

M42 Junction 6 Improvement Scheme Number TR010027 Volume 6 6.3 Environmental Statement Appendix 9.1 Protected and Notable Sites and Species

Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

January 2019



Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

M42 Junction 6 Improvement

Development Consent Order 202[-]

6.3 Environmental Statement Appendix 9.1 Protected and Notable Sites and Species

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Appendix 9.1 – Protected and Notable Sites and Species

1 Introduction

1.1 Purpose of this document

- 1.1.1 The purpose of this appendix is to provide further detail to that contained in Chapter 9 Biodiversity of the Environmental Statement [TR010027/APP/6.1] on the biological records information from within the Order Limits of the Scheme and within the surrounding area. This includes:
 - a. statutory designated sites;
 - b. non-statutory designated sites;
 - c. protected species;
 - d. notable species;
 - e. invasive species; and
 - f. other species considered relevant to the Scheme.

2 Methodology

2.1 Desk study

- 2.1.1 A request for the provision of ecological data for an area up to 1km from the Order Limits was requested from the following consultees in October 2017 and again on 15 October 2018:
 - a. Warwickshire Biological Records Centre.
- 2.1.2 A desk study was carried out to identify any nature conservation designations, and protected and notable habitats and species potentially relevant to the Scheme.
- 2.1.3 A stratified approach was taken when defining the desk study area, based on the likely zone of influence of the Scheme on different ecological receptors; and, an understanding of the maximum distances typically considered by statutory consultees. Accordingly, the desk study identified:
 - a. any statutory nature conservation designations of International importance located within 30km of the Order Limits;
 - b. statutory nature conservations designations of National importance within 2km of the Order Limits;
 - c. statutory nature conservation designations of up to County importance within 1km of the Order Limits;
 - d. non-statutory nature conservation designations within 1km of the Order Limits: and



- e. protected and/or notable habitats and species within 1km of the Order Limits.
- 2.1.4 Protected and/or notable habitats and species include those listed under:
 - a. schedules 1, 5 and 8 of the Wildlife and Countryside Act 1981 (as amended) [REF 1];
 - schedules 2 and 4 of The Conservation of Habitat & Species Regulations 2017 [REF 2];
 - species and habitats of Principal Importance for nature conservation in England listed under Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 [REF 3];
 - d. habitats designated according to the criteria for the selection of Local Wildlife Sites (LWS) [REF 4];
 - e. species and habitats listed on the Warwickshire, Coventry and Solihull Biodiversity Action Plan (LBAP) [REF 5]; and
 - f. records of non-native controlled weed species were also collated; such species are listed under Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) [REF 1].
- 2.1.5 The desk study was carried out using the data sources detailed in **Table 1**.



Table 1: Desk study area and data sources

Ecological feature	Study area	Data sources	Date accessed
International statutory nature conservation designations including Special Protection Area (SPA), possible/candidate SPA, Special Area of Conservation (SAC), possible/candidate SAC, Ramsar site and proposed Ramsar site.	30km	Multi-Agency Geographic Information for the Countryside (MAGIC) [REF 6]	August 2017 to October 2018
National statutory nature conservation designations including Site of Special Scientific Interest (SSSI) and possible SSSI.	2km	MAGIC [REF 6]	August 2017 to October 2018
Local statutory nature conservation designations including Local Nature Reserve (LNR)	1km	MAGIC [REF 6]	August to October 2018
Non-statutory nature conservation designations including LWS and potential LWS, Ecosite and ancient woodland.	2km	Warwickshire Biological Record Centre (WBRC) [REF 7] Solihull Green Infrastructure Study [REF 8]	October 2018
Protected and notable habitats and species	2km	MAGIC website [REF 6] WBRC [REF 7] Wardell Armstrong reports for Motorway Service Area (MSA) and New Junction between Junctions 5 & 6 of the M42	October 2018
Controlled weed species	1km	WBRC [REF 7]	October 2018

3 Desk study

3.1 Nature conservation designations

Statutory nature conservation designations

3.1.1 **Table 2** summarises the location and qualifying features of these sites. Full details for the qualifying features of these designated sites are provided in the Habitat Regulations Assessment: No Significant Effects Report [TR010027/APP/6.8].



Table 2: Statutory nature conservation designations of international importance within 30km of the Order Limits

Designation	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
Ensor's Pool SAC	Internationally important population of white-clawed crayfish	International (a designated SAC)	16km north-east.
Fens Pools SAC	Internationally important population of GCN	International (a designated SAC)	27km north-west.
Cannock Extension Canal SAC	Internationally important population of floating water-plantain (<i>Luronium natans</i>)	International (a designated SAC)	27km north-east
River Mease SAC	Internationally important aquatic vegetation communities and the presence of otter (<i>Lutra lutra</i>), white clawed crayfish, spined loach (<i>Cobitis taenia</i>) and bullhead (<i>Cottus gobio</i>)	International (a designated SAC)	28km north

3.1.2 National statutory nature conservation sites identified within 2km of the Order Limits are summarised in **Table 3** with locations illustrated on **Figure 9.1A** in Appendix 9.1 [**TR010027/APP/6.3**].

Table 3: Statutory national nature conservation designations within 2km of the Order Limits

Designation	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
Bickenhill Meadows SSSI/Warwickshire Wildlife Trust (WWT) Nature Reserve)/ Ecosite (37/18)	7.2ha of lowland neutral grassland (MG4/MG5 community) – one of the richest grassland floras in the county.	National (a designated SSSI)	The two management units are both located within the Order Limits
River Blythe SSSI	39km stretch of lowland river on clay substrate. Botanically, one of the richest rivers in lowland	SSSI)	The Order Limits crosses the SSSI at its southern- most extent, just south of Filey Lane.
	England. The habitats present are also important for invertebrate communities.		Additional hydrological connectivity with the Scheme via Hollywell Brook and via Shadow Brook and tributaries.
Coleshill and Bannerly Pools SSSI	37.7ha designated for lowland fen, marsh and	National (a designated SSSI)	Located adjacent to the north extent of the Order

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Designation	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
	swamp and for lowland broadleaved, mixed and yew woodland. The two pools and land between form the only valley mire system in Warwickshire		Limits.
Coleshill Pool, Bog and Wood (08/18) SSSI	Designated as part of the nationally important Coleshill and Bannerly Pools SSSI. Site consists of two pools which form the only valley mire system in Warwickshire	SSSI)	Located adjacent to the north extent of the Scheme.

Non-statutory nature conservation designations

- 3.1.3 Non-statutory nature conservation designations identified within 1km of the Scheme's Order Limits are summarised in **Table 4** and their locations are illustrated on **Figure 9.1B** in Appendix 9.1 [**TR010027/APP/6.3**].
- 3.1.4 **Table 3** includes all designated sites, as well as potential designations that are believed to meet relevant criteria but are yet to be assessed and formally adopted. All ungraded, destroyed and rejected local designations have been excluded.

Table 4: Non-statutory nature conservation designations within 1km of the Order Limits

Designation (reference number)	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
Aspbury's Coppice Ancient Woodland/potential LWS (pLWS) (P1)/Ecosite (49/18).	Ancient woodland.	County (Meets a number of criteria for which a LWS would be designated due to the	Located on land required for construction of the Scheme.
Listed on Natural England's Ancient		presence of ancient woodland, ancient woodland indicator	
Woodland Inventory as Plantation on Ancient Woodland Site (PAWS).		species and notable lichen, fungi and invertebrate species. Ancient woodland is also a Habitat of Principal Importance)	
Hollywell Brook corridor to A41 pLWS (P13)/Ecosite (76/28)	Aquatic habitats and associated grassland, woodland and online ponds.	Up to County (pLWS designated by SMBC)	Crossed by the Order Limits.
Castle Hill Farm Meadows	The LWS is one of	Regional (Species-rich	A section of the Order



Designation (reference number)	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
LWS (L2)/Clock Lane Meadows Ecosite (53/18)	the largest and most important grasslands in the county.	grasslands of this type and quality are rare nationally. Less than 1% of the NCA is occupied by high quality lowland meadow habitat)	Limits is located within the part of LWS.
Barber's Coppice Ecosite (05/18)	Mixed woodland.	Up to County (importance advised by citation)	Located adjacent to the Order Limits.
Main Birmingham to London Railway Line Ecosite (21/18)	Marginal habitat of some value as a refuge and distribution corridor for nesting birds and other local species.	Local (Parish) (importance advised by citation)	Located adjacent to the Order Limits.
Hen Wood and Hen Wood Meadow LWS (L20)	Damp meadow adjacent to River Blythe SSSI that supports a variety of grasses and herbs.	County (LWS)	Located adjacent to the southern-most extent of the Order Limits.
Disused Railway & Sidings pLWS (P8)/disused Track and Siding Wood Ecosite (25/28B)/ Nursery Cottage Brickworks Jacksons Local Geological site (LGS)	A disused railway with overgrown neglected hedgerows of oak (Quercus sp), ash (Fraxinus excelsior) and hawthorn (Crataegus Monogyna).	County (pLWS)	Located adjacent to the eastern boundary of the Order Limits.
Coleshill Pool Wood LWS (07/18)	Oak woodland with frequent birch (<i>Betula</i> sp.)	County (LWS)	Located adjacent to the north-most extent of the Order Limits.
Catherine-de-Barnes Meadows Ecosite (36/18)	Species-rich grassland.	Up to County (importance advised by citation)	Located adjacent the south-western boundary of the Order Limits.
Greens Ward Piece LWS (L7) (part of Shadowbrook Lane Meadows Warwickshire Wildlife Trust (WWT) Nature Reserve)/ Ecosite (37/18)	Small field of unimproved pasture.	County (LWS)	Within the Order Limits.
Wayside Cottages Meadow LWS (55/18)	A field of largely unimproved herb-rich grassland.	County (LWS designated by SMBC.)	Located approximately 30m west of the Order Limits.



Designation (reference number)	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
Pendigo Lake & The Rough Ecosite (33/18)	Not available.	Up to County (Ecosite designated by SMBC)	Located approximately 30m west of the Order Limits.
Marsh adjacent to River Blythe pLWS (P16)	Marsh area next to the River Blythe	Up to County (pLWS designated by SMBC.)	Located approximately 80m east of the Order Limits.
Bickenhill Churchyard Ecosite (41/18)	Little ecological information available, likely to be semi-improved or unimproved grassland.	Local (Parish) (importance advised by citation)	Located approximately 85m east of the Order Limits.
Henwood Mill LWS (L10)	Wet woodland mostly dominated by alder (Alnus glutinosa)	County (LWS)	Located approximately 130m west of the southern extent of the Order Limits.
Land by Henwood Tip pLWS (P15)	Wet alder coppice with crack willow and an understory of scattered elder	Up to County (pLWS)	Located approximately 160m north west of the Order Limits.
Pond at Hampton Manor Wood North pLWS (P20)/ Hampton Manor Grounds & Churchyard & Hampton-in- Arden Spinney Ecosite (70/28)	Broadleaved plantation with diverse range of species and relatively species-rich grassland area.	Up to County (pLWS)	Located approximately 400m east the Order Limits.
Grand Union Canal pLWS (P11)	The banks and canal support a varied flora.		Closest point is located approximately 200m west of the southern extent of the Order Limits.
Denbigh Spinney LWS (L4)	Broadleaved semi- natural woodland with abundant alder	County (pLWS)	Located approximately 450m east of the Order Limits.
Henwood Tip LWS (L11)	Poor wet semi- improved grassland with undulating hollows and ridges	County (LWS)	Located approximately 355m west of the southern-most extent of the Order Limits.
Kingshurst Brook/Low Brook, headwaters and Tributaries pLWS	The brook and banks supports a diverse range of flora.	Up to County (pLWS designated by SMBC)	Located adjacent west boundary of the Order Limits.



Designation (reference number)	Reason(s) for designation	Value (reasoning)	Relationship to the Scheme
Terrets and Pool pLWS (P27)	Alder woodland	County (importance advised by citation)	Located approximately 500m west of southern extent of the Order Limits.
Bickenhill Plantation LWS (L1)	Coniferous plantation and birch woodland	County (importance advised by citation)	Located approximately 550m west of the Order Limits.
GCN Pond deferred LWS (D2) pLWS	Open and poorly vegetated, reported to support GCN, there are no specific records to confirm this	Up to County (pLWS designated by SMBC)	Located approximately 730m west of southern extent of the Order Limits.
Pumells Brook Woodland (L14)	Sycamore (Acer pseudoplatanus) and alder woodland	County (LWS designated by SMBC)	Located approximately 800m south of the Order Limits.
Brick Kiln Hole Wood pLWS (P4)	Two areas of woodland	Up to County (importance advised by citation)	Located approximately 830m north west of Order Limits.
Hedgerow pLWS (P12)	Hedgerow bordering a range of habitats, including mixed plantation, arable, improved	Up to County (pLWS designated by SMBC)	Located approximately 880m south east of the Order Limits.
	grassland and tall ruderal.		
Purnells Brook Woodland LWS/Purnells Brook Meadows pLWS (P23)	Woodland and semi- improved grassland	County (LWS)	Located approximately 880m south of the Order Limits
Blythe Flood Plain pLWS (P3)	Marshy areas, semi- improved grassland and broadleaved woodland	Up to County (pLWS designated by SMBC)	Located approximately 1.2km east of the Order Limits.
Botanical Site, Island over M6 (Damp hollow adjacent to A446T) (24/18)	Broad-leaved woodland plantation	Ecosite	0.5km north of the scheme boundary

3.2 Protected and/or notable species records

3.2.1 The following provides a summary of protected and/ or otherwise notable species recorded within 2km of the Order Limits. A table detailing the species records closest to the Order Limits can be found in Annex A. The locations of protected



and otherwise notable species are illustrated in **Figures 9.1C**, **9.1D**, **9.1E**, **9.1F** & **9.1G** in Appendix 9.1 [**TR010027/APP/6.3**].

Bats

- 3.2.2 The desk study has identified that a range of bat species roost within the study area, including common pipistrelle (*Pipistrellus pipstrellus*), soprano pipistrelle (*P. pygmaeus*), Daubenton's bat (*Myotis daubentonii*) and brown long-eared bat (*Plecotus auritus*). Non-roosting records of noctule (*Nyctalus noctula*), serotine (*Eptesicus serotinus*), Leisler's bat (*Nyctalus leisler*) and Natterer's bat (*M. nattereri*) were identified.
- 3.2.3 The closest roosts to the Scheme were:
 - a. a roost recorded in 2013 within an area located 0.1km east of the Order Limits;
 - b. a roost of an unidentified bat species was recorded 0.1km west of the southern extent of the Order Limits in 2014;
 - four roosts were found 1.2km west of the Order Limits in 2013; two common pipistrelle roosts, one soprano pipistrelle roost and one Daubenton's bat roost; and
 - d. a brown long-eared roost was recorded 1km east of the Order Limits in 2015.
- 3.2.4 All other roosts are located more than 1km from the Order Limits (Annex A).
- 3.2.5 Observations of bats recorded (i.e. non-roosting records) within the Order Limits include common pipistrelle, *Myotis* species and brown long-eared bat. Other species within 1km of the Order Limits include Natterer's bat, soprano pipistrelle, noctule and Leisler's bat, all of which were recorded in 2015.

Otter

- 3.2.6 The desk study and the consultation with the Environment Agency confirmed the presence of otter on Hollywell Brook, the River Blythe and the Grand Union Canal, with the majority of records relating to the River Blythe.
- 3.2.7 The closest otter record was recorded 0.2km west of the Order Limits in 2017 on the Grand Union Canal.

Water vole

3.2.8 The closest water vole (*Arvicola amphibius*) record was observed 1.8km southwest of the Order Limits in 1985.

Other mammals

3.2.9 A harvest mouse record was found within the Order Limits in 2000.

Birds

3.2.10 The desk study returned records of five Schedule 1 species within 1km of the Order Limits in the last ten years, namely: kingfisher (*Alcedo atthis*) barn owl (*Tyto alba*), fieldfare (*Turdus pilaris*), redwing (*Turdus iliacus*) and wryneck (*Jynx torquilla*).



- 3.2.11 The only kingfisher record was recorded adjacent to the Order Limits in 1964.
- 3.2.12 Barn owl records were also returned from The Barn Owl Trust. The closest barn owl record to the Order Limits was recorded adjacent to the eastern extent of the Order Limits in 1996. A more recent record observed 0.7km west of the Order Limits was recorded in 2015.
- 3.2.13 Thirteen bird species under the Birds of Conservation Concern (BoCC) 2015 Red list have been recorded within 1km of the Order Limits. Nine bird species under the BoCC Amber list have also been recorded within 1km of the Order Limits.
 Table 5 lists those notable bird species that may breed in the habitats that are present within the Order Limits.

Table 5: Relevant desk-based study results

Species	Conservation status ¹
Barn owl (<i>Tyto alba</i>)	Sch-1: Green List
Bullfinch (<i>Pyrrhula pyrrhula</i>)	NERC S41; Amber List
Dunnock (Prunella modularis)	NERC S41; Amber List
Kestrel (Falco tinnunculus)	Amber List
Linnet (Linaria cannabina)	NERC S41; LBAP; Red List
Mallard (Anas platyrhynchos)	Amber List
Meadow pipit (Anthus pratensis)	Amber List
Mistle thrush (Turdus viscivorus)	Red List
Red kite (Milvus milvus)	Birds Dir; Sch-1; Green List
Song thrush (Turdus philomelos)	NERC S41; LBAP; Red List
Starling (Sturnus vulgaris)	NERC S41; Red List
Stock dove (Columba oenas)	Amber List
Willow warbler (Phylloscopus trochilus)	Amber List

¹ Birds Dir, Annex 1 of the EC Directive on the Conservation of Wild Birds 2009 (Directive 2009/147/EC) [REF 9]; Sch-1, Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) [REF 1]; NERC S41, Species of Principal Importance under Section 41 of the NERC Act 2006 [REF 3]; LBAP, Priority Species of the LBAP [REF 5]; Red List, BoCC Red List Species [REF 10]; Amber List, BoCC Amber List [REF 10].



Herpetofauna

- 3.2.14 There was a single record for slow worm within the last ten years, which was located 1km east of the Order Limits at Hampton in Arden train station in 2014. There were no other reptile records for the search area within the last ten years.
- 3.2.15 The closest great crested newt (*Triturus cristatus*) records were located 300 metres north and east of the Order Limits. Common toad (*Bufo bufo*) had also been recorded within the Order Limits in 2011.

Invertebrates

- 3.2.16 The desk study identified a large number of records of protected and notable species of terrestrial invertebrates within the search area from the past ten years.
- 3.2.17 Seventeen different invertebrates that are Species of Principal Importance (SPI) were found within or immediately adjacent to the Order Limits.
- 3.2.18 Eleven species of these were recorded within Shadowbrook Meadows Nature Reserve (comprising Bickenhill Meadows SSSI & Greens Ward Piece LWS), within the Order Limits, with dates ranging from 1996 to 2005.
- 3.2.19 Species within the wider boundary of the Scheme included the moths latticed heath (*Chiasmia clathrate*), cinnabar moth (*Tyria jacobaea*) and Argent & Sable (*Rheumaptera hastate*), the latter is also a Priority Species of the LBAP [REF 5]. Small heath (*Coenonympha pamphius*) listed as near threatened under the Red Data Book [REF 10] was also found within the Order Limits.

White-clawed crayfish

3.2.20 The desk study identified records of 22 individual white clawed crayfish (*Austropotamobius pallipes*) on Low Brook south of the A41 in 2011. The LBAP [REF 5] reported a good population on Low Brook in 2014 near Birmingham Airport. Low Brook is part of Kingshurst Brook/Low Brook, headwaters and Tributaries pLWS.

Flora

- 3.2.21 The desk study identified records of black poplar Populus nigra within the study area; however, none of these were confirmed during the Phase 1 habitat survey or Woodland NVC surveys (see Appendix 9.2 [TR010027/APP/6.3]). The field surveys recorded Poplar species and hybrid black poplar.
- 3.2.22 No rare plant species have been recorded within the Order Limits. The closest records consist of corn marigold (*Glebionis segetum*); annual knawel (*Scleranthus annuus* subsp. *annuus*) and tubular water-dropwort (*Oenanthe fistulosa*) were located adjacent to the southern extent of the Order Limits.

3.3 Invasive species

- 3.3.1 No invasive species records have been recorded within the Order Limits.
- 3.3.2 The closest records to the Order Limits consist of orange balsam (*Impatiens capensis*) and Indian balsam (*Imaptiens glandulifera*), both located adjacent to the southern extent of the scheme boundary in 2016. Rhododendron



(*Rhododendron ponticum*) has also been recorded adjacent to the northern extent of the Order Limits, recorded in 1951.

3.3.3 Japanese knotweed (*Fallopia japonica*), has been recorded 0.1km west of the central extent of the Order Limits in 2016.



4 References

Source
The Wildlife & Countryside Act 1981. HMSO. https://www.legislation.gov.uk/ukpga/1981/69
The Conservation of Habitats and Species Regulations 2017. HMSO. http://www.legislation.gov.uk/uksi/2017/1012/contents/made
The Natural Environment & Rural Communities Act 2006. HMSO. https://www.legislation.gov.uk/ukpga/2006/16/contents
Warwickshire Wildlife Trust Guidance Note on Application of Site Selection Criteria: 'The Green Book' – Guidance on the Selection of Local Wildlife Sites in Warwickshire, Coventry and Solihull (ver 12/13). Local Wildlife Sites Project. https://apps.warwickshire.gov.uk/api/documents/WCCC-863-559
Warwickshire Wildlife Trust (2017) Warwickshire, Coventry & Solihull Biodiversity Action Plan. http://www.warwickshirewildlifetrust.org.uk/LBAP
MAGIC website. www.magic.gov.uk.
Warwickshire Biological Records Centre. https://www.warwickshire.gov.uk/biologicalrecords
Solihull Metropolitan Borough Council (2012) Green Infrastructure Study. http://www.solihull.gov.uk/Portals/0/Planning/LDF/Solihull_Green_Infrastructure_Study.pdf
EC Directive on the Conservation of Wild Birds 2009 (Directive 2009/147/EC) (2009). European Commission. https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0147&from=EN
IUCN 2018. The IUCN Red List of Threatened Species. Version 2018-2. http://www.iucnredlist.org
Convention on the Conservation of European Wildlife and Natural Habitats https://www.coe.int/en/web/bern-convention
Environmental Protection Act 1990. HMSO https://www.legislation.gov.uk/ukpga/1990/43/contents
Eaton, M., Aebischer, N., Brown A., Hearn R., Lock L., Musgrove A., Noble D., Stroud D. and R., Gregory (2015) <i>Birds of Conservation Concern 4: the population status of birds in the UK, Channel Islands and Isle of Man.</i> British Birds (108) pp 708-746 https://britishbirds.co.uk/wp-content/uploads/2014/07/BoCC4.pdf
Stroh, P.A., Leach, S.J., August, T.A., Walker, K.J., Pearman, D.A., Rumsey, F.J., Harrower, C.A., Fay, M.F., Martin, J.P., Pankhurst, T., Preston, C.D. & Taylor, I. (2014) <i>A Vascular Plant Red List for England</i> . Botanical Society of Britain and Ireland, Bristol. https://bsbi.org/wp-content/uploads/dlm_uploads/England_Red_List_1.pdf



Annex A: Citations

COUNTY: WEST MIDLANDS SITE NAME: BICKENHILL MEADOWS

DISTRICT: Solihull SITE REF: 15W18

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife

and Countryside Act 1981 as amended

Local Planning Authority: SOLIHULL METROPOLITAN BOROUGH COUNCIL

National Grid Reference: SP 182822, SP 188816 Area: 7.2 (ha.) 17.8 (ac.)

Ordnance Survey Sheet 1:50,000: 139 1:10,000: SP 18 SE

Date Notified (Under 1949 Act): – Date of Last Revision: –

Date Notified (Under 1981 Act): 1991 Date of Last Revision: –

Other Information:

New site.

Description and Reasons for Notification:

Bickenhill Meadows consists of two groups of fields comprising species-rich grassland situated to the south and west of the village of Bickenhill on predominantly neutral soils overlying Keuper Marl.

The meadows comprise one of the richest grassland floras in the county with good examples of both meadow foxtail *Alopecurus pratensis* – great burnet *Sanguisorba officinalis* floodmeadow and common knapweed *Centaurea nigra* – crested dog's-tail *Cynosurus cristatus* meadow and pasture. Both grassland types have declined very severely nationally in the 20th century due to agricultural improvement. The West Midlands Region contains a major part of the national resource of the common knapweed – crested dog's-tail grassland type which is typically associated with level topography, loam or clay soils, moderately free drainage and the retention of traditional farming methods with small fields.

There is a complex pattern of vegetation resulting from local variations in topography and drainage, such as the ridge and furrow pattern, evident in some of the fields. This has led to the development of mosaics where the main vegetation types intermingle, as well as to areas where each type can be recognised. Characteristic species include common bent *Agrostis capillaris*, meadow foxtail, Yorkshire-fog *Holcus lanatus*, sweet vernal-grass *Anthoxanthum odoratum*, common sorrel *Rumex acetosa*, cat's-ear *Hypochoeris radicata*, ribwort plantain *Plantago lanceolata* and yellow rattle *Rhinanthus minor*. The sward is enriched by the presence of cowslip *Primula veris*, quaking-grass *Briza media*, lady's bedstraw *Galium verum*, devil's-bit scabious *Succisa pratensis*, heath-grass *Danthonia decumbens* and common spotted-orchid *Dactylorhiza fuchsii*. The fields also contain a number of uncommon species such as betony *Stachys officinalis*, pepper-saxifrage *Silaum silaus*, saw-wort *Serratula tinctoria*, as well as meadow thistle *Cirsium dissectum*, a county rarity.

Further interest is provided by wetter areas characterised by rushes *Juncus* spp., sedges *Carex* spp. and tall herbs such as meadowsweet *Filipendula ulmaria* and great burnet. Both groups of meadows have streams and there is a good range of tree and shrub species in the hedgerows around the fields.

COUNTY: WARWICKSHIRE SITE NAME: COLESHILL AND **BANNERLY POOLS**

DISTRICT: North Warwickshire SITE REF: 15WEQ

Status: Site of Special Scientific Interest (SSSI) notified (Under Section 28 of the Wildlife and Countryside Act) 1981 as amended

Local Planning Authority: WARWICKSHIRE COUNTY COUNCIL, North Warwickshire

Borough Council

National Grid Reference: SP 200860 Area: 37.6 (ha.) 92.9 (ac.)

1:10,000: SP 18 NE, SP 28 NW Ordnance Survey Sheet 1:50,000: 139

Date Notified (Under 1949 Act): 1954 Date of Last Revision: 1973

Date Notified (Under 1981 Act): 1988 Date of last Revision: –

Other Information:

Site formerly known as Coleshill Pool and Bog. Site boundary alteration (extension).

Description and Reasons for Notification:

The site lies just to the south of Coleshill village on the eastern outskirts of Birmingham.

It consists of two pools – Coleshill and Bannerly Pools – and an interjacent area, known as the Bogs, which together form the only valley mire system in Warwickshire. Coleshill Pool and the Bogs have formed on Pleistocene sands and gravels overlying Keuper Marl whereas Bannerly Pool lies on alluvial clay.

Coleshill Pool lies at the head of the valley system. Here a valley bog has developed over deep peat which has built up in part of the pool. The water then flows through the Bogs with its narrow streamside mire and acid, valley alder wood (a nationally restricted habitat) thence to Bannerly Pool with its swamp and sump alderwood – another nationally restricted habitat.

The valley bog adjoining Coleshill Pool is dominated by greater pond-sedge *Carex riparia* and soft rush Juncus effusus, but with areas of lesser pond-sedge C. acutiformis and bulrush Typha latifolia locally abundant. Cross-leaved heath Erica tetralix and marsh cinquefoil *Potentilla palustris* which are county rarities are also present. In places the bog is being invaded by downy birch Betula pubescens and grey willow Salix cinerea.

Coleshill Pool and its bog are surrounded by mature woodland of pedunculate oak *Quercus* robur and silver birch Betula pendula in which there are some planted Scots Pines Pinus sylvestris. The ground flora is strongly acidophilous (acid-loving) and is dominated by bracken Pteridium aquilinum, bramble Rubus fruticosus agg. and wavy hair-grass Deschampsia flexuosa, with locally abundant heather Calluna vulgaris and purple moorgrass Molinia caerulea, both of which are rare in the county.

The Bogs also has mature oak/birch woodland but includes a wet valley alderwood, with abundant birch and some invading *Rhododendron ponticum*. The ground flora includes locally dominant bramble and purple moor-grass with abundant gipsywort Lycopus europaeus and creeping bent Agrostis stolonifera. Pendulous sedge Carex pendula and greater tussock-sedge C. paniculata are also present amid small carpets of bog mosses which include Sphagnum recurvum, S. squarrosum, and S. fimbriatum.

Bannerly Pool is surrounded by a sump alder wood in which alder dominates the canopy, with the occasional crack willow Salix fragilis. Alder is also abundant in the shrub layer,

with goat willow *Salix caprea* and downy birch *Betula pubescens*. The ground flora includes abundant greater tussock-sedge in large old tussocks, greater pond-sedge, meadowsweet *Filipendula ulmaria*, yellow iris *Iris pseudacorus*, rough meadow-grass *Poa trivialis*, wood avens *Geum urbanum* and occasional marsh-marigold *Caltha palustris*. The margin of Bannerly Pool is occupied by small areas of swamp dominated by greater pond-sedge, lesser pond-sedge, greater tussock-sedge, soft rush and bulrush.

COUNTY: WEST MIDLANDS & WARWICKSHIRE SITE NAME: RIVER

BLYTHE

DISTRICT: SOLIHULL, NORTH WARWICKSHIRE, SITE REF: 15WF5

STRATFORD-UPON-AVON

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended.

Local Planning Authority: WARWICKSHIRE COUNTY COUNCIL, Solihull Metropolitan Borough Council, North Warwickshire Borough Council, Stratford-upon-Avon District Council

National Grid Reference: SP 109729 to SP 212916 Area: 102.2 (ha.) 252.5 (ac.)

Ordnance Survey Sheet 1:50, 000: 139 1:10,000: SP 17 SW, NW, NE, SP 27 NW,

SP 28 SW, NW, SP 29 SW

Date Notified (Under 1949 Act): – Date of Last Revision: –

Date Notified (Under 1981 Act): 1989 Date of Last Revision: –

Other Information:

A new site

Description and Reasons for Notification:

The 39 kilometre stretch of the River Blythe, from the point at which Spring Brook exits from under the Stratford-upon-Avon to Birmingham railway line to its confluence with the River Tame, is a particularly fine example of a lowland river on clay.

The Blythe has a wide range of natural structural features such as riffles, pools, small cliffs and meanders. These features are combined with a high diversity of substrate types ranging from fine silt and clay in the lower reaches to sands and gravels in the upper and middle reaches and in the riffles. The structure of this river is very variable and its importance is increased because of the rarity of such examples in lowland Britain.

The diverse physical features of the Blythe are mirrored by its diverse plant communities. The mean number of plant species found in any 1 km stretch is above average for a lowland river, as is the number of species recorded for the whole length of the river. Botanically, the Blythe is one of the richest rivers in lowland England with the most species-rich sections containing as many species as the very richest chalk streams.

Unlike many lowland rivers, the Blythe shows a clear succession of plant communities from its source to its confluence with the Tame. The substratum in the upper reaches is frequently composed of loose gravel and the margins still retain a high density of trees and shrubs. The vegetation in the channel is, therefore, shade-impoverished but algae and some flowering plants such as waterweeds *Elodea* spp. and water-starworts *Callitriche* spp. provide seasonal cover. The habitats in these upper reaches are important for their invertebrates

Downstream, the trees and shrubs on the margins become fewer but still remain at a higher density than most lowland rivers. As the river becomes deeper and wider and the shading from trees is reduced, the flora becomes rich and varied. In the shallow, fast-running stretches with gravel beds, water-crowfoots *Ranunculus fluitans* and *R. penicillatus* var. *calcareus* grow in profusion with 'blanket-weed' algae which are abundant through the summer months. Where larger stones are present a rich encrusting algal flora develops along with the fresh water sponge *Ephydatia fluviatilis*.

There is a rich flora in stretches with a moderate rate of flow over a clay bottom. The emergent common clubrush *Schoenoplectus lacustris* and branched bur-reed *Sparganium erectum* occur here alongside submerged species of pondweed *Potamogeton pectinatus*, *P. perfoliatus* and *P. crispus*, lesser bur-reed *Sparganium emersum*, spiked water-milfoil *Myriophyllum spicatum* and many other less common species. On the margins, sedges *Carex* spp. are frequent alongside species of sweet-grass *Glyceria* spp., reed canary-grass *Phalaris arundinacea* and many other flowering plants.

In the lower reaches where shallow stretches alternate with deeper, slower sections, the flora is diverse. Alongside many of the species recorded upstream are flowering rush *Butomus umbellatus*, arrowhead *Sagittaria sagittifolia* and yellow water-lily *Nuphar lutea*. The marginal flora is rich with mats of aquatic vegetation encroaching from the banks into the water. Amphibious bistort *Polygonum amphibium*, great yellow-cress *Rorippa amphibia* and reed sweet-grass *Glyceria maxima* are typical constituents of this community.

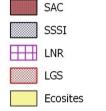
Several damp, unimproved meadows occur along the length of the river. They receive some of their water from annual flooding and are largely dependent upon the river for the maintenance of a high water-table. Rushes *Juncus* spp., sedges and tufted hair-grass *Deschampsia cespitosa* are usually the dominant species along with moisture-loving herbs such as meadowsweet *Filipendula ulmaria*, marsh marigold *Caltha palustris* and wild angelica *Angelica sylvestris*. There are several small areas of wet alder *Alnus glutinosa* and willow *Salix* spp. woodland which have a varied ground flora and are an integral part of the river system.

The river supports a diverse invertebrate community with a wide range of molluscs, oligochaetes and caddisflies. The most notable species is the pea-shell cockle *Pisidium moitessierianum* which is at the western edge of its range here. The dragonflies are also well represented with the beautiful demoiselle *Calopteryx virgo* being the least common of the species found.



WARWICKSHIRE BIOLOGICAL RECORDS CENTRE

Data search M42 J6 SP187823 Sites_north



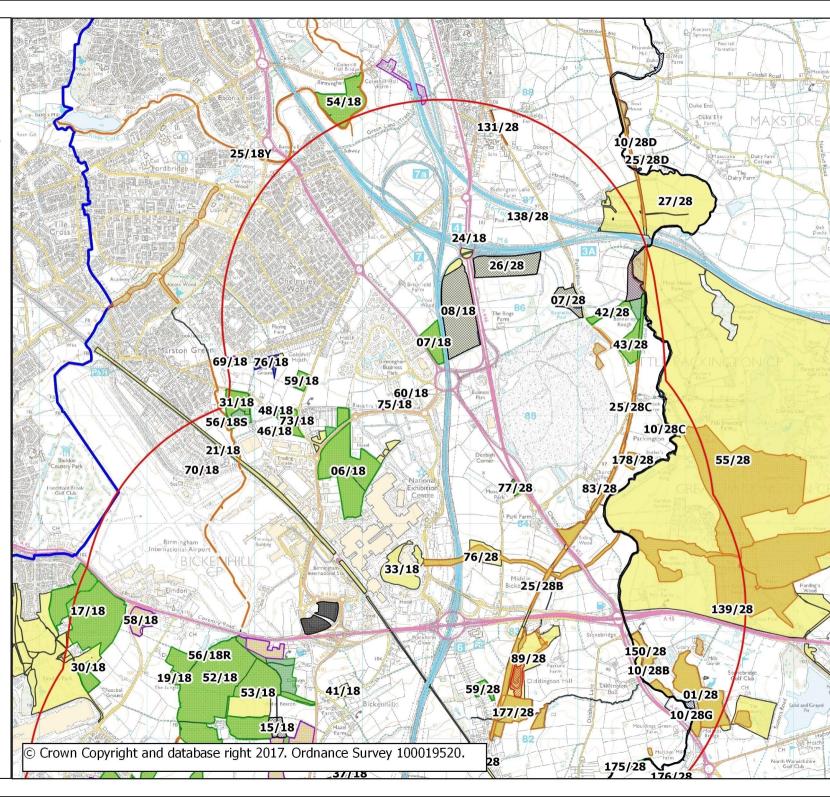
Local Wildlife Sites (LWS)



potential site

rejected

Warwickshire Biological Records Centre, Ecological Services, Warwickshire County Council, Warwick CV34 4SS Tel: 01926 418060





WARWICKSHIRE BIOLOGICAL **RECORDS CENTRE**

Data search M42 J6 SP187823 Sites south



SAC

LGS

Ecosites

Local Wildlife Sites (LWS)

deferred

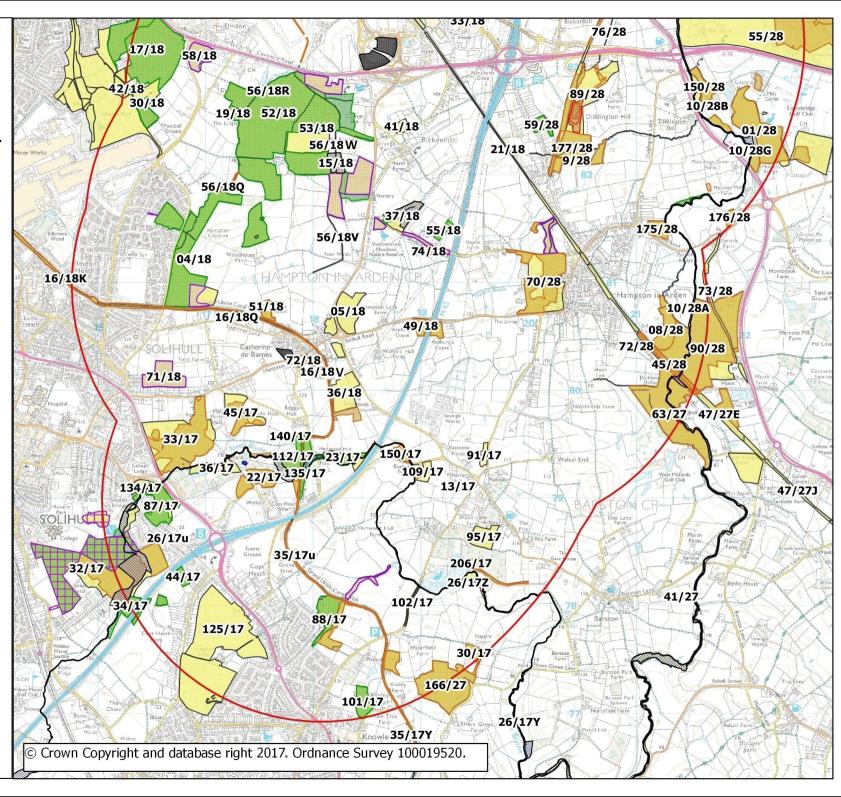
destroyed

LWS

potential site

rejected

Warwickshire Biological Records Centre, Ecological Services, Warwickshire County Council, Warwick CV34 4SS Tel: 01926 418060





Date: 10/10/2017 Our Ref: AE6622

Valerie Wheeler Name:

AECOM Company: Site Name: M42 J6 **Grid Ref:** SP187823

Site Radius: 5km

Mariya Tarnavska **Ecological Assistant**

Warwickshire Biological Records Centre

Ecological Services WCC, PO Box 43 Warwick CV34 4SX

Tel: 01926 418060

www.warwickshire.gov.uk/biologicalrecords

wbrc@warwickshire.gov.uk

Ecosite Brief Descriptions

01/28

Somers Gravel Pits and

Wood

Identified as Somers Gravel Pit potential Local Wildlife Site (pLWS). Eatern part of the site has nature conservation status ungraded.

This site consists of a series of abandoned and flooded gravel extraction pools, tall herb and new deciduous plantations. The flora is in the process of regeneration and the site is colonised by a wide variety of wildlife. Willow Salix sp and reedbeds are growing around the edges of the pits on very steep banks. The main body of the woodland is made up of conifers with a border of deciduous trees. There is an area of oak Quercus sp, birch Betula pendula and alder Alnus woodland at the northern tip of the site. Lesser-spotted woodpecker Dendrocops minor has been known to breed onsite.

Hampton Coppice LWS

Part of the site is designated as Hampton and Elmdon Coppice Local Wildlife Site (LWS).

A section in the SE corner is not of LWS quality and was rejected by the panel.

Includes Hampton & Elmdon Coppice LWS and Elmdon Heath. Elmdon Coppice is to the west of Damson Parkway, with Hampton Coppice and Elmdon Heath on the other side of the road.

Hampton and Elmdon Coppice LWS is an area of wood and marsh situated on the urban fringe of Solihull. The drier woodland areas of the LWS are dominated by oak *Quercus sp* and birch *Betula sp* on quite acidic soil.

The shrub layer includes hazel *Corylus avellana*, hawthorn *Crataegus monogyna*, holly *Ilex aquifolium* and rhododendron *Rhododendron ponticum*.

The ground flora is mostly dominated by bluebell *Hyacinthoides non-scripta*, bramble *Rubus futicosus agg* and bracken *Pteridium aquilinum*. There are also patches of acidophillous vegetation, including wavy hair grass *Deschampsia flexuosa* and bilberry *Vaccinium myrtillus*. Other notable woodland herbs recorded include wood sage *Teucrium scorodonia*, wood sorrel *Oxalis acetosella*, wood millet *Milium effusum*, hairy wood rush *Luzula pilosa* and wood speedwell *Veronica montana*.

The Low Brook stream runs through the western section of Hampton Coppice. Here the woodland is wetter, with alder *Alnus glutinosa* prominent, whilst common nettle is prominent in the ground layer. Other species present include opposite-leaved golden saxifrage *Chrysosplenium oppositifolium*, remote sedge *Carex remota*, greater tussock sedge *Carex paniculata*, and valerian *Valeriana officinalis*.

The invertebrate interest is likely to be great here given the rarity of alder woodland and the amount of invertebrates specific to it.

Elmdon Heath is found in the south of the LWS, adjacent to the Grand Union Canal. The sward is mostly rank, with abundant tussock grass Deschampsia cespitosia, soft rush Juncus effusus and yorkshire fog Holcus lanatus. The sward is herb rich, with abundant meadowsweet Filipendula ulmaria, with ragged robin Silene flos-cuculi, flattened meadow-grass Poa compressa, marsh horsetail Equisetum palustre and the cinquefoil Potentilla x suberecta also present.

All three woodpecker species have been recorded at Hampton Coppice, whilst Elmdon Heath is productive for a variety of breeding warblers, most notably grasshopper warbler *Locustella naevia* in some years.

Barber's Coppice

Nature conservation status ungraded.

The site is of District nature conservation value.

This woodland is cut in two by Catherine-de-Barnes Lane, although the eastern section is much the larger of the two. The site includes the road verge adjacent to the eastern section of the wood, near the roundabout.

A mixed woodland, the site was clearfelled in the 1980's and replanted mainly with scot's pine *Pinus sylvestris* and european larch *Larix decidua*, although the occasional oak *Quercus robur* can be found, and there is also a small stand of birch *Betula pubescens* and *Betula verrucosa*.

The ground flora is largely dominated by bramble *Rubus fruticosus* agg, although there are patches of bluebell *Hyacinthoides non-scripta* and wavy hair-grass *Deschampsia flexuosa*, while broad buckler fern *Dryopteris filix-mas* is frequent to abundant in places. In 1983 and 1989, following the wood being clearfelled and replanted, there were records of ling heather *Calluna vulgaris* along sandy verges both in the wood and adjacent to the road.

Bickenhill Plantations LWS Designated as Bickenhill Plantation Local Wildlife Site (LWS). The site was previously larger but was lost to the expansion of the NEC from the 1980's onwards.

Bickenhill Plantations is an area of coniferous plantation and birch woodland situated between the NEC, M42 and Birmingham Airport.

Approximately half the LWS is semi-mature coniferous plantation of pine Pinus sp with small areas of western hemlock *Tsuga heterophylla*. The ground layer here is mostly dominated by bracken *Pteridium aquilinum*. Hard fern *Blechnum spicant* is present but rare. A management plan has been initiated which involves clear felling the conifers and replanting with native broad-leaved species.

The eastern part of the LWS is the most natural area, with a vegetation type roughly corresponding to W4 Betula pubescens-Molinia caerulea woodland (downy birch-purple moor grass woodland). The ground layer is dominated by purple moor grass Molinia caerulea with abundant broad buckler fern Dryopteris dilatata. Sharp flowered rush Juncus acutiflorus and soft rush Juncus effusus are occasional, as are wavy hair grass Deschampsia flexuosa and velvet bent Agrostis canina. Heath bedstraw Galium saxatile, honeysuckle Lonicera periclymenum and tormentil Potentilla erecta are present but rare. To the south of this area a 1ha clearing has been made to conserve an area of purple moor grass marsh.

Other areas of woodland, dominated by birch with oak, occur to the west and north of the site. The ground here is drier and the ground flora is dominated by wavy hair grass, creeping soft grass *Holcus mollis* and common bent *Agrostis capillaris*. This part includes marginal areas of dry grassland with heather *Calluna vulgaris*, harebell *Campanula rotundifola*, perforate St John's wort *Hypericum perforatum*, autumn hawkbit *Leontodon autumnalis*, mouse-ear hawkweed *Hieracium pilosella*, tormentil, sheep's sorrel *Rumex acetosella* and hare's-foot clover *Trifolium arvense*.

This is the only site in the county for bog bush cricket *Metrioptera brachyptera*, whilst the range of threatened insects include 1 Red Data Book species, 38 Nationally Scarce species and 15 Regionally Scarce species.

07/18	Designated as Coleshill Pool Wood Local Wildlife Site (LWS).
Coleshill Pool Woods LWS	Once part of Coleshill Bogs SSSI, it is now isolated by the M42 motorway. An oak woodland with frequent birch (some quite mature), it has an understorey of mainly young birch Betula sp., hazel Corylus avellana, alder Alnus glutinosa and elm Ulmus sp. along the roadside. The ground flora is partly dominated by bramble Rubus fruticosus agg, with frequent broad buckler fern Dryopteris dilatata. There are also some extensive patches of wood sage Teucrium scorodonia, locally abundant honeysuckle Lonicera periclymenum and patches of rosebay willowherb Chamaenerion angustifolium. To the south of the woodland is a semi-natural birch woodland, with a scattered understorey of elder Sambucus nigra and encroaching sycamore Acer pseudoplatanus. The ground flora is dominated by bramble with frequent to abundant broad buckler fern Dryopteris dilatata, wood sage and male fern Dryopteris filix-mas.
07/28 Bannerley Wood and Pool SSSI	Designated as part of the nationally important Coleshill and Bannerley Pools Site of Special Scientific Interest (SSSI). This part of the site consists of Bannerley Wood and Pool, which consists of Bannerley Pool with its swamp and sump alderwood – a nationally restricted habitat. The site also includes Bannerley Rough.
08/18 Coleshill Pool and Bog SSSI	Designated as part of the nationally important Coleshill and Bannerly Pools Site of Special Scientific Interest (SSSI). Site consists of 2 pools – Coleshill and Bannerly – and an area known as the Bogs, which together form the only valley mire system in Warwickshire. A valley bog has developed over deep peat which has built up in part of the pool. Coleshill Pool is the head of the valley system, with the water then flowing through the Bogs, with its narrow stream side mire and acid valley alder wood (nationally restricted habitat) thence to Bannerly Pool, with its swamp and sump alderwood – another nationally restricted habitat. The ecosite system splits these SSSIs into separate sites (Bannerly Pool was added to the SSSI in more recent years) and is larger than the SSSI at Bannerly Pool, where it includes an area of land called Bannerly Rough, which is similar habitat and of county value.
08/28 Siden Hill Wood	Identified as Siden Hill Wood potential Local Wildlife Site (pLWS). A wooded hill with brook and pond, the wood is mixed with beech Fagus sylvatica, oak Quercus sp, ash Fraxinus excelsior, birch Betula pendula, hawthorn Crataegus monogyna and conifers such as spruce Picea sp, scot's pine Pinus sylvestris and larch Larix sp. The ponds at the northern end are stagnant and filled with dead wood.

10/28A

River Blythe SSSI

The River Blythe is designated as a Nationally important Site of Special Scientific Interest (SSSI)

The 39-kilometre stretch of the River Blythe is a particularly fine example of a lowland river on clay, one of the richest lowland rivers in England. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates, which include spiked water-milfoil *Myriophyllum spicatum*, least bur-reed *Sparganium natans*, flowering rush *Butomus umbellatus*, pea-shell cockle *Pisidium sp.* and beautiful demoiselle *Calopteryx virgo*. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe.

This catchment area has recently seen the return of the otter *Lutra lutra*, whilst other notable species recorded along stretches of the river include water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes*.

The tributaries are not SSSI's but are important for wildlife and the River Blythe.

10/28B

River Blythe SSSI

The River Blythe is designated as a Nationally important Site of Special Scientific Interest (SSSI)

The 39-kilometre stretch of the River Blythe is a particularly fine example of a lowland river on clay, one of the richest lowland rivers in England. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates, which include spiked water-milfoil Myriophyllum spicatum, least bur-reed Sparganium natans, flowering rush Butomus umbellatus, pea-shell cockle Pisidium sp. and beautiful demoiselle Calopteryx virgo. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe.

This catchment area has recently seen the return of the otter *Lutra lutra*, whilst other notable species recorded along stretches of the river include water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes*.

The tributaries are not SSSI's but are important for wildlife and the River Blythe.

10/28C

River Blythe SSSI

The River Blythe is designated as a Nationally important Site of Special Scientific Interest (SSSI)

The 39-kilometre stretch of the River Blythe is a particularly fine example of a lowland river on clay, one of the richest lowland rivers in England. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates, which include spiked water-milfoil *Myriophyllum spicatum*, least bur-reed *Sparganium natans*, flowering rush *Butomus umbellatus*, pea-shell cockle *Pisidium sp.* and beautiful demoiselle *Calopteryx virgo*. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe.

This catchment area has recently seen the return of the otter *Lutra lutra*, whilst other notable species recorded along stretches of the river include water vole *Arvicola amphibius* and white-clawed crayfish *Austropotamobius pallipes*.

The tributaries are not SSSI's but are important for wildlife and the River Blythe.

10/28D

River Blythe SSSI

The River Blythe is designated as a Nationally important Site of Special Scientific Interest (SSSI)

The 39-kilometre stretch of the River Blythe is a particularly fine example of a lowland river on clay, one of the richest lowland rivers in England. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates, which include spiked water-milfoil Myriophyllum spicatum, least bur-reed Sparganium natans, flowering rush Butomus umbellatus, pea-shell cockle Pisidium sp. and beautiful demoiselle Calopteryx virgo. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe.

This catchment area has recently seen the return of the otter Lutra lutra, whilst other notable species recorded along stretches of the river include water vole Arvicola amphibius and white-clawed crayfish Austropotamobius pallipes.

The tributaries are not SSSI's but are important for wildlife and the River Blythe.

10/28G The River Blythe is designated as a Nationally important Site of Special Scientific Interest (SSSI) River Blythe The 39-kilometre stretch of the River Blythe is a particularly fine SSSI example of a lowland river on clay, one of the richest lowland rivers in England. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates. which include spiked Myriophyllum spicatum, least bur-reed Sparganium natans, flowering rush Butomus umbellatus, pea-shell cockle Pisidium sp. and beautiful demoiselle Calopteryx virgo. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe. This catchment area has recently seen the return of the otter Lutra lutra, whilst other notable species recorded along stretches of the river include water vole Arvicola amphibius and white-clawed crayfish Austropotamobius pallipes. The tributaries are not SSSI's but are important for wildlife and the River Blythe. Designated as Knowle Wet Meadow Local Wildlife Site (LWS). 101/17 Knowle Wet Meadow Wet meadow, with wetter areas being dominated by a variety of sedges, including oval sedge Carex leporina and carnation sedge **LWS** Carex panicea, and rushes including wood rush Luzula sp. A stream runs through the site. In drier areas the meadow is dominated by sweet vernal grass Anthoxanthum odoratum, with other notable species being devil's-bit scabious Succisa pratensis, sneezewort Achillea ptarmica and yellow rattle Rhinathus minor. The site is also good for invertebrates. 102/17 Nature conservation status ungraded. Hampton Road Verge, A species-rich roadside verge. Plant species include agrimony Knowle Agrimonia eupatoria, knapweed Centaurea nigra, common St John's wort Hypericum perforatum, rough hawkbit Leontodon hispidus, tufted vetch Vicia cracca, horsetail Equisetum sp., field bindweed Convolvulus arvensis, field scabious Knautia arvensis, feverfew Tanacetum parthenium, black medick Medicago lupulina and wild carrot Daucus carota.

109/17	Part of the site is identified as Eastcote Hall Moat potential Local
Eastcote Hall Moat	Wildlife Site (pLWS).
	Adjacent to the River Blythe SSSI.
	The moat surrounding the hall is fairly shallow, but clear. Aquatic plants are abundant including yellow water lily <i>Iris pseudacorus</i> , common duckweed <i>Lemna minor</i> , common water starwort <i>Callitriche agg</i> and curled pondweed <i>Potamogeton crispus</i> and broad-leaved pondweed <i>Potamogeton natans</i> . There are also patches of reedmace <i>Typha latifolia</i> and remote sedge <i>Carex remota</i> , lady's fern <i>Athyrium filix-femina</i> grows around the edges and it is stocked with fish. Overhanging trees include alder <i>Alnus glutinosa</i> and ash <i>Fraxinus excelsior</i> , whilst there is an adjacent pond with very little aquatic vegetation and is heavily shaded by trees.
112/17	Site is designated as a Henwood Tip Local Wildlife Site (LWS).
Henwood Tip	Poor wet semi-improved grassland with undulating hollows and
LWS	ridges. The grassland contains locally abundant common bent grass Agrostis capillaris, hairy sedge Carex hirta, selfheal Prunella vulgari, thistle Cirssium spp, creeping cinquefoil Potentilla reptans, cock's foot Dactylis glomerata; couch grass Elytrigia repens; tufted hairgrass Deschampsia cespitosa; ragwort Senecio spp; nettle Urtica dioica with lesser stitchwort Stellaria graminea; sorrel Rumex spp and some banks of bramble Rubus fruticosus, frequent red campion Silene dioica and a field layer dominated by common smoothcap Atrichum undulatum and commom feather moss Eurhynchium praelongum, broad buckler-fern Dryopteris dilatata; wood avens Geum urbanum; dog's mercury Mercurialis perennis. There is a local abundance of water dropwort Oenanthe spp and fern Dryopteris filixmas. Wet alder Alnus spp coppice with crack willow Salix fragilis and an understorey of scattered elder. This site was previously used as a tip.
125/17	Nature conservation status ungraded.
Copt Heath Golf Course (Knowle)	Amenity grassland covers much of the site with sporadic patches of broadleaved plantation. In the south-east corner of the site there is a small abandoned quarry with a mosaic of habitats including wet rank grassland, hawthorn <i>Crataegus monogyna</i> and elder <i>Sambucus nigra</i> scrub, woodland and some large pools.
13/17	Nature conservation status ungraded.
Pond, nr. Wharley Hall, Eastcote	A small pond surrounded by oak <i>Quercus sp</i> and ash <i>Fraxinus</i> excelsior. There is an understory of elder <i>Sambucus nigra</i> and hawthorn <i>Crataegus monogyna</i> , with nettle <i>Urtica dioica</i> , cock's-foot <i>Dactylis glomerata</i> and bittersweet <i>Solanum dulcamara</i> in the ground flora.

Packington Lane Road Verge

Identified as Road Verge potential Local Wildlife Site (pLWS).

Species rich semi-improved grassland on a road verge with some encroachment of bramble *Rubus fruticosus agg*. And hawthorn *Crataegus monogyna* from the hedgerow. Herb species include abundant bulbous buttercup *Ranunculus bulbosus*, sheep's sorrel *Rumex acetosella* and common vetch *Vicia sativa*, with occasional yarrow *Achillea millefolium*, knapweed *Centaurea nigra*, white campion *Silene latifolia*, common mouse-ear *Cerastium fontanum*, forget-me-not *Myosotis sp.*, thyme-leaved speedwell *Veronica serpyllifolia* and lesser stitchwort *Stellaria graminea*.

134/17

131/28

Sandals bridge Meadows & Wood LWS Most of this site is designated as part of Old Brickworks, Riverside Drive Local Wildlife Site (LWS), with the remainder of the site with ungraded nature conservation status.

Site of County nature conservation value.

As well as broadleaved woodland, an area of plantation can be found in the north and semi-natural woodland in the south. The latter is identified as a pLWS. There are also areas of wet meadow.

The site is adjacent to the River Blythe SSSI.

The wooded areas include alder *Alnus glutinosa* and crack willow *Salix fragilis* by the river, with dog's mercury *Mercurialis perennis*, wild garlic *Allium ursinium* and wild angelica *Angelica sylvestris* also present. The meadows are diverse with great burnet *Sanguisorba officinalis*, greater bird's-foot-trefoil *Lotus pedunculatus* and lady's-mantle *Alchemilla vulgaris*. Wetter areas include gypsywort *Lycopus europaeus*, yellow flag *Iris pseudacorus* and meadowsweet *Filipendula ulmaria*.

Canal Wood SSSI, LWS The area in the east of this site is included within the River Blythe Site of Special Scientific Interest (SSSI).

East of the Grand Union Canal is designated as Henwood Mill Local Wildlife Site (LWS).

South west of the Grand Union Canal is identified as the Land by Henwood Tip potential Local Wildlife Site (pLWS).

Henwood Mill LWS and River Blythe SSSI

Wet woodland mostly dominated by alder Alnus glutinosa with ash Fraxinus excelsior, sycamore Acer pseudoplatanus, english oak Quercus robur, yew Taxus baccata, grey willow Salix cinerea, wild cherry Prunus avium and crack willow Salix fragilis. The shrub layer is sparse with hazel Corylus avellana, hawthorn Crataegus monogyna, holly Ilex aguifolium, blackthorn Prunus spinosa and elder Sambucus nigra. The ground layer is generally dominated by nettle Urtica dioica and bramble Rubus fruticosus agg with indian balsam Impatiens glandulifera locally dominant. Other species recorded were (not in order of abundance): hairy brome Bromopsis ramose, water plantain Alisma plantago-aquatica, garlic mustard Alliaria petiolata, angelica Angelica sylvestris, fool's watercress Apium nodiflorum, mugwort Artemisia vulgaris, lords and ladies Arum maculatum, marsh marigold Caltha palustris, wavy bittercress Cardamine flexuosa, remote sedge Carex remota, creeping thistle Cirsium arvense, marsh thistle Cirsium palustre, broad buckler-ferm Dryopteris dilatata, male fern Dryopteris filix mas, hart's-tongue fern Phyllitis scolopendrium, water-pepper Polystichium aculeatum, great willowherb Epilobium hirsutum, cleavers Galium aparine, herb-robert Geranium robertianum, wood avens Geum urbanum, ground ivy Glechoma hederacea, ivy Hedera helix, hogweed Heracleum sphondylium, bluebell Hyacinthoides nonscripta, orange balsam Impatiens capensis, nipplewort Lapsana communis, water mint Mentha aquatica, dogs mercury Mercurialis perennis, water pepper Persicaria hydropiper, dog rose Rosa canina, wood dock Rumex sanguineus, red campion Silene dioica, hedge woundwort Stachys sylvatica, common chickweed Stellaria media, dandelion Taraxacum agg, upright hedge parsley Torilis japonica, brooklime Veronica beccabunga, water starwort Callitriche agg, duckweed Lemna sp, creeping buttercup Ranunculus repens and meadowsweet Filipendula ulmaria. A tawny owl Strix aluco was seen. The lepidoptera speckled wood Pararge aegeria, green veined white Pieris napi and silver y Autographa gamma where seen.

The wood is secondary and occupies areas shown as fields on the 1st edition OS Map. (HBA Dec. 1998)

Land by Henwood Tip pLWS

Wet alder coppice with crack willow and an understory of scattered elder. The ground flora contains locally abundant water dropwort *Oenanthe sp* with frequent red campion, male fern *Dryopteris filix-mas* and a field layer dominated by *Atrichum undulatum* and *Eurhynchium praelongum*. Also contains nettle, broad buckler-fern, wood avens, dog's mercury and bramble.

Rank semi-improved grassland with undulating hollows and ridges containing abundant cock's-foot *Dactylis glomerata*, common couch *Elytrigia repens*, nettle and common bent *Agrostis capillaris* in the hollows. The ridges tend to be much richer and dominated by common bent with abundant lesser stitchwort *Stellaria graminea*, red fescue *Festuca rubra* and lesser knapweed *Centaurea nigra*, with

frequent ragwort *Senecio sp,* sorrel *Rumex acetosa* and self-heal *Prunella vulgaris.* (HBA Dec. 1998)

138/28	Nature conservation status ungraded.
Pool Farm Ponds	Site consists of two ponds, with the smaller often drying up in the summer. The larger pond has a diverse range of marginal and aquatic vegetation.
139/28	Nature conservation status ungraded.
Woodland at Kennels Packington Park	The site includes woodlands, hedgerows and a pool.
	One area of woodland is an open oak <i>Quercus sp</i> plantation with some lime <i>Tilia sp</i> , pine <i>Pinus ap</i> , birch <i>Betula sp</i> and an understorey of mainly scattered hazel <i>Corylus avellana</i> with some hawthorn <i>Crataegus monogyna</i> . The ground flora is dominated by bracken <i>Pteridium aquilinum</i> with bramble <i>Rubus fruticosus</i> and some garlic mustard <i>Alliaria petiolata</i> . Other plantation areas have coppiced sycamore <i>Acer pseudoplatanus</i> , lime, sweet chestnut <i>Castanea sativa</i> and oak. The understorey is sparse.
	Species rich hedgerows contain hawthorn, hazel, holly <i>Ilex aquifolium</i> , elm <i>Ulmus sp</i> , crabapple <i>Malus sylvestris</i> , elder <i>Sambucus nigra</i> , ash <i>Fraxinus excelsior</i> , dog rose <i>Rosa canina</i> and occasional mature oak standards.
	A former pool (possibly once a quarry) has oak and birch woodland, and although the quarry has now largely dried out, some open water still remains with water forget-me-not <i>Myosotis scorpioides</i> and locally dominant rushes along the banks.
140/17	Identified as Land by Henwood Tip potential Local Wildlife Site
Pool South of Bogay Hall	(pLWS).
	Large open pond containing locally abundant water figwort Scrophularia auriculata, amphibious bistort Persicaria amphibia, branched bur-reed Sparganium erectum and some introduced water lily.

Land nr. Bickenhill (Bikenhill Meadows) SSSI Designated as Bickenhill Meadows Nationally Important Site of Special Scientific Interest (SSSI).

This SSSI consists of two separate areas, the first is a Warwickshire Wildlife Trust Nature Reserve called Shadowbrook Lane Meadow (37/18) which together with a smaller meadow to the northwest (15/18) form Bickenhill Meadows SSSI.

The meadows comprise one of the richest grassland floras in the county with good examples of both meadow foxtail Alopecurus pratensis-great burnet Sanguisorba officinalis flood meadow and common knapweed Centaurea nigra-crested dog's-tail Cynosurus cristatus grassland type. There is a complex pattern of vegetation resulting from local variations in topography and drainage, such as the ridge and furrow pattern, evident in some of the fields. Characteristic species include common bent Agrostis capillaris, meadow foxtail, yorkshire fog Holcus lanatus, sweet vernal grass Anthoxanthum odoratum, common sorrel Rumex acetosa, cat's-ear Hypochaeris radicata and yellow rattle Rhinanthus minor. The sward is enriched by cowslip Primula veris, quaking-grass Briza media, lady's bedstraw Galium verum, devil's-bit scabious Succisa pratensis, heath grass Danthonia decumbens and common spotted orchid Orchis fuchsii. The fields also contain a number of uncommon species such as betony Stachys officinalis, pepper-saxifrage Silaum silaus, saw-wort Serratula tinctoria, lady's mantle Alchemilla vulgaris, devil's-bit scabious, salad burnet Sanguisorba minor, quaking grass as well as meadow thistle Cirsium dissectum, a county rarity.

Wetter areas contain rushes, sedges and tall herbs such as meadowsweet *Filpendula ulmaria* and great burnet. Both groups of meadows have streams and there is a good range of tree and shrub species in the hedgerows around the fields.

150/17

Marsh adjacent to River Blythe

Identified as a potential Local Wildlife Site (pLWS).

Adjacent to River Blythe SSSI.

Marsh area next to the River Blythe dominated by yorkshire fog *Holcus lanatus* and creeping bent *Agrostis stolonifera* and containing locally abundant soft rush *Juncus effusus*, nettle *Urtica dioica*, some reed canary-grass *Phalaris arundinacea*, tufted hair-grass *Deschampsia cespitosa* and thistle *Cirsium sp*.

Blythe Floodplain

Identified as Blythe Flood Plain potential Local Wildlife Site (pLWS).

The site includes marshy areas, semi-improved grassland and a broad-leaved woodland.

The marshy areas in the south of the site are managed with soft rush *Juncus effusus* dominating and abundant meadow foxtail *Alopecurus pratensis*, sharp flowered rush *Juncus acutiflorus*,great pond sedge *Carex riparia*, ragged robin *Silene flos-cuculi* and great bird's-foot trefoil *Lotus pedunculatus*.

The semi-improved grasslands are mainly in the north of the site and contain a good range of flora along with some damper patches supporting soft rush, meadowsweet *Filipendula ulmaria* and fool's watercress *Apium nodiflorum*. The drier areas contain common bent *Agrostis capillaris*, reed canary grass *Phalaris arundinacea*, upright hedge parsley *Torilis japonica*, selfheal *Prunella vulgaris*, and ladies bedstraw *Galium verum*.

There is an alder *Alnus glutinosa* woodland towards the centre of the site with crack willow *Salix fragilis*, mature oak *Quercus*, ash *Fraxinus excelsior* and a sparse understorey containing hazel *Corylus avellana*, hawthorn *Crataegus monogyna* and elder *Sambucus nigra*. The ground flora comprises wild angelica *Angelica sylvestris*, red campion *Silene dioica*, wood meadow grass *Poa nemoralis*, wood avens *Geum urbanum*, yellow archangel *Lamiastrum galeobdolon*, and lesser celandine *Ficaria verna*. Woodland clearings and the edges of the river contain meadowsweet, soft rush, reed sweet-grass *Glyceria maxima* and reed canary grass *Phalaris arundinacea*.

16/18K

Grand Union Canal

Identified as Grand Union Canal potential Local Wildlife Site (pLWS). Section to the north has nature conservation status ungraded. Site of County value.

The canal in this 10km square has a great deal of built development on both banks along much of its length. However, near Hampton-in-Arden there are open sections with farmland surrounding. Conditions are fairly dry and acidic and support a varied flora with species such as wild carrot *Daucus carota*, harebell *Campanula rotundifolia* and devil's bit scabious *Succisa pratensis* with heather *Calluna vulgaris* recorded on cutting sides. The canal itself has some stretches of emergent common reed *Phragmites australis* and occasional patches of yellow iris *Iris pseudacorus*, reed canary-grass *Phalaris arundinacea*, hard rush *Juncus inflexus*, greater pond sedge *Carex riparia* and water dropwort *Oenanthe crocata*. The canal also contains patches of floating-leaved pondweed *Potamogeton natans* and water plantain *Alisma plantago-aquatica*.

There is a small steep wooded cutting adjacent to the canal at Olton which supports hawthorn *Crataegus monogyna*, sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* and a range of birds and butterflies.

Kingfisher *Alcedo atthis* has been recorded along this linear feature.

16/18Q

Grand Union Canal

Identified as Grand Union Canal potential Local Wildlife Site (pLWS). Site of County value.

The canal in this 10km square has a great deal of built development on both banks along much of its length. However, near Hampton-in-Arden there are open sections with farmland surrounding. Conditions are fairly dry and acidic and support a varied flora with species such as wild carrot *Daucus carota*, harebell *Campanula rotundifolia* and devil's bit scabious *Succisa pratensis* with heather *Calluna vulgaris* recorded on cutting sides. The canal itself has some stretches of emergent common reed *Phragmites australis* and occasional patches of yellow iris *Iris pseudacorus*, reed canary-grass *Phalaris arundinacea*, hard rush *Juncus inflexus*, greater pond sedge *Carex riparia* and water dropwort *Oenanthe crocata*. The canal also contains patches of floating-leaved pondweed *Potamogeton natans* and water plantain *Alisma plantago-aquatica*.

There is a small steep wooded cutting adjacent to the canal at Olton which supports hawthorn *Crataegus monogyna*, sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* and a range of birds and butterflies.

Kingfisher *Alcedo atthis* has been recorded along this linear feature.

16/18V

Grand Union Canal

Identified as Grand Union Canal potential Local Wildlife Site (pLWS).

The canal in this 10km square has a great deal of built development on both banks along much of its length. However, near Hampton-in-Arden there are open sections with farmland surrounding. Conditions are fairly dry and acidic and support a varied flora with species such as wild carrot *Daucus carota*, harebell *Campanula rotundifolia* and devil's bit scabious *Succisa pratensis* with heather *Calluna vulgaris* recorded on cutting sides. The canal itself has some stretches of emergent common reed *Phragmites australis* and occasional patches of yellow iris *Iris pseudacorus*, reed canary-grass *Phalaris arundinacea*, hard rush *Juncus inflexus*, greater pond sedge *Carex riparia* and water dropwort *Oenanthe crocata*. The canal also contains patches of floating-leaved pondweed *Potamogeton natans* and water plantain *Alisma plantago-aquatica*.

There is a small steep wooded cutting adjacent to the canal at Olton which supports hawthorn *Crataegus monogyna*, sycamore *Acer pseudoplatanus* and ash *Fraxinus excelsior* and a range of birds and butterflies.

Kingfisher *Alcedo atthis* has been recorded along this linear feature.

166/27

Kixley Farm Meadows

Identified as Kixley Farm Meadows potential Local Wildlife Site (pLWS).

Large semi-improved neutral grassland meadow separated by a stream with black medick *Medicago lupulina*, red clover *Trifolium pratense*, white clover *Trifolium repens*, common sorrel *Oxalis acetosella*, bulbous buttercup *Ranunculus bulbosus*, yellow rattle *Rhinanthus minor*, meadow vetchling *Lathyrus pratensis*, creeping cinquefoil *Potentilla reptans*, great burnet *Sanguisorba officinalis*, meadowsweet *Filipendula ulmaria* and common chickweed *Stellaria media*.

Elmdon Park LWS, LNR Broad-leaved semi-natural woodland in the SW corner of the park is designated as Elmdon Park Wood Local Wildlife Site (LWS)

This part of the site is also designated as Elmdon Manor statutory Local Nature Reserve (LNR).

Area to the east of LNR has been rejected by the LWS panel. Not of LWS quality.

Areas of the site to the north-west are designated as Elmdon Grange Wood and Elmond Grange Park Local Wildlife Sites (LWS). The rest of the site has nature conservation status ungraded.

Although the site is mostly parkland with amenity grassland and planted trees, there are also areas of mature woodland and a pond.

Elmdon Park Wood LWS is a semi-natural woodland with an area of standing water. It is dominated by English oak *Quercus robur*, ash *Fraxinus excelsior* and silver birch *Betula pendula*. Other species present include crack willow *Salix fragilis*, alder *Alnus glutinosa*, rowan *Sorbus aucuparia*, wych elm *Ulmus glabra*, sycamore *Acer pseudoplatanus*, beech *Fagus sylvatica* and yew *Taxus baccata*.

Three ground flora species particularly associated with ancient woodland, woodruff *Galium odoratum*, wood sorrel *Oxalis acetosa* and wood millet *Milium effusum*, have all been recorded on site. Two other scare species that have been recorded are sneezewort *Achillea ptarmica* and giant bellflower *Campanula latifolia*.

Marginal plants around the pond include great willowherb *Epilobium hirsuta*, gipsywort *Lycopus europaeus* and wild angelica *Angelica sylvestris*, whilst there is also a record of blunt-leaved pondweed *Potamogeton obtusifolius*.

175/28

Fields adjacent to River Blythe

Identified as Fields adjacent to River Blythe-Hampton Depot potential Local Wildlife Site (pLWS).

The southern part of the site is a large area of neglected semi-improved grassland dominated by false oat-grass *Arrhenatherum* elatius, Yorkshire fog *Holcus* lanatus, common bent *Agrostis* capillaris, timothy *Phleum* pratense, cock's foot *Dactylis* glomerata with bird's foot trefoil *Lotus* corniculatus, autumn hawkbit *Leontodon* autumnalis and perforate st john's wort *Hypericum* perforatum. The northern part of the site is an area of marsh area dominated by meadowsweet *Filipendula* ulmaria with abundant great willowherb *Epilobium* hirsutum, great pond sedge *Carex* riparia, hedge woundwort *Stachys* sylvatica, hogweed *Heracleum* sphondylium and wild angelica *Angelica* sylvestris.

176/28

Wet Woodland

Identified as Wet Woodland potential Local Wildlife Site (pLWS).

Alder *Alnus glutinosa* and crack willow *Salix fragilis* woodland which contains clearings dominated by wild angelica *Angelica sylvestris* with marsh thistle *Cirsium palustre*, great willowherb *Epilobium hirsutum*, woody nightshade *Solanum dulcamara* and encroaching willow *Salix sp* scrub.

177/28	Identified as Marshy Fields potential Local Wildlife Site (pLWS).
Marshy Fields	The southern part of the site is neglected semi-improved grassland containing abundant cock's foot <i>Dactylis glomerata</i> , false oat-grass <i>Arrhenatherum elatius</i> , tufted hair grass <i>Deschampsia caespitosa</i> and common couch <i>Elytrigia repens</i> . Much of the area is suffering from encroaching bramble <i>Rubus fruticosus</i> . The northern extent has been planted with oak <i>Quercus</i> and contains ash <i>Fraxinus excelsior</i> , alder <i>Alnus glutinosa</i> and goat willow <i>Salix caprea</i> . The northern part is poor semi-improved grassland.
178/28	Identified as Butlers Moors Wood potential Local Wildlife Site (pLWS).
Butlers Moors Wood	Block of woodland, possibly plantation, in the centre of an arable field. Part is poplar <i>Populus sp</i> , but silver birch <i>Betula pendula</i> is also present.
19/18	Designated as Castle Hill Farm Meadows Local Wildlife Site (LWS).
The Jungle LWS	A small area of derelict broadleaved woodland, which in places is fairly marshy. The flora recorded is of limited interest, though brooklime <i>Veronica beccabunga</i> has been noted.
206/17	Identified as a potential Local Wildlife Site (pLWS).
Hedgerow	Hedgerow bordering a range of habitats, including mixed plantation, arable, improved grassland and tall ruderal.
21/18 Main Birmingham to London Railway Line	Nature conservation status ungraded. Parish Value only. Marginal habitat of some value as a refuge and distribution corridor for nesting birds and other local species.
22/17 Terrets	Identified as a potential Local Wildlife Site (pLWS). The small pond to the north, also included within the Ecosite, has been deferred by the LWS panel and remains a potential Local Wildlife Site. Site of County value.
	The eastern part of this site is alder <i>Alnus glutinosa</i> woodland with some mature oak <i>Quercus robur</i> , birch <i>Betula pendula</i> and an understory of scattered hazel <i>Corylus avellana</i> and elder <i>Sambucus nigra</i> . The woodland is drained through a series of pools and channels that run through the wood and contains male fern <i>Dryopteris filix-mas</i> , broad buckler-fern <i>Dryopteris dilatata</i> , tufted hair-grass <i>Deschampsia cespitosa</i> , remote sedge <i>Carex remota</i> , soft rush <i>Juncus effusus</i> , red campion <i>Silene dioica</i> and bramble <i>Rubus fruticosus agg</i> . In the west is a birch woodland with some oak and an understory of scattered hazel. The ground flora includes bramble, male fern, red campion and nettle <i>Urtica dioica</i> . Contains a recently enlarged pool.
	The site also includes a large pond to northeast. It is open and poorly vegetated, and although reported to support great crested newt <i>Triturus cristatus</i> , there are no specific records to confirm this. The aquatic vegetation includes lesser spearwort Ranunculus flammula and nodding bur-marigold Bidens cernua, whilst a good variety of dragonflies have also been noted onsite. Access to the pond is via

23/17 Designated as Hen Wood and Hen Wood Meadow Local Wildlife Site (LWS). Wood & Meadow, nr. Henwood Mill Adjacent to River Blythe SSSI. LWS Meadow is damp and supports a variety of grasses and herbs, including devil's-bit scabious Succisa pratensis, selfheal Prunella vulgaris, great burnet Sanguisorba officinalis, betony Stachys officinalis, sneezewort Achillea ptarmica, ragged robin Silene floscuculi etc. Ditch has associated species, and wood canopy is oak Quercus sp., willow Salix sp., alder Alnus glutinosa and some hybrid black poplar Populus nigra x deltoides, with a dense understory of hazel Corylus avellana, blackthorn Prunus spinosa and hawthorn Crataegus monogyna and a good ground flora. 24/18 Nature conservation status ungraded. Botanical Site. Island Green belt with no ecological information. over M6 (Damp hollow adjacent to A446T) 25/18Y Much of this site falls within Birmingham. Identified as a potential Local Wildlife Site (pLWS). River Cole County nature conservation value. Part LWS River and associated corridor forms a linear habitat. The river flows in a shallow channel over a gravel bed. The adjacent habitats include grassland and marsh of high quality, one area being listed on Natural England's grassland inventory. Species include common knapweed Centaurea nigra and greater knapweed Centaurea scabiosa. as well as great burnet Sanguisorba officinalis and sedge Carex sp beds. The river also flows through areas of arable and improved grassland, which are included within the designation as part of the river and its corridor. A few small woodlands are also adjacent, as well as associated streams and ditches, which include good stands of aquatic and emergent vegetation. Features also include a number of associated field ponds, which appear suitable for great crested-newts Triturus cristatus. Identified as Disused Railway & Sidings potential Local Wildlife Site 25/28B (pLWS). Disused Track & Siding A section of the site is included within Nursery Cottage Brickworks Wood Jacksons Local Geological site (LGS). The River Blythe SSSI runs adjacent to much of the site. A disused railway with overgrown neglected hedgerows of oak Quercus sp, ash Fraxinus excelsior and hawthorn Crataegus monogyna which are encroaching onto the railway line. Dense scrub and tall herb run through the middle, with the species recorded including rosebay willowherb Epilobium angustifolium, bramble Rubus fruticosus and nettle Urtica dioica in the scrub, and in the more grassy areas there is hemp nettle Galeopsis sp, agrimony Agrimonia eupatoria, pignut Conopodium majus, dog violet Viola riviniana,

selfheal Prunella vulgaris and bush vetch Vicia sepium.

25/28C	Identified as Disused Railway & Sidings potential Local Wildlife Site (pLWS). A section of the site is included within Todds Rough, Bannerly Rough.			
Disused Track				
Part LWS	A section of the site is included within Todds Rough, Bannerly Rough and Bannerly Marsh Local Wildlife Site (LWS).			
	The River Blythe SSSI runs adjacent to much of the site.			
	A disused railway with overgrown neglected hedgerows of oak <i>Quercus</i> sp, ash <i>Fraxinus excelsior</i> and hawthorn <i>Crataegus monogyna</i> which are encroaching onto the railway line. Dense scrub and tall herb run through the middle, with the species recorded including rosebay willowherb <i>Epilobium angustifolium</i> , bramble <i>Rubus fruticosus</i> and nettle <i>Urtica dioica</i> in the scrub, and in the more grassy areas there is hemp nettle <i>Galeopsis</i> sp, agrimony <i>Agrimonia eupatoria</i> , pignut <i>Conopodium majus</i> , dog violet <i>Viola riviniana</i> , selfheal <i>Prunella vulgaris</i> and bush vetch <i>Vicia sepium</i> .			
25/28D Disused Track	Identified as Disused Railway & Sidings potential Local Wildlife Sit (pLWS).			
	The River Blythe SSSI runs adjacent to much of the site.			
	A disused railway with overgrown neglected hedgerows of oak <i>Quercus</i> sp, ash <i>Fraxinus excelsior</i> and hawthorn <i>Crataegus monogyna</i> which are encroaching onto the railway line. Dense scrub and tall herb run through the middle, with the species recorded including rosebay willowherb <i>Epilobium angustifolium</i> , bramble <i>Rubus fruticosus</i> and nettle <i>Urtica dioica</i> in the scrub, and in the more grassy areas there is hemp nettle <i>Galeopsis</i> sp, agrimony <i>Agrimonia eupatoria</i> , pignut <i>Conopodium majus</i> , dog violet <i>Viola riviniana</i> , selfheal <i>Prunella vulgaris</i> and bush vetch <i>Vicia sepium</i> .			
26/17u River Blythe	Designated as a nationally important Site of Special Scientific Interest (SSSI).			
SSSI	The River Blythe is a particularly fine example of a lowland river on clay, with riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates. The SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe. Otter Lut <i>ra lutra</i> has been noted on the river.			
26/17Y	Designated as a nationally important Site of Special Scientific Interest (SSSI).			
River Blythe	(3331).			
SSSI	The River Blythe is a particularly fine example of a lowland river on clay, with riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates. The SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe. Otter <i>Lutra lutra</i> has been noted on the river.			

26/17Z Designated as a nationally important Site of Special Scientific Interest (SSSI). River Blythe The River Blythe is a particularly fine example of a lowland river on SSSI clay, with riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates. The SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe. Otter Lutra lutra has been noted on the river. 26/28 Designated as part of the nationally important Coleshill and Bannerley Pools Site of Special Scientific Interest (SSSI). Coleshill Pool, Bog & Wood Site consists of 2 pools - Coleshill and Bannerley - and an area known as the Bogs which together form the only valley mire system in SSSI Warwickshire. A valley bog has developed over deep peat which has built up in part of the pool. Coleshill pool is the head of the valley system the water then flows through the Bogs with its narrow stream side mire and acid, valley alder wood (nationally restricted habitat) thence to Bannerley Pool with its swamp and sump alderwood another nationally restricted habitat. The Ecosite system spilts these SSSIs into separate sites (Bannerley Pool was added to the SSSI in more recent years) and is larger than the SSSI at Bannerley Pool where it includes an area of land called Bannerley Rough which is similar habitat and of County Value. Nature conservation status ungraded. 27/28 Hawkeswell Farm, inc. The River Blythe SSSI runs around the eastern perimeter of the site. Hawkeswell railway cutting A series of meadows with ponds. One meadow is grazed by livestock and species poor, being dominated by grasses such as yorkshire fog Holcus lanatus, perennial rye-grass Lolium perenne, creeping buttercup Ranunculus repens and selfheal Prunella vulgaris. The second meadow is a moderately species rich tall hay meadow, dominated by meadowsweet Fillipendula ulmaria, common bent Agrostis capillaris, selfheal and pepper-saxifrage Silaum silaus. The ponds contain common water-crowfoot Ranunculus aquatilis, water speedwell Veronica anagallis-aquatica, floating sweetgrass Glyceria fluitans and brooklime Veronica beccabunga. A railway cutting runs through the site and supports hawthorn *Crataegus monogyna*, mature oak Quercus robur, ash Fraxius excelsior and some field maple Acer campestre. 30/17 Identified as Nappins Covert potential Local Wildlife Site (pLWS). Nappins Covert and This is a small deciduous mature oak Quercus sp. wood with ash adjoining land Fraxinus excelsior and sycamore Acer pseudoplatanus. The scrub layer includes hawthorn Crataegus monogyna, elder Sambucus nigra and wild privet Ligustrum vulgare. The ground flora is limited but includes species such as bluebell Hyacinthoides non-scripta, dog's mercury Mercurialis perennis, yellow archangel Lamium galeobdolon, enchanter's nightshade Circaea lutetiana and wood avens Geum urbanum. There is a small wooded pit to the south east surrounded by

black pine Pinus nigra, oak and willow Salix sp..

30/18 Elmdon Manor Part LWS

Part of the site to the south is designated as Elmdon Manor Local Nature Reserve Local Wildlife Site (LWS).

Northern part of the site has nature conservation status ungraded. The site is a Wildlife Trust Nature Reserve.

Old garden and orchard opposite Elmdon Park, the site is a mixture of woodland, scrub, grassland and open water. The walled orchard and much of the central area is tall herb and scrub, with willows *Salix sp*, common nettle *Urtica dioica* and brambles *Rubus fruticosus agg* dominant. Other plants present include common centaury *Centaurium erythraea*, hedge bindweed *Calystegia sepium*, cut-leaved crane's-bill *Geranium dissectum* and bittersweet *Solanum dulcamara*.

The pool is mostly overshadowed by trees, but there is an area of emergent vegetation, including common reedmace *Typha latifolia*, purple loosestrife *Lythrum salicaria* and yellow loosestrife *Lysimachia vulgaris*.

Woodland trees include beech Fagus sylvatica, ash Fraxinus excelsior and pedunculate oak Quercus robur, several of which have been planted, whilst the rich grassland flora includes sneezewort Achillea ptarmica, common knapweed Centaurea nigra, lesser stitchwort Stellaria graminea, false-fox sedge Carex otrubae, meadow vetchling Lathyris pratensis and common cat's-ear Hypochaeris radicata.

The site supports a range of birds, including six breeding species of warbler, whilst a survey in the 1980's also found 15 butterfly species, including dingy skipper *Thymelicus acteon*.

31/18 School Rough etc

Previously selected as a potential Local Wildlife Site (pLWS) however site was rejected by the LWS panel. Not of LWS quality.

This land consists of a meandering stream and ditches, along with scattered trees, mainly consisting of birch Betula sp and oak *Quercus sp*. The woodland is grazed by cattle. There is no other ecological information for the site.

Brueton Park (part SSSI) LWS, LNR

The area in the north is designated as Brueton Park Local Wildlife Site (LWS). This and an area to the north comprise Malvern & Brueton Local Nature Reserve (LNR). The area to the south is identified as a potential Local Wildlife Site (pLWS). Some smaller areas are included within the Ecosite but with no specific nature conservation designation.

The River Blythe SSSI (26/17) runs through this site.

The area around the River Blythe is mixed broadleaved woodland with abundant wild garlic *Allium ursinium* in the ground flora and in places old hazel *Corylus avellana* coppice. The site also includes a large, varied meadow, quite wet in places, with associated tall herb species and an area of acid marsh has species such as great burnet *Sanguisorba officinalis* and ragged robin *Silene flos-cuculi*. The site is good for birds, with the area of woodland along the River Blythe being an established location for lesser spotted woodpecker *Dendrocops minor*, whilst barn owl *Tyto alba* is also present on site and probably breeds. The damp scrubland along the river also used to be a good location for the declining willow tit *Poecile montanus*, although the species may no longer be present. The site is important for dragonflies, amphibians and various invertebrates.

33/17

Berry Hall Wood Lands

Majority of the site is identified as Berry Hall Wood potential Local Wildlife Site (pLWS).

The Rookery contains old oak *Quercus sp* trees with other deciduous and coniferous species and is an important habitat for woodland birds and other wildlife. There are a number of wet peaty areas and ponds, whilst just to the south can be found a small ash *Fraxinus excelsior* and hawthorn *Crataegus monogyna* woodland.

There are also areas of plantation woodland, with beech Fagus sylvatica, birch Betula sp, goat willow Salix caprea, pine Pinus sp and norway spruce Picea abies, whilst further small areas of oak woodland with rowan Sorbus aucuparia, alder Alnus glutinosa, yew Taxus baccata and some conifers present. The ground flora contains bramble Rubus fruticous, nettle Urtica dioica and the wetter patches soft rush Juncus effusus and greater willowherb Epilobium hirsutum.

A wet meadow can be found nearby, containing abundant common bent *Agrostis capillaris*, soft rush, locally abundant ragged robin *Silene flos-cuculi*, blue water speedwell *Veronica anagallis-aquatica* and sharp-flowered rush *Juncus acutiflorus*.

A wooded area along the River Blythe has alder and crack willow with many wet hollows that have greater pond-sedge *Carex riparia*.

33/18

Pendigo Lake & The Rough

Nature conservation status ungraded.

The lake is used by motor boats, whilst The Rough is the remains of ancient birch *Betula sp* woodland. The only ecological information for the site refers to a group of twenty common pochard *Aythya ferina* on the lake in February 1992.

34/17 Halfmoon Coppice	Designated as part of the Brueton Park, Halfmoon Coppice and Meadow Local Wildlife Site (LWS).				
LWS	Mixed broadleaved ancient woodland that is split in two by the M42 and borders the River Blythe on its northern side. The woodland is mainly alder <i>Alnus glutinosa</i> , ash <i>Fraxinus excelsior</i> and beech <i>Fagus sylvatica</i> , with hazel coppice <i>Corylus avellana</i> in the understorey. The ground flora is fairly rich, whilst lesser spotted woodpecker <i>Dendrocopos minor</i> is regularly noted within the woodland.				
35/17U	Identified as Grand Union Canal potential Local Wildlife Site (pLWS). County nature conservation value.				
Grand Union Canal	County flatare conservation value.				
	An important linear feature, the canal supports a variety of aquatic and marginal vegetation. Hedges border the towpath and there are many ferns on the lock walls and gates. Marginal plants include reedmace <i>Typha latifolia</i> , common reed <i>Phragmites australis</i> and branched bur-reed <i>Sparganium erectum</i> . Aquatic vegetation includes arrowhead <i>Sagittaria sagittifolia</i> and broad-leaved pondweed <i>Potamogeton natans</i> .				
35/17Y	Identified as Grand Union Canal potential Local Wildlife Site (pLWS). County nature conservation value.				
Grand Union Canal	An important linear feature, the canal supports a variety of aquatic and marginal vegetation. Hedges border the towpath and there are many ferns on the lock walls and gates. Marginal plants include reedmace <i>Typha latifolia</i> , common reed <i>Phragmites australis</i> and branched bur-reed <i>Sparganium erectum</i> . Aquatic vegetation includes arrowhead <i>Sagittaria sagittifolia</i> and broad-leaved pondweed <i>Potamogeton natans</i> .				
36/17	Nature conservation status ungraded.				
Wet Meadow, near Berry Hall (Ravenshaw	Adjacent to the River Blythe SSSI.				
Hall Meadow)	Damp/wet meadow which supports fairly rich flora including marsh marigold <i>Caltha palustris</i> , cuckoo-flower <i>Cardamine pratensis</i> , foxtail <i>Alopecurus</i> sp, various rush species, sedges, and several other flora species. River bank has mature alders <i>Alnus glutinosa</i> , blackthorn <i>Prunus spinosa</i> , ash <i>Fraxinus excelsior</i> and hawthorn <i>Crataegus monogyna</i> . Site provides a valuable habitat for birds.				
36/18	Nature conservation status ungraded.				
Catherine-de-Barnes Meadows	Although some of the initial seven species-rich fields and a small area of woodland have now been destroyed, the remainder of the site is still present.				

Shadowbrook Lane Meadow N.R. (part SSSI-Bikenhill Meadows)

SSSI, LWS

The majority of this site is identified as Bickenhill Meadows nationally important Site of Special Scientific Interest (SSSI).

Part of this site to the west is designated as Greens Ward Piece Local wildlife Site (LWS).

An area to the west of the site excluded from the LWS due to poorer quality.

Bickenhill Meadows SSSI

This SSSI consists of two separate areas, the first is a Warwickshire Wildlife Trust Nature Reserve called Shadowbrook Lane Meadow (37/18) which together with a smaller meadow to the northwest (15/18) form Bickenhill Meadows SSSI.

This part of the SSSI consists of a series of four old meadows left unploughed with no indication of fertiliser application and is cut during the summer for hay. The flora of the meadows includes heath spotted-orchid *Dactylorhiza maculata*, cowslip *Primula veris*, betony *Stachys officinalis* and marsh marigold *Caltha palustris*. Two of the meadows are interesting with very frequent yellow rattle *Rhinanthus minor* and jointed rush *Juncus articulatus*. A third meadow is the most diverse with indicators of neutral wet grassland and a fourth meadow is very wet with dense pignut *Conopodium majus*. In the SSSI thre is also a wet woodland and stream. The woodland is rather species poor with the exception being by the stream where marginal aquatic vegetation is present.

The hedgerows present are species rich and include tree species such as alder *Alnus glutinosa*, rose *Rosa* sp, blackberry *Rubus fruticosus*, hazel *Corylus avellana*, holly *Ilex aquifolium* and ash *Fraxinus excelsior*. The flora includes bluebells *Hyacinthoides non-scripta*, foxglove *Digitalis purpurea* and stitchwort *Stellaria* sp.

Greens Ward Piece LWS

Small field of unimproved pasture, part of Shadowbrook Lane Meadows WWT Nature Reserve. The meadow is marshy with sharp-flowered rush *Juncus acutiflorus* particularly dominant. Seven species of grass are found here although they only appear occasionally. There is a good assemblage of rushes and sedges including bristle clubrush *Isolepis setacea* and oval sedge *Carex ovalis* and in the wet area of the field there are also some herbs. These include abundant marsh thistle *Cirsium palustre* and devil's-bit scabious *Succisa pratensis* with occasional greater bird's-foot-trefoil *Lotus pedunculatus* and ragged robin *Silene flos-cuculi*. The drier parts of grassland support lesser knapweed *Centaurea nigra*, pignut and yellow rattle as well as several lepidoptera such as common blue and chimney sweeper.

Rejected LWS

Parts of the site were previously identified as potential LWS but rejected by the LWS panel. These areas include planted woodland and ruderal vegetation habitats adjacent to the SSSI and LWS. There is also a species rich roadside hedge containing more than 8 woody species including field maple *Acer campestre*, holly *Ilex aquifolium* and mature oak *Quercus* sp. with honeysuckle *Lonicera periclymenum* and gorse *Ulex europaeus*.

A semi-improved meadow across the lane is also included within the ecosite, but has been rejected by the LWS panel as it is not of LWS quality.

A money spider *Lepthyphantes cristatus* has been recorded at this site which is described as nationally local and c120 golden plover *Pluvialis apricaria* were recorded at the site in 1992.

41/18 Bickenhill Churchyard	Nature conservation status ungraded. Parish Value.
	There is little ecological information on the site, although the three most recent records from the 1990's revealed the presence of barren brome <i>Anisantha sterilis</i> , annual honesty <i>Lunaria annua</i> and sticky mouse-ear chickweed <i>Cerastium glomeratum</i> . There are also older records of common blubell <i>Hyacinthoides non-scripta</i> and red campion <i>Silene dioica</i> .
41/27 River Blythe	Designated as River Blythe Nationally important Site of Special Scientific Interest (SSSI).
SSSI	A 39 kilometre stretch of the River Blythe is a particularly fine example of a lowland river on clay. The Blythe has a wide range of structural features such as riffles, pools, small cliffs and meanders. The diverse physical features of the Blythe are mirrored by its diverse plant communities and associated invertebrates. The designated SSSI includes several damp unimproved meadows and woodlands that are hydrologically dependent on the Blythe. This catchment area has recently seen the return of the otter previously extinct over much of England. The otter is one of the most heavily protected mammals in Europe. There are also records of
	bullhead Cottus gobio on this stretch of the river.
42/18	Nature conservation status ungraded.
Elmdon Church	The churchyard supports species such as lady fern <i>Athyrum filix-femina</i> and ramsons <i>Allium ursinum</i> , but overall the floral diversity is low.
42/28 Bannerley Rough	This site is designated as part of Bannerley Rough, Todd's Rough and Bannerley Marsh Local Wildlife Site (LWS).
LWS	The LWS is an area of dry, acidic oak <i>Quercus sp.</i> and silver birch <i>Betula pendula</i> woodland on an ancient woodland site. Birch is dominant in the south of the site and oak in the north, with a sparse understorey of hazel <i>Corylus avellana</i> and holly <i>Ilex aquifolium</i> . Bramble <i>Rubus fruticosus agg.</i> and bracken <i>Pteridium aquilinum</i> make up the majority of the ground flora with bluebell <i>Hyacinthoides non-scripta</i> , honeysuckle <i>Lonicera periclymenum</i> and wood sage <i>Teucrium scorodonia</i> also present. The field to the north is marshy with a variety of rushes and sedges including abundant soft rush <i>Juncus effusus</i> . Bird's-foot trefoil <i>Lotus corniculatus</i> , brooklime <i>Veronica beccabunga</i> , lesser spearwort <i>Ranunculus flammula</i> and common mouse-ear <i>Cerastium fontanum</i> are also present.

43/28	This site is designated as part of Bannerley Rough, Todd's Rough and		
Todd's Rough	Bannerley Marsh Local Wildlife Site (LWS).		
LWS	Woodland and disused railway embankment. Fairly extensive derelict birch coppice with ash <i>Fraxinus excelsior</i> , oak <i>Quercus robur</i> , rowan <i>Sorbus aucuparia</i> , alder <i>Alnus glutinosa</i> and hazel Corylus avellana. Coppice is on gently sloping ground which collects water at the northern end and along the base of the embankment creating damp conditions. Area to east of embankment is grazed and generally species-poor. To the far eastern side there is an area of hawthorn <i>Crataegus monogyna</i> scrub and pasture. The embankment has a great variety of tree species. Site appears to be unmanaged.		
44/17 Woodland off Warwick	Designated as Woodland adjacent to Blythewood Close Local Wildlife Site (LWS).		
Road LWS	Woodland consists of ash <i>Fraxinus excelsior</i> , oak <i>Quercus</i> sp, sycamore <i>Acer pseudoplatanus</i> , dead and suckering wych elm <i>Ulmus glabra</i> , elder <i>Sambucus nigra</i> and hawthorn <i>Crataegus monogyna</i> . Sparse ground flora of bluebells <i>Hyacinthoides non-scripta</i> , lords and ladies <i>Arum maculatum</i> , dog's mercury <i>Mercurialis perennis</i> , yorkshire fog <i>Holcus lanatus</i> and bramble <i>Rubus fruticosus</i> . Open grassy areas have cock's foot <i>Dactylis glomerata</i> , rushes <i>Juncus</i> sp and buttercups <i>Ranunculus</i> sp.		
45/17 Brick Kiln Hole Wood	Identified as Brick Kiln Hole Wood potential Local Wildlife Site (pLWS).		
	Two areas of woodland, one of which is an old clay pit with shallow pools, now colonised by oak <i>Quercus sp</i> and sycamore <i>Acer pseudoplatanus</i> , with hawthorn <i>Crataegus monogyna</i> and young sycamore shrub layer. The other area of wood is mixed with conifers, much elder <i>Sambucus nigra</i> , ash <i>Fraxinus excelsior</i> and oak.		
45/28 Main London to	South of this site is identified as psrt of the Siden Hill Wood potential Local Wildlife Site (pLWS).		
Birmingham Railway	Both sides of the cutting slope gently down to the railway line. The banks are covered by a mixture of scrub and tall herb. They are dominated by bramble <i>Rubus fruticosus</i> , rose <i>Rosa</i> sp, rosebay willowherb <i>Epilobium angustifolium</i> and wild mignonette <i>Reseda lutea</i> , with patches of toadflax <i>Linaria</i> sp, field scabious <i>Knautia arvensis</i> and black knapweed <i>Centaurea nigra</i> .		
46/18	Nature conservation status ungraded.		
Bickenhill Parish Burial Ground	There is low floral diversity, although a good range of trees exists including common lime <i>Tilia europaea</i> , aspen <i>Populus tremula</i> , oak <i>Quercus sp</i> , hawthorn <i>Crataegus monogyna</i> and hazel <i>Corylus avellana</i> . Herb species include white bryony <i>Bryonia dioica</i> , lesser trefoil <i>Trifolium dubium</i> , cow parsley <i>Anthriscus sylvestris</i> , white dead nettle <i>Lamium album</i> , small nettle <i>Urtica urens</i> , sheeps sorrel <i>Rumex acetosella</i> and clustered dock Rumex conglomeratus. (Data collected 1984)		

47/27E	Nature conservation status ungraded.				
Main London to Birmingham Railway Line	A deep well-wooded cutting, the sides are dominated by hawthorn Crataegus monogyna scrub in the southern half and a mixture of rank grasses, bramble Rubus fruticosus and tall herbs in the north.				
47/27J	Nature conservation status ungraded.				
Main London to Birmingham Railway Line	A deep well-wooded cutting, the sides are dominated by hawthorn <i>Crataegus monogyna</i> scrub in the southern half and a mixture of rank grasses, bramble <i>Rubus fruticosus</i> and tall herbs in the north.				
48/18	Designated as Heath Corner Local Wildlife Site (LWS).				
Heath Corner LWS	Small paddock of semi-improved grassland dominated by a mix of sweet vernal grass <i>Anthoxanthum odoratum</i> , common bent <i>Agrostis capillaris</i> and red fescue <i>Festuca rubra</i> . Forbs are abundant and include yarrow <i>Achillea millefolium</i> , common bird's foot trefoil <i>Lotus corniculatus</i> , ribwort plantain <i>Plantago lanceolata</i> and lesser stitchwort <i>Stellaria graminea</i> . The centre of the field includes an area of more acidic grassland which includes locally frequent sheep's fescue <i>F. ovina</i> and heath grass <i>Danthonia decumbens</i> with harebell <i>Campanula rotundifolia</i> , mouse-ear hawkweed <i>Pilosella officinarum</i> and sheep's sorrel <i>Rumex acetosella</i> .				
49/18 Aspbury's Coppice	Identified as Aspbury's Coppice potential Local Wildlife Site (pLWS). Listed on English Natures Ancient Woodland Inventory.				
	The site is split by the M42 motorway.				
The area west of the motorway is an oak <i>Quercus robur</i> plustiful occasional scot's pine <i>Pinus sylvestris</i> and some ash excelsior coppice. The understorey contains scattered haze avellana, hawthorn <i>Crataegus monogyna</i> and elder <i>Sambuc The ground flora</i> is dominated by cleavers <i>Galium aparin Urtica dioica</i> and common bluebell <i>Hyacinthoides non-scri localised expanses</i> of dogs mercury <i>Mercurialis perent present are red campion Silene dioica</i> , male fern <i>Dryopteris enchanters nightshade Circaea lutetiana</i> and foxglove <i>purpurea</i> .					
	The area east of the motorway is a forty year old mixed plantation of mainly pine <i>Pinus sp</i> with oak <i>Quercus sp</i> . The understorey is similar to the area west of the motorway. Woodland grass species present include wood false brome <i>Brachypodium sylvaticum</i> , greater hairy brome <i>Bromopsis ramosus</i> , wood melick <i>Melica uniflora</i> and wood millet <i>Milium effusum</i> . Woodland herbs are present at low frequency, and include cuckoo pint <i>Arum maculatum</i> , greater stitchwort <i>Stellaria holostea</i> , wood avens <i>Geum urbanum</i> and ground ivy <i>Glechoma hederacea</i> .				
	An extensive list of invertebrates have been recorded at the site, including three locally rare species; whilst a good range of common bird species are also present.				

Catherine de Barnes Hay Meadow SINC

Identified as Catherine-de-Barnes Hay Meadow potential Local Wildlife Site (pLWS).

The site to the north of the canal is a broadleaved semi-natural woodland. Oak *Quercus sp* and birch *Betula sp* woodland with an understorey of frequent holly *Ilex aquifolium*, rowan *Sorbus aucuparia* and hazel *Corylus avellana*. The ground flora is mainly bramble *Rubus fruticosus* or bare ground with locally abundant bluebell *Hyacinthoides non-scripta* and bracken *Pteridium aquilinum* (HBA May 1998).

52/18

Meadows to the east of the Jungle

LWS

Designated Castle Hill Farm Meadows Local Wildlife Site (LWS). An area to the north of the site is excluded from the LWS due to poorer quality.

Eastern part of the site has nature conservation status ungraded.

Castle Hill Farm Meadows LWS

This LWS is one of the largest and most important grassland LWSs in the County. Most of this site is crested dog's-tail *Cynosurus cristatus* and lesser knapweed *Centaurea nigra* (MG5), which is a nationally rare grassland type. Much of the site has received sympathetic grassland management, such as hay cutting and light grazing, resulting in a species rich habitat.

Other notable species recorded in areas of the LWS which also fall within the ecosite include cuckooflower *Cardamine pratensis*, greater bird's-foot trefoil *Lotus pedunculatus* and lesser stitchwort *Stellaria graminea* and adder's tongue *Ophioglossum vulgatum*. The wetter areas support a variety of sedges *Carex sp* and rushes *Juncus sp*. The national rarity fine-leaved water dropwort *Oenanthe aquatica* may potentially also be found at the site, although this record requires confirmation.

The remainder of the ecosite was previously identified as a potential LWS but rejected by the LWS panel. The area in the north of the site is cattle grazed grassland, with the fields in the south-east also semi-improved, although they are not as species rich. Two notable species found in the area include bee orchid *Ophrys apifera* and pale sedge *Carex pallexens*, the latter being a particularly rare species in the county.

Clock Lane Meadows Part LWS

Part of the site is designated as part of Castle Hill Farm Meadows Local Wildlife Site (LWS).

A part of the ecosite remains with nature conservation status ungraded.

Castle Hill Farm Meadows LWS

This LWS is one of the largest and most important grassland sites in the county. Most of this site is crested dog's-tail *Cynosurus cristatus* and lesser knapweed *Centaurea nigra* (MG5), which is a nationally rare grassland type. Much of the site has received sympathetic grassland management, such as hay cutting and light grazing, resulting in a species rich habitat.

Specific species recorded in areas of the LWS which are within this Ecosite include smooth meadow grass *Poa pratensis*, jointed rush *Juncus articulatus*, sharp flowered rush *Juncus acutiflorus*, hairy sedge *Carex hirta* and glaucous sedge *Carex flacca*. A number of herbs are also present, including common centaury *Centaureum erythraea* and bird's-foot trefoil *Lotus corniculatus*. The drier areas of the field support common spotted orchid *Dactylorhiza fuchsii*, pignut *Conopodium majus* and ragged robin *Silene flos-cuculi*.

The field to the south of the LWS area is poor semi-improved grassland, dominated by yorkshire fog *Holcus lanatus* and creeping buttercup *Ranunculus repens*.

The blackneck *Lygephila pastinum*, a nationally rare species of moth, has also been recorded on site.

54/18

River Cole Flood Meadow LWS

Designated as Wheeley Moor Farm Meadows Local Wildlife Site (LWS), which extends past the ecosite boundary.

A large semi-improved flood meadow, it is dominated by foxtail Hordeum jubatum, with abundant common bent Agrostis capillaris, cock's-foot Dactylis glomerata, yorkshire fog Holcus lanatus, red fescue Festuca rubra, ribwort plantain Plantago lanceolata and extensive areas of great burnet Sanguisorba officinalis. The buried pipeline that runs through the site also contains an area that is species rich, and although unmanaged, contains false oat-grass Arrhenatherum elatius, yarrow Achillea millefolium, hairy sedge Carex hirta and smooth meadow-grass Poa pratensis.

55/18

Wayside Cottages Meadow LWS

Designated as Wayside Cottages Meadow Local Wildlife Site (LWS).

A field of largely unimproved grassland. Several grasses are abundant including crested dog's tail *Cynosurus cristatus* and sweet vernal grass *Anthoxanthum odoratum*. There are also a number of sedge species present, including glaucous sedge *Carex flacca*, oval sedge *Carex ovalis* and field wood rush *Luzula campestris*.

The sward is herb rich with abundant lesser knapweed *Centaurea nigra* throughout. Other forbs recorded at a lower frequency include ribwort plantain *Plantago lanceolata*, zig zag clover *Trifolium medium* and yellow rattle *Rhinanthus minor*.

Packington Park

Parts of this site, mostly the woodlands, have been identified as Packington Park Great Pool and Hall Pool potential Local Wildlife Site (pLWS).

The rest of the site has nature conservation status ungraded.

The River Blythe SSSI runs along the west of the site, whilst the park was once extensive oak *Quercus* parkland with semi-improved acid grassland, bracken *Pteridium aquilinum* and standards.

The River Blythe is rich in this area and there are also several wellestablished lakes which are used for fishing, several small mixed woodlands and in the north of the estate is an area of sand and gravel working which has now been flooded. Part of the site is the Forest of Arden Golf Course, whilst large numbers of deer roam across the site.

A range of other protected species have been noted on site, with a number of important bat roosts present. Some of the more interesting breeding bird species being lesser spotted woodpecker *Dendrocopos minor* and spotted flycatcher *Muscicapa striata*. A large colony of house martin *Delichon urbicum* also breed onsite.

Mulliner's Rough 44/28 lies within 55/28.

56/18Q

Kinghurst Brook / Low Brook, headwaters & Tributaries

Most of this linear site is identified as Kingshurst Brook potential Local Wildlife Site (pLWS).

Kingshurst Brook has a diverse range of vegetation such as reed sweet grass *Glyceria maxima*, curled pondweed *Potomogeton crispus*, buttercup *Ranunculus sp*, yellow iris *Iris pseudacorus* and canadian waterweed *Elodea canadensis*. The surrounding banks are regularly mown and broad-leaved trees have been planted. Ground flora along the banks is quite rich in places and includes cuckooflower *Cardamine pratensis*, great burnet *Sanguisorba officinalis*, meadow vetchling *Lathyrus pratensis*, yarrow *Achillea millefolium*, bulbous buttercup *Ranunculus bulbosus*, creeping cinquefoil *Potentilla reptans*, weld *Reseda luteola*, common knapweed *Centaurea nigra*, perforate St. John's-wort *Hypericum perforatum* and red campion *Silene dioica*.

Data collected 1977-1998.

56/18R

Kinghurst Brook / Low Brook, headwaters & Tributaries Most of this linear site is identified as Kingshurst Brook potential Local Wildlife Site (pLWS).

Kingshurst Brook has a diverse range of vegetation such as reed sweet grass *Glyceria maxima*, curled pondweed *Potomogeton crispus*, buttercup *Ranunculus sp*, yellow iris *Iris pseudacorus* and canadian waterweed *Elodea canadensis*. The surrounding banks are regularly mown and broad-leaved trees have been planted. Ground flora along the banks is quite rich in places and includes cuckooflower *Cardamine pratensis*, great burnet *Sanguisorba officinalis*, meadow vetchling *Lathyrus pratensis*, yarrow *Achillea millefolium*, bulbous buttercup *Ranunculus bulbosus*, creeping cinquefoil *Potentilla reptans*, weld *Reseda luteola*, common knapweed *Centaurea nigra*, perforate St. John's-wort *Hypericum perforatum* and red campion *Silene dioica*.

Data collected 1977-1998.

56/18S

Kinghurst Brook / Low Brook, headwaters & Tributaries Most of this linear site is identified as Kingshurst Brook potential Local Wildlife Site (pLWS).

A small part of the brook falls within Birmingham and is not included within the Warwickshire pLWS.

Kingshurst Brook has a diverse range of vegetation such as reed sweet grass *Glyceria maxima*, curled pondweed *Potomogeton crispus*, buttercup *Ranunculus sp*, yellow iris *Iris pseudacorus* and canadian waterweed *Elodea canadensis*. The surrounding banks are regularly mown and broad-leaved trees have been planted. Ground flora along the banks is quite rich in places and includes cuckooflower *Cardamine pratensis*, great burnet *Sanguisorba officinalis*, meadow vetchling *Lathyrus pratensis*, yarrow *Achillea millefolium*, bulbous buttercup *Ranunculus bulbosus*, creeping cinquefoil *Potentilla reptans*, weld *Reseda luteola*, common knapweed *Centaurea nigra*, perforate St. John's-wort *Hypericum perforatum* and red campion *Silene dioica*.

Data collected 1977-1998.

56/18V

Kinghurst Brook / Low Brook, headwaters & Tributaries Most of this linear site is identified as Kingshurst Brook potential Local Wildlife Site (pLWS).

Kingshurst Brook has a diverse range of vegetation such as reed sweet grass *Glyceria maxima*, curled pondweed *Potomogeton crispus*, buttercup *Ranunculus sp*, yellow iris *Iris pseudacorus* and canadian waterweed *Elodea canadensis*. The surrounding banks are regularly mown and broad-leaved trees have been planted. Ground flora along the banks is quite rich in places and includes cuckooflower *Cardamine pratensis*, great burnet *Sanguisorba officinalis*, meadow vetchling *Lathyrus pratensis*, yarrow *Achillea millefolium*, bulbous buttercup *Ranunculus bulbosus*, creeping cinquefoil *Potentilla reptans*, weld *Reseda luteola*, common knapweed *Centaurea nigra*, perforate St. John's-wort *Hypericum perforatum* and red campion *Silene dioica*.

Data collected 1977-1998.

56/18W

Kinghurst Brook / Low Brook, headwaters & Tributaries Most of this linear site is identified as Kingshurst Brook potential Local Wildlife Site (pLWS).

Kingshurst Brook has a diverse range of vegetation such as reed sweet grass *Glyceria maxima*, curled pondweed *Potomogeton crispus*, buttercup *Ranunculus sp*, yellow iris *Iris pseudacorus* and canadian waterweed *Elodea canadensis*. The surrounding banks are regularly mown and broad-leaved trees have been planted. Ground flora along the banks is quite rich in places and includes cuckooflower *Cardamine pratensis*, great burnet *Sanguisorba officinalis*, meadow vetchling *Lathyrus pratensis*, yarrow *Achillea millefolium*, bulbous buttercup *Ranunculus bulbosus*, creeping cinquefoil *Potentilla reptans*, weld *Reseda luteola*, common knapweed *Centaurea nigra*, perforate St. John's-wort *Hypericum perforatum* and red campion *Silene dioica*.

Data collected 1977-1998.

58/18 Elmdon Grasslands	Previously selected as a potential Local Wildlife Site (pLWS), however, the site is no longer considered of LWS quality and has been rejected by the LWS panel.				
	Semi-improved grasslands dominated by crested dog's tail <i>Cynosurus cristatus</i> , with abundant thyme-leaved speedwell <i>Veronica serpyllifolia</i> , creeping cinquefoil <i>Potentilla reptans</i> , black medick <i>Medicago lupulina</i> , field wood-rush <i>Luzula campestris</i> and bulbous buttercup <i>Ranunculus bulbosus</i> . Thought to have once been heavily grazed by horses, it is now neglected, with encroaching gorse <i>Ulex europaeus</i> , blackthorn <i>Prunus spinosa</i> , bramble <i>Rubus fruticosus agg</i> and hawthorn <i>Crataegus monogyna</i> .				
59/18	Designated as Coleshill Heath Road Wood Local Wildlife Site (LWS).				
Coleshill Heath Woodland LWS	The site consists of oak <i>Quercus sp</i> woodland, with frequent birch <i>Betula sp</i> , hazel <i>Corylus avellana</i> , alder <i>Alnus glutinosa</i> , with an elm <i>Ulmus sp</i> understorey. Ground flora includes abundant bramble <i>Rubus fruticosus agg</i> , frequent broad buckler fern <i>Dryopteris dilatata</i> and patches of wood sage <i>Teucrium scorodonia</i> , honeysuckle <i>Lonicera periclymenum</i> and rosebay willowherb <i>Chamaenerion angustifolium</i> .				
59/28	Designated as Meadow on Old Station Road, Hampton-in-Arden Local Wildlife Site (LWS).				
Hampton Grassland					
LWS	Semi-improved grassland dominated by crested dog's-tail <i>Cynosurus cristatus</i> , with ribwort plantain <i>Plantago lanceolata</i> , creeping buttercup <i>Ranunculus repens</i> , red clover <i>Trifolium pratense</i> , meadow buttercup <i>Ranunculus acris</i> , ox-eye daisy <i>Leucanthemum vulgare</i> , black knapweed <i>Centaurea nigra</i> and autumn hawkbit <i>Leontodon autumnalis</i> . Ragwort <i>Senecio jacobaea</i> and agrimony <i>Agrimonia</i> are also present. The south-eastern corner of the site is similar to that above but with bird's-foot trefoil <i>Lotus corniculatus</i> , lady's bedstraw <i>Galium verum</i> , cat's-ear <i>Hypochaeris radicata</i> , meadow vetchling <i>Lathyrus pratensis</i> and cowslip <i>Primula veris</i> . The meadow is cut for hay and then horse grazed.				
60/18	Previously selected as a potential Local Wildlife Site (pLWS) however site rejected by LWS panel. Not of LWS quality.				
Blackfirs Lane Hedgerows	A species rich hedgerow, it is unclear whether this is just on the north side of the road or along the south side as well. It supports a great range of trees and shrubs including crab apple <i>Malus sylvestris</i> , rowan Sorbus aucuparia, hazel Corylus avellana and oak Quercus sp. Bramble Rubus fruticosus agg and honeysuckle Loniclera pericylmenum are also present.				

63/27 Identified as Ryton End, Bradnock Marsh potential Local Wildlife Site (pLWS). Ryton End (Bradnock's Marsh) The River Blythe SSSI runs through the site. Brandocks Marsh is an area of old flooded gravel pits with associated grassland, wet woodland, swamp and mash. The site is of importance for botanical, invertebrate and bird interest. The River Blythe itself is a Site of Special Scientific Interest (SSSI). The adjacent boundaries of the Blythe are included within this site. The bankside emergent vegetation includes areas with reedmace Typha latifolia, himalayan balsam Impatiens glandulifera and reed canary-grass Phalaris arundinacea. A few smaller pools occur with reedmace, lesser pond-sedge Carex acutiformis, remote sedge Carex remota, rigid hornwort Ceratophyllum demersum and yellow water lilly Nuphar lutea. There are also small areas of alder Alnus glutinosa woodland. Some of the wet woodland areas include crack willow Salix fragilis woodland with some hazel Corylus avellana coppice. Ground flora with lesser celandine Ficaria verna with patches of ramsons Allium ursinium. Many of the pools contain strong populations of Odonata (dragonfly) and have potential as newt sites. Other habitats include flood meadow grassland with lesser knapweed Centaurea nigra, bulbous Ranunculus bulbosus, creeping buttercup Ranunculus repens and meadow buttercup Ranunculus acris, hairy sedge Carex hirta, and great burnet Sanguisorba officinalis; tussocky grassland with cock's-foot Dactylis glomerata, false oat-grass Arrhenatherum elatius and tufted hair-grass Deschampsia caespitosa, soft rush Juncus effuses, pignut Conopodium majus, hard rush Juncus inflexus, lesser knapweed, cat's-ear Hypochaeris radicata and wild angelica Angelica sylvestris and swamp areas with meadowsweet Filipendula ulmaria, figwort Scrophularia nodosa, wild angelica, purple-loosestrife Lythrum salicaria, and greater pond-sedge Carex riparia. 69/18 Site of local nature conservation value. Part of site was previously selected as a potential Local Wildlife Site (pLWS), however, it was Wood rejected by LWS panel. Not of LWS quality. The woodland runs alongside a small stream and is a mix of crack willow Salix fragilis, alder Alnus glutinosa and oak Quercus sp. The ground flora is quite varied and contains pignut Conopodium majus, wood anemone Anemone nemorosa and common bluebell Hyacinthoides non-scripta. 70/18 Previously selected as a potential Local Wildlife Site (pLWS), however, site rejected by LWS panel. Not of LWS quality. Pond A large pond, the site holds broad-leaved pondweed Potomogeton natans, locally dominant reed sweet grass Glyceria maxima, as well as yellow iris Iris pseudacorus, floating sweet grass Glyceria fluitans and water forget-me-not Myosotis scorpioides.

70/28 Hampton Manor Grounds & Churchyard & Hampton-in-Arden Spinney	The majority of the site is broadleaved plantation and is identified as Pond at Hampton Manor Wood North potential Local Wildlife Site (pLWS). The section of woodland in the north is rejected LWS. A diverse area with a range of tree species including silver birch Betula pendula, cherry Prunus sp, holly Ilex aquifolium, hornbeam Carpinus betulus, horse chestnut Aesculus hippocastanum, rowan Sorbus aucuparia, sycamore Acer pseudoplatanus and yew Taxus bacatta. There are also a good number of exotic species. The grassland area is also considered to be relatively species rich.
71/18 Pinfold Nurseries	Previously selected as a potential Local Wildlife Site (pLWS), however, the site is no longer considered of LWS quality and has been rejected by the LWS panel.
	An abandoned orchard that was dug up after WW2 and is now derelict. The site is dominated by common nettle <i>Urtica dioica</i> , but supposedly contains lesser burdock <i>Arctium minus</i> and rare goldenrod <i>Solidago virgaurea</i> , the latter species being particularly rare within the county.
72/18 Catherine de Barnes Meadow, South	Identified as Catherine de Barnes Meadow, South potential Local Wildlife Site (pLWS). A small field which, although subject to mowing or grazing, has
	retained species richness. It is dominated by meadow foxtail Alopecurus pratensis, with frequent sorrel Rumex acetosa, ribwort plantain Plantago lanceolata and field woodrush Luzula campestris. Bulbous buttercup Ranunculus bulbosus, cut leaved crane's bill Geranium dissectum and springy turf moss Rhytidiadelphus squarrosus can also be found on site.
72/28 Marsh Lane	Part of the site to the south is identified as part of Marston Green Park potential Local Wildlife Site (pLWS).
	Lane with hedge dating back to 1400's, the tree species include crab apple <i>Malus sylvestris</i> , ash <i>Fraxinus excelsior</i> , elder <i>Sambucus nigra</i> , elm <i>Ulmus sp</i> , hawthorn <i>Crataegus monogyna</i> , broad-leaved lime <i>Tilia platyphyllos</i> , common lime <i>Tilia x europaea</i> , oak <i>Quercus sp</i> , field maple <i>Acer campestre</i> , rose <i>Rosa sp</i> , and sycamore <i>Acer pseudoplatanus</i> . A range of butterflies have been noted.

73/18 Bickenhill Millenium	Designated as Marston Green Millennium Wood Local Wildlife Site (LWS).
Wood LWS	The site consists of broad-leaved woodland plantation, areas of semi- improved grassland and tall ruderal.
	Woodland species include sessile oak Quercus petraea, pedunculate oak Quercus robur, silver birch Betula pendula, downy birch Betula pubescens, rowan Sorbus aucuparia, goat willow Salix caprea and grey willow Salix cinerea.
	Common knapweed Centaurea nigra, pyramidal orchid Anacamptis pyramidalis and cornflower Centaurea cyanus can be found in semi-improved grassland.
	The site is used by grasshoppers and butterflies. It is also abundant with mosses (HBA data 2009).
73/28	Nature conservation status ungraded.
Old Kenilworth Road	Hedgerow, scrub and overgrown verges make up most of the site. Opposite Arden House there is an interesting piece of gorse <i>Ulex europaeus</i> and dry grassland. The surrounding land is agricultural.
74/18 Road side hedge	Previously selected as a potential Local Wildlife Site (pLWS), however, site rejected by LWS panel. Not of LWS quality.
	A species rich hedge containing a good variety of species, including field maple <i>Acer campestre</i> and mature oak <i>Quercus sp.</i> Gorse <i>Ulex europaeus</i> is also present.
75/18 Hedgerow	Previously selected as a potential Local Wildlife Site (pLWS), however, site rejected by LWS panel. Not of LWS quality.
	A species rich hedge which includes crab apple <i>Malus sylvestris</i> , alder buckthorn <i>Rhamnus frangula</i> and oak <i>Quercus sp</i> standards.
76/18 Cricket Pitch Rough	Part of the site is identified as Cricket Pitch Rough North potential Local Wildlife Site (pLWS). The designation has been deferred by the Local Wildlife Sites Panel.
	Semi-improved grassland dominated by false oat-grass Arrhenatherum elatius. Some of the more notable species present include common centaury Centaurium erythraea, hop trefoil Trifolium campestre and yellow loosestrife Lysimachia vulgaris, the latter species in particular being a notable species for the county as it is indicative of a particularly fine habitat. A small wet area within the grassland contains yellow iris Iris pseudacorus and marsh thistle Cirsium palustre, whilst there is also a small hornbeam Carpinus betulus plantation on site. The adjoining field is less rich and is grazed by horses.

76/28	Identified as Holywell Brook potential Local Wildlife Site (pLWS).			
Hollywell Brook corridor to A41	The stream flows into the River Blythe SSSI and includes an area of grassland and artificial ponds. The pond contains common reed <i>Phragmites australis</i> beds as well as rushes and much aquatic and emergent vegetation including brooklime <i>Veronica beccabunga</i> , marsh bedstraw <i>Galium palustre</i> , branched bur-reed <i>Sparganium erectum</i> , celery leaved buttercup <i>Ranunculus sceleratus</i> and reed mace <i>Typha angustifolia</i> . A small woodland is also included at Hollywell Rough Brook, mainly being oak <i>Quercus</i> sp and crack willow <i>Salix fragilis</i> .			
77/28	The woodland is designated as Denbigh Spinney Local Wildlife Site (LWS).			
Denbigh Spinney	(LVVO).			
LWS	Broadleaved semi-natural woodland with abundant alder <i>Alnus glutinosa</i> , locally frequent downy birch <i>Betula pubescens</i> and rare oak <i>Quercus robur</i> . The ground flora contains abundant broad buckler fern <i>Dryopteris dilatata</i> , three-nerved sandwort <i>Moehringia trinervia</i> , gipsywort <i>Lycopus europaeus</i> , lesser burdock <i>Arctium minus</i> , woodsedge <i>Carex sylvatica</i> , remote sedge <i>Carex remota</i> , lady-fern <i>Athyrium filix-femina</i> and marsh thistle <i>Cirsium palustre</i> .			
83/28	Nature conservation status ungraded.			
Little Packington (redundant) Churchyard	Neglected churchyard consisting mainly of silver birch Betula pendutrees and tall herbs including rosebay willowherb Epilobiu angustifolium, common nettle Urtica dioica, bluebell Hyacinthoid non-scripta and lords and ladies Arum maculatum.			
87/17	Most of the Ecosite is designated as part of Old Brickworks, Riverside			
Old Brick Works, Riverside Drive, Solihull	Drive Local Wildlife Site (LWS). Site of County value.			
LWS	Former brickwork's, now with areas of woodland, floodplain meadow, swamp and post industrial habitat. The area contains a mix of calcicolous and calciferous vegetation as a result of the previous disturbance.			
	There is a small area of heathland with sizeable patches of heather <i>Calluna vulgaris</i> (a rarity in the county context). The grassland areas include bee orchid <i>Ophrys apifera</i> , agrimony <i>Agrimonia eupatoria</i> , yellow rattle <i>Rhinanthus minor</i> and meadowsweet <i>Filipendula ulmaria</i> . The swamp areas include areas of reed canary grass <i>Phalaris arundinacea</i> , greater pond-sedge <i>Carex riparia</i> , hard rush <i>Juncus inflexus</i> and wild angelica <i>Angelica sylvestris</i> . The wet woodland is mainly willow <i>Salix</i> sp with some mature oak <i>Quercus</i> sp and hawthorn <i>Crataegus monogyna</i> .			

Copt Heath Canalside Meadows

Part LWS

The majority of the site is woodland designated as Purnells Brook Woodland Local Wildlife Site (LWS).

The remainder of the site along the east edge is semi-improved grassland and is identified as Purnells Brook Meadows potential Local Wildlife Site (pLWS).

Access to the site is good, with the main access point being the public footpath that crosses the wood in the south, off Wychwood Avenue. There are less formal paths throughout the wood.

The site has variety of woodlands and grasslands. There is a dense plantation of sycamore *Acer pseudoplatanus* in the south west corner of the site, to the east of which is alder *Alnus glutinosa* woodland with occasional hazel *Corylus avellana*, oak *Quercus robur*, blackthorn *Prunus spinosa*, elder *Sambucus nigra* and hawthorn *Crataegus monogyna*. The ground flora is part dominated by bramble *Rubus fruticosus agg* with abundant red campion *Silene dioica*, lesser celandine *Ficaria verna*, lords and ladies *Arum maculatum*, wood avens *Geum urbanum*, bugle *Ajuga reptans* and patches of dog's mercury *Mercurialis perennis*. The stretch of woodland known as Wychwood also has bluebell *Hyacinthoides non-scripta* present.

On both sides of the canal there are some semi-improved fields that run alongside the brook. The southern field contains abundant tufted hair-grass *Deschampsia cespitosa* with betony *Stachys officinalis*, meadowsweet *Filiepndula ulmaria*, lesser knapweed *Centaurea nigra*, devil's bit scabious *Succisa pratensis* and great burnet *Sanguisorba officinalis* also present. The semi-improved grassland to the north of the canal is dominated by tufted hair-grass, meadow foxtail *Alopecurus pratensis* and cock's-foot *Dactylis glomerata*. The brook is dominated by watercress *Rorippa nasturtium-aquaticum*.

89/28

Arden Brickworks LGS

Identified as part of Disused Railway & Sidings potential Local Wildlife Site (pLWS).

The centre of this site is covered by the Nursery Cottage Brickworks Local Geological Site (LGS).

The LGS provides the best fresh exposures of the Triassic, Mercia Mudstone Group within the former Warwickshire county boundary. The Ecosite is larger and includes areas of semi-improved grassland, short ephemeral vegetation and open water. A spur of a mineral line is included which contains scrub with hawthorn *Crataegus monogyna* and willow *Salix* sp, as well as areas of bramble *Rubus fruticosus*. Open grassland with black knapweed *Centaurea nigra*, herb robert *Geranium robertianum*, selfheal *Prunella vulgaris*, meadow vetchling *Lathyrus pratensis* and areas of tall herb grassland with ragwort *Senecio jacobaea*, great willowherb *Epilobium hirsutum* and teasel *Dipsacus fullonum* are also present.

9/28

Shadow Brook

Nature conservation status ungraded.

A field to the south of the brook is identified as part of Marshy Fields potential Local Wildlife Site (pLWS).

The field comprises of poor semi-improved grassland which is dominated by perennial ryegrass *Lolium perenne* and meadow foxtail *Alopecurus pratensis*. Meadowsweet *Fillipendula ulmaria*, sorrel *Rumex acetosa* and creeping buttercup *Raninculus repens* are abundant.

90/28 Marsh Lane Nature Reserve	Fields south of Grove Quarry are identified as a potential Local Wildlife Site (pLWS). Former gravel and sand extraction site consisting of two main pools with woodland, grassland, smaller ponds and some agricultural land. A good variety of bird species have been recorded, with some of the more interesting breeding species, albeit not all on an annual basis, are lapwing Vanellus vanellus, ringed plover Charadrius hiaticula, little ringed plover Charadrius dubius, common tern Sterna hirundo, grasshopper warber Locustella naevia and spotted flycatcher Muscicapa striata.		
91/17 Eastcote Lane Wood, nr. Hampton in Arden	Nature conservation status ungraded. Previously woodland, the site was found to have been felled in February 1999 and was recorded as semi-improved grassland (HBA). The wood was previously hazel <i>Corylus avellana</i> coppice under oak <i>Quercus sp</i> , although at the southern end a greater mix of species was noted.		
95/17 Wood, nr. Hospital	Nature conservation status ungraded. This deciduous woodland was clear-felled in 1983 and a small area has been replanted.		

Non-statutory site designations

County important sites are known as 'Local Wildlife Sites' (previously Sites of Importance for Nature Conservation). There are also a number of sites of nature conservation importance, termed "Ecosites", which are found within your area of search. Information about the designation and grading of Ecosites is included in the table above.

The county is currently reviewing its site system and will be identifying further Local Wildlife Sites (LWS) over the next few years. Currently we have identified those sites which are potential Local Wildlife Sites (pLWS) and these are also indicated below with the Ecosite details; many sites are as yet ungraded against the LWS system. Please contact us if you would like a copy of the detailed citation for an LWS within your search area.

Some Ecosites are also Local Geological Sites (LGS) or statutory Local Nature Reserves (LNRs). Details of these designations are also given in the table with the Ecosite details.

The table above gives brief details of all known Ecosites within your area of search; please see the enclosed map for locations. Sites of regional and local biodiversity interest are considered to play a fundamental role in meeting overall national biodiversity targets, and therefore appropriate weight must be attached to designated Ecosites in all planning applications (in accordance with local plan policies and the general principles of the National Planning Policy Framework (NPPF)).

N.B. All watercourses are considered to be of ecological importance; however, accurate assessment of the relative importance of the various stretches is not yet generally possible.

Structure and Local Plan policies provide protection for these sites or, in circumstances where development is allowed, require mitigation measures to off-set any damage. In order to achieve this it is essential that adequate survey details for sites which may be affected by development are gathered at a very early stage. For sites of high biodiversity value this requires Phase 2 survey work and species specific surveys including invertebrates, mammals, birds and so on. Guidance is available from the Institute of Environmental Assessment (IEA) in "Guidelines for Baseline Ecological Assessment".

Please note that the brief descriptions above include species recorded within the whole Ecosite, and therefore potentially an area outside of your specific area of search. In particular descriptions of linear Ecosites such as water courses and railway lines may include species which were not necessarily recorded within your area of search.

For further information relating to specific sites please contact WBRC at wbrc@warwickshire.gov.uk For information relating to SSSIs please contact Natural England.

Working for Warnickshire



Annex B: Species Records

Table B-1: Species records provided by Warwickshire Biological Records Centre

Common name	Scientific name	Location of nearest record (km) and	Date of record	Legal status & conservation
		bearing ¹		aims ^{2, 3}
Mammals				
Harvest mouse	Micromys minutus	Within scheme	2000	NERC Sect. 41
Chinese muntjac	Muntiacus reevesi	0.1km W	2004	GB non-native
Chinese muntjac	Muntiacus reevesi	0.1km W	2004	GB non-native
West european hedgehog	Erinaceus europaeus	0.2km W	2014	NERC Sect. 41, LBAP
Otter	Lutra lutra	0.2km W	2017	W&CA, LBAP, HabRegs, IUCN Red list
Brown hare	Lepus europaeus	1.1km W 2.0km E	1985 2010	NERC Sect. 41
Polecat	Mustela putorius	1.5km W	1996	NERC Sect. 41
Water vole	Arvicola amphibius	1.8km SW	1985	W&CA, NERC Sect. 41, LBAP
American mink	Neovison vison	2.0km W	2003	GB non-native, INNS list
Bats				
Myotis species	Myotis species	Observation: within scheme boundary	2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Common pipistrelle	Pipistrellus pipistrellus	Roost: 0.1km E Roost: 1.2km W Roost: 1.3km W Observation: 0.3km E Observation: Within scheme boundary.	2013 2013 2013 2014 2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Brown long- eared	Plecotus auritus	Roost: 0.1km E Roost: 1km E Observation: within scheme boundary Observation: 0.1km E	2013 2015 2015 2013	W&CA, NERC Sect. 41 HabRegs, LBAP



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Noctule	Nyctalus noctula	Observation: 0.08km E	2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Soprano pipistrelle	Pipistrellus pygmaeus	Roost: 0.1km E Roost: 1.3km W Observation: 0.1km E	2013 2013 2014	W&CA, NERC Sect. 41 HabRegs, LBAP
Unidentified bat species	Chiroptera species	Roost: 0.1km W Roost: 1.6km N Roost: 1.3km E Roost: 1.1km S Observation: 0.9km E	2014 2010 2012 2012 1990	W&CA, NERC Sect. 41, LBAP
Natterer's bat	Myotis nattereri	Observation: 0.2km E	2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Leisler's bat	Nyctalus leisleri	Observation: 0.8km E	2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Pipistrelle species	Pipistrellus species	Roost: 1.9km S Observation: 1.1km W	2012 2015	W&CA, NERC Sect. 41 HabRegs, LBAP
Daubenton's bat	Myotis daubentonii	Roost: 1.7km E Roost: 1.2km W Observation: 1.3km W	2016 2013 2013	W&CA, NERC Sect. 41 HabRegs, LBAP
Serotine	Eptesicus serotinus	Observation: 1.9km W	2001	W&CA, NERC Sect. 41 HabRegs, LBAP
Herpetofauna				
Common toad	Bufo bufo	Within scheme boundary	2011	W&CA, NERC Sect. 41, Bern3
Slow-worm	Anguis fragilis	0.3km NE 1km E	1985 2014	W&CA, NERC Sect. 41
Adder	Vipera berus	0.3km NE	1845	W&CA, NERC Sect. 41, LBAP
Great crested newt	Triturus cristatus	0.3km N & E	2013	W&CA, NERC Sect. 41 & 42, HabRegs
Slow-worm	Anguis fragilis	0.3km NE 1km E	1985 2014	W&CA, NERC Sect. 41
Adder	Vipera berus	0.3km NE	1845	W&CA, NERC Sect. 41, LBAP
Grass snake	Natrix helvetica	0.7km W	1982	W&CA, NERC Sect. 41 & 42, Bern3



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Common lizard	Zootoca vivipara	1km W	1986	W&CA, NERC Sect. 41
Crayfish				
White-clawed crayfish	Austropotamobius pallipes	0.6km W	2011	W&CA, NERC Sect. 41, HabRegs, LBAP
Invasive plants				
Rhododendron	Rhododendron ponticum	Adjacent to north of scheme Adjacent to east of scheme	1951 1982	W&CA Schedule 9
Indian balsam	Impatiens glandulifera	0.4km W 0.7km W	1986 2012	W&CA, EPA, INNS list
Japanese knotweed	Fallopia japonica	0.5km W 0.6km W	2012 1998	W&CA, EPA, INNS list
New Zealand pigmyweed	Crassula helmsii	0.7km W	2012	W&CA Schedule 9
Montbretia	Crocosmia pottsii x aurea = C. x crocosmiiflora	1.2km W	2013	W&CA Schedule 9
Variegated yellow archangel	Lamium galeobdolon subsp. argentatum	1.2km E 1.7km W	1987 2014	W&CA Schedule 9
Canadian waterweed	Elodea canadensis	1.3km W	1998	INNS list, GB non-native
Nuttall's waterweed	Elodea nuttallii	1.5km SE	1987	W&CA Schedule 9
Three-corned garlic	Allium triquetrum	1.7km W	2014	W&CA Schedule 9
Water fern	Azolla filiculoides	1.7km W	2013	W&CA Schedule 9
Orange balsam	Impatiens glandulifera	1.8km E	2012	W&CA Schedule 9, INNS list
Birds				
Mallard	Anas platyrhynchos	Within scheme boundary	Unknown	BoCC - Amber
Bullfinch	Pyrrhula pyrrhula	Within scheme boundary	Unknown	NERC Sect. 41, BoCC - Amber



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Dunnock	Prunella modularis	Within scheme boundary	Unknown	NERC Sect. 41, BoCC - Amber
Stock Dove	Columba oenas	Within scheme boundary	Unknown	BoCC - Amber
Tawny Owl	Strix aluco	Within scheme boundary	Unknown	BoCC - Amber
Tree Sparrow	Passer montanus	Within scheme boundary	Unknown	NERC Sect. 41, BoCC - Red
Yellowhammer	Emberiza citrinella	Within scheme boundary	Unknown	NERC Sect. 41, BoCC - Red
Barn owl	Tyto alba	Adjacent to eastern side of scheme boundary 0.7km W	1996 2015	LBAP, W&CA Schedule 1
Kingfisher	Alcedo atthis	Adjacent to scheme boundary	1964	W&CA Schedule 1, BoCC - Amber
Woodcock	Scolopax rusticola	Adjacent to scheme boundary	1964	BoCC - Red
Kestrel	Falco tinnunculus	0.1km W	2012	BoCC - Amber
Linnet	Linaria cannabina	0.1km W	2012	NERC Sect. 41, BoCC - Red
Pochard	Aythya ferina	0.1km W	1992	BoCC - Red
Mistle Thrush	Turdus viscivorus	0.1km NW	1991	BoCC - Red
Starling	Sturnus vulgaris	0.2km W	2012	NERC Sect. 41, BoCC - Red
Willow Warbler	Phylloscopus trochilus	0.2km W	2012	BoCC - Amber
Fieldfare	Turdus pilaris	0.2km W	2012	W&CA Schedule 1, BoCC - Red
Redwing	Turdus iliacus	0.2km W	2012	W&CA Schedule 1, BoCC - Red
Wryneck	Jynx torquilla	0.4km SW	2006	W&CA Schedule



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Reed Bunting	Emberiza schoeniclus	0.4km W	1986	NERC Sect. 41, BoCC - Amber
Skylark	Alauda arvensis	0.6km W	1995	NERC Sect. 41, BoCC - Red
Cuckoo	Cuculus canorus	0.7km W	1982	NERC Sect. 41, BoCC - Red
Song Thrush	Turdus philomelos	0.9km W	1985	NERC Sect. 41, BoCC - Red
Grey Partridge	Perdix perdix	1km W	1976	NERC Sect. 41, BoCC - Red
Grey Wagtail	Motacilla cinerea	1km W	Unknown	BoCC - Red
House Sparrow	Passer domesticus	1km W	1985	NERC Sect. 41, BoCC - Red
Lesser Spotted Woodpecker	Dendrocopos minor	1km W	1976	NERC Sect. 41, BoCC - Red
Marsh Tit	Poecile palustris	1km W	1976	NERC Sect. 41, BoCC - Red
Redstart	Phoenicurus phoenicurus	1km W	1976	BoCC - Amber
Snipe	Gallinago gallinago	1km W	Unknown	BoCC - Amber
Spotted Flycatcher	Muscicapa striata	1km W	1976	NERC Sect. 41, BoCC - Red
Tree Pipit	Anthus trivialis	1km W	1976	NERC Sect. 41, BoCC - Red
Turtle Dove	Streptopelia turtur	1km W	1976	NERC Sect. 41, BoCC - Red
Willow Tit	Poecile montana	1km W	1976	NERC Sect. 41, BoCC - Red
Yellow Wagtail	Motacilla flava	1km W	1976	NERC Sect. 41, BoCC - Red
Brambling	Fringilla montifringilla	1km W	1976	W&CA Schedule



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Lesser Redpoll	Acanthis cabaret	1.1km W	1976	NERC Sect. 41, BoCC - Red
Meadow Pipit	Anthus pratensis	1.2km W	1976	BoCC - Amber
House Martin	Delichon urbicum	1.3km W	2000	BoCC - Amber
Black-headed Gull	Chroicocephalus ridibundus	1.4km W	2013	BoCC - Amber
Lesser Black- backed Gull	Larus fuscus	1.4km W	2013	BoCC - Amber
Herring Gull	Larus argentatus	1.7km W	1992	NERC Sect. 41, BoCC - Red
Lapwing	Vanellus vanellus	1.7km W	1992	NERC Sect. 41, BoCC - Red
Nightingale	Luscinia megarhynchos	1.7km W	1984	BoCC - Red
Swift	Apus apus	1.7km W	1992	BoCC - Amber
Wood Warbler	Phylloscopus sibilatrix	1.7km W	1984	NERC Sect. 41, BoCC - Red
Black Redstart	Phoenicurus ochruros	1.8km E	2006	W&CA Schedule 1, BoCC - Red
Red Kite	Milvus milvus	1.8km W	2014	W&CA
Rare plants				
		Within scheme boundary, SE of Bickenhill, hedge beside stream just W of M42 Within scheme boundary, N. of	2010	
Black poplar	Populus nigra	Eastcote Sewage Works, nr. Hampton in Arden, corner of copse		
Corn Marigold	Glebionis segetum	0.1km SW	1982	LBAP, England status: vulnerable



Common name	Scientific name	Location of nearest record (km) and bearing ¹	Date of record	Legal status & conservation aims ^{2, 3}
Tubular Water- dropwort	Oenanthe fistulosa	0.1km SW	2001	NERC Sect. 41, Warwickshire status: Scarce, England status: vulnerable
Annual Knawel	Scleranthus annuus subsp. annuus	0.1km SW	1986	NERC Sect. 41, Warwickshire status: Scarce, England status: Endangered

¹ N, North; E, east; S, south; W, west

² NERC Sect. 41, Species of Principal Importance under Section 41of NERC Act 2006 [REF 3]; LBAP, Priority Species of Warwickshire, Coventry & Solihull Biodiversity Action Plan [REF 5]; W&CA, protected under Wildlife and Countryside Act 1981 (as amended) [REF 1]; HabRegs, protected under The Conservation of Habitats and Species Regulations 2017 [REF 2]; IUCN red list, species listed on the International Union for Conservation of Nature (IUCN) red list [REF 10]; Bern3, Bern Convention Appendix 3 [REF 11]; EPA, Environmental Protection Act 1990 [REF 12]; INNS list, invasive non-native species listed under Schedule-9 of the Wildlife & Countryside Act 1981 (as amended) [REF 1]; BoCC, Birds of Conservation Concern Amber/Red list [REF 13].

³ England Status is stated according to Stroh *et al* 2014 [REF 14]; Warwickshire status, refers to plants that are according to plants that are native or archaeophytes in Great Britain but only rarely found in Warwickshire as casuals.



Annex C: Figures

