

Appendix 8.9: Invertebrate Survey

Land at Barkham Square

Land at Barkham
Square: Invertebrate
Survey
FINAL
November 2025

Approval for issue

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Glossary

Term	Meaning
The Applicant	Crest Nicholson Operations Limited (Chiltern m Division)
The Project	Land at Barkham Square

Abbreviations

Abbreviation	Meaning
ES	Environmental Statement
N	Nationally Notable (invertebrates) (occurring in between 16 and 100 hectares)
N-A	Nationally Notable A (invertebrates) (occurring in fewer than 30 hectads)
N-B	Nationally Notable 8 (invertebrates) (uncommon in Britain - occurring in 31 to 100hectads)
NR	Nationally Rare (occurring in 15 of fewer hectares)
NS	Nationally Scarce (occurring in between 16 and 100 hectads)
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)
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).

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

1 INTRODUCTION

1.1 Overview

- 1.1.1 This Appendix of the Environmental Statement (ES) has been prepared by RPS on behalf of Crest Nicholson Operations Limited (Chiltern Division).
- 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 8: Ecology and Nature Conservation of the ES.

1.2 Site Description

- 1.2.1 The site is located at Barkham Square, Arborfield south-east of Reading, Berkshire (the Site). It comprises approximately 61.3 ha of mainly grassland grazed by sheep. There are blocks of ancient woodland found on Site. There is a pond located to the south, adjacent to the Barkham Brook. The Barkham Brook runs through the centre of the Site in a north-south orientation.
- 1.2.2 The wider landscape is generally rural in nature with parcels of woodland, including ancient woodland. Arable fields are found to the east and north of the Site. Waterman's Lake is located approximately 30m south of the Site boundary.

1.3 Legislation

- 1.3.1 Two key pieces of legislation are relevant for terrestrial invertebrates in the UK, these are: the 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 2 km for invertebrate records.
- 2.1.3 The desk study results are presented in Appendix 8.1 PEA of the ES. 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 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 The Invertebrate Scoping Survey was undertaken on the 23rd April 2024. The weather conditions were dry and cloudy with a light north wind. Temperature was recorded as 11°C.
- 2.2.3 Descriptions of the habitats on Site are provided in Appendix 8.1 PEA and summarised in the Chapter 8 Ecology and Nature Conservation of the ES.

Invertebrate Assemblage Surveys

- 2.2.4 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 Surveys were undertaken by suitably trained and experienced entomologists with experience in undertaking the survey methodologies used. Surveys were completed on the 23rd April 2024.

2.3 Limitations

- 2.3.1 The weather on Site at the time of survey was generally cloudy and a lower than optimal temperature, which could have affected the invertebrate species observed at time of survey.
- 2.3.2 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 190 invertebrate species of conservation interest or concern within the ecology desk Study Area. Records of particular relevance include; stag beetle *Lucanus cervus*, cinnabar moth *Tyria jacobaeae*, common darter dragonfly *Sympetrum striolatum*, and white-clawed crayfish *Austropotamobius pallipes*.
- 3.1.2 Results of surveys for white-clawed crayfish are described in Appendix 8.8: White-claw crayfish and summarised in Chapter 8 Ecology and Nature Conservation of the ES.

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 3.1: Invertebrates scoping survey results.

Invertebrate Potential	Habitat description and rationale for invertebrate potential classification
High	Four main areas of nettle beds are found across the Site, with smaller scattered patches also noted. Plants that are found to support many species of insects and spiders were found associated with the nettle beds. These plant species include; cleavers <i>Galium aparine</i> , white dead nettle <i>Lamium album</i> , and broad-leaved dock <i>Rumex obtusifolius</i> .
High	Two areas of woodland are present on Site and at time of survey were noted to be grazed by sheep. One of the areas of pasture woodland had a high composition of English oak in the canopy, along with aspen <i>Populus tremula</i>, coppiced small-leaved lime <i>Tilia cordata</i>. Holly <i>Ilex aquifolium</i> is present in the understory. Ground flora is comprised of grasses, nitrophilic plants and wild bluebell <i>Hyacinthoides non-scripta</i>. Due to the abundance of oak this area is noted to have high invertebrate potential. The other area of pasture woodland is dominated by a canopy of English oak with birch <i>Betula sp</i> present in fewer numbers. The understory is comprised of hazel <i>Corylus avellana</i>, elder <i>Sambucus nigra</i>, and grey willow <i>Salix cinerea</i>. Non-native, planted species of <i>Poplar sp.</i>, and other willow <i>Salix sp.</i>, and horse chestnut <i>Aesculus hippocastanum</i> are also found present. Grasses and nettles make up the ground flora. The composition of shrub and tree species makes this of high invertebrate potential.
High	Scrub and hedgerow with trees where present are primarily located along the margins of the Site. One hedge of significance runs southwest to northeast in the western part of the Site. This hedge mainly consists of hawthorn <i>Crataegus monogyna</i> , blackthorn <i>Prunus spinosa</i> , field maple <i>Acer campestre</i> , and bramble <i>Rubus fruticosus agg.</i> In hedgerows located close to the margin of the Site, English oak and Ash <i>Fraxinus excelsior</i> are common. Shrubs included; elder <i>Sambucus nigra</i> , cherry-plum <i>Prunus cerasifera</i> , spindle <i>Euonymus europaeus</i> , and both grey and goat willows <i>Salix cinerea</i> and <i>S. caprea</i> . Ground flora present is limited, however garlic mustard <i>Allaria petiolata</i> is found in small numbers. The variety of tree and shrub species make this of high invertebrate potential.
High	The Barkham Brook runs through the centre of the Site from southwest to northeast. An open pond is also present within the south of the Site, in an area of woodland. The tree species adjacent to the pond are alder <i>Alnus glutinosa</i> , and willow species. Emergent plants include; reedmace <i>Typha latifolia</i> , water mint <i>Mentha aquatica</i> , and water-plantain <i>Alisma plantago-aquatica</i> . Pondweed species <i>Potamogeton sp</i> are present, as well as water-starwort <i>Callitriche sp</i> . The variety of native vegetation and clean water makes this area of habitat of high invertebrate potential.

3.3 Invertebrate Assemblages

3.3.1 The survey data from the 2024 invertebrate assemblage survey are present in Annex D. In summary, 52 species were recorded during the course of this survey, including:

- Mollusca – 1 species. Netted Field Slug, this species is very widespread.
- Crustacea – 2 species. Spiny Woodlouse and Common Rough Woodlouse are both widespread and common throughout Britain.
- Chilopoda – 1 species. Common Centipede, widespread throughout the UK.
- Arachnida: 9 species in total 6 of which could be determined to species. Spiders are often difficult to identify to species, especially to immature states. All of the species seen were common, at least in the southern half of England.
- Insecta: Hemiptera – 7 species, of these 3 were Mirid bugs, 2 were shield bugs, one was a flower bug, one was a leafhopper and one a pond skater. The leafhopper *Metidiocerus rutilans* is found locally distributed on trees in southern Britain.
- Insecta: Lepidoptera – 2 species. A fairy moth *Adela reaumurella* and Common Carpet moth *Epirrhoe alternata* are widespread in the UK.
- Insecta: Hymenoptera – 8 species of Hymenoptera were recorded. All species identified are widespread and common.
- Insecta: Diptera – 7 species recorded, all species are common and widespread in southern England.
- Insecta: Coleoptera – 14 species were recorded; the harlequin ladybird *Harmonia axyridis* was observed on Site. This species is non-native and invasive but is widespread in England. All species recorded are considered common in England.

4 SUMMARY

- 4.1.1 Desk study records confirmed the presence of a variety of invertebrate species, species of note to the Site were stag beetle *Lucanus cervus*, cinnabar moth *Tyria jacobaeae*, and common darter dragonfly *Sympetrum striolatum*.
- 4.1.2 The Site is largely comprised of grassland with parcels of ancient woodland as well as native vegetation found to the grassland margins. The grassland, woodland, scrub and hedgerows were surveyed. The majority of grassland was of low invertebrate potential.
- 4.1.3 The areas of high invertebrate interest are distributed throughout the Site. The ancient woodland had an abundance of English oak as well as large variety of shrub and tree species, which gives it a high potential for invertebrates. The large pond present to the south and the stretch of the Barkham Brook which runs through the Site has a wide composition of vegetation and clean water providing this habitat with a high potential for invertebrates.
- 4.1.4 No species identified during the invertebrate assemblage surveys were of particular interest or conservation concern.

5 REFERENCES

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Annex A Invertebrate Scoping Survey Results Map

Protected and invertebrate species within 1km of the 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	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

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Sawflies & Wasps						
Invertebrates - Ants, Bees, Sawflies & Wasps	Sharp-collared Furrow Bee	<i>Lasioglossum malachurum</i>	30	0.55	2021	N-B
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

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	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
Invertebrates - Ants, Bees, Sawflies & Wasps	An Ant, Bee, Sawfly or Wasp	<i>Priocnemis wasphyalinata</i>	7	0.68	2021	N-B
Invertebrates - Ants, Bees, Sawflies & Wasps	Large Garden Bumblebee	<i>Bombus ruderalis</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

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Sawflies & Wasps						
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
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

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>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
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

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 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>Plectrophloeus 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>Omalium rugatum</i>	6	0.48	2021	N
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

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>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

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>Phytoecia cylindrica</i>	4	0.62	2021	N-B
Invertebrates - Beetles	A Beetle	<i>Sphindus dubius</i>	11	0.62	2021	N-B
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>Gyrophæna 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>Batrissodes 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>Gyrophæna manca</i>	3	1.05	2021	N
Invertebrates - Beetles	A Beetle	<i>Strigocis bicornis</i>	2	1.08	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>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
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

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>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
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

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>Atheta laevana</i>	1	1.48	2020	RL-GB-pre94-Insu
Invertebrates - Beetles	A Beetle	<i>Gyrophæna 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
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

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>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>Satyrrium pruni</i>	19	0 (6 records)	2019	WCA5, RL-GB-post2001-EN
Invertebrates - Butterflies	Brown Hairstreak	<i>Thecla betulae</i>	59	0.02	2020	S41, RL-GB-post2001-VU

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
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-cherries	<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/corvus</i>	5	0.88	2016	RL-GB-post2001-DD

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
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
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 centrargo</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

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
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
Invertebrates - Moths	Dark Spinach	<i>Pelurga comitata</i>	1	1.32	2018	S41
Invertebrates - Moths	Least Minor	<i>Photodes 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

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - A True Fly True Flies		<i>Cladoneura hirtipennis</i>	3	0.62	2021	NS
Invertebrates - A True Fly True Flies		<i>Dolichopus virgultorum</i>	5	0.62	2021	NS
Invertebrates - A True Fly True Flies		<i>Eustalomyia hilaris</i>	3	0.62	2021	RL-GB-pre94-R
Invertebrates - A True Fly True Flies		<i>Redtenbacheria insignis</i>	1	0.62	2021	RL-GB-pre94-VU
Invertebrates - A True Fly True Flies		<i>Tachypeza fuscipennis</i>	2	0.62	2021	NS
Invertebrates - A True Fly True Flies		<i>Blaesoxipha plumicornis</i>	12	0.64	2020	N
Invertebrates - A True Fly True Flies		<i>Myopa pellucida</i>	6	0.64	2021	RL-GB-pre94-R
Invertebrates - A True Fly True Flies		<i>Myolepta dubia</i>	1	0.66	2021	NS
Invertebrates - A True Fly True Flies		<i>Phaonia siebecki</i>	1	0.66	2017	N
Invertebrates - A True Fly True Flies		<i>Sarcophaga subulata</i>	1	0.68	2021	N
Invertebrates - Variegated True Flies Fruit-fly		<i>Phortica variegata</i>	1	0.86	2019	S41, RL-GB-pre94-EN
Invertebrates - A True Fly True Flies		<i>Neoascia interrupta</i>	1	0.99	2021	NS
Invertebrates - A True Fly True Flies		<i>Platypalpus mikii</i>	1	1.05	2017	NS
Invertebrates - A True Fly True Flies		<i>Pseudolyciella pallidiventris</i>	1	1.05	2019	RL-GB-post2001-DD
Invertebrates - A True Fly True Flies		<i>Trichonta fragilis</i>	1	1.05	2017	NS
Invertebrates - A True Fly True Flies		<i>Meligramma euchromum</i>	1	1.07	2021	NS

Group	Common name	Scientific name	No of records	Nearest distance from the Project (km)	Year of most recent record	Conservation status
Invertebrates - A True Fly True Flies		<i>Brachyopa bicolor</i>	1	1.13	2021	NS
Invertebrates - Wood Snipefly True Flies		<i>Rhagio annulatus</i>	1	1.26	2021	RL-GB-post2001-NT
Invertebrates - A True Fly True Flies		<i>Brachycampta neglecta</i>	2	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Dicranomyia chorea</i>	1	1.27	2021	RL-GB-pre94-R
Invertebrates - A True Fly True Flies		<i>Grzegorzekia collaris</i>	1	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Helina abdominalis</i>	9	1.27	2021	N
Invertebrates - A True Fly True Flies		<i>Hercostomus nigrilamellatus</i>	3	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Keroplatus testaceus</i>	3	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Macronychia polyodon</i>	1	1.27	2021	RL-GB-pre94-R
Invertebrates - A True Fly True Flies		<i>Mycomya insignis</i>	2	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Rymosia spinipes</i>	1	1.27	2021	NS
Invertebrates - A True Fly True Flies		<i>Fannia gotlandica</i>	1	1.28	2017	N
Invertebrates - A True Fly True Flies		<i>Eustalomyia vittipes</i>	1	1.32	2021	N
Invertebrates - A True Fly True Flies		<i>Acnemia amoena</i>	1	1.33	2021	RL-GB-pre94-NT
Invertebrates - A True Fly True Flies		<i>Lispocephala falculata</i>	1	1.33	2021	N, RL-GB-pre94-R
Invertebrates - A True Fly True Flies		<i>Rhamphomyia caliginosa</i>	2	1.33	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>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
2024
Taxonomic
Invertebrate
Survey Data

Anx Table 3 2024 Surveys Taxonomic Invertebrate Survey Data.

Taxon Group	Taxon	Common Name	Grid reference	Notes
Mollusca:	<i>Cepaea hortensis</i>	Netted Field Slug	SU7766	Under wood debris
Crustacea:	<i>Philoscia muscorum</i>	Shiny Woodlouse	SU7766	Under wood debris
	<i>Porcellio scaber</i>	Common Rough Woodlouse	SU7766	Under wood debris
Chilopoda:	<i>Lithobius forficatus</i>	a centipede	SU7766	Under wood debris
Arachnida:	<i>Araniella sp.</i>	a spider	SU7766	Beaten off hawthorn
	<i>Atea sp.</i>	a spider	SU7766	Immature beaten off oak
	<i>Larinioides cornutus</i>	Furrow Spider	SU7766	Immature swept from nettles
	<i>Mangora acalypha</i>	Cricket-bat Spider	SU7766	Immatures swept from nettles
	<i>Pardosa saltans</i>	a wolf spider	SU7766	On the ground in pasture woodland area
	<i>Philodromus sp.</i>	a spider	SU7766	Immatures off various trees and shrubs
	<i>Pisaura mirabilis</i>	Nursery-web spider	SU7866	On nettles
	<i>Tetragnatha extensa</i>	a grass spider	SU7966	On nettles
	<i>Tetragnatha obtusa</i>	a grass spider	SU7766	Beaten off hawthorn
Insecta: Hemiptera	<i>Anthocoris nemoralis</i>	a flower bug	SU7766	Beaten off hawthorn
	<i>Deraeocoris lutescens</i>	a Mirid bug	SU7766	Beaten off hawthorn
	<i>Gerris sp.</i>	a pond skater	SU7766	Nymphs on large pond
	<i>Harpocera thoracica</i>	a Mirid bug	SU7766	Several beaten off of oak in pasture woodland

Taxon Group	Taxon	Common Name	Grid reference	Notes
	<i>Liocoris tripustulatus</i>	a Mirid bug	SU7766	On stinging nettles
	<i>Metidiocerus rutilans</i>	a leafhopper	SU7766	Beaten of crack willow
	<i>Tritomegas bicolor</i>	Pied Shieldbug	SU7866	5 on white dead nettle in eastern meadow
	<i>Pentatoma rufipes</i>	Red-legged Shieldbug	SU7766	Several nymphs on oak
Insecta: Lepidoptera	<i>Adela reaumurella</i>	a fairy moth	SU7766	One in pasture woodland area
	<i>Epirrhoe alternata</i>	Common Carpet	SU7866	One seen in eastern meadow
Insecta: Hymenoptera	<i>Aglaostigma aucuparia</i>	a sawfly	SU766 & SU7866	2 on stinging nettles in both kilometre squares
	<i>Andrena fulva</i>	Lawn Bee	SU7866	Female seen
	<i>Andrena scotica</i>	Chocolate Mining Bee	SU7766	Male on hawthorn blossom
	<i>Apenymus filiformis</i>	a sawfly	SU7766	Several larvae off oak
	<i>Apis mellifera</i>	Honey Bee	SU7766	On grey willow blossom
	<i>Bombus pascuorum</i>	Common Carder Bee	SU7866	Several on white dead nettle
	<i>Bombus terrestris</i>	Buff-tailed Bumble-bee	SU7766	Several queens seen
	<i>Lasius sp.</i>	Ant species	SU7766 & SU7866	Under reptile mats
Insecta: Diptera	<i>Cheilosia impressa</i>	a hoverfly	SU7766	Sitting on stinging nettle
	<i>Emphis stercorea</i>	a empid fly	SU7766	Common especially around nettle beds
	<i>Epistrophe eligans</i>	a hoverfly	SU7766	One seen by hawthorn hedgerow
	<i>Eristalis pertinax</i>	a hoverfly	SU7766	One seen by hawthorn hedgerow
	<i>Scathophaga stercoraria</i>	Yellow Dung Fly	SU7766	On sheep dung
	<i>Syrphus sp.</i>	a hoverfly	SU7866	Sitting on nettles
	<i>Tipula vernalis</i>	a crane fly	SU7766	Disturbed from an oak in the pasture woodland
	<i>Trigonotylus ruficornis</i>	a Mirid bug	D	Adult swept
	<i>Agriotes obscurus</i>	a click beetle	SU7766	Under old reptile mats

Taxon Group	Taxon	Common Name	Grid reference	Notes
Insecta: Coleoptera	<i>Coccinella septempunctata</i>	7-spot Ladybird	SU7766 & SU7866	On stinging nettles
	<i>Curculio glandium</i>	Acorn Weevil	SU7766	One beaten off oak
	<i>Dasytes aeneus</i>	a beetle	SU7766	Several beaten off flowering oak
	<i>Gastrophysa viridula</i>	Green Dock Beetle	SU7766	On broad-leaved dock in fields
	<i>Harmonia axyridis</i>	Harlequin Ladybird	SU7766	Beaten off hawthorn and spindle
	<i>Ischnomera cyanea</i>	a beetle	SU7766	One beaten off flowering hawthorn
	<i>Phyllobius pomaceus</i>	Green Nettle Weevil	SU7766	On stinging nettles
	<i>Phyllobius pyri</i>	a weevil	SU7766	Beaten off flowering oak and hawthorn
	<i>Plagiodera versicolora</i>	a leaf beetle	SU7766	Beaten off goat willow
	<i>Physlobera 22-punctata</i>	22-spot ladybird	SU7766	Beaten off flowering spindle
	<i>Rhizobius chrysomeloides</i>	a ladybird	SU7766	Beaten off flowering spindle
	<i>Tatianaerhynchites aequatus</i>	a fruit weevil	SU7766	Several beaten off hawthorn
	<i>Tytthapsis 16-punctata</i>	16-spot Ladybird	SU7766	On stinging nettles

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.