



Botley West Solar Farm

Environmental Statement

Volume 3

Appendix 9.6: Invertebrate Survey Report

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Glossary

Term	Meaning
The Applicant	SolarFive Ltd (SolarFive)
The Project	Botley West Solar Farm
The Developer: Photovolt Development Partners GmbH	Photovolt Development Partners GmbH (PVDP).

Abbreviations

Abbreviation	Meaning
ES	Environmental Statement
N	Nationally Notable (invertebrates) (occurring in between 16 and 100 hectads)
N-A	Nationally Notable A (invertebrates) (occurring in fewer than 30 hectads)
N-B	Nationally Notable B (invertebrates) (uncommon in Britain - occurring in 31 to 100 hectads)
NR	Nationally Rare (occurring in 15 or fewer hectads)
NS	Nationally Scarce (occurring in between 16 and 100 hectads)
PVDP	Photovolt Development Partners GmbH
R	Great Britain Red List species (pre 1994 and post 2001) at risk but not presently vulnerable or endangered.
RL-GB-pre94-EN	Species listed as endangered on the Great Britain pre-1994 Red List
RL-GB-pre94-Inde	Great Britain Red List species listed on the pre 1994 red list and known to be endangered, rare or vulnerable but with insufficient data to place into one of these categories.
RL-GB-pre94-Insu	Great Britain Red List species listed on the pre 1994 red list and for which there is insufficient data to assess threat.
RL-GB-pre94-NT	Species listed as near-threatened on the Great Britain pre-1994 Red List
RL-GB-pre94-R	Species listed as rare on the Great Britain pre-1994 Red List
RL-GB-pre94-VU	Species listed as vulnerable on the Great Britain pre-1994 Red List
RL-GB-post2001-DD	Species listed on the Great Britain post-2001 Red List but for which there is insufficient data to assign a risk category.
RL-GB-post2001-EN	Species listed as endangered on the Great Britain post-2001 Red List
RL-GB-post2001-NT	Species listed as near-threatened on the Great Britain post-2001 Red List
RL-GB-post2001-VU	Species listed as vulnerable on the Great Britain post-2001 Red List
RL-Global-post2001-NT	Species listed as near threatened on the Global post 2001 Red List of the International Union for Conservation of Nature (IUCN)

Abbreviation	Meaning
S41	Species listed as being of principal importance for conservation in England under Section 41 of the Natural environment and rural communities act 2006.
TVERC	Thames Valley Environmental Records Centre.
WCA5	Animal species protected from intentional killing injuring or taking under schedule 5 of the Wildlife and Countryside Act 1981 (as amended) .

Units

Unit	Description
%	Percentage
ha	Hectare
km ²	Square kilometres
m	metre

1 Introduction

1.1 Overview

1.1.1 This Appendix of the Environmental Statement (ES) has been prepared by RPS on behalf of Photovolt Development Partners GmbH. (PVDP) for the Applicant, SolarFive Ltd. (SolarFive).

1.1.2 The purpose of this technical report is to present the methodology and results of the invertebrate desk study and field surveys for the Project. The results of this report have been used to inform Chapter 9: Ecology and Nature Conservation in Volume 1 of the ES [EN010147/APP/6.3].

1.2 Site description

1.2.1 The site is located in rural Oxfordshire near to Blenheim Palace and the villages of Bladon, Woodstock, Cassington and Cumnor. It comprises approximately 1400 ha of mainly arable land with over 90 km of hedgerow dividing fields. The River Evenlode runs through the centre of the site in a north-south orientation.

1.2.2 The wider landscape is rural in nature with blocks of woodland, including ancient woodland, other riparian systems (both the River Glyme and Cherwell are nearby) and large water bodies including the lakes within Blenheim Palace and Farmoor Reservoir.

1.3 Legislation

1.3.1 Two key pieces of legislation are relevant for terrestrial invertebrates in the UK, these are: Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended).

1.3.2 The Conservations of Habitats and Species Regulations 2017 (as amended) protects one species of terrestrial invertebrate, the large blue *Phengaris arion*. Under schedule 2 it is an offence to:

- Deliberately kill, injure, disturb or capture them;
- Deliberately destroy their eggs damage or destroy their breeding sites and resting places (even when invertebrates are not present); and
- Possess, control or transport them (alive or dead).

1.3.3 The Wildlife and Countryside Act 1981 (as amended) fully protects 27 species of terrestrial invertebrate due to their rarity. Under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) it is an offence to:

- Intentionally kill, injure, or take the animal from the wild;
- Damage or destroy any structure used by that species for shelter and protection including obstruction of its use or disturbing the animal;
- Possess the species (dead or alive); and
- Trade or sell the species, dead, alive or any derivatives.

- 1.3.4 Other species of invertebrate are protected against sale only and have no specific habitat protection.
- 1.3.5 Numerous species of invertebrate are listed under Section 41 of The Natural Environment and Rural Communities Act (2006) as being of principle importance for conservation in England (Priority Species). Public bodies and planning authorities have a legal duty to have regard for conserving a species of principal importance when exercising their duties.

2 Methodology

2.1 Desk Study

- 2.1.1 Information on invertebrates was obtained as part of the ecology desk study. Records were requested from Thames Valley Environmental Records Centre (TVERC).
- 2.1.2 The desk study area comprised the area within the redline boundary of the site and a buffer of 1 km for invertebrate records.
- 2.1.3 The desk study results are presented in Volume 3, Appendix 9.1: Desk Study of the ES [EN010147/APP/6.5]. A summary of invertebrate records is provided in this report.

2.2 Field Surveys

Invertebrate Scoping Survey

- 2.2.1 An experienced and competent invertebrate specialist undertook a walkover of the Project site and noted areas of moderate and high invertebrate potential based on their structure, diversity and species assemblages. Unsuitable areas of habitat were scoped out by the surveyor.
- 2.2.2 Areas 1-14 and Denman's Farm (See Annex A) were surveyed between June and September 2022. Areas A-F (See Annex A) were later added to the Project site and were surveyed in August 2024.
- 2.2.3 Descriptions of the habitats are described in Volume 3, Appendix 9.2: Phase 1 Habitat Survey Report [EN010147/APP/6.5] and summarised in the Volume 1, Chapter 9 Ecology and Nature Conservation of the ES [EN010147/APP/6.3].

Invertebrate Assemblage Surveys

- 2.2.4 Site-specific surveys comprised a series of timed samples that followed methodologies defined in Surveying Terrestrial and Freshwater Invertebrates for Conservation Evaluation (Drake *et al.*, 2007). Surveys utilised a variety of search techniques, including sweep-netting, hand searching, spot searching and netting of flying insects.
- 2.2.5 Species groups targeted during the surveys comprised beetles (Coleoptera), bugs (Hemiptera), butterflies and day-flying moths (Lepidoptera), bees (*Aculeate Hymenoptera*), flies (Diptera, including larger Brachycera and hoverflies), and grasshoppers and bushcrickets (Orthoptera).

- 2.2.6 Most protected species are readily identifiable in the field. Invertebrates species that could not be identified in the field were preserved in 70% alcohol (industrial methylated spirits) and identified following the survey, using identification aids (as per accepted methods in Drake *et al.*, 2007).
- 2.2.7 Areas 1-14 and Denman’s Farm (See Annex A) were surveyed between June and September 2022 and Areas A-F (See Annex A) were later added to the Project site and were surveyed in August 2024.
- 2.2.8 Survey visits were only conducted in suitable weather which include sunny spells and dry days.
- 2.2.9 A summary of survey dates, areas and weather conditions during the surveys are detailed in Table 2.2.1 below.

Table 2.2.1. Survey dates, areas and weather conditions during invertebrate assemblage surveys.

Survey Date	Area	Temperature (°C)	Weather Conditions
01/06/2022	12, 13, 14	16	Cloudy with sunny spells. Warm with light wind.
15/06/2022	9, 11	24	Bright and sunny. No wind and very warm.
06/07/2022	Denman’s Farm	21	Dry and cloudy with some sun breaking through
22/07/2022	3, 4	21	Partly sunny with high cloud cover.
12/08/2022	6	30	Very hot with full sun and no cloud
01/09/2022	7,8	23	Warm and sunny with showers.
02/08/2024	A,B,C	28	Mostly sunny throughout; dry; light SW winds.
05/08/2024	D	26	Cloudy with sunny spells; dry but humid.
15/08/2024	E	23	Cloudy with hazy sun; dry but humid.
23/08/2024	F	21	Mostly sunny throughout; dry; moderate west winds.

- 2.2.10 Surveys were undertaken by suitably trained and experienced entomologists with experience in undertaking the survey methodologies used.

2.3 Limitations

- 2.3.1 Due to the farming practices being undertaken over the majority of the site, site conditions were in a constant state of change. Farming activities such as chemical application and the use machinery could periodically affect invertebrate habitats and their assemblages.
- 2.3.2 The 2024 surveys started late in the season (August) and thus may have missed earlier season species. 2024 was also a poor year for some invertebrate groups, especially Lepidoptera (moths and butterflies).

3 Results

3.1 Desk Study

3.1.1 The ecology desk study identified records of 244 terrestrial invertebrate species of conservation interest or concern within the ecology desk Study Area. The records covered several groups, namely true flies, true bugs, moths and butterflies, mayflies, dragonflies and damselflies, molluscs, beetles, false scorpions; and ants, bees, wasps and sawflies.

3.1.2 The records included 33 priority species, one species listed on Annex B of the EC Habitats Directive, five species protected (partially) under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) 60 notable / nationally scarce species, and 79 species listed on at least one Red List.

3.1.3 Only four species have been recorded within the Project site, including butterflies: small heath *Coenonympha pamphilus pamphilus*, common club-tail *Gomphus vulgatissimus* and black hairstreak *Satyrrium pruni*.

3.1.4 The records are presented in Annex B of this report.

3.2 Invertebrate Scoping

3.2.1 A description of the habitats of value to invertebrates within the areas surveyed are presented below in Table 3.2.1 and displayed in Annex A.

3.2.2 Areas that are not included in the table are considered to have low potential to support invertebrate species or would support common and widespread species only.

Table 3.2.1 Invertebrates scoping survey results.

Area	Invertebrate Potential	Habitat description and rationale for invertebrate potential classification
1	Moderate	Species rich hedgerows and uncultivated field margins in the north of the survey area. Small uncut improved grassland in the south with many nectar sources.
	High	The cycle path that intersects Areas 1 and 2 contains a double tree/scrub line with small pockets of woodland and a narrow fringe of species-rich calcareous semi-improved grassland. The tree/shrub species include a significant quantity of hawthorn <i>Crataegus monogyna</i> , blackthorn <i>Prunus spinosa</i> and dog rose <i>Rosa canina</i> agg. A scarce plant, wild liquorice <i>Astragalus glycyphyllos</i> is present in two locations in the path-side scrub. A scarce and declining moth – the liquorice piercer <i>Grapholita pallifrontana</i> is associated with the pods of this plant.
2	Moderate	Species-rich tree line and hedgerow with uncultivated 2 m strip either side in the south of Area 2.
	High	See Area 1 high potential.
3	Moderate	Species-rich hedgerows and tree-lines with uncut grassland strips.
	High	An uncut semi-improved calcareous grassland averaging 8 m wide these include hedge bedstraw <i>Galium album</i> , greater knapweed <i>Centaurea scabiosa</i> , yellow-rattle <i>Rhinanthus minor</i> agg., red and alsike clovers <i>Trifolium pratense</i> and <i>T. hybridum</i> , wild basil <i>Clinopodium vulgare</i> , field scabious <i>Knautia arvensis</i> hogweed <i>Heracleum sphondylium</i> and woolly thistle <i>Cirsium eriophorum</i> .
4	Moderate	Species-rich hedgerows and tree-lines with uncut grassland strips.

5	Moderate	A broad strip of uncut grassland and adjacent ploughed area left for arable plants in the south. Plenty of nectar sources for insects.
6	Moderate	A mixture of species-rich hedges, isolated oak trees, some dead wood on the oaks, broad-leaved woodland, and 5-metre-wide uncut strips.
	High	There is a small area of high invertebrate potential extending from the edge of Bladon village into Area 6 and including the surrounds of a small coppice with native vegetation classification (W8 NVC category). Along the woodland edge and adjacent track, the quantity of insect life was clearly more than that seen elsewhere in Area 6.
7	Moderate	A large area of four fields in the west of Area 7 which are either ploughed areas left for a variety of forbs, especially annuals or where seed-crops are grown. All surrounded by hedgerows. This area is of interest for invertebrates, if only temporarily until it is resown.
	High	A section of the River Evenlode valley extending either side of the railway line from the western side of Area 7 through Area 8 to the north-eastern side of Area 9. Along the River Evenlode either side of the railway are numerous willows and alders and rich flora of marsh and aquatic plants; this area has a high potential for invertebrate species not found elsewhere on the Project site. The river itself looks reasonably clean and there were plenty of Odonata (dragonflies and damselflies). There is also an overgrown hedgerow in the western section.
8	Moderate	A combination of species-rich hedges by the road and some, albeit impoverished, vegetation along a damp ditch in Area 8. Clearly of some invertebrate interest but not very important.
	High	See Area 7 for shared high value habitat.
9	Moderate	Thick and species-rich hedges and adjacent grassland with nectar sources by the busy road on the western edge.
	High	See Area 7 for shared high value habitat.

12	Moderate	Thick and species-rich hedges and adjacent grassland with nectar sources by the busy road on the western edge.
13,14	Moderate	Two adjacent track sides in Area 13 and on the border of Area 13 & Area 14. Here there is semi-improved calcareous grassland and numerous nectar sources attracting many insects here.
9,10,11 12,13, 14	High	Sections of the site that are intersected by the river Evenlode have high potential for invertebrate assemblages, The river flows through many of the areas and has the highest potential to support a diverse array of invertebrate species.
Denmans' Farm	Moderate	All the areas identified with invertebrate potential were either along the hedges and edges of fields or adjacent to woodlands to the south of the area.
A	High	There were entire field margins, including the wider marginal areas in the north. These areas contained species rich rank chalky grassland and fallow agricultural areas with a rich assortment of food plants and nectar sources.
B	High	There were very wide margins of flora rich rank chalky grassland, especially on the north-west side of the field.
C	High	The entire meadow here was of interest for survey. It was neutral grassland with a more limited variety of flora but with abundant nectar sources along the river to the east and nettle beds on the southern boundary. Much of the area looks as if it might be waterlogged in wet winters
D	Moderate	This is a very arable area on relatively thin and chalky soil but the hedgerows and narrow margins of one field contained a richer variety of grasses and flora.
	High	This sheltered meadow area with deeper, damper, and more neutral soil is very different from the rest of the area providing a rich and diverse variety of nectar and food sources.
E	Moderate	Invertebrate potential in field margins and along the access track to the sewage farm.

	High	<p>Species rich tree lines and hedgerows with some good marginal vegetation north of the sewage farm and an area of 'waste' ground west of it on a gravelly soil with bare ground habitat and ruderal plants.</p> <p>And high potential at the northern end of the eastern field and on the eastern edge of the western field due to ranker grassland with a rich variety of flora and nectar sources.</p>
F	Moderate	Moderate interest along the raised tree-lined track separating the north field from the rest
	High	<p>High potential for invertebrates on the western side of the northern field where there is a wide margin and varied hedgerow, a little less rich on the eastern side.</p> <p>The area near the River Thames had high potential invertebrate habitat between the south bank of the river and the dense, scrubby woodland to the south. The vegetation here was tall, varied, and herbaceous with many nectar sources and invertebrate foodplants.</p>

3.3 Invertebrate Assemblages

2022 Surveys

3.3.1 The survey data from the 2022 invertebrate assemblage surveys are presented in Annex C. In summary, 86 species of invertebrate were recorded during the course of this survey, including:

- Mollusca – 3 species. The two terrestrial snails are very common and the freshwater mussel in the River Evenlode;
- Insecta: Odonata – 5 species. Only common species were seen, mainly near River Evenlode but two wider ranging later season species seen in Area 8;
- Insecta: Ephemera - 1 species. A common species seen on the River Evenlode;
- Insecta: Orthoptera – 1 species. Dark Bush Cricket *Pholidoptera griseoptera* is a very common species in the general countryside;
- Insecta: Hemiptera – 4 species. All are common species in the general countryside;
- Insecta: Lepidoptera – 29 species. Of these 18 species were butterflies and all are common or very common species in various habitats in southern England. The remaining 11 moth species, all recorded as adults, apart from the yellow-tail Moth *Euproctis similis*, and all species are at least moderately common in southern England;
- Insecta: Diptera – 7 species. All were very common species in England;
- Insecta: Hymenoptera – 5 species. All were common or very common species in southern England; and
- Insecta: Coleoptera – 11 species. All of these common or very common species that would be expected to occur in an agricultural landscape in southern England.

2024 Surveys

3.3.2 The survey data from the 2024 invertebrate assemblage surveys are present in Annex D. In summary, 176 species were recorded during the course of this survey, including:

- Mollusca – 2 species. The two terrestrial snails, Kentish Snail and White-lipped Hedge Snail are very common in the countryside generally.
- Arachnida: Acarae – 2 species. Two gall mites, both causing galls on field maple leaves, were recorded in 2024.
- Arachnida: Opiliones – 2 species. One species, the distinctive *Dicranopalpus ramosus*, very widespread.
- Arachnida: Araneae – 17 species of which 12 could be confidently determined to species. Spiders are often difficult to identify to species,

especially to immature states. Many very small spiders were not identified. All of the species seen were common, at least in the southern half of England.

- Insecta: Odonata – 5 species, including 3 dragonflies and 2 damselflies. These were all common species. Most of the records were from near to the River Thames in Area F.
- Insecta: Orthoptera – 7 species including 2 common grasshoppers, 4 common species of bush-cricket and one sighting of the less common slender groundhopper *Tetrix subulata*.
- Insecta: Dermaptera – Just 1 species, the common earwig, seen. This is a very common species. There are only 4 resident earwigs occurring in the UK in total and only 3 likely in Oxfordshire.
- Insecta: Hemiptera – 40 species recorded, of these 3 were in the former order known as Homoptera, which includes aphids, leafhoppers, and froghoppers. The ‘true’ Hemiptera, included 5 shieldbugs, 3 leather (or squash) bugs, and 16 Mirid bugs. There were some relatively uncommon species seen, especially the Mirid bug *Deraeocoris scutellaris*, and the Reed Damselbug *Nabis lineatus*. All of the other species seen are common in southern England.
- Insecta: Lepidoptera – 27 species were recorded, 15 species of butterfly were recorded. All butterfly and moths recorded were common countryside species.
- Insecta: Diptera – 34 species of two-winged fly were identified. Fleabane, ox-tongue, water mint, and angelica were particularly good nectar sources for these species. All of the flies recorded are at least moderately common species, at least in south-east England.
- Insecta: Hymenoptera – 16 species of Hymenoptera were recorded. Many ichneumons were seen but could not be identified. The identification of three species of Lasioglossum bee in areas B and D were of interest, but most of the species seen are commonplace. Some identifications of galls, rather than adult insects, were made.
- Insecta: Coleoptera – 24 species were identified, of these 9 species were ladybirds. The species seen were mostly generally common, although the clover head weevil *Hypera meles* is scarcer but currently increasing in numbers.

4 Summary

4.1.1

Desk study records confirmed the presence of a variety of invertebrate species, of which were mostly common and widespread species. However, the records included 33 priority species, one species listed on Annex B of the EC Habitats directive, five species protected (partially) under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) 60 notable / nationally scarce species, and 79 species listed on at least one Red List.

- 4.1.2 Four species have been recorded within the Project site, including butterflies: small heath *Coenonympha pamphilus pamphilus*, common club-tail *Gomphus vulgatissimus* and black hairstreak *Satyrium pruni*.
- 4.1.3 The Project site is largely agricultural with various sized fields and relatively small patches of woodland or scrub as is typical of the farmed landscape of lowland England as a whole. There is much variation in soil conditions from damp to dry and from calcareous (limestone) to neutral (clays etc.). Some woodland edges were studied, mainly in the 2022 survey. In 2024 the hedgerows, field margins, two riverside areas, and open arable habitat were surveyed. Generally, the crop fields had a very poor invertebrate diversity.
- 4.1.4 The areas of high invertebrate interest are patchily distributed but the hedgerows and field margins in many places have good connectivity and are well managed for wildlife diversity. The presence of marshy habitats by rivers add to the invertebrate potential of some areas.
- 4.1.5 The species found were mainly common or very common and widespread countryside specialists as there is little semi-natural habitat to be found away from the woodlands and immediate riverbanks (i.e., no rich calcareous grassland, extensive marsh, bog, or heath within the Project site). A few more localised species were found but these may be under recorded taxa or formerly rare species that are on the increase.
- 4.1.6 No species identified during the invertebrate assemblage surveys were of particular interest or conservation concern.

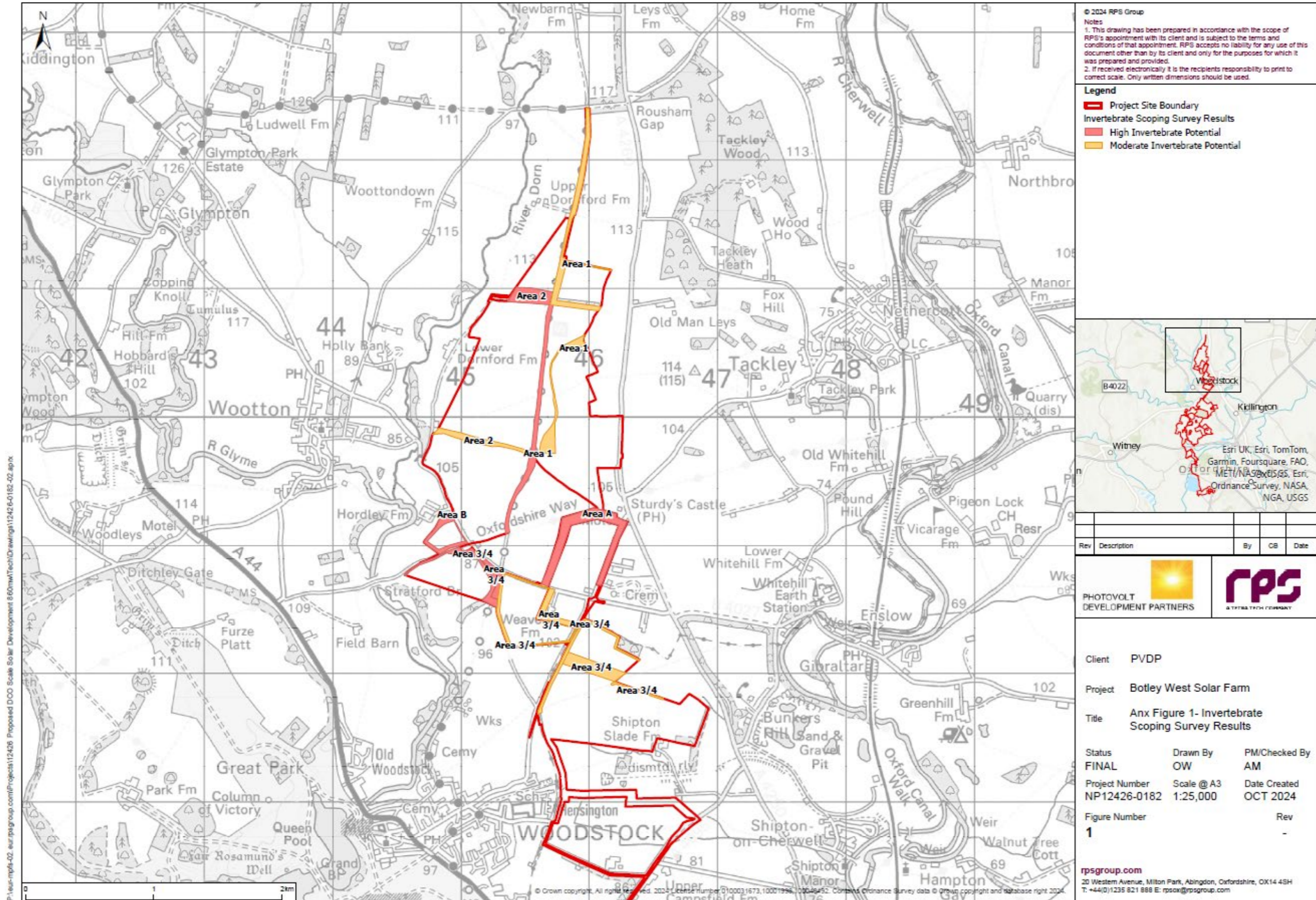
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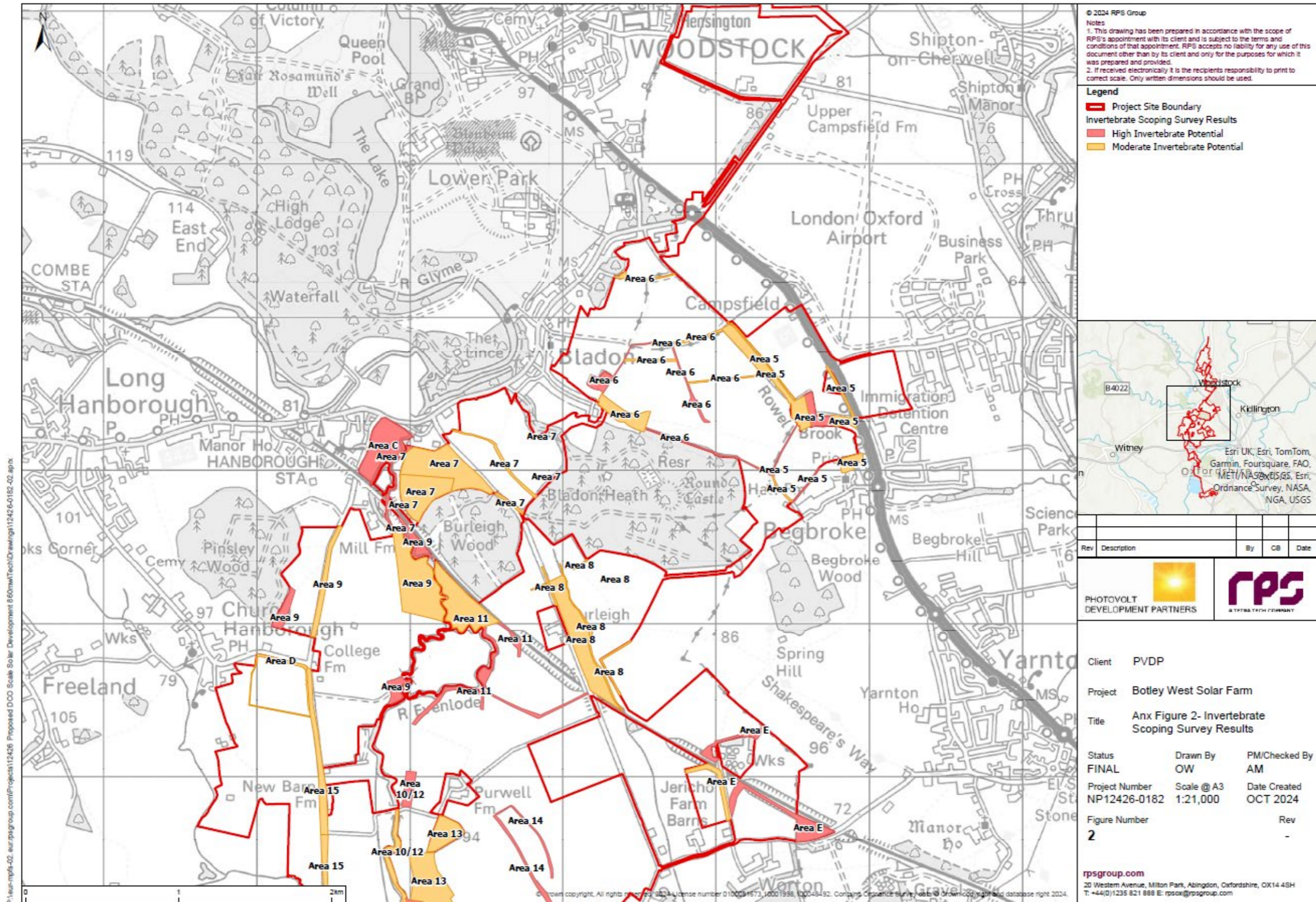
Annex A

Invertebrate Scoping Survey Results Map

Anx Figure 1 Invertebrate Survey Scoping Results (1 of 4).

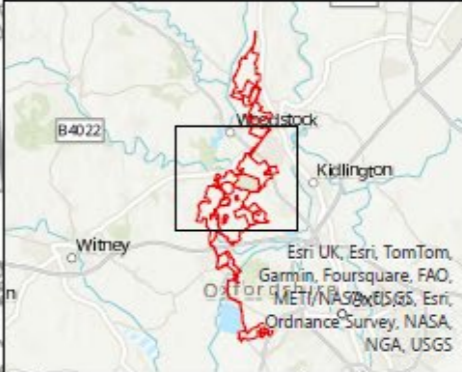


Anx Figure 2 Invertebrate Survey Scoping Results (2 of 4).



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Legend
 Project Site Boundary
 Invertebrate Scoping Survey Results
 High Invertebrate Potential
 Moderate Invertebrate Potential



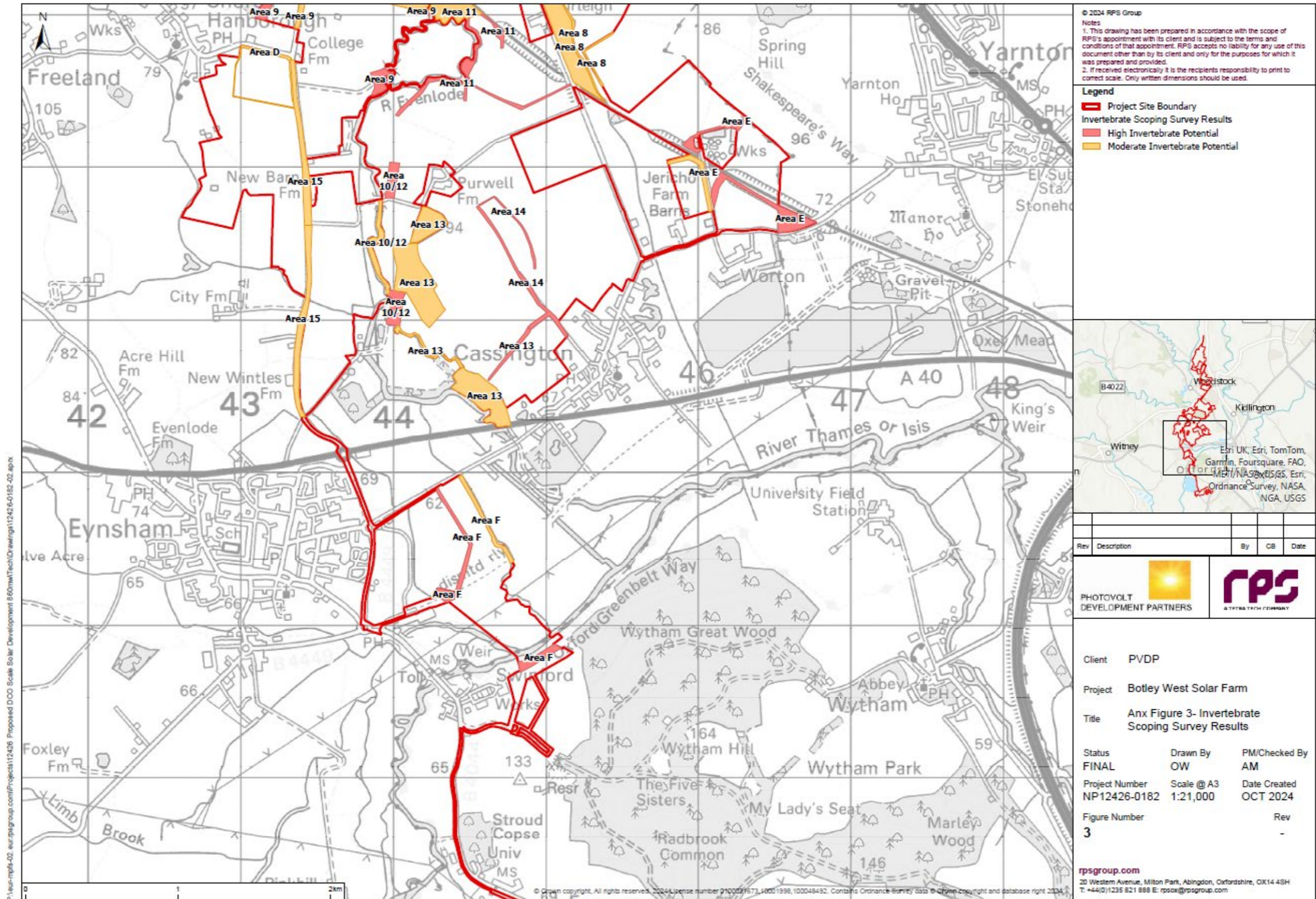
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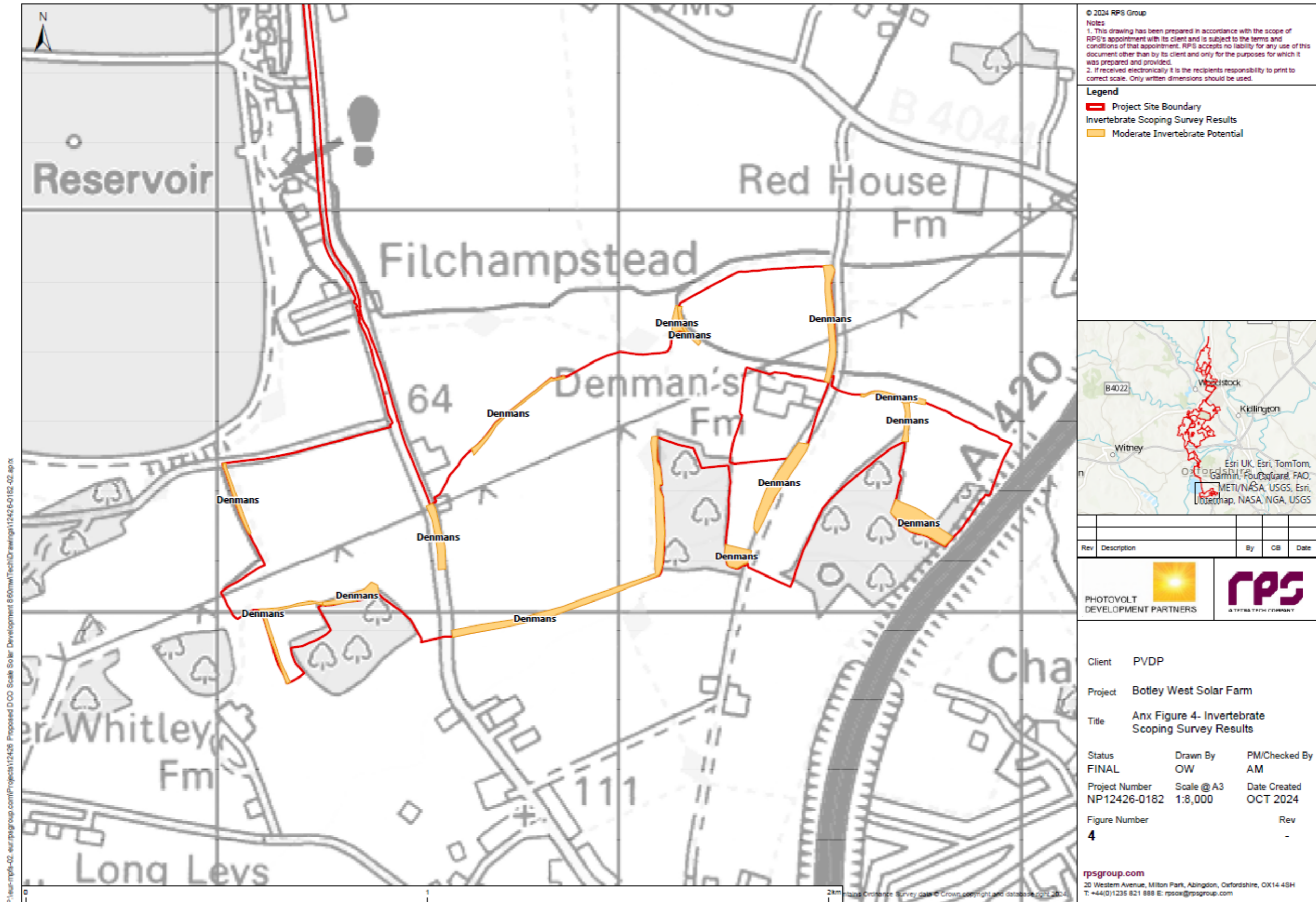
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Status	Drawn By	PM/Checked By	
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Anx Figure 3 Invertebrate Survey Scoping Results (3 of 4).



Anx Figure 4 Invertebrate Survey Scoping Results (4 of 4).



Annex B

Invertebrate Desk Study Records

Anx Table 1 Protected and invertebrate species within 1 km of the Project site.

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Auplopus carbonarius</i>	8	0.48	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Lobe-spurred Furrow Bee	<i>Lasioglossum pauxillum</i>	49	0.48	2021	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Nysson trimaculatus</i>	1	0.48	2018	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Pemphredon morio</i>	2	0.48	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Hill Cuckoo Bee	<i>Bombus rupestris</i>	37	0.49	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Dolichovespula saxonica</i>	11	0.49	2021	RL-GB-pre94-Insu
Invertebrates - Ants, Bees, Sawflies & Wasps	Four-spotted Furrow Bee	<i>Lasioglossum quadrinotatum</i>	1	0.49	2020	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Hawksbeard Mining Bee	<i>Andrena fulvago</i>	4	0.55	2021	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Sharp-collared Furrow Bee	<i>Lasioglossum malachurum</i>	30	0.55	2021	N-B

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Ants, Bees, Sawflies & Wasps	Ridge-cheeked Furrow Bee	<i>Lasioglossum puncticolle</i>	13	0.55	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Yellow-shouldered Nomad Bee	<i>Nomada ferruginata</i>	9	0.55	2020	RL-GB-pre94-EN
Invertebrates - Ants, Bees, Sawflies & Wasps	Red-tailed Mason Bee	<i>Osmia bicolor</i>	70	0.55	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Painted Nomad Bee	<i>Nomada fucata</i>	3	0.64	2021	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Swollen-thighed Blood Bee	<i>Sphecodes crassus</i>	9	0.65	2020	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Small Tiphia	<i>Tiphia minuta</i>	6	0.65	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Dolichovespula media</i>	8	0.66	2020	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Dark Blood Bee	<i>Sphecodes niger</i>	1	0.67	2020	RL-GB-pre94-R
Invertebrates - Ants, Bees, Sawflies & Wasps	Big-headed Mining Bee	<i>Andrena bucephala</i>	10	0.68	2020	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Gorytes laticinctus</i>	1	0.68	2020	RL-GB-pre94-R
Invertebrates - Ants, Bees, Sawflies & Wasps	Long-horned Nomad Bee	<i>Nomada hirtipes</i>	4	0.68	2019	RL-GB-pre94-R

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Priocnemis hyalinata</i>	7	0.68	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Large Garden Bumblebee	<i>Bombus ruderatus</i>	1	0.75	2018	S41, N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Large Sallow Mining Bee	<i>Andrena apicata</i>	1	0.81	2018	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Lathbury's Nomad Bee	<i>Nomada lathburiana</i>	3	0.81	2017	RL-GB-pre94-R
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Anoplius caviventris</i>	2	0.83	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Ridge-saddled Carpenter Bee	<i>Heriades truncorum</i>	3	0.83	2021	RL-GB-pre94-Insu
Invertebrates - Ants, Bees, Sawflies & Wasps	Trimmer's Mining Bee	<i>Andrena trimmerana</i>	2	0.91	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Brown Tree Ant	<i>Lasius brunneus</i>	10	0.94	2021	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Large Scabious Mining Bee	<i>Andrena hattorfiana</i>	3	1.15	2020	RL-GB-pre94-R
Invertebrates - Ants, Bees, Sawflies & Wasps	Red-tailed Blood Bee	<i>Sphecodes rubicundus</i>	1	1.15	2020	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	Brown-Banded Carder Bee	<i>Bombus humilis</i>	12	1.26	2018	S41

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Didineis lunicornis</i>	2	1.26	2021	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Microdynerus exilis</i>	1	1.26	2020	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Crossocerus walkeri</i>	1	1.27	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Stigmus pendulus</i>	1	1.28	2018	RL-GB-pre94-Insu
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Priocnemis confusor</i>	1	1.33	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Crossocerus distinguendus</i>	2	1.42	2022	N-A
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Chrysis illigeri</i>	1	1.45	2017	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Red-shanked Carder Bee	<i>Bombus ruderarius</i>	1	1.85	2017	S41
Invertebrates - Beetles	A Beetle	<i>Nebrioporus depressus</i>	1	0.01	2017	N-B, RL-GB-post2001-NT
Invertebrates - Beetles	A Beetle	<i>Riolus subviolaceus</i>	1	0.03	2016	NS
Invertebrates - Beetles	Stag Beetle	<i>Lucanus cervus</i>	2	0.14	2022	HDir2, WCA5, S41
Invertebrates - Beetles	Rugged Oil-beetle	<i>Meloe rugosus</i>	6	0.15	2020	S41
Invertebrates - Beetles	A Beetle	<i>Kissophagus vicinus</i>	1	0.28	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Larinus carlinae</i>	3	0.44	2021	N-B

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Beetles	Cramp-Ball Fungus Weevil	<i>Platyrhinus resinosus</i>	12	0.44	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Cryptarcha strigata</i>	4	0.45	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Cryptophagus micaceus</i>	21	0.45	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Cypha pulicaria</i>	8	0.45	2021	N
Invertebrates - Beetles	A Beetle	<i>Enicmus brevicornis</i>	35	0.45	2021	N
Invertebrates - Beetles	A Beetle	<i>Eपुरaea silacea</i>	3	0.45	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Notolaemus unifasciatus</i>	1	0.45	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Orthoperus nigrescens</i>	44	0.45	2021	N-B
Invertebrates - Beetles	Pinhole Borer	<i>Platypus cylindrus</i>	17	0.45	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Plectophloeus nitidus</i>	2	0.45	2019	RL-GB-pre94-VU
Invertebrates - Beetles	A Beetle	<i>Taphrorychus bicolor</i>	19	0.45	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Trinodes hirtus</i>	12	0.45	2021	RL-GB-post2001-NT
Invertebrates - Beetles	A Beetle	<i>Uleiota planatus</i>	13	0.46	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Euplectus tholini</i>	2	0.47	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Diplocoelus fagi</i>	5	0.48	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Ernoporicus fagi</i>	7	0.48	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Hylis olexai</i>	3	0.48	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Laemophloeus monilis</i>	9	0.48	2021	RL-GB-pre94-EN
Invertebrates - Beetles	A Beetle	<i>Omalius rugatum</i>	6	0.48	2021	N

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Invertebrates - Beetles	A Beetle	<i>Orthoperus aequalis</i>	3	0.48	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Phloeopora corticalis</i>	2	0.48	2021	N
Invertebrates - Beetles	A Beetle	<i>Pseudotriphyllus suturalis</i>	4	0.48	2021	RL-Global-post2001-NT
Invertebrates - Beetles	A Beetle	<i>Scydmaenus rufus</i>	2	0.48	2021	RL-GB-pre94-VU
Invertebrates - Beetles	A Beetle	<i>Atomaria nigriventris</i>	1	0.49	2020	N
Invertebrates - Beetles	Horsetail Weevil	<i>Grypus equiseti</i>	1	0.49	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Aulonothroscus brevicollis</i>	26	0.53	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Ernoporicus caucasicus</i>	8	0.53	2021	RL-GB-pre94-EN
Invertebrates - Beetles	A Beetle	<i>Hylis cariniceps</i>	1	0.53	2021	RL-GB-pre94-EN
Invertebrates - Beetles	A Beetle	<i>Symbiotes latus</i>	3	0.53	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Anisandrus dispar</i>	2	0.55	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Carpelimus fuliginosus</i>	1	0.55	2021	N
Invertebrates - Beetles	A Beetle	<i>Dropephylla gracilicornis</i>	9	0.55	2021	N
Invertebrates - Beetles	A Beetle	<i>Enicmus rugosus</i>	8	0.55	2021	N
Invertebrates - Beetles	A Beetle	<i>Silvanus bidentatus</i>	6	0.55	2021	N-B
Invertebrates - Beetles	Ambrosia Beetle	<i>Xyleborus dryographus</i>	5	0.57	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Platystomos albinus</i>	2	0.59	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Ampedus elongatulus</i>	4	0.62	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Phytoecia cylindrica</i>	4	0.62	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Sphindus dubius</i>	11	0.62	2021	N-B

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Beetles	A Beetle	<i>Stenichnus godarti</i>	4	0.62	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Zyras haworthi</i>	1	0.62	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Anthonomus chevrolati</i>	1	0.66	2020	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Rhinocyllus conicus</i>	8	0.66	2020	N-A
Invertebrates - Beetles	A Beetle	<i>Pseudoprotapion astragali</i>	2	0.68	2019	N-A
Invertebrates - Beetles	A Beetle	<i>Quedius scitus</i>	4	0.71	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Gyrophana strictula</i>	1	0.73	2021	N
Invertebrates - Beetles	Cardinal Click Beetle	<i>Ampedus cardinalis</i>	14	0.84	2021	RL-GB-pre94-VU, RL-Global-post2001-NT
Invertebrates - Beetles	A Beetle	<i>Batrisodes venustus</i>	3	0.86	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Anaglyptus mysticus</i>	2	0.93	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Procræus tibialis</i>	7	1.02	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Aleochara discipennis</i>	1	1.05	2021	N
Invertebrates - Beetles	A Beetle	<i>Gyrophana manca</i>	3	1.05	2021	N
Invertebrates - Beetles	A Beetle	<i>Strigocis bicornis</i>	2	1.08	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Atheta difficilis</i>	9	1.10	2021	N
Invertebrates - Beetles	A Beetle	<i>Microrhagus pygmaeus</i>	8	1.10	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Calambus bipustulatus</i>	6	1.13	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Scydmorephes helvolus</i>	1	1.13	2021	N
Invertebrates - Beetles	A Beetle	<i>Hydnobius punctatus</i>	1	1.14	2016	N

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Invertebrates - Beetles	A Beetle	<i>Malthodes crassicornis</i>	4	1.14	2021	RL-GB-post2001-NT
Invertebrates - Beetles	A Beetle	<i>Anotylus mutator</i>	11	1.15	2021	N
Invertebrates - Beetles	A Beetle	<i>Elater ferrugineus</i>	2	1.15	2021	RL-GB-pre94-EN
Invertebrates - Beetles	A Beetle	<i>Hypnogyra angularis</i>	3	1.16	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Polydrusus flavipes</i>	3	1.18	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Ctenicera pectinicornis</i>	2	1.20	2016	N-A
Invertebrates - Beetles	A Beetle	<i>Paraphotistus nigricornis</i>	1	1.20	2015	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Aleochara diversa</i>	3	1.27	2021	N
Invertebrates - Beetles	A Beetle	<i>Choleva glauca</i>	4	1.27	2021	N
Invertebrates - Beetles	A Beetle	<i>Nemozoma elongatum</i>	1	1.27	2021	RL-GB-post2001- VU
Invertebrates - Beetles	A Beetle	<i>Neuraphes praeteritus</i>	1	1.27	2021	N
Invertebrates - Beetles	A Beetle	<i>Scydmorephes sparshalli</i>	1	1.27	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Aleochara stichai</i>	3	1.33	2021	N
Invertebrates - Beetles	A Beetle	<i>Amarochara bonnairei</i>	1	1.33	2021	RL-GB-pre94-Inde
Invertebrates - Beetles	A Beetle	<i>Atheta pervagata</i>	1	1.33	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Atheta scapularis</i>	1	1.33	2021	N
Invertebrates - Beetles	A Beetle	<i>Brachysomus hirtus</i>	1	1.33	2021	RL-GB-pre94-R
Invertebrates - Beetles	A Beetle	<i>Leiodes macropus</i>	1	1.33	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Leiodes strigipennis</i>	2	1.33	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Stichoglossa semirufa</i>	1	1.33	2021	RL-GB-pre94-Inde

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Invertebrates - Beetles	A Beetle	<i>Hypopycna rufula</i>	1	1.34	2021	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Quedius aetolicus</i>	1	1.34	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Quedius invreae</i>	1	1.34	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Ampedus quercicola</i>	1	1.37	2020	N-B
Invertebrates - Beetles	A Beetle	<i>Grammoptera abdominalis</i>	2	1.38	2021	N-A
Invertebrates - Beetles	A Beetle	<i>Ischnodes sanguinicollis</i>	1	1.41	2016	N-A
Invertebrates - Beetles	A Beetle	<i>Atomaria clavigera</i>	1	1.43	2019	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Atheta laevana</i>	1	1.48	2020	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Gyrophaena joyi</i>	1	1.50	2021	N
Invertebrates - Beetles	A Beetle	<i>Meligethes gagathinus</i>	1	1.51	2020	N
Invertebrates - Beetles	A Beetle	<i>Cossonus parallelepipedus</i>	2	1.53	2022	N-B
Invertebrates - Beetles	A Beetle	<i>Stenus butrintensis</i>	1	1.54	2020	N
Invertebrates - Beetles	A Beetle	<i>Stenus niveus</i>	1	1.54	2020	N-B
Invertebrates - Beetles	A Beetle	<i>Rhizophagus nitidulus</i>	1	1.55	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Helophorus dorsalis</i>	1	1.59	2020	NS
Invertebrates - Beetles	A Beetle	<i>Ampedus nigrinus</i>	1	1.62	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Coeliodes transversealbofasciatus</i>	1	1.62	2020	N
Invertebrates - Beetles	A Beetle	<i>Globicornis nigripes</i>	3	1.62	2021	RL-GB-post2001-VU
Invertebrates - Beetles	A Beetle	<i>Cryptarcha undata</i>	2	1.63	2021	N-B

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Beetles	A Beetle	<i>Epuraea guttata</i>	2	1.63	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Cis festivus</i>	1	1.64	2020	N-B
Invertebrates - Beetles	A Beetle	<i>Axinotarsus pulicarius</i>	1	1.68	2019	RL-GB-post2001-VU
Invertebrates - Beetles	A Beetle	<i>Cypha discoidea</i>	1	1.68	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Dorytomus filirostris</i>	1	1.69	2018	N-B
Invertebrates - Beetles	A Beetle	<i>Magdalis carbonaria</i>	1	1.70	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Polydrusus formosus</i>	3	1.70	2019	N-A
Invertebrates - Beetles	A Beetle	<i>Meligethes haemorrhoidalis</i>	1	1.73	2021	N
Invertebrates - Beetles	A Beetle	<i>Paederus fuscipes</i>	1	1.78	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Clambus pallidulus</i>	1	1.84	2021	RL-GB-post2001-DD
Invertebrates - Beetles	A Beetle	<i>Oligota apicata</i>	1	1.84	2021	N
Invertebrates - Beetles	A Beetle	<i>Sepedophilus testaceus</i>	1	1.84	2021	N
Invertebrates - Beetles	A Beetle	<i>Poecilium alni</i>	3	1.85	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Magdalis cerasi</i>	2	1.87	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Curculio villosus</i>	1	1.88	2019	N-B
Invertebrates - Beetles	A Beetle	<i>Bibloporus minutus</i>	1	1.91	2021	N-B
Invertebrates - Butterflies	Small Heath	<i>Coenonympha pamphilus pamphilus</i>	16	0 (1 record)	2022	S41, RL-GB-post2001-NT
Invertebrates - Butterflies	Common Club-tail	<i>Gomphus vulgatissimus</i>	12	0 (2 records)	2020	RL-GB-post2001-NT
Invertebrates - Butterflies	Black Hairstreak	<i>Satyrium pruni</i>	19	0 (6 records)	2019	WCA5, RL-GB-post2001-EN

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Butterflies	Brown Hairstreak	<i>Thecla betulae</i>	59	0.02	2020	S41, RL-GB-post2001-VU
Invertebrates - Butterflies	Small Heath	<i>Coenonympha pamphilus</i>	21	0.07	2019	S41, RL-GB-post2001-NT
Invertebrates - Butterflies	White Admiral	<i>Limenitis camilla</i>	8	0.27	2019	S41, RL-GB-post2001-VU
Invertebrates - Butterflies	White-letter Hairstreak	<i>Satyrrium w-album</i>	9	0.33	2019	WCA5, S41, RL-GB-post2001-EN
Invertebrates - Butterflies	Purple Emperor	<i>Apatura iris</i>	15	0.44	2021	WCA5, RL-GB-post2001-NT
Invertebrates - Butterflies	Grizzled Skipper	<i>Pyrgus malvae</i>	1	0.68	2018	S41, RL-GB-post2001-VU
Invertebrates - Dragonflies & Damselflies	Common Darter	<i>Sympetrum striolatum</i>	191	0.04	2022	RL-GB-post2001-DD
Invertebrates - Dragonflies & Damselflies	Scarce Chaser	<i>Libellula fulva</i>	1	0.46	2018	RL-GB-post2001-NT
Invertebrates - Dragonflies & Damselflies	Variable Damselfly	<i>Coenagrion pulchellum</i>	1	1.97	2020	RL-GB-post2001-NT
Invertebrates - False Scorpions	Large Tree-cherne	<i>Dendrochernes cyrneus</i>	2	1.05	2019	RL-GB-pre94-R
Invertebrates - Mayflies	A Mayfly	<i>Baetis fuscatus</i>	1	0.03	2021	RL-GB-post2001-DD
Invertebrates - Mayflies	A Mayfly	<i>Ephemera lineata</i>	2	0.03	2019	RL-GB-post2001-VU
Invertebrates - Molluscs	Roman Snail	<i>Helix (Helix) pomatia</i>	27	0.44	2020	HDir5, WCA5
Invertebrates - Molluscs	Large Black Slug	<i>Arion (Arion) ater</i>	2	0.47	2020	RL-GB-post2001-DD
Invertebrates - Molluscs	Marsh Pond Snail	<i>Stagnicola palustris/fuscus/co rvus</i>	5	0.88	2016	RL-GB-post2001-DD
Invertebrates - Moths	Large Nutmeg	<i>Apamea anceps</i>	12	0.07	2018	S41
Invertebrates - Moths	Mottled Rustic	<i>Caradrina morpheus</i>	3	0.07	2017	S41

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Moths	Cinnabar	<i>Tyria jacobaeae</i>	34	0.37	2021	S41
Invertebrates - Moths	Blood-vein	<i>Timandra comae</i>	37	0.62	2021	S41
Invertebrates - Moths	Knot Grass	<i>Acronicta rumicis</i>	10	0.68	2021	S41
Invertebrates - Moths	August Thorn	<i>Ennomos quercinaria</i>	8	0.82	2021	S41
Invertebrates - Moths	Green-brindled Crescent	<i>Allophyes oxyacanthae</i>	16	0.83	2020	S41
Invertebrates - Moths	Minor Shoulder-knot	<i>Brachylomia viminalis</i>	21	0.83	2021	S41
Invertebrates - Moths	Bulrush Veneer	<i>Calamotropha paludella</i>	5	0.83	2021	N-B
Invertebrates - Moths	Buff Ermine	<i>Spilosoma lutea</i>	31	0.83	2021	S41
Invertebrates - Moths	Grey Dagger	<i>Acronicta psi</i>	3	0.92	2020	S41
Invertebrates - Moths	Centre-barred Sallow	<i>Atethmia centrago</i>	17	0.92	2021	S41
Invertebrates - Moths	Dark Crimson Underwing	<i>Catocala sponsa</i>	1	0.92	2021	S41, RL-GB-pre94-R
Invertebrates - Moths	Lichen Sober	<i>Dichomeris alacella</i>	5	0.92	2021	N
Invertebrates - Moths	Autumnal Rustic	<i>Eugnorisma glareosa</i>	13	0.92	2021	S41
Invertebrates - Moths	Brindled Beauty	<i>Lycia hirtaria</i>	29	0.92	2019	S41
Invertebrates - Moths	Large Wainscot	<i>Rhizedra lutosa</i>	17	0.92	2019	S41
Invertebrates - Moths	Brown-spot Pinion	<i>Anchoscelis litura</i>	9	1.05	2020	S41
Invertebrates - Moths	Deep-brown Dart	<i>Aporophyla lutulenta</i>	15	1.23	2021	S41
Invertebrates - Moths	Latticed Heath	<i>Chiasmia clathrata</i>	1	1.23	2020	S41
Invertebrates - Moths	Beaded Chestnut	<i>Agrochola lychnidis</i>	20	1.32	2019	S41

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - Moths	Dark Spinach	<i>Pelurga comitata</i>	1	1.32	2018	S41
Invertebrates - Moths	Least Minor	<i>Photedes captiuncula</i>	1	1.32	2017	RL-GB-pre94-R
Invertebrates - Moths	Balsam Carpet	<i>Xanthorhoe biriviata</i>	1	1.32	2018	RL-GB-pre94-R
Invertebrates - Moths	Dark-barred Twin-spot Carpet	<i>Xanthorhoe ferrugata</i>	3	1.32	2019	S41
Invertebrates - True Bugs	A True Fly	<i>Pocota personata</i>	1	1.07	2020	NS
Invertebrates - True Bugs	A True Fly	<i>Ctenophora pectinicornis</i>	3	1.13	2021	N
Invertebrates - True Bugs	A True Bug	<i>Mycetophila deflexa</i>	1	1.27	2021	RL-GB-post94-DD
Invertebrates - True Flies	False Woodlouse-fly	<i>Eggisops pecchiolii</i>	1	0.44	2020	N
Invertebrates - True Flies	A True Fly	<i>Sarcophaga villeneuvei</i>	1	0.44	2020	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Mycomya occultans</i>	1	0.48	2020	NS
Invertebrates - True Flies	A True Fly	<i>Platycheirus sticticus</i>	1	0.53	2017	NS
Invertebrates - True Flies	A True Fly	<i>Cladoneura hirtipennis</i>	3	0.62	2021	NS
Invertebrates - True Flies	A True Fly	<i>Dolichopus virgultorum</i>	5	0.62	2021	NS
Invertebrates - True Flies	A True Fly	<i>Eustalomyia hiliaris</i>	3	0.62	2021	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Redtenbacheria insignis</i>	1	0.62	2021	RL-GB-pre94-VU
Invertebrates - True Flies	A True Fly	<i>Tachypeza fuscipennis</i>	2	0.62	2021	NS
Invertebrates - True Flies	A True Fly	<i>Blaesoxipha plumicornis</i>	12	0.64	2020	N
Invertebrates - True Flies	A True Fly	<i>Myopa pellucida</i>	6	0.64	2021	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Myolepta dubia</i>	1	0.66	2021	NS

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - True Flies	A True Fly	<i>Phaonia siebecki</i>	1	0.66	2017	N
Invertebrates - True Flies	A True Fly	<i>Sarcophaga subulata</i>	1	0.68	2021	N
Invertebrates - True Flies	Variegated Fruit-fly	<i>Phortica variegata</i>	1	0.86	2019	S41, RL-GB-pre94-EN
Invertebrates - True Flies	A True Fly	<i>Neoascia interrupta</i>	1	0.99	2021	NS
Invertebrates - True Flies	A True Fly	<i>Platypalpus mikii</i>	1	1.05	2017	NS
Invertebrates - True Flies	A True Fly	<i>Pseudolyciella pallidiventris</i>	1	1.05	2019	RL-GB-post2001-DD
Invertebrates - True Flies	A True Fly	<i>Trichonta fragilis</i>	1	1.05	2017	NS
Invertebrates - True Flies	A True Fly	<i>Meligramma euchromum</i>	1	1.07	2021	NS
Invertebrates - True Flies	A True Fly	<i>Brachyopa bicolor</i>	1	1.13	2021	NS
Invertebrates - True Flies	Wood Snipefly	<i>Rhagio annulatus</i>	1	1.26	2021	RL-GB-post2001-NT
Invertebrates - True Flies	A True Fly	<i>Brachycampta neglecta</i>	2	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Dicranomyia chorea</i>	1	1.27	2021	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Grzegorzekia collaris</i>	1	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Helina abdominalis</i>	9	1.27	2021	N
Invertebrates - True Flies	A True Fly	<i>Hercostomus nigrilamellatus</i>	3	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Keroplatus testaceus</i>	3	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Macronychia polyodon</i>	1	1.27	2021	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Mycomya insignis</i>	2	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Rymosia spinipes</i>	1	1.27	2021	NS
Invertebrates - True Flies	A True Fly	<i>Fannia gotlandica</i>	1	1.28	2017	N

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - True Flies	A True Fly	<i>Eustalomyia vittipes</i>	1	1.32	2021	N
Invertebrates - True Flies	A True Fly	<i>Acnemia amoena</i>	1	1.33	2021	RL-GB-pre94-NT
Invertebrates - True Flies	A True Fly	<i>Lispocephala falculata</i>	1	1.33	2021	N, RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Rhamphomyia caliginosa</i>	2	1.33	2021	NS
Invertebrates - True Flies	A True Fly	<i>Rhamphomyia lamellata</i>	1	1.33	2021	NS
Invertebrates - True Flies	Drab Wood-soldierfly	<i>Solva marginata</i>	1	1.33	2021	RL-GB-pre94-VU
Invertebrates - True Flies	A True Fly	<i>Homoneura interstincta</i>	1	1.34	2021	RL-GB-pre94-R
Invertebrates - True Flies	A True Fly	<i>Goniglossum wiedemanni</i>	2	1.56	2019	N

Annex C

2022 Taxonomic Invertebrate Survey Data

Anx Table 2 2022 Surveys Taxonomic Invertebrate Survey Data.

Taxon Group	Taxon	Common Name	Area	Notes
Mollusca:	<i>Cepaea hortensis</i>	White-lipped Hedge Snail	6	-
	<i>Monacha cantiana</i>	Kentish Snail	9	-
	<i>Unio pictorum</i>	Painters Mussel	13	Two shells on ground near to river Evenlode
Insecta: Odonata	<i>Aeshna cyanea</i>	Southern Hawker Dragonfly	7 & 8	3 seen
	<i>Anax imperator</i>	Emperor Dragonfly	12	-
	<i>Anax imperator</i>	Emperor Dragonfly	11	Two males
	<i>Calopteryx splendens</i>	Banded Demoiselle Damselfly	12 & 13	Abundant along River Evenlode
	<i>Calopteryx splendens</i>	Banded Demoiselle Damselfly	11	Abundant along River Evenlode
	<i>Erythromma sp.</i>	Red-eyed Damselfly sp.	11	On water lily leaves on River Evenlode
	<i>Sympetrum striolatum</i>	Common Darter Dragonfly	8	-
Insecta: Ephemeroptera	<i>Ephemera vulgata</i>	a mayfly	13	One by river Evenlode
Insecta: Orthoptera	<i>Pholidoptera griseoaptera</i>	Dark Bush-cricket	12	Nymphs
Insecta: Hemiptera	<i>Acanthosoma haemorrhoidale</i>	Hawthorn Shieldbug	Denman's Farm	Dead in cattle trough
	<i>Cercopis vulnerata</i>	Red-and-black Froghopper	12; 13; 14	-
	<i>Coreus marginatus</i>	Dock (= Blackberry) Bug	6	Nymphs on knotgrass
	<i>Eurydema oleracea</i>	Crucifer Shieldbug	13	One by river Evenlode on garlic mustard
Insecta: Lepidoptera	<i>Aglais urticae</i>	Small Tortoiseshell	12 & 13	-
	<i>Aglais urticae</i>	Small Tortoiseshell	11	-
	<i>Aglais urticae</i>	Small Tortoiseshell	Denman's Farm	-
	<i>Agriphila tristella</i>	a grass moth	12	-

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Anthocharis cardamines</i>	Orange Tip	13	-
	<i>Aphantopus hyperantus</i>	Ringlet	Denman's Farm	-
	<i>Aphantopus hyperantus</i>	Ringlet	2	-
	<i>Aricia agrestis</i>	Brown Argus	3	1 seen
	<i>Aricia agrestis</i>	Brown Argus	4	2 seen
	<i>Calliphora dominula</i>	Scarlet Tiger	9	-
	<i>Cauchas rufimitrella</i>	a micro moth	12	-
	<i>Chrysoteuchia culmella</i>	Garden Grass Veneer	11	-
	<i>Euclidia mi</i>	Mother Shipton	14	-
	<i>Euproctis similis</i>	Yellow-tail Moth	12	Larva on hawthorn
	<i>Euproctis similis</i>	Yellow-tail Moth	11	Larva on rose
	<i>Favonia quercus</i>	Purple Hairstreak	6	
	<i>Gonepteryx rhamni</i>	Brimstone (butterfly)	3	
	<i>Maniola jurtina</i>	Meadow Brown	13	-
	<i>Maniola jurtina</i>	Meadow Brown	9 & 11	-
	<i>Maniola jurtina</i>	Meadow Brown	Denman's Farm	-
	<i>Maniola jurtina</i>	Meadow Brown	3	-
	<i>Maniola jurtina</i>	Meadow Brown	6	-
	<i>Melanargia galathea</i>	Marbled White	Denman's Farm	-
	<i>Melanargia galathea</i>	Marbled White	3	-
	<i>Ochlodes faunus</i>	Large Skipper	Denman's Farm	-
	<i>Orgyia antiqua</i>	Vapourer Moth	8	Male flying
	<i>Pammene aurana</i>	a tortrix moth	13	On hogweed by River Evenlode
	<i>Pararge aegeria</i>	Speckled Wood	2	-
	<i>Pararge aegeria</i>	Speckled Wood	6	-
	<i>Pieris brassicae</i>	Large White	2	-
	<i>Pieris brassicae</i>	Large White	8	-
	<i>Pieris napi</i>	Green-veined White	2	

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Pieris napi</i>	Green-veined White	3	-
	<i>Pieris rapae</i>	Small White	13	-
	<i>Pieris rapae</i>	Small White	Denman's Farm	-
	<i>Pieris rapae</i>	Small White	3	-
	<i>Pieris rapae</i>	Small White	8	-
	<i>Polygonia c-album</i>	Comma	Denman's Farm	-
	<i>Polygonia c-album</i>	Comma	3	-
	<i>Polyommatus icarus</i>	Common Blue	6	On creeping thistle
	<i>Pyronia tithonus</i>	Gatekeeper	Denman's Farm	-
	<i>Pyronia tithonus</i>	Gatekeeper	2	-
	<i>Pyronia tithonus</i>	Gatekeeper	3	-
	<i>Rivula sericialis</i>	Sraw Dot	11	-
	<i>Thymelicus sp.</i>	Small/Essex Skipper	Denman's Farm	-
	<i>Thymelicus sp.</i>	Small/Essex Skipper	3	-
	<i>Vanessa atalanta</i>	Red Admiral	13	One on hogweed blooms
	<i>Vanessa atalanta</i>	Red Admiral	11	-
	<i>Vanessa atalanta</i>	Red Admiral	Denman's Farm	-
	<i>Vanessa atalanta</i>	Red Admiral	2	-
	<i>Vanessa atalanta</i>	Red Admiral	6	-
	<i>Vanessa atalanta</i>	Red Admiral	8	-
	<i>Yponomeuta sp.</i>	Ermine moth sp.	4	-
	<i>Insecta: Diptera</i>			-
Insecta: Diptera	<i>Chloromyia formosa</i>	Broad Centurion (Soldier Fly)	Denman's Farm	-
	<i>Episyrphus balteatus</i>	Marmalade Hoverfly	13	-
	<i>Episyrphus balteatus</i>	Marmalade Hoverfly	Denman's Farm	-
	<i>Eriothrix rufomaculata</i>	a fly	3	Abundant on flowers

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Melagyna sp.</i>	a hoverfly	3	-
	<i>Platystoma sp.</i>	a fly	13	Several on hogweed blooms
	<i>Poecilobothrus nobilitatus</i>	Semaphore Fly	Denman's Farm	-
	<i>Volucella pellucens</i>	Pied Hoverfly	13	Two by River Evenlode
Insecta: Hymenoptera	<i>Andrena cineraria</i>	Grey Mining Bee	13	One on hogweed blooms
	<i>Apis mellifera</i>	Honey Bee	13	Many on hogweed blooms
	<i>Apis mellifera</i>	Honey Bee	11	-
	<i>Apis mellifera</i>	Honey Bee	Denman's Farm	-
	<i>Apis mellifera</i>	Honey Bee	3	On Clematis
	<i>Apis mellifera</i>	Honey Bee	6	On creeping thistle
	<i>Bombus hypnorum</i>	Tree Bumble Bee	13	Edge of woodland on hogweed by track
	<i>Bombus lapidarius</i>	Red-tailed Bumble Bee	3	-
	<i>Bombus pascuorum</i>	Common Carder Bee	13	-
	<i>Bombus pascuorum</i>	Common Carder Bee	11	-
	<i>Bombus pascuorum</i>	Common Carder Bee	6	-
	Insecta: Coleoptera	<i>Cantharis rustica</i>	a sailor beetle	12
<i>Clytis arietis</i>		Wasp Longhorn Beetle	13	Two on hogweed blooms
<i>Coccinella 7-punctata</i>		7-spot Ladybird	9 & 11	-
<i>Coccinella 7-punctata</i>		7-spot Ladybird	Denman's Farm	-
<i>Coccinella 7-punctata</i>		7-spot Ladybird	6	-
<i>Harmonia axyridis</i>		Harlequin Ladybird	13	-
<i>Malachius bipustulatus</i>		Malachite Beetle	12	-
<i>Oedemera lurida</i>		a beetle	13	Mainly on hogweed
<i>Oedemera lurida</i>		a beetle	Denman's Farm	-

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Oedemera nobilis</i>	Thick-legged Flower Beetle	13	Mainly on hogweed
	<i>Oedemera nobilis</i>	Thick-legged Flower Beetle	Denman's Farm	-
	<i>Oedemera nobilis</i>	Thick-legged Flower Beetle	3	-
	<i>Pyrrochroa serraticornis</i>	Cardinal Beetle	13	Two seen
	<i>Rhagonycha fulva</i>	Red Soldier Beetle	Denman's Farm	-
	<i>Rhagonycha fulva</i>	Red Soldier Beetle	3	-
	<i>Ruptela maculata</i>	Harlequin Longhorn Beetle	Denman's Farm	-
	<i>Subcoccinella 24-punctata</i>	24-spot Ladybird	13	Edge of woodland

Annex D

2024 Taxonomic Invertebrate Survey Data

Anx Table 3 2024 Surveys Taxonomic Invertebrate Survey Data.

Taxon Group	Taxon	Common Name	Area	Notes
Mollusca:	<i>Cepaea hortensis</i>	White-lipped Hedge Snail	B, C	All stages
	<i>Monacha cantiana</i>	Kentish Snail	A, B, C	All stages
	<i>Monacha cantiana</i>	Kentish Snail	D	All stages
	<i>Monacha cantiana</i>	Kentish Snail	E	All stages
Arachnida: Acarae	<i>Aceria aceriscampestris</i>	a gall mite	D	Red blister galls on field maple leaves
	<i>Aceria aceriscampestris</i>	a gall mite	F	Red blister galls on field maple leaves
	<i>Aceria macrochelus</i>	a gall mite	F	Galls on field maple leaves
Arachnida: Opilions	<i>Dicranopalpus ramosus</i>	a harvestman	C	Immature
	<i>Dicranopalpus ramosus</i>	a harvestman	D	Immatures swept
	<i>Dicranopalpus ramosus</i>	a harvestman	E	Adults and immatures swept
	<i>Dicranopalpus ramosus</i>	a harvestman	F	Adults and immatures off various trees
	<i>Mitopus morio</i>	a harvestman	A, B	Adults
Arachnida: Aranea	<i>Anelosimus vittatus</i>	a spider	E	Immature beaten off trees
	<i>Araniella sp.</i>	a spider	E	Immature off fruiting hawthorn
	<i>Cheiracanthium erraticum</i>	a spider	E	Adult
	<i>Enoplagnatha ovata/latimana</i>	Comb-footed Spider	A, B, C	Adults
	<i>Enoplagnatha ovata/latimana</i>	Comb-footed Spider	E	Immatures off nettles
	<i>Larinioides cornutus</i>	an orbweb spider	B	Immatures
	<i>Larinioides cornutus</i>	an orbweb spider	D	Immature
	<i>Larinioides cornutus</i>	an orbweb spider	E	Immatures
	<i>Larinioides cornutus</i>	an orbweb spider	F	Immatures on meadowsweet
<i>Meta segmentata</i>	an orbweb spider	C	Immature	

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Meta segmentata</i>	an orbweb spider	F	Adult off grey willow
	<i>Misumena vatia</i>	a flower spider	E	Immature female on oxtongue flower
	<i>Nuctenea umbratica</i>	a spider	E	Immature off fruiting hawthorn
	<i>Pisaura mirabilis</i>	Nursery web spider	D	Adults and immatures swept
	<i>Pisaura mirabilis</i>	Nursery web spider	E	Immatures swept
	<i>Philodromus cespitum</i>	a crab spider	E	Adult beaten off oak
	<i>Philodromus dispar</i>	a crab spider	D	Adult female swept off of black grass
	<i>Steatodea sp.</i>	a false widow spider	E	Immature beaten off oak
	<i>Tetragnatha extensa</i>	a grass spider	D	Immature swept from black grass
	<i>Tetragnatha extensa</i>	a grass spider	E	Immatures swept
	<i>Tetragnatha extensa</i>	a grass spider	F	Immatures swept
	<i>Tetragnatha sp.</i>	a spider	F	2 immatures off of hop
	<i>Tibellus oblongus</i>	a grass spider	D	Adult and immature
	<i>Tibellus oblongus</i>	a grass spider	E	Adult swept
	<i>Xysticus cristatus</i>	a spider	F	Adults
	<i>Xysticus sp.</i>	a spider	A, B	All stages
	<i>Xysticus sp.</i>	a spider	E	All stages
Insecta: Odonata	<i>Aeshna grandis</i>	Brown Hawker	F	Adult
	<i>Aeshna mixta</i>	Migrant Hawker	F	Adult male
	<i>Calopteryx splendens</i>	Banded Demoiselle Damselfly	C	One seen
	<i>Calopteryx splendens</i>	Banded Demoiselle Damselfly	F	Adult male on ditch north of River Thames
	<i>Enallagma cyathigerum</i>	Common Blue Damselfly	E	Adults
	<i>Sympetrum striolatum</i>	Common Darter	F	Adult male
	<i>Sympetrum striolatum</i>	Common Darter	F	Adult male on ditch north of River Thames
	Insecta: Orthoptera	<i>Chorthippus brunneus</i>	Field Grasshopper	A, B
<i>Chorthippus brunneus</i>		Field Grasshopper	D	Adults
<i>Chorthippus brunneus</i>		Field Grasshopper	E	Adults
<i>Leptophyes punctatissima</i>		Speckled Bush Cricket	B	Adult

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Leptophyes punctatissima</i>	Speckled Bush Cricket	D	Adulty female beaten from hedge
	<i>Leptophyes punctatissima</i>	Speckled Bush Cricket	E	2 adults swept
	<i>Meconema thalassinum</i>	Oak Bush Cricket	F	Adult female off blackthorn
	<i>Omocestus viridulus</i>	Common Green Grasshopper	A, B	Adults
	<i>Omocestus viridulus</i>	Common Green Grasshopper	D	Adults
	<i>Omocestus viridulus</i>	Common Green Grasshopper	E	Adults
	<i>Pholidoptera griseoptera</i>	Dark Bush-cricket	C	Adult
	<i>Roeseliana roeselii</i>	Roesel's Bush Cricket	C	Adult
	<i>Tetrix subulata</i>	Slender Groundhopper	D	Adult
Insecta: Dermaptera	<i>Forficula auricularia</i>	Common Earwig	A	Adult
Insecta: Hemiptera	<i>Acanthosoma haemorrhoidale</i>	Hawthorn Shieldbug	D	Nymph beaten from hawthorn
	<i>Acanthosoma haemorrhoidale</i>	Hawthorn Shieldbug	E	Nymph off hawthorn
	<i>Adelphocoris lineolatus</i>	Lucerne Bug	A, B	Adults
	<i>Aelia acuminata</i>	Bishops Mitre Shield bug	D	Adult and immature
	<i>Anthocoris nemoralis</i>	a flower bug	D	Adult swept off black grass
	<i>Apolygus spinolae</i>	a Mirid bug	F	Adult swept off nettle
	<i>Campyloneura virgula</i>	a Mirid bug	D	Adults off trees including field maple
	<i>Closterotomus norwegicus</i>	a Mirid bug	D	Adult swept from sow-thistle
	<i>Coreus marginatus</i>	Dock (= Blackberry) Bug	B	Nymph
	<i>Coreus marginatus</i>	Dock (= Blackberry) Bug	E	Nymph
	<i>Coreus marginatus</i>	Dock (= Blackberry) Bug	F	Nymph
	<i>Coriomerus denticulatus</i>	Dentated Leatherbug	E	Nymph

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Corizus hyoscyami</i>	Cinnamon Bug	D	Adult swept from sow-thistle
	<i>Deraeocoris lutescens</i>	a Mirid bug	D	Adult beaten from hawthorn
	<i>Deraeocoris lutescens</i>	a Mirid bug	F	Adult off grey willow
	<i>Deraeocoris ruber</i>	a Mirid bug	C	Adults on nettles
	<i>Deraeocoris ruber</i>	a Mirid bug	D	Adult on nettle
	<i>Deraeocoris scutellaris</i>	a Mirid bug	D	Adult on nettle. Not a common species
	<i>Dicyphus epilobii</i>	a Mirid bug	D	Adults on hairy willowherb
	<i>Dicyphus epilobii</i>	a Mirid bug	E	Adults on hairy willowherb
	<i>Dicyphus epilobii</i>	a Mirid bug	F	Adults on hairy willowherb
	<i>Dicyphus errans</i>	a Mirid bug	D	Adults on hairy willowherb
	<i>Dicyphus errans</i>	a Mirid bug	F	Adults on hairy willowherb
	<i>Eurydema oleracea</i>	Crucifer Shieldbug	D	Adult and nymph
	<i>Eurydema oleracea</i>	Crucifer Shieldbug	E	Adult swept
	<i>Gonocerus acutangulatus</i>	Box Bug	F	Adult off fruiting hawthorn
	<i>Himacerus apterus</i>	Tree Damselbug	D	Adults off of various trees
	<i>Himacerus apterus</i>	Tree Damselbug	F	Adults off of hop and hawthorn
	<i>Himacerus mirmicioides</i>	Ant Damsel Bug	C	Nymph
	<i>Idiocerus ribauti/vittifrons</i>	a leafhopper	D	Adult female off field maple
	<i>Liocoris tripustulatus</i>	a Mirid bug	C	Adults on nettles
	<i>Liocoris tripustulatus</i>	a Mirid bug	D	Adults on nettles
	<i>Liocoris tripustulatus</i>	a Mirid bug	F	Adults on nettles
	<i>Lygus sp.</i>	a Mirid bug	D	Adults off hawthorn and swept
	<i>Lygus sp.</i>	a Mirid bug	E	Adults swept
	<i>Lygus sp.</i>	a Mirid bug	F	Adult swept from sow-thistle
	<i>Nabis ferus</i>	Field damselbug	E	Adults swept
	<i>Nabis flavomarginatus</i>	a damsel bug	C	Adult
	<i>Nabis limbatus</i>	Marsh damselbug	E	Adult
	<i>Nabis lineatus</i>	Reed damselbug	F	Adult
	<i>Neophilaenus lineatus</i>	a froghopper	D	Adult

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Neophilaenus lineatus</i>	a froghopper	E	Adult
	<i>Neophilaenus lineatus</i>	a froghopper	F	Adult swept off nettle
	<i>Notostira elongata</i>	a grass Mirid bug	B, C	Adults
	<i>Notostira elongata</i>	a grass Mirid bug	D	Adults on grasses
	<i>Notostira elongata</i>	a grass Mirid bug	E	Adult
	<i>Oncotylus viridoflavus</i>	Knapweed Bug	B	Adults
	<i>Orthops basalis/kalmii</i>	a Mirid bug	F	Adult on angelica
	<i>Palomena prasina</i>	Green Shieldbug	B, C	Nymphs
	<i>Palomena prasina</i>	Green Shieldbug	D	Nymphs
	<i>Palomena prasina</i>	Green Shieldbug	E	Nymph off hawthorn
	<i>Palomena prasina</i>	Green Shieldbug	F	Nymph
	<i>Pentatoma rufipes</i>	Red-legged Shieldbug	D	Adults off field maple
	<i>Philaenus spumarius</i>	Common Froghopper	A, B, C	Adults
	<i>Philaenus spumarius</i>	Common Froghopper	D	Adults
	<i>Philaenus spumarius</i>	Common Froghopper	E	Adults off nettles
	<i>Philaenus spumarius</i>	Common Froghopper	F	Adults off trees and in grass
	<i>Physatocheila dumetorum</i>	Hawthorn Lacebug	D	Adult off of hawthorn
	<i>Physatocheila dumetorum</i>	Hawthorn Lacebug	E	3 adults off of fruiting hawthorn
	<i>Phytocoris tiliae</i>	a Mirid bug	A, B	Adults
	<i>Phytocoris varipes</i>	a Mirid bug	D	Adults on hawthorn and swept from grasses
	<i>Phytocoris varipes</i>	a Mirid bug	E	Adults swept
	<i>Plagiognathus arbustorum</i>	a Mirid bug	C	Adults off nettles
	<i>Plagiognathus arbustorum</i>	a Mirid bug	D	Adults off nettles
	<i>Plagiognathus arbustorum</i>	a Mirid bug	F	Adults off nettles
	<i>Plagiognathus chrysanthemii</i>	a Mirid bug	B	Adults
	<i>Stictopleurus punctatonervosus</i>	a Rhopalid (glass) bug	D	Adult swept from bristly oxtongue
	<i>Trigonotylus ruficornis</i>	a Mirid bug	D	Adult swept

Taxon Group	Taxon	Common Name	Area	Notes
Insecta: Lepidoptera	<i>Ancylis badiana</i>	a totrix moth	A	Adult
	<i>Aglais io</i>	Peacock	A, C	Adults
	<i>Agriphila straminella</i>	a grass moth	A, B, C	Adults
	<i>Agriphila straminella</i>	a grass moth	D	Adults
	<i>Aphantopus hyperantus</i>	Ringlet	C	Adult
	<i>Aricia agrestis</i>	Brown Argus	A	Adults
	<i>Aricia agrestis</i>	Brown Argus	D	5 adults
	<i>Aricia agrestis</i>	Brown Argus	E	2 adults
	<i>Aricia agrestis</i>	Brown Argus	F	Adult
	<i>Autographa gamma</i>	Silver Y	B, C	Adult
	<i>Camptogramma bilineata</i>	Yellow Shell	D	Adult
	<i>Coenonympha pamphilus</i>	Small Heath	A	Adults
	<i>Coenonympha pamphilus</i>	Small Heath	E	Adult
	<i>Coleophora sp.</i>	A case bearing moth	A, B	Adults of species associated with clover
	<i>Grapholita compositella</i>	a micro-moth	A, B	Adults
	<i>Maniola jurtina</i>	Meadow Brown	A, B, C	Adults
	<i>Maniola jurtina</i>	Meadow Brown	D	Adult
	<i>Maniola jurtina</i>	Meadow Brown	F	Adults
	<i>Melanargia galathea</i>	Marbled White	A, C	Adults
	<i>Ochlodes faunus</i>	Large Skipper	C	Adult
	<i>Pararge aegeria</i>	Speckled Wood	A	Adult
	<i>Pararge aegeria</i>	Speckled Wood	D	Adult
	<i>Pararge aegeria</i>	Speckled Wood	E	2 adults
	<i>Phalera bucephala</i>	Buff-tip Moth	F	Larvae on oak
	<i>Pieris napi</i>	Green-veined White	A, C	Adults
	<i>Pieris napi</i>	Green-veined White	F	1 adult
	<i>Pieris rapae</i>	Small White	A, B, C	Adults
	<i>Pieris rapae</i>	Small White	D	Adults
	<i>Pieris rapae</i>	Small White	E	2 adults

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Pieris rapae</i>	Small White	F	Several adults
	<i>Polygonia c-album</i>	Comma	F	Adult
	<i>Polyommatus icarus</i>	Common Blue	A	Adults
	<i>Polyommatus icarus</i>	Common Blue	D	One male
	<i>Polyommatus icarus</i>	Common Blue	F	2 males
	<i>Pyronia tithonus</i>	Gatekeeper	A, B, C	Adults
	<i>Pyronia tithonus</i>	Gatekeeper	D	Adults
	<i>Pyronia tithonus</i>	Gatekeeper	E	2 adults
	<i>Pyronia tithonus</i>	Gatekeeper	F	Adult
	<i>Rivula sericialis</i>	Sraw Dot	D	2 adults
	<i>Stigmella aceris</i>	A leafmining moth	D	Mines in field maple leaves
	<i>Stigmella aurella</i>	A leafmining moth	D	Mines in bramble leaves
	<i>Thymelicus sp.</i>	Small/Essex Skipper	A, B	Adults
	<i>Thymelicus sp.</i>	Small Skipper	C	Adult
	<i>Tyria jacobaeae</i>	Cinnabar	D	Larva of of common ragwort
	<i>Tyria jacobaeae</i>	Cinnabar	E	Larva on hoary ragwort
	<i>Vanessa atalanta</i>	Red Admiral	C	Adult
	<i>Vanessa atalanta</i>	Red Admiral	F	Adults
	<i>Zygaena filipendulae</i>	Six-spot Burnet Moth	B	Adult
Insecta: Diptera	<i>Cheilosia bergenstammi</i>	a hoverfly	D	Adult on carrot
	<i>Cheilosia bergenstammi</i>	a hoverfly	E	Adult on carrot
	<i>Cheilosia impressa</i>	a hoverfly	F	Adults numerous on angelica and hogweed
	<i>Chrysotoxum bicinctum</i>	a hoverfly	F	Adult on hogweed
	<i>Chrysotoxum verralli</i>	a hoverfly	E	Adult on hogweed by track to sewage works
	<i>Coremacera marginata</i>	a fly	A, B	Adults
	<i>Dasysyrphus albostratus</i>	a hoverfly	E	Adult on field bindweed bloom
	<i>Episyrphus balteatus</i>	Marmalade Hoverfly	A, B, C	Adults
	<i>Episyrphus balteatus</i>	Marmalade Hoverfly	F	Adults in small numbers

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Eriothrix rufomaculata</i>	a tachinid fly	A, B, C	Adults
	<i>Eriothrix rufomaculata</i>	a tachinid fly	F	3 adults seen
	<i>Eristalis arbustorum</i>	a drone fly	E	Adults on fleabane
	<i>Eristalis arbustorum</i>	a drone fly	F	Adults
	<i>Eristalis horticola</i>	a drone fly	C	Adult
	<i>Eristalis horticola</i>	a drone fly	F	Adult on water mint
	<i>Eristalis pertinax</i>	a drone fly	C	Adult
	<i>Eristalis pertinax</i>	a drone fly	D	Adults
	<i>Eristalis pertinax</i>	a drone fly	F	Adults on hogweed and angelica
	<i>Eristalis tenax</i>	a drone fly	E	Adults on carrot blooms
	<i>Eupeodes corollae</i>	a hoverfly	F	Adult on fleabane
	<i>Graphomya maculata</i>	a tachinid fly	C	Adult
	<i>Graphomya maculata</i>	a tachinid fly	F	Adults on hogweed
	<i>Helophilus pendulus</i>	a hoverfly	F	Adult on water mint
	<i>Leptogaster cylindrica</i>	a robberfly	E	Adult
	<i>Lucilia sp.</i>	Greenbottle	F	Adults common on flowers
	<i>Merzomyia westermanni</i>	a fly	D	Adult on carrot
	<i>Melanostoma mellinum</i>	a hoverfly	E	Adult male on carrot blooms
	<i>Mesembrina meridiana</i>	Noon Fly	F	Adult
	<i>Myathropa florea</i>	Batman Hoverfly	C	Adult
	<i>Myathropa florea</i>	Batman Hoverfly	F	Adults on hogweed and angelica
	<i>Phania funestra</i>	a fly	F	Adult
	<i>Phasia hemiptera</i>	a tachinid fly	C	Adult on gypsywort
	<i>Platycheiris clypeatus</i>	a hoverfly	A	Adult female
	<i>Platycheiris clypeatus</i>	a hoverfly	D	Dead adults killed by fungal fly mould
	<i>Sarcophaga sp.</i>	flesh fly	E	Adults
	<i>Sarcophaga sp.</i>	flesh fly	F	Adults
	<i>Spaerophoria scripta</i>	a hoverfly	A, B	Adults
	<i>Spaerophoria sp.</i>	a hoverfly	D	Adults females
	<i>Spaerophoria sp.</i>	a hoverfly	E	Plentiful adults

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Spaerophoria sp.</i>	a hoverfly	F	Adults
	<i>Syrphus sp.</i>	a hoverfly	E	Adult on hogweed by track to sewage works
	<i>Syritta pipiens</i>	a hoverfly	F	Adult on fleabane
	<i>Tachina fera</i>	a tachinid fly	C	Adult
	<i>Tachina fera</i>	a tachinid fly	F	Adult on angelica
	<i>Urophora cardui</i>	a gall fly	Gall	Gall on creeping thistle
	<i>Urophora cardui</i>	a gall fly	F	Gall on creeping thistle
	<i>Volucella inanis</i>	a large hoverfly	A	Adult on ragwort
Insecta: Hymenoptera	<i>Andricus quercuscalcis</i>	Knopper Gall	D	On acorns of English oak
	<i>Andricus quercuscalcis</i>	Knopper Gall	F	On acorns of English oak
	<i>Apis mellifera</i>	Honey Bee	A, B, C	Adults
	<i>Apis mellifera</i>	Honey Bee	D	Adults
	<i>Apis mellifera</i>	Honey Bee	E	Adults
	<i>Apis mellifera</i>	Honey Bee	F	Adults
	<i>Athalia rosae</i>	Turnip Sawfly	E	Adult on carrot blooms
	<i>Athalia rosae</i>	Turnip Sawfly	F	Adult on angelica
	<i>Bombus lapidarius</i>	Red-tailed Bumble Bee	A	Adult female
	<i>Bombus pascuorum</i>	Common Carder Bee	C	Adult
	<i>Bombus pascuorum</i>	Common Carder Bee	E	A few adults
	<i>Bombus pascuorum</i>	Common Carder Bee	F	A few adults
	<i>Bombus terrestris</i>	Buff-tailed Bumble Bee	F	Adult
	<i>Bombus terrestris/lucorum</i>	Bumble Bee	A, B, C	Adults
	<i>Bombus terrestris/lucorum</i>	Bumble Bee	D	Adults
	<i>Ctenichneumon panzeri</i>	an ichneumon	E	Adults on carrot blooms
	<i>Diplolepis rosae</i>	Robin's Pin-cushion	A	Gall
	<i>Diplolepis rosae</i>	Robin's Pin-cushion	E	Gall
	<i>Ectemnius lituratus</i>	A digger wasp	D	Adult female on carrot
	<i>Lasioglossum sp.</i>	a solitary bee	E	Adults
<i>Lasioglossum sp.</i>	a solitary bee	F	Adult on fleabane	

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Lasioglossum calceatum</i>	a solitary bee	B	Adult
	<i>Lasioglossum fulvicorne</i>	a solitary bee	D	Adult netted off flowers
	<i>Lasioglossum lativentre</i>	a solitary bee	D	Adult netted off flowers
	<i>Lasius niger</i> agg.	Black Garden Ant	D	Adults
	<i>Vespa crabro</i>	Hornet	E	Adult
	<i>Vespula</i> sp.	A social wasp	F	Adult on water mint
Insecta: Coleoptera	<i>Adalia decempunctata</i>	10-spot Ladybird	F	Adult off grey willow
	<i>Altica</i> sp.	a leaf beetle	D	Adults swept
	<i>Altica</i> sp.	a leaf beetle	E	Adult
	<i>Cassida vibex</i>	a tortoise beetle	B	Adult on knapweed
	<i>Coccinella 7-punctata</i>	7-spot Ladybird	A, B, C	Adults and larvae
	<i>Coccinella 7-punctata</i>	7-spot Ladybird	D	Adult off of oak
	<i>Coccinella 7-punctata</i>	7-spot Ladybird	D	Adults
	<i>Coccinella 7-punctata</i>	7-spot Ladybird	F	Adults numerous
	<i>Crytocephalus pusillus</i>	a leaf beetle	E	Adult off fruiting hawthorn
	<i>Crytocephalus pusillus</i>	a leaf beetle	F	Adult off of oak
	<i>Curculio glandium</i>	Acorn Weevil	D	Adult off field maple
	<i>Curculio glandium</i>	Acorn Weevil	F	Adult off of oak
	<i>Demetrias atricapillus</i>	a ground beetle	D	Adult
	<i>Gastrophysa polygoni</i>	Knotweed Leaf Beetle	A	Adults
	<i>Halyzia sedecimpunctata</i>	Orange Ladybird	F	Adult off grey willow
	<i>Harmonia axyridis</i>	Harlequin Ladybird	C	Adults and pupae
	<i>Harmonia axyridis</i>	Harlequin Ladybird	D	Adults and pupae
	<i>Harmonia axyridis</i>	Harlequin Ladybird	F	Adults
	<i>Harpalus rufipes</i>	Strawberry Beetle	E	Adult
	<i>Hypera meles</i>	a weevil	D	Adult
<i>Lochmaea crataegi</i>	Hawthorn Leaf Beetle	E	Adult beaten off hawthorn	
<i>Oedemera lurida</i>	a beetle	C	Adult swept off of red clover	
<i>Oedemera lurida</i>	a beetle	D	Adult off sow-thistle	

Taxon Group	Taxon	Common Name	Area	Notes
	<i>Oedemera lurida</i>	a beetle	E	Adult on bristly oxtongue bloom
	<i>Oedemera nobilis</i>	Swollen-thighed Beetle	D	Adult off sow-thistle
	<i>Oulema melanopus</i> agg.	Cereal Beetle	D	Adult swept from black grass
	<i>Oulema melanopus</i> agg.	Cereal Beetle	F	Adult swept from barley
	<i>Paradromius linearis</i>	a Carabid beetle	D	Adult beaten off trees
	<i>Propylea 14-punctata</i>	14-spot Ladybird	A, B, C	Numerous adults
	<i>Propylea 14-punctata</i>	14-spot Ladybird	D	Adults
	<i>Propylea 14-punctata</i>	14-spot Ladybird	E	Adults swept off of nettles
	<i>Psyllobora 22-punctata</i>	22-spot Ladybird	D	Adult swept off black grass
	<i>Psyllobora 22-punctata</i>	22-spot Ladybird	F	Adult off fruiting hawthorn
	<i>Rhagonycha fulva</i>	Red Soldier Beetle	A, B, C	Numerous adults
	<i>Rhagonycha fulva</i>	Red Soldier Beetle	D	A few adults
	<i>Rhyzobius chrysomeloides</i>	a micro ladybird	E	Adult beaten off oak
	<i>Sitona lineatus</i>	Pea Leaf Weevil	A, B, C	Numerous adults
	<i>Sitona lineatus</i>	Pea Leaf Weevil	E	Adult swept
	<i>Subcoccinella 24-punctata</i>	24-spot Ladybird	E	Adult off nettle
	<i>Subcoccinella 24-punctata</i>	24-spot Ladybird	F	Adults swept
	<i>Tytthapis sedecimpunctata</i>	16-spot Ladybird	D	Adult
	<i>Tytthapis sedecimpunctata</i>	16-spot Ladybird	C	Adult

Annex E

British Conservation Status Categories

Anx Table 4 British Conservation Status Categories.

Category	Definition
Red Data Book Category 1. RDB1-ENDANGERED	Taxa in danger of extinction if causal factors continue unabated. Includes species occurring as a single colony or only in habitats which are much reduced and highly threatened or which have shown a rapid and continuous decline.
Red Data Book Category 2. RDB2-VULNERABLE	Taxa believed likely to move into the endangered category in the near future if the causal factors continue operating. Includes species of which most or all populations are decreasing and those which are confined to vulnerable habitats.
Red Data Book Category 3. RDB3-RARE	Taxa with small populations that are not at present endangered or vulnerable, but are at risk; usually localised within restricted geographical areas or habitats or are thinly scattered over a wider range. Includes species estimated to exist in only fifteen or less post 1970 10 km squares or, if more, then in vulnerable habitat.
Red Data Book Category 4. RDBK – Data deficient	Taxa that are suspected, but not definitely known, to belong to any of the above categories, because of lack of information. Includes taxa recently discovered or recognised in Great Britain which may prove to be more widespread in the future; taxa with very few or perhaps only a single known locality but which belong to poorly recorded or taxonomically difficult groups; species known from very few localities but which occur in inaccessible habitats or habitats which are seldom sampled; species with very few or perhaps only a single known locality and of questionable native status, but not clearly falling into the category of recent colonist, vagrant or introduction.
N	Nationally Notable (invertebrates) (occurring in between 16 and 100 hectads).
Nationally Scarce Category a. N-A	Taxa which do not fall within the RDB categories but which are uncommon in Great Britain and are known to occur in 16 to 30 10 km squares or, in less well recorded groups, within seven or fewer vice-counties.
Nationally Scarce Category b. N-B	Taxa which do not fall within the RDB categories but which are uncommon in Great Britain and are known to occur in between 31 and 100 10 km squares or, in less well recorded groups, between eight and twenty vice-counties.