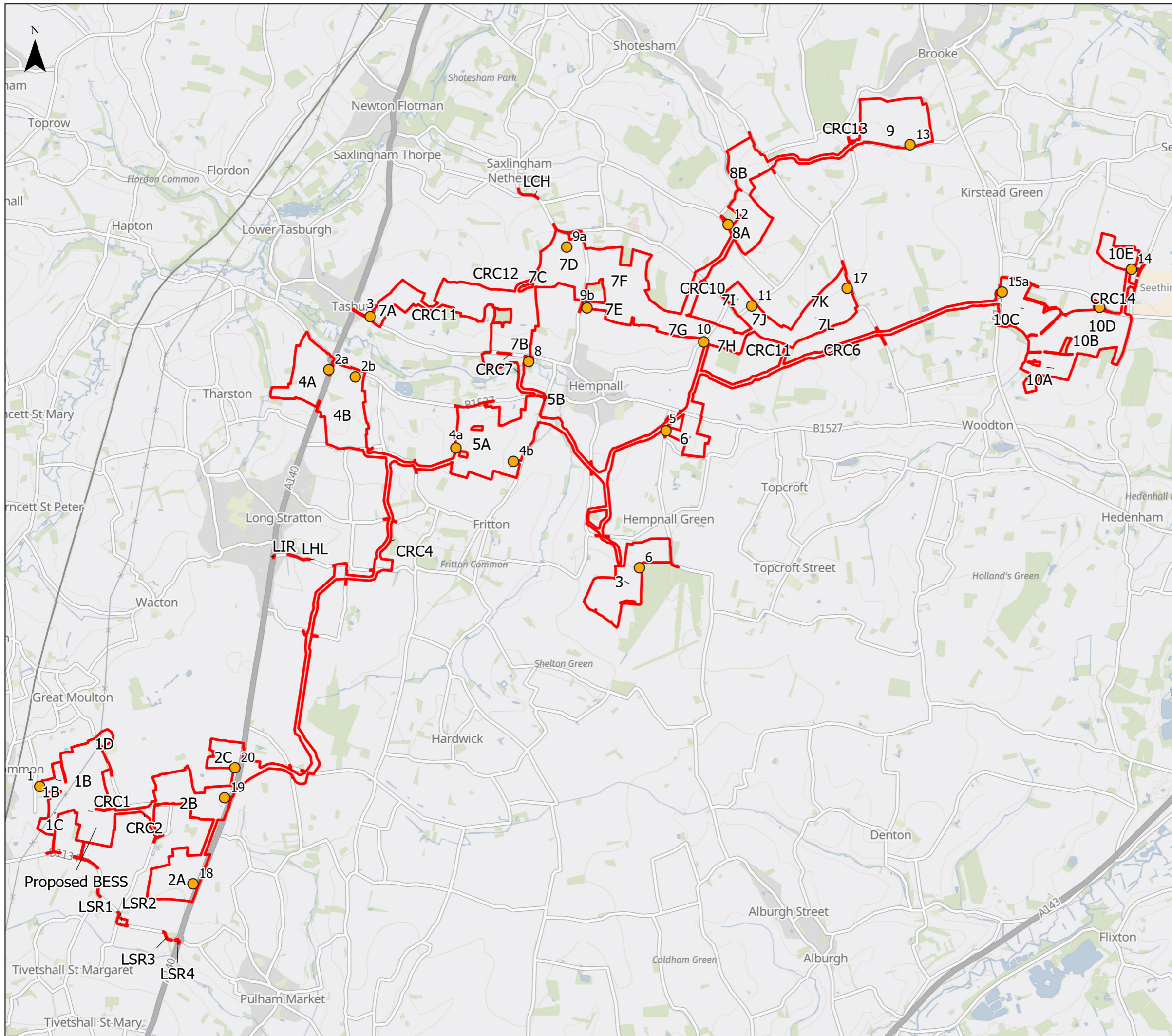
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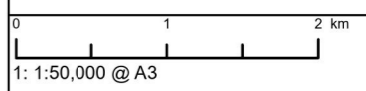
## 6 Figures

**Figure 1: Survey Station Location Plan**



- Legend**
- Order Limits
  - Invertebrate Survey location

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APFP Regulation: 5(2)(a)	Application Doc No. APP/6.3.8.2
Ref: Appendix 8.2	Date: 25/02/2026
Drawn: CM	Checked: DF

**Figure 1: Survey Station Locations**  
Revision A

## Annex A Raw Survey Data

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Mollusca	Helicidae	<i>Cepaea hortensis</i>	X		X						X				X									
Mollusca	Helicidae	<i>Cepaea nemoralis</i>								X														
Mollusca	Helicidae	<i>Monacha cantiana</i>				X	X																	
Mollusca	Hygromiidae	<i>Ashfordia granulata</i>						X		X														
Mollusca	Hygromiidae	<i>Candidula intersecta</i>		X																		X		
Mollusca	Hygromiidae	<i>Cerneuella virgata</i>	X																					
Mollusca	Hygromiidae	<i>Trichia hispida</i>													X									
Mollusca	Zonitidae	<i>Aegopinella nitidula</i>				X		X																
Mollusca	Zonitidae	<i>Oxychilus alliarius</i>								X														
Isopoda	Armadillidiidae	<i>Armadillidium vulgare</i>								X				X									X	
Isopoda	Ligiidae	<i>Ligidium hypnorum</i>								X														
Isopoda	Philosciidae	<i>Philoscia muscorum</i>					X			X	X												X	X
Isopoda	Porcellionidae	<i>Porcellio scaber</i>																						X
Pseudoscorpiones	Chernetidae	<i>Lamprochernes chyzeri</i>											X											
Chilopoda	Lithobiidae	<i>Lithobius forficatus</i>					X																	X
Chilopoda	Lithobiidae	<i>Lithobius microps</i>								X														
Diplopoda	Polydesmidae	<i>Polydesmus coriaceus</i>								X														
Ixodida	Ixodidae	<i>Ixodes ricinus</i>										X												
Opiliones	Nemastomatidae	<i>Nemastoma bimaculatum</i>																					X	
Opiliones	Phalangidae	<i>Dicranopalpus ramosus sensu stricto</i>			X			X				X									X			
Opiliones	Phalangidae	<i>Oligolophus tridens</i>		X																			X	
Opiliones	Phalangidae	<i>Paroligolophus agrestis</i>			X																X			X
Araneae	Araneidae	<i>Agalenatea redii</i>	X	X	X		X	X	X	X		X		X	X	X	X	X	X	X	X		X	

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Araneae	Araneidae	<i>Araneus diadematus</i>	X	X		X					X	X								X				
Araneae	Araneidae	<i>Araneus marmoreus</i>	X																					
Araneae	Araneidae	<i>Larinioides cornutus</i>		X							X	X										X	X	X
Araneae	Araneidae	<i>Mangora acalypha</i>			X	X						X			X				X		X	X		
Araneae	Araneidae	<i>Zygiella x-notata</i>																				X		
Araneae	Clubionidae	<i>Cheiracanthium erraticum</i>	X																					
Araneae	Clubionidae	<i>Clubiona pallidula</i>			X																			
Araneae	Clubionidae	<i>Clubiona phragmitis</i>									X													
Araneae	Dictynidae	<i>Dictyna uncinata</i>		X																				
Araneae	Dysderidae	<i>Harpactea hombergi</i>																					X	
Araneae	Gnaphosidae	<i>Zelotes latreillei</i>																					X	
Araneae	Linyphiidae	<i>Bathyphantes gracilis</i>						X		X		X	X		X	X	X		X	X	X			
Araneae	Linyphiidae	<i>Dicymbium nigrum</i>																	X					
Araneae	Linyphiidae	<i>Erigone atra</i>					X					X											X	X
Araneae	Linyphiidae	<i>Erigone dentipalpis</i>						X		X				X	X	X	X							
Araneae	Linyphiidae	<i>Linyphia triangularis</i>							X															
Araneae	Linyphiidae	<i>Meioneta beata</i>																				X		
Araneae	Linyphiidae	<i>Meioneta rurestris</i>																				X		
Araneae	Linyphiidae	<i>Microlinyphia pusilla</i>																						X
Araneae	Linyphiidae	<i>Neriene clathrata</i>									X	X												
Araneae	Linyphiidae	<i>Oedothorax retusus</i>													X									
Araneae	Linyphiidae	<i>Porrhomma microphthalmum</i>													X									
Araneae	Linyphiidae	<i>Tenuiphantes tenuis</i>						X	X	X		X			X	X		X	X		X	X	X	X
Araneae	Linyphiidae	<i>Tenuiphantes zimmermanni</i>																						X
Araneae	Lycosidae	<i>Alopecosa pulverulenta</i>														X								X



Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Dermaptera	Forficulidae	<i>Forficula auricularia</i>	X	X																		X	X	
Mecoptera	Panorpidae	<i>Panorpa communis</i>											X											
Orthoptera	Acrididae	<i>Chorthippus brunneus</i>				X								X									X	
Orthoptera	Acrididae	<i>Chorthippus parallelus</i>				X	X		X			X				X		X	X					
Orthoptera	Acrididae	<i>Omocestus viridulus</i>														X				X				
Orthoptera	Tettigoniidae	<i>Conocephalus fuscus</i>													X									
Orthoptera	Tettigoniidae	<i>Leptophyes punctatissima</i>										X												
Orthoptera	Tettigoniidae	<i>Metrioptera roeselii</i>													X						X			
Orthoptera	Tettigoniidae	<i>Pholidoptera griseoptera</i>															X							
Psocoptera	Psocidae	<i>Psococerastis gibbosa</i>							X															
Heteroptera	Anthocoridae	<i>Anthocoris confusus</i>																			X			
Heteroptera	Anthocoridae	<i>Orius niger</i>																				X		
Heteroptera	Coreidae	<i>Coreus marginatus</i>										X		X								X		X
Heteroptera	Lygaeidae	<i>Cymus melanocephalus</i>										X			X									
Heteroptera	Lygaeidae	<i>Ischnodemus sabuleti</i>								X														
Heteroptera	Lygaeidae	<i>Nysius graminicola</i>																			X			
Heteroptera	Lygaeidae	<i>Nysius huttoni</i>		X																				
Heteroptera	Lygaeidae	<i>Nysius senecionis</i>		X												X				X				
Heteroptera	Lygaeidae	<i>Peritrechus geniculatus</i>												X										
Heteroptera	Lygaeidae	<i>Stygnocoris sabulosus</i>																			X			
Heteroptera	Miridae	<i>Apolygus lucorum</i>					X																	
Heteroptera	Miridae	<i>Capsus ater</i>										X												
Heteroptera	Miridae	<i>Charagochilus gyllenhali</i>		X																				

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Heteroptera	Miridae	<i>Closterotomus norwegicus</i>						X		X			X								X			
Heteroptera	Miridae	<i>Deraeocoris ruber</i>							X												X			
Heteroptera	Miridae	<i>Dicyphus epilobii</i>											X											
Heteroptera	Miridae	<i>Dicyphus stachydis</i>													X									
Heteroptera	Miridae	<i>Heterotoma planicornis</i>			X																			
Heteroptera	Miridae	<i>Liocoris tripustulatus</i>	X		X	X		X	X	X			X					X						
Heteroptera	Miridae	<i>Lygus pratensis</i>		X		X	X	X	X	X		X	X		X	X	X			X	X	X		
Heteroptera	Miridae	<i>Lygus rugulipennis</i>		X	X	X	X			X				X	X			X			X			
Heteroptera	Miridae	<i>Megaloceroea recticornis</i>	X						X															
Heteroptera	Miridae	<i>Notostira elongata</i>	X		X		X	X		X		X	X	X	X			X	X	X	X	X	X	
Heteroptera	Miridae	<i>Oncotylus viridiflavus</i>		X																				
Heteroptera	Miridae	<i>Orthocephalus saltator</i>															X							
Heteroptera	Miridae	<i>Orthops campestris</i>								X	X					X								
Heteroptera	Miridae	<i>Orthops kalmii</i>				X	X																	
Heteroptera	Miridae	<i>Phytocoris varipes</i>	X						X	X		X	X			X	X		X	X	X			
Heteroptera	Miridae	<i>Pinalitus cervinus</i>																				X		
Heteroptera	Miridae	<i>Plagiognathus arbustorum</i>	X		X	X			X	X	X	X			X			X			X			
Heteroptera	Miridae	<i>Plagiognathus chrysanthemi</i>		X		X						X	X			X								
Heteroptera	Miridae	<i>Stenodema calcarata</i>												X			X	X	X					
Heteroptera	Miridae	<i>Stenodema laevigata</i>	X	X	X	X	X	X	X		X	X		X				X		X				
Heteroptera	Miridae	<i>Stenotus binotatus</i>	X		X	X		X			X		X				X							
Heteroptera	Nabidae	<i>Himacerus major</i>															X							
Heteroptera	Nabidae	<i>Himacerus mirmicoides</i>	X					X	X				X		X						X			
Heteroptera	Nabidae	<i>Nabis ferus</i>				X					X			X	X						X			

Higher taxon	Family	Species	Station																				
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19
Heteroptera	Nabidae	<i>Nabis limbatus</i>	X									X	X					X	X	X			
Heteroptera	Nabidae	<i>Nabis rugosus</i>		X	X		X	X	X						X		X		X				
Heteroptera	Pentatomidae	<i>Aelia acuminata</i>		X	X		X							X									
Heteroptera	Pentatomidae	<i>Dolycoris baccarum</i>											X		X	X		X					
Heteroptera	Pentatomidae	<i>Eysarcoris venustissimus</i>	X																				
Heteroptera	Pentatomidae	<i>Palomena prasina</i>	X					X					X	X									
Heteroptera	Piesmatidae	<i>Piesma maculatum</i>							X		X												
Heteroptera	Rhopalidae	<i>Stictopleurus punctatonervosus</i>					X			X				X				X				X	
Heteroptera	Scutelleridae	<i>Eurygaster testudinaria</i>													X								
Heteroptera	Tingidae	<i>Tingis cardui</i>												X									
Homoptera	Aphididae	<i>Anoecia corni</i>									X												
Homoptera	Aphrophoridae	<i>Neophilaenus lineatus</i>							X			X	X		X		X		X				
Homoptera	Aphrophoridae	<i>Philaenus spumarius</i>	X					X	X	X		X	X	X		X		X	X	X	X	X	X
Homoptera	Cicadellidae	<i>Allygus mixtus</i>																				X	
Homoptera	Cicadellidae	<i>Anaceratagallia ribauti</i>															X				X		
Homoptera	Cicadellidae	<i>Anaceratagallia venosa</i>														X							
Homoptera	Cicadellidae	<i>Aphrodes makarovi</i>	X	X	X	X		X														X	X
Homoptera	Cicadellidae	<i>Aphrophora alni</i>										X		X				X					
Homoptera	Cicadellidae	<i>Arthaldeus pascuellus</i>					X					X					X				X		
Homoptera	Cicadellidae	<i>Arthaldeus striifrons</i>													X						X	X	X
Homoptera	Cicadellidae	<i>Cicadula persimilis</i>					X																
Homoptera	Cicadellidae	<i>Cicadula quadrinotata</i>													X								
Homoptera	Cicadellidae	<i>Eupelix cuspidata</i>																			X		
Homoptera	Cicadellidae	<i>Eupteryx atropunctata</i>						X											X				
Homoptera	Cicadellidae	<i>Eupteryx aurata</i>			X			X			X						X						

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Homoptera	Cicadellidae	<i>Eupteryx urticae</i>		X				X														X		
Homoptera	Cicadellidae	<i>Euscelis incisus</i>	X										X	X			X							
Homoptera	Cicadellidae	<i>Grypotes puncticollis</i>																						X
Homoptera	Cicadellidae	<i>lassus lanio</i>								X														
Homoptera	Cicadellidae	<i>Mocydiopsis parvicauda</i>													X									
Homoptera	Cicadellidae	<i>Psammotettix albomarginatus</i>							X								X						X	
Homoptera	Cicadellidae	<i>Rhopalopyx elongata</i>																		X				
Homoptera	Cicadellidae	<i>Stroggylocephalus agrestis</i>									X													
Homoptera	Cicadellidae	<i>Zyginidia scutellaris</i>					X		X	X		X	X		X	X	X	X			X			
Homoptera	Delphacidae	<i>Asiraca clavicornis</i>													X								X	X
Homoptera	Delphacidae	<i>Conomelus anceps</i>										X				X								
Homoptera	Delphacidae	<i>Javesella pellucida</i>	X	X				X		X		X	X	X			X		X	X	X			
Homoptera	Delphacidae	<i>Muellerianella fairmairei</i>														X								
Homoptera	Delphacidae	<i>Stenocranus minutus</i>							X	X							X	X					X	
Homoptera	Delphacidae	<i>Xanthodelphax flaveola</i>										X												
Homoptera	Delphacidae	<i>Xanthodelphax stramineus</i>														X								
Trichoptera	Polycentropodidae	<i>Plectrocnemia conspersa</i>										X												
Lepidoptera	Crambidae	<i>Anania hortulata</i>															X							
Lepidoptera	Hesperiidae	<i>Thymelicus lineola</i>							X															
Lepidoptera	Lycaenidae	<i>Neozephyrus quercus</i>														X								
Lepidoptera	Noctuidae	<i>Autographa gamma</i>										X												
Lepidoptera	Nymphalidae	<i>Inachis io</i>							X			X												
Lepidoptera	Nymphalidae	<i>Maniola jurtina</i>	X	X	X	X		X	X		X	X			X	X				X	X			

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Lepidoptera	Nymphalidae	<i>Pyronia tithonus</i>	X									X		X										
Lepidoptera	Pieridae	<i>Pieris brassicae</i>										X		X	X				X	X				
Lepidoptera	Pieridae	<i>Pieris rapae</i>												X										
Hymenoptera	Andrenidae	<i>Andrena minutula</i>				X	X		X															
Hymenoptera	Apidae	<i>Bombus lapidarius</i>		X					X				X											
Hymenoptera	Apidae	<i>Bombus pascuorum</i>											X		X				X		X	X		
Hymenoptera	Apidae	<i>Bombus pratorum</i>																	X					
Hymenoptera	Apidae	<i>Bombus terrestris</i>	X	X					X	X				X	X									
Hymenoptera	Colletidae	<i>Hylaeus communis</i>								X														
Hymenoptera	Crabronidae	<i>Entomognathus brevis</i>				X												X						
Hymenoptera	Formicidae	<i>Lasius niger</i>			X	X	X																	
Hymenoptera	Formicidae	<i>Myrmica ruginodis</i>					X												X			X		
Hymenoptera	Formicidae	<i>Myrmica scabrinodis</i>		X						X		X	X						X		X			
Hymenoptera	Halictidae	<i>Lasioglossum albipes</i>					X													X	X			
Hymenoptera	Halictidae	<i>Lasioglossum malachurum</i>													X		X							
Hymenoptera	Halictidae	<i>Lasioglossum morio</i>						X														X		
Hymenoptera	Halictidae	<i>Lasioglossum pauxillum</i>				X	X	X				X										X		
Hymenoptera	Tenthredinidae	<i>Athalia rosae</i>								X		X												
Hymenoptera	Tenthredinidae	<i>Blennocampa phyllocolpa</i>									X													
Hymenoptera	Vespidae	<i>Vespa crabro</i>	X																					
Hymenoptera	Vespidae	<i>Vespula vulgaris</i>																					X	
Diptera	Agromyzidae	<i>Cerodontha denticornis</i>																		X				X
Diptera	Agromyzidae	<i>Napomyza lateralis</i>				X											X			X		X		
Diptera	Agromyzidae	<i>Pseudonapomyza atra</i>																					X	
Diptera	Anthomyiidae	<i>Anthomyia liturata</i>		X		X		X					X	X			X			X	X	X		

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Anthomyiidae	<i>Anthomyia pluvialis</i>																				X	X	X
Diptera	Anthomyiidae	<i>Botanophila brunneilinea</i>		X	X																			X
Diptera	Anthomyiidae	<i>Botanophila fugax</i>							X	X		X										X		
Diptera	Anthomyiidae	<i>Delia floralis</i>					X																	
Diptera	Anthomyiidae	<i>Delia florilega</i>	X																			X		
Diptera	Anthomyiidae	<i>Delia platyura</i>			X	X			X			X	X								X	X	X	
Diptera	Anthomyiidae	<i>Hylemya urbica</i>	X																					
Diptera	Anthomyiidae	<i>Hylemya variata</i>										X	X						X	X				
Diptera	Anthomyiidae	<i>Phorbia fumigata</i>	X													X								
Diptera	Anthomyzidae	<i>Anthomyza gracilis</i>	X	X	X	X	X			X	X		X		X			X		X				
Diptera	Asilidae	<i>Leptogaster cylindrica</i>																X	X					
Diptera	Asilidae	<i>Machimus cingulatus</i>			X																			
Diptera	Bibionidae	<i>Dilophus febrilis</i>								X													X	
Diptera	Calliphoridae	<i>Calliphora vicina</i>				X					X						X		X					
Diptera	Calliphoridae	<i>Lucilia richardsi</i>																	X					
Diptera	Calliphoridae	<i>Lucilia sericata</i>				X																		
Diptera	Calliphoridae	<i>Lucilia silvarum</i>																				X		
Diptera	Calliphoridae	<i>Melanomya nana</i>	X			X						X			X									
Diptera	Calliphoridae	<i>Melinda gentilis</i>					X																	
Diptera	Calliphoridae	<i>Melinda viridicyanea</i>						X																
Diptera	Carnidae	<i>Meoneura lamellata</i>				X	X																	
Diptera	Chamaemyiidae	<i>Chamaemyia juncorum</i>		X																				
Diptera	Chloropidae	<i>Cetema neglectum</i>										X												
Diptera	Chloropidae	<i>Chlorops pumilionis</i>	X																					
Diptera	Chloropidae	<i>Lasiochaeta pubescens</i>										X	X	X	X		X							
Diptera	Chloropidae	<i>Lasiosina herpini</i>									X													

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Chloropidae	<i>Meromyza femorata</i>							X				X											
Diptera	Chloropidae	<i>Oscinella frit</i>		X	X	X			X		X		X	X	X	X	X		X	X		X		
Diptera	Chloropidae	<i>Oscinella nigerrima</i>															X							
Diptera	Chloropidae	<i>Tricimba cincta</i>		X			X																	
Diptera	Conopidae	<i>Conops quadrifasciatus</i>													X									X
Diptera	Conopidae	<i>Sicus ferrugineus</i>							X															
Diptera	Culicidae	<i>Culex modestus</i>											X											
Diptera	Dolichopodidae	<i>Argyra argyria</i>													X									
Diptera	Dolichopodidae	<i>Dolichopus festivus</i>	X					X						X										
Diptera	Dolichopodidae	<i>Dolichopus griseipennis</i>	X		X			X													X			
Diptera	Dolichopodidae	<i>Syntormon aulicus</i>																					X	
Diptera	Drosophilidae	<i>Scaptomyza pallida</i>	X						X				X									X		
Diptera	Empididae	<i>Empis livida</i>		X				X		X														
Diptera	Ephydriidae	<i>Hydrellia albiceps</i> (= <i>maura</i> )	X			X			X												X			
Diptera	Ephydriidae	<i>Limnellia quadrata</i>										X												
Diptera	Ephydriidae	<i>Nostima picta</i>	X									X			X									X
Diptera	Ephydriidae	<i>Parydra coarctata</i>											X											
Diptera	Ephydriidae	<i>Pelina aenea</i>				X																		
Diptera	Ephydriidae	<i>Philygria interstincta</i>															X							
Diptera	Ephydriidae	<i>Philygria vittipennis</i>			X	X	X																	
Diptera	Ephydriidae	<i>Scatella stagnalis</i>						X																
Diptera	Fanniidae	<i>Fannia armata</i>																				X		
Diptera	Fanniidae	<i>Fannia genualis</i>		X							X											X		
Diptera	Fanniidae	<i>Fannia serena</i>				X	X		X	X														
Diptera	Fanniidae	<i>Fannia similis</i>	X	X													X							
Diptera	Hippoboscidae	<i>Lipoptena cervi</i>												X										

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Hybotidae	<i>Hybos culiciformis</i>			X																			
Diptera	Keroplatidae	<i>Macrocera phalerata</i>												X										
Diptera	Lauxaniidae	<i>Calliopum aeneum</i>												X								X		
Diptera	Lauxaniidae	<i>Minettia fasciata</i>							X				X	X				X		X	X			
Diptera	Lauxaniidae	<i>Sapromyza quadripunctata</i>						X			X	X	X	X	X			X		X				
Diptera	Limoniidae	<i>Dicranophragma adjunctum</i>													X									
Diptera	Limoniidae	<i>Erioptera flavata</i>	X																					
Diptera	Limoniidae	<i>Phylidorea ferruginea</i>								X														
Diptera	Lonchopteridae	<i>Lonchoptera bifurcata</i>	X							X	X	X	X				X							
Diptera	Lonchopteridae	<i>Lonchoptera lutea</i>				X	X		X	X	X	X	X	X										
Diptera	Muscidae	<i>Azelia triquetra</i>	X																					X
Diptera	Muscidae	<i>Coenosia infantula</i>	X	X				X	X													X		
Diptera	Muscidae	<i>Coenosia pumila</i>													X									X
Diptera	Muscidae	<i>Coenosia testacea</i>											X											
Diptera	Muscidae	<i>Coenosia tigrina</i>				X	X	X	X		X		X		X							X		
Diptera	Muscidae	<i>Hebecnema umbratica</i>	X																					
Diptera	Muscidae	<i>Helina depuncta</i>						X																X
Diptera	Muscidae	<i>Helina evecta</i>			X																	X		
Diptera	Muscidae	<i>Helina lasiophthalma</i>																	X					
Diptera	Muscidae	<i>Helina reversio</i>						X										X						
Diptera	Muscidae	<i>Helina setiventris</i>		X																				X
Diptera	Muscidae	<i>Muscina levida</i>											X											
Diptera	Muscidae	<i>Myospila meditabunda</i>	X																					
Diptera	Muscidae	<i>Phaonia atriceps</i>								X														
Diptera	Muscidae	<i>Phaonia signata</i> (= <i>tuguriorum</i> )	X																					

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Muscidae	<i>Schoenomyza litorella</i>	X																					
Diptera	Opomyzidae	<i>Geomyza subnigra</i>																					X	
Diptera	Opomyzidae	<i>Geomyza tripunctata</i>							X				X			X	X				X	X	X	
Diptera	Opomyzidae	<i>Opomyza florum</i>	X	X	X		X	X	X	X	X	X						X					X	
Diptera	Opomyzidae	<i>Opomyza germinationis</i>			X			X		X			X				X							
Diptera	Opomyzidae	<i>Opomyza petrei</i>	X								X	X						X						
Diptera	Pipunculidae	<i>Cephalops varipes</i>	X													X								
Diptera	Pipunculidae	<i>Cephalops vittipes</i>						X																
Diptera	Pipunculidae	<i>Tomosvaryella sylvatica</i>																				X		
Diptera	Polleniidae	<i>Pollenia pediculata</i>																	X					
Diptera	Polleniidae	<i>Pollenia rudis</i>																	X					
Diptera	Psychodidae	<i>Pericoma trivialis</i>														X								
Diptera	Ptychopteridae	<i>Ptychoptera contaminata</i>									X													
Diptera	Rhagionidae	<i>Chrysopilus asiliformis</i>						X															X	
Diptera	Rhinophoridae	<i>Phyto melanocephala</i>																				X		
Diptera	Rhinophoridae	<i>Rhinophora lepida</i>						X					X								X		X	
Diptera	Sarcophagidae	<i>Blaesoxipha plumicornis</i>													X									
Diptera	Sarcophagidae	<i>Brachicoma devia</i>											X											
Diptera	Sarcophagidae	<i>Nyctia halterata</i>																				X		
Diptera	Sarcophagidae	<i>Sarcophaga aratrix</i>																				X		
Diptera	Sarcophagidae	<i>Sarcophaga arcipes</i>							X								X							
Diptera	Sarcophagidae	<i>Sarcophaga crassimargo</i>				X								X										
Diptera	Sarcophagidae	<i>Sarcophaga haemorrhoea</i>					X										X					X		
Diptera	Sarcophagidae	<i>Sarcophaga vagans</i>					X																	

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Scathophagidae	<i>Scathophaga stercoraria</i>	X					X	X	X			X					X				X		
Diptera	Scatopsidae	<i>Scatopse notata</i>				X																		
Diptera	Sciomyzidae	<i>Coremacera marginata</i>	X																		X			
Diptera	Sciomyzidae	<i>Ilione albiseta</i>												X				X					X	
Diptera	Sciomyzidae	<i>Limnia unguicornis</i>											X	X										
Diptera	Sciomyzidae	<i>Pherbellia cinerella</i>													X									
Diptera	Sciomyzidae	<i>Sepedon sphegea</i>																	X					
Diptera	Sciomyzidae	<i>Trypetoptera punctulata</i>						X																
Diptera	Sepsidae	<i>Nemopoda nitidula</i>																			X			
Diptera	Sepsidae	<i>Sepsis cynipsea</i>															X							
Diptera	Sepsidae	<i>Sepsis fulgens</i>				X	X		X		X	X	X		X	X								
Diptera	Sepsidae	<i>Sepsis punctum</i>								X														
Diptera	Sepsidae	<i>Themira annulipes</i>				X											X							
Diptera	Sphaeroceridae	<i>Copromyza equina</i>	X																		X			
Diptera	Sphaeroceridae	<i>Copromyza stercoraria</i>			X																			
Diptera	Sphaeroceridae	<i>Crumomyia pedestris</i>								X														
Diptera	Sphaeroceridae	<i>Eulimosina ochripes</i>											X											
Diptera	Sphaeroceridae	<i>Ischiolepta pusilla</i>				X																		
Diptera	Sphaeroceridae	<i>Leptocera fontinalis</i>	X																					
Diptera	Sphaeroceridae	<i>Leptocera nigra</i>										X	X				X				X		X	
Diptera	Sphaeroceridae	<i>Lotophila atra</i>	X										X											
Diptera	Sphaeroceridae	<i>Minilimosina vitripennis</i>										X												
Diptera	Sphaeroceridae	<i>Pullimosina vulgusta</i>								X														
Diptera	Sphaeroceridae	<i>Rachispoda longior</i>															X							
Diptera	Sphaeroceridae	<i>Rachispoda uniseta</i>																					X	
Diptera	Sphaeroceridae	<i>Spelobia clunipes</i>	X										X											

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Sphaeroceridae	<i>Spelobia luteilabris</i>									X													
Diptera	Sphaeroceridae	<i>Spelobia manicata</i>																		X				
Diptera	Sphaeroceridae	<i>Spelobia rufilabris</i>																		X				
Diptera	Stratiomyidae	<i>Pachygaster atra</i>			X																			
Diptera	Syrphidae	<i>Cheilosia bergenstammi</i>						X											X		X			
Diptera	Syrphidae	<i>Cheilosia pagana</i>								X														
Diptera	Syrphidae	<i>Cheilosia proxima</i>																	X					
Diptera	Syrphidae	<i>Episyrphus balteatus</i>	X								X													
Diptera	Syrphidae	<i>Eristalis arbustorum</i>											X											
Diptera	Syrphidae	<i>Eristalis nemorum</i>	X																					
Diptera	Syrphidae	<i>Eristalis tenax</i>																		X		X		
Diptera	Syrphidae	<i>Eupeodes luniger</i>																				X		
Diptera	Syrphidae	<i>Helophilus pendulus</i>	X																					
Diptera	Syrphidae	<i>Melanostoma mellinum</i>	X								X				X				X		X			
Diptera	Syrphidae	<i>Melanostoma scalare</i>							X			X		X			X				X			
Diptera	Syrphidae	<i>Neoascia podagrica</i>									X													
Diptera	Syrphidae	<i>Platycheirus albimanus</i>	X																					
Diptera	Syrphidae	<i>Platycheirus clypeatus</i>									X				X									
Diptera	Syrphidae	<i>Platycheirus occultus</i>							X															
Diptera	Syrphidae	<i>Platycheirus peltatus</i>																					X	
Diptera	Syrphidae	<i>Riponnensia splendens</i>							X															
Diptera	Syrphidae	<i>Sphaerophoria scripta</i>							X													X		
Diptera	Syrphidae	<i>Syrritta pipiens</i>						X		X	X				X							X		
Diptera	Syrphidae	<i>Xanthogramma pedissequum</i>						X																
Diptera	Syrphidae	<i>Xylota sylvarum</i>						X		X							X							

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Diptera	Tachinidae	<i>Eriothrix rufomaculata</i>					X		X	X							X	X	X				X	
Diptera	Tachinidae	<i>Exorista rustica</i>			X																			
Diptera	Tachinidae	<i>Phania funesta</i>					X		X														X	
Diptera	Tachinidae	<i>Phasia obesa</i>																X		X				
Diptera	Tachinidae	<i>Siphona geniculata</i>							X															
Diptera	Tachinidae	<i>Tachina fera</i>													X									
Diptera	Tachinidae	<i>Tachina magnicornis</i>																	X					
Diptera	Tephritidae	<i>Chaetorellia jaceae</i>							X															
Diptera	Tephritidae	<i>Merzomyia westermanni</i>																	X					
Diptera	Tephritidae	<i>Tephritis divisa</i>															X							
Diptera	Tephritidae	<i>Tephritis neesii</i>		X			X																	
Diptera	Tephritidae	<i>Terellia tussilaginis</i>					X																	
Diptera	Tephritidae	<i>Urophora quadrifasciata</i>					X		X		X			X	X	X								
Diptera	Tephritidae	<i>Urophora stylata</i>	X																					
Diptera	Tipulidae	<i>Tipula lateralis</i>			X										X									
Diptera	Tipulidae	<i>Tipula paludosa</i>	X				X		X	X	X	X	X	X	X		X		X	X			X	
Diptera	Ulidiidae	<i>Herina lugubris</i>																	X					
Coleoptera	Anthicidae	<i>Anthicus antherinus</i>							X												X			
Coleoptera	Anthicidae	<i>Omonadus floralis</i>		X			X		X		X		X	X	X	X								
Coleoptera	Apionidae	<i>Apion frumentarium</i>																			X			
Coleoptera	Apionidae	<i>Ceratapion onopordi</i>																			X			
Coleoptera	Apionidae	<i>Eutrichapion viciae</i>													X	X								
Coleoptera	Apionidae	<i>Ischnopterapion loti</i>										X												
Coleoptera	Apionidae	<i>Protapion apricans</i>		X					X										X					X
Coleoptera	Apionidae	<i>Protapion assimile</i>																	X					

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Coleoptera	Apionidae	<i>Protapion fulvipes</i>										X						X						
Coleoptera	Cantharidae	<i>Rhagonycha fulva</i>	X		X						X	X			X						X			
Coleoptera	Carabidae	<i>Agonum emarginatum</i>									X								X					
Coleoptera	Carabidae	<i>Amara ovata</i>													X									
Coleoptera	Carabidae	<i>Bembidion assimile</i>													X									
Coleoptera	Carabidae	<i>Bembidion biguttatum</i>													X									
Coleoptera	Carabidae	<i>Bembidion lampros</i>							X															
Coleoptera	Carabidae	<i>Bembidion lunulatum</i>					X																	
Coleoptera	Carabidae	<i>Bembidion mannerheimi</i>												X					X					X
Coleoptera	Carabidae	<i>Bembidion quadrimaculatum</i>													X								X	
Coleoptera	Carabidae	<i>Demetrias atricapillus</i>					X		X															
Coleoptera	Carabidae	<i>Harpalus affinis</i>							X															
Coleoptera	Carabidae	<i>Leistus fulvibarbis</i>		X																				
Coleoptera	Carabidae	<i>Nebria brevicollis</i>																	X					
Coleoptera	Carabidae	<i>Notiophilus biguttatus</i>						X											X					X
Coleoptera	Carabidae	<i>Ophonus ardosiacus</i>		X																				
Coleoptera	Carabidae	<i>Paradromius linearis</i>		X																				
Coleoptera	Carabidae	<i>Poecilus cupreus</i>				X									X				X					
Coleoptera	Carabidae	<i>Poecilus versicolor</i>													X									X
Coleoptera	Carabidae	<i>Pterostichus madidus</i>									X							X					X	
Coleoptera	Carabidae	<i>Pterostichus nigrita</i>									X													
Coleoptera	Carabidae	<i>Pterostichus strenuus</i>									X													X
Coleoptera	Carabidae	<i>Trechus obtusus</i>					X				X													
Coleoptera	Chrysomelidae	<i>Altica lythri</i>													X									
Coleoptera	Chrysomelidae	<i>Batophila aerata</i>														X		X						

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Coleoptera	Chrysomelidae	<i>Cassida rubiginosa</i>			X		X															X		
Coleoptera	Chrysomelidae	<i>Chaetocnema concinna</i>										X				X					X			
Coleoptera	Chrysomelidae	<i>Chaetocnema hortensis</i>							X			X	X	X	X							X		
Coleoptera	Chrysomelidae	<i>Chaetocnema picipes</i>										X												
Coleoptera	Chrysomelidae	<i>Longitarsus flavicornis</i>														X		X						
Coleoptera	Chrysomelidae	<i>Longitarsus gracilis</i>							X															
Coleoptera	Chrysomelidae	<i>Longitarsus melanocephalus</i>														X								
Coleoptera	Chrysomelidae	<i>Oulema melanopus</i>	X	X	X			X	X			X		X										
Coleoptera	Chrysomelidae	<i>Phaedon cochleariae</i>														X								X
Coleoptera	Chrysomelidae	<i>Phyllotreta nemorum</i>	X					X	X			X		X	X									
Coleoptera	Chrysomelidae	<i>Psylliodes chrysocephala</i>											X			X						X	X	
Coleoptera	Coccinellidae	<i>Coccinella septempunctata</i>	X			X			X	X		X		X	X	X			X	X	X			
Coleoptera	Coccinellidae	<i>Harmonia axyridis</i>						X																
Coleoptera	Coccinellidae	<i>Hippodamia variegata</i>														X								
Coleoptera	Coccinellidae	<i>Propylea quattuordecimpunctata</i>	X	X	X	X		X				X				X								
Coleoptera	Coccinellidae	<i>Psyllobora vigintiduopunctata</i>		X																				
Coleoptera	Coccinellidae	<i>Rhizobius litura</i>				X	X									X		X	X		X	X		
Coleoptera	Coccinellidae	<i>Subcoccinella vigintiquatuor punctata</i>	X	X	X	X																	X	
Coleoptera	Coccinellidae	<i>Tytthaspis sedecimpunctata</i>			X			X	X				X	X			X							
Coleoptera	Curculionidae	<i>Ceutorhynchus obstrictus</i>							X															
Coleoptera	Curculionidae	<i>Cionus hortulanus</i>	X																					

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Coleoptera	Curculionidae	<i>Cionus tuberculatus</i>	X																					
Coleoptera	Curculionidae	<i>Euophryum confine</i>																		X				
Coleoptera	Curculionidae	<i>Mecinus pascuorum</i>										X					X							
Coleoptera	Curculionidae	<i>Otiorhynchus singularis</i>											X											
Coleoptera	Curculionidae	<i>Otiorhynchus sulcatus</i>																		X				
Coleoptera	Curculionidae	<i>Phloeophagus lignarius</i>																					X	
Coleoptera	Curculionidae	<i>Sitona lineatus</i>		X	X	X	X		X	X	X		X		X	X	X			X	X	X	X	
Coleoptera	Curculionidae	<i>Sitona obsoletus</i>														X								
Coleoptera	Curculionidae	<i>Tychius picirostris</i>										X												
Coleoptera	Dermestidae	<i>Anthrenus fuscus</i>					X																	
Coleoptera	Hydrophilidae	<i>Cercyon ustulatus</i>										X												
Coleoptera	Hydrophilidae	<i>Megasternum concinnum</i>		X			X					X												
Coleoptera	Leiodidae	<i>Nargus velox</i>		X																				
Coleoptera	Oedemeridae	<i>Oedemera nobilis</i>		X																				
Coleoptera	Phalacridae	<i>Phalacrus fimetarius</i>												X										
Coleoptera	Phalacridae	<i>Stilbus testaceus</i>	X						X	X														
Coleoptera	Ptinidae	<i>Anobium punctatum</i>					X																	X
Coleoptera	Scaptiidae	<i>Anaspis regimbarti</i>							X				X								X			
Coleoptera	Staphylinidae	<i>Anotylus rugosus</i>					X																	
Coleoptera	Staphylinidae	<i>Cypha longicornis</i>																					X	
Coleoptera	Staphylinidae	<i>Drusilla canaliculata</i>					X				X									X			X	
Coleoptera	Staphylinidae	<i>Micropeplus staphylinoides</i>									X													
Coleoptera	Staphylinidae	<i>Ocypus aeneocephalus</i>																		X				
Coleoptera	Staphylinidae	<i>Ocypus olens</i>													X					X			X	
Coleoptera	Staphylinidae	<i>Philonthus cognatus</i>				X																		

Higher taxon	Family	Species	Station																					
			1	2a	2b	3	4a	4b	5	6	8	9a	9b	10	11	12	13	14	15a	15b	17	18	19	20
Coleoptera	Staphylinidae	<i>Philonthus concinnus</i>														X								
Coleoptera	Staphylinidae	<i>Quedius cinctus</i>		X																				
Coleoptera	Staphylinidae	<i>Quedius levicollis</i>								X													X	
Coleoptera	Staphylinidae	<i>Quedius molochinus</i>								X					X									
Coleoptera	Staphylinidae	<i>Quedius picipes</i>								X									X					
Coleoptera	Staphylinidae	<i>Quedius semiobscurus</i>								X	X								X			X		
Coleoptera	Staphylinidae	<i>Rugilus erichsonii</i>								X														
Coleoptera	Staphylinidae	<i>Sepedophilus marshami</i>																		X				
Coleoptera	Staphylinidae	<i>Stenus cicindeloides</i>	X																					
Coleoptera	Staphylinidae	<i>Stenus fulvicornis</i>									X	X												
Coleoptera	Staphylinidae	<i>Stenus ossium</i>									X						X							
Coleoptera	Staphylinidae	<i>Stenus picipes</i>									X													
Coleoptera	Staphylinidae	<i>Tachinus flavipes</i>																	X					
Coleoptera	Staphylinidae	<i>Tachyporus hypnorum</i>																					X	
Coleoptera	Staphylinidae	<i>Tachyporus nitidulus</i>						X				X	X											
Coleoptera	Staphylinidae	<i>Tasgius morsitans</i>								X														
Coleoptera	Staphylinidae	<i>Tasgius winkleri</i>																					X	
Coleoptera	Tenebrionidae	<i>Lagria hirta</i>						X																

## Annex B Photographs



Photograph 1. Survey Station 2a.



Photograph 2. Survey Station 11.



Photograph 3. Survey Station 15b.