

# **Shamley Green & Wonersh, Surrey (VC17)**

## **Invertebrate Survey**

**November 2024**

Written by: Scotty Dodd MSc MCIEEM MRES

November 2024

---

## Quality Control

The information and data which has been prepared and provided is true and has been prepared and provided in accordance with the *Code of Professional Conduct issued by the Chartered Institute of Ecology and Environmental Management (CIEEM)*. We confirm that the opinions expressed are our true and professional bona fide opinions.

		Date
Survey Ecologist	Scotty Dodd MSc MCIEEM MRES	Survey date: Summer 2024
Report Author	Scotty Dodd MSc MCIEEM MRES	Submission date:26/11/2024

**The contents of this report were correct at the time of the site visit. The report is provided for the sole use of the named client and is confidential.**

All rights in this report are reserved. No part of it may be reproduced or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, or stored in any retrieval system of any nature, without our written permission. Its content and format are for the exclusive use of the addressee in dealing with this. It may not be sold, lent, hired out or divulged to any third party not directly involved in this situation without our written consent.

---

Contents

---

<b>Quality Control .....</b>	<b>1</b>
<b>Summary .....</b>	<b>3</b>
<b>1. Introduction .....</b>	<b>5</b>
<b>2. Methods .....</b>	<b>5</b>
<b>3. Results .....</b>	<b>6</b>
<b>4. Discussion and Recommendations .....</b>	<b>9</b>
<b>Species Recorded .....</b>	<b>9</b>
<b>Pantheon Output .....</b>	<b>16</b>
<b>Conclusions &amp; Recommendations .....</b>	<b>17</b>
<b>5. References &amp; Bibliography .....</b>	<b>19</b>
<b>6. Appendix 1: Species List .....</b>	<b>0</b>
<b>7. Appendix 2. Status categories for Rare and Notable species .....</b>	<b>0</b>

## Summary

Three visits were made to Shamley & Wonersh Greens during summer 2024 by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES on behalf of Wonersh Parish Council. The remit was to audit the invertebrate fauna of the agreed areas of grassland and scrub edge in Shamley Green and Wonersh and provide management advice based on the survey's findings.

**Survey date/s:** 12<sup>th</sup> May, 4<sup>th</sup> July & 10<sup>th</sup> August.

**Species total:** 351 invertebrate species identified.

### European Protected Species or Wildlife & Countryside Act species:

Stag Beetle *Lucanus cervus*

### UKBAP / SPI (NERC S41) species:

1 species :-

- Stag Beetle *Lucanus cervus* (Priority Species)

### Species with a Conservation Designation – 18 species

Order	Family	Taxon	Vernacular	SQS	Status	SAT	SG	LH	WG&P
Arachnida: Araneae (Spiders & allies)	Dictynidae	<i>Nigma puella</i>	a spider	4	NS		0	1	0
Arachnida: Araneae (Spiders & allies)	Salticidae	<i>Ballus chalybeius</i>	a spider	4	NS		0	1	0
Coleoptera (Beetles)	Cantharidae	<i>Malthinus frontalis</i>	a soldier beetle	4	NS	A211	1	0	0
Coleoptera (Beetles)	Chrysomelidae	<i>Agelastica alni</i>	Alder Leaf Beetle	8	DD; NR		0	1	1
Coleoptera (Beetles)	Cleridae	<i>Korynetes caeruleus</i>	Steely Blue Beetle	4	NS	A211	1	0	0
Coleoptera (Beetles)	Coccinellidae	<i>Nephus quadrimaculatus</i>	Ivy Ladybird	8	[RDB 2]; pNS		1	0	0
Coleoptera (Weevils)	Curculionidae	<i>Ellescus bipunctatus</i>	a weevil	4	[Nb]		0	1	0
Coleoptera (Weevils)	Curculionidae	<i>Hypera meles</i>	a weevil	4	[Nb]		0	1	0
Coleoptera (Weevils)	Curculionidae	<i>Polydrusus formosus</i>	a weevil	4	[Na]		1	0	0
Coleoptera (Beetles)	Lucanidae	<i>Lucanus cervus</i>	Stag Beetle	4	Legal Protection; NS; NT (European); S41 Priority Species	A211	1	0	0
Coleoptera (Beetles)	Melyridae	<i>Anthocomus fasciatus</i>	a beetle	4	NS	A212	1	1	1
Coleoptera (Beetles)	Mordellidae	<i>Mordellistena humeralis</i>	a beetle	4	NS		0	1	0
Dictyoptera	Blattellidae	<i>Ectobius lapponicus</i>	Dusky cockroach	4	NS	F001	0	0	1

Order	Family	Taxon	Vernacular	SQS	Status	SAT	SG	LH	WG&P
Diptera (two-winged flies)	Asilidae	<i>Eutolmus rufibarbis</i>	a robberfly	4	NS	F111	0	0	1
Diptera (two-winged flies)	Tephritidae	<i>Acinia corniculata</i>	Scarce Knapweed Fly	16	[RDB 1]		0	0	1
Diptera (two-winged flies)	Tephritidae	<i>Oxyna flavipennis</i>	Clouded Yarrow Fly	4	[N]		1	0	0
Hymenoptera: Aculeata (Ants)	Formicidae	<i>Lasius brunneus</i>	an ant	4	[Na]	A211	1	1	1
Hymenoptera: Aculeata (Bees)	Melittidae	<i>Dasypoda hirtipes</i>	Pantaloon Bee	1	[Nb]	F002, F111	0	0	1

SG – Duck Pond Green; LH – Lords Hill; WG&P- Wonersh Green and Platt

### Pantheon analysis:

Two Specific Assemblage Types were found to be in Favourable condition by SSSI standards.

- Scrub edge F001
- Heartwood decay A211

### Recommendations:

Management recommendations are provided.

---

## 1. Introduction

- 1.1 Three visits were made to Shamley & Wonersh Greens during summer 2024 by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES on behalf of Wonersh Parish Council. The remit was to audit the invertebrate fauna of the agreed areas of grassland and scrub edge in Shamley Green and Wonersh and provide management advice based on the survey's findings.
- 1.2 The areas of Common Land surveyed included Duck Pond Green and Lordshill in Shamley Green and Wonersh Green and The Platt in Wonersh. The woodland areas were not surveyed in 2024 and the survey focused on grassland habitats and their interface with scrub edge habitats. Trees within the grasslands were sampled.
- 1.3 This report provides the survey's findings and provides management advice. A full list of invertebrate species observed during the survey is appended.

## 2. Methods

- 2.1 The sites were visited on the 12<sup>th</sup> May, 4<sup>th</sup> July & 10<sup>th</sup> August 2024 by Invertebrate Ecologist Scotty Dodd MSc MCIEEM MRES.
- 2.2 Weather conditions were generally optimal for the three survey visits.
- 2.3 A general walkover survey of the sites was undertaken to visually identify features and habitats with the potential to support scarce or protected invertebrates. Features of interest were sampled for invertebrates using heavy duty calico sweep net, beating tray, suction sampler, butterfly net for spot-netting at resources of interest and hand searching targeted food-plants / features. Visual observations of mobile insects were also noted.

### Data Analysis

- 2.4 There is currently no standard framework for evaluating the invertebrate value of a site as part of an Ecological Impact Assessment. However most active invertebrate ecologists have adopted the Pantheon programme to assess sites. Pantheon was developed by Natural England and the Centre for Ecology & Hydrology to analyse invertebrate sample data and assess assemblage data for favourable versus unfavourable condition by SSSI standards. Hence, if one or more assemblages are found to be in favourable condition this would indicate that the site is likely to be of significant importance for invertebrates. Further information on Pantheon is available here:  
<http://www.brc.ac.uk/pantheon/about/pantheon>.
- 2.5 Users import lists of invertebrates (called "samples") into Pantheon, which then matches the species to the preferred name in the *UK species inventory* (A list of species maintained by the Natural History Museum). Not all macro-invertebrate taxa are included in the database. To date over c.13,000 species have been assessed, this being about a quarter of the total macro-

---

invertebrate fauna (estimated at 37,000). It remains limited to those taxa and families where there is enough ecological information to give a fair level of coding accuracy. These include species such as beetles, flies, bugs & hoppers, butterflies & macro-moths, ants, bees, wasps, spiders and molluscs.

2.6 The method for defining species resources was broadly similar to that followed in Natural England Research Report 024 (Webb *et al.*, 2010):

*‘For each species, a literature search was undertaken. All relevant ecological information was extracted and added to a spreadsheet. This included ‘structural elements of the habitats that the species is generally associated with (e.g. emergent vegetation, seed heads) and/or other environmental factors that it requires, host plant and/or animal species alongside ecological guild of larvae as well as adults where these differed, (e.g. herbivore, carnivore). Only those resources which were considered important to the species in completing its life cycle were included’.*

2.7 The assemblage types are labelled in terms that relate to their favoured habitats in order to make them accessible to non-specialists. However, they are actually defined by lists of characteristic species that are generally found together in nature. Two levels are recognised in the classification. Broad assemblage types (BATs) are a comprehensive series of assemblage types that are characterised by more widespread species. They can be expressed in lists from a wide range of sites. Specific assemblage types (SATs) are characterised by ecologically restricted species and are generally only expressed in lists from sites with conservation value. Since 2008 there has also been a third category of assemblage types that cut across this classification. They are mainly defined by lists of species dependent on a particular environmental resource, such as flowers as a source of pollen and nectar.

### **Limitations**

2.8 Daytime surveys will miss the vast majority of night flying species (moths, many Ichneumons etc.).

2.9 Since the first surveys in 2021 spring and summer weather conditions continue to be some of the worst on record for flying invertebrates and 2024 was no exception.

## **3. Results**

### **Species Recorded**

3.1 A total of 351 invertebrate species were recorded during the survey. A full list of invertebrates recorded is appended.

3.2 A single invertebrate species protected under Schedule 5 (Section 9) of the Wildlife & Countryside Act (as amended) 1981 were recorded during the survey: Stag Beetle *Lucanus cervus*.

3.3 There are currently 943 SPI (covering all taxonomic groups) included on the S41 list. The S41 list is intended to provide guidance to decision-makers, e.g. those

representing public bodies and local/regional authorities, in implementing their duty under Section 40 of the NERC Act to ‘...have regard to the conservation of biodiversity in England when carrying out their normal functions’. A single UK Biodiversity Action Plan (UK BAP) priority species and Species of Principle Importance (SPI) covered under The Natural Environment and Rural Communities Act 2006 Section 41 (NERC S41). One Section 41 species was recorded:–

- Stag Beetle *Lucanus cervus* (Priority Species)

3.4 The survey recorded 18 species with a conservation designation. The legally protected S41 Stag Beetle *Lucanus cervus* is also regarded as Nationally Scarce (NS) in the UK and is considered to be Near Threatened (NT) in Europe under IUCN criteria. A further 17 species are considered to be Red Data Book (RDB) or Nationally Scarce (NS). NS species without parenthesis have been recently reviewed using IUCN criteria. Those species within parenthesis (i.e. RDB, Na & Nb species) are yet to be reviewed using the new criteria and the status may be downgraded; this is qualified in the discussion section for each species:

**Table 1: List of species with a conservation designation. Sub-sites where species found are indicated to the right; 1 = present, 0 = absent. SG = Duck Pond Green, Shamley Green, LH = Lordshill, WG&P = Wonersh Green & The Platt.**

Order	Family	Taxon	Vernacular	SQS	Status	SAT	SG	LH	WG&P
Arachnida: Araneae (Spiders & allies)	Dictynidae	<i>Nigma puella</i>	a spider	4	NS		0	1	0
Arachnida: Araneae (Spiders & allies)	Salticidae	<i>Ballus chalybeius</i>	a spider	4	NS		0	1	0
Coleoptera (Beetles)	Cantharidae	<i>Malthinus frontalis</i>	a soldier beetle	4	NS	A211	1	0	0
Coleoptera (Beetles)	Chrysomelidae	<i>Agelastica alni</i>	Alder Leaf Beetle	8	DD; NR		0	1	1
Coleoptera (Beetles)	Cleridae	<i>Korynetes caeruleus</i>	Steely Blue Beetle	4	NS	A211	1	0	0
Coleoptera (Beetles)	Coccinellidae	<i>Nephus quadrimaculatus</i>	Ivy Ladybird	8	[RDB 2]; pNS		1	0	0
Coleoptera (Weevils)	Curculionidae	<i>Ellescus bipunctatus</i>	a weevil	4	[Nb]		0	1	0
Coleoptera (Weevils)	Curculionidae	<i>Hypera meles</i>	a weevil	4	[Nb]		0	1	0
Coleoptera (Weevils)	Curculionidae	<i>Polydrusus formosus</i>	a weevil	4	[Na]		1	0	0
Coleoptera (Beetles)	Lucanidae	<i>Lucanus cervus</i>	Stag Beetle	4	Legal Protection; NS; NT (European); S41 Priority Species	A211	1	0	0
Coleoptera (Beetles)	Melyridae	<i>Anthocomus fasciatus</i>	a beetle	4	NS	A212	1	1	1
Coleoptera (Beetles)	Mordellidae	<i>Mordellistena humeralis</i>	a beetle	4	NS		0	1	0

Order	Family	Taxon	Vernacular	SQS	Status	SAT	SG	LH	WG&P
Dictyoptera	Blattellidae	<i>Ectobius lapponicus</i>	Dusky cockroach	4	NS	F001	0	0	1
Diptera (two-winged flies)	Asilidae	<i>Eutolmus rufibarbis</i>	a robberfly	4	NS	F111	0	0	1
Diptera (two-winged flies)	Tephritidae	<i>Acinia corniculata</i>	Scarce Knapweed Fly	16	[RDB 1]		0	0	1
Diptera (two-winged flies)	Tephritidae	<i>Oxyyna flavipennis</i>	Clouded Yarrow Fly	4	[N]		1	0	0
Hymenoptera: Aculeata (Ants)	Formicidae	<i>Lasius brunneus</i>	an ant	4	[Na]	A211	1	1	1
Hymenoptera: Aculeata (Bees)	Melittidae	<i>Dasypoda hirtipes</i>	Pantaloony Bee	1	[Nb]	F002, F111	0	0	1

**Table 2: Number of species recorded at each sub site and number of species with a conservation designation at each sub site.**

Site	No. Sp.	Status
Shamley Green	189	8
Lordshill	187	8
Wonersh Green & The Platt	196	7

### Pantheon Analysis

3.5 Two SATs were found to be in Favourable condition, by SSSI standards. The Specific Assemblage Type (SAT) for heartwood decay A211 is represented by 7 qualifying saproxylic species across the sites, of which 4 have a conservation designation. The SAT scrub edge F001 is once again found to be Favourable and is represented by 15 qualifying species across all grassland areas and with 2 species with a conservation status. This is a moderate result. Exceptional sites might expect to have in excess of six SATs in Favourable condition. However, the result suggests that the complex of sites are of local importance.

**Table 3: Pantheon analysis showing Specific Assemblage Types (SATs) detected, number of species (No.Sp.) recorded that are assigned to the SAT and percentage representation of all species assigned to the SAT (% Rep.).**

Broad biotope	Habitat	SAT	No. of sp.	% rep.	SQI	Species with status	SAT Code	Reported condition
open habitats		scrub edge	15	7	120	2	F001	Favourable (15 species, 11 required)
tree-associated	decaying wood	heartwood decay	7	4	271	4	A211	Favourable (7 species, 6 required)
tree-associated	decaying wood	bark & sapwood decay	14	3	123	1	A212	Unfavourable (14 species, 19 required)
open habitats		rich flower resource	9	4	100	1	F002	Unfavourable (9 species, 15 required)
open habitats	short sward & bare ground	bare sand & chalk	6	1	150	2	F111	Unfavourable (6 species, 19 required)
open habitats		scrub-heath & moorland	4	1	100	1	F003	Unfavourable (4 species, 9 required)

Broad biotope	Habitat	SAT	No. of sp.	% rep.	SQI	Species with status	SAT Code	Reported condition
								required)
open habitats	short sward & bare ground	open short sward	4	2	100		F112	Unfavourable (4 species, 13 required)
tree-associated	decaying wood	epiphyte fauna	2	10	100		A215	Unfavourable (2 species, 3 required)

## 4. Discussion and Recommendations

### Species Recorded

- 4.1 A total of 351 invertebrate species were recorded during the survey. This is a relatively typical number of species for three survey visits to several broadly similar grassland compartments. The total number of species recorded is lower than the previous survey but it must be taken in to account that fewer survey visits were made and the woodland and copse areas were not surveyed. A full list of invertebrates recorded is appended.
- 4.2 The number of species recorded at each sub site is roughly comparable with Wonersh Green & The Platt supporting the highest number of species (196), albeit by a much smaller margin than the previous survey, again survey effort must be taken into account. Shamley Green and Lordshill share a very similar species count with totals of 189 and 187 respectively. In the previous survey there was a stark disparity between the number of species with a conservation designation associated with the open grassland habitats with Wonersh Green & The Platt supporting approximately triple the number of species with a conservation designation. In this survey the number of species with a conservation designation is very similar with Shamley Green having 8, Lordshill 8 and Wonersh Green & The Platt having 7 species.
- 4.3 18 of the species recorded have a conservation designation, representing 5% of the overall list, this is comparable to the previous result of 6%. The following species with a conservation designation were recorded:

**Table 4: Species recorded with conversation statuses.**

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
Arachnida: Araneae (Spiders & allies)	Dictynidae	<i>Nigma puella</i>	a spider	4	NS		Restricted to south of a line from Suffolk to Glamorgan. Localised but can be locally frequent in the south-east. Arboreal predator on low shrubs, hedgerows and	0	1	0

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
							similar.			
Arachnida: Araneae (Spiders & allies)	Salticidae	<i>Ballus chalybeius</i>	a spider	4	NS		Widespread in south-eastern England, but otherwise has a scattered distribution across southern England and Wales, being recorded as far north as Leicestershire and North Wales, with old records for Durham. An arboreal species associated with woodland and scrub habitats.	0	1	0
Coleoptera (Beetles)	Cantharidae	<i>Malthinus frontalis</i>	a soldier beetle	4	NS	A211	Mainly southern central and south-east England. Very local in the north and west, Wales and Scotland. A saproxylic species associated with large, open grown broadleaved trees in parklands, open woodlands etc.	1	0	0
Coleoptera (Beetles)	Chrysomelidae	<i>Agelastica alni</i>	Alder Leaf Beetle	8	DD; NR		Formerly believed to be extinct in the UK this species has rapidly expanded its range since rediscovery in 2004. Widespread and often abundant. NR status to be revised. Larvae feed on Alder, Hazel, Willow and possibly Birch.	0	1	1

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
Coleoptera (Beetles)	Cleridae	<i>Korynetes caeruleus</i>	Steely Blue Beetle	4	NS	A211	Mainly southern central and south-east England. Very local in the north and west, Wales and Scotland. A saproxylic species associated with large, open grown broadleaved trees in parklands, open woodlands etc. Larvae predate other beetle larvae in decaying timbers, including those on old half-timbered houses.	1	0	0
Coleoptera (Beetles)	Coccinellidae	<i>Nephus quadrimaculatus</i>	Ivy Ladybird	8	[RDB 2]; pNS		Mainly south-east England and East Anglia becoming very localised in western central England and east Wales. Associated with Ivy <i>Hedera helix</i> where adults and larvae feed on scale insects (Coccidae).	1	0	0
Coleoptera (Weevils)	Curculionidae	<i>Elleucus bipunctatus</i>	a weevil	4	[Nb]		Very localised in England, Wales and southern Scotland, more frequent in Ireland. Associated with willows <i>Salix</i> sp. Phytophagous. Adults overwinter in tussocks.	0	1	0
Coleoptera (Weevils)	Curculionidae	<i>Hypera meles</i>	a weevil	4	[Nb]		Localised in southern England and thought to be increasing. Formerly known from northern England with doubtful records for Wales. Absent from Scotland. A grassland species	0	1	0

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
							associated with clovers, usually Red Clover <i>Trifolium pratense</i> and White Clover <i>T.repens</i> . On other Fabaceae in continental Europe.			
Coleoptera (Weevils)	Curculionidae	<i>Polydrusus formosus</i>	a weevil	4	[Na]		Widespread across southern and central England, where it appears to be increasing dramatically, with occasional coastal records from Wales. An arboreal, polyphagous species whose hosts includes a wide range of broadleaf trees. Likely to be downgraded.	1	0	0
Coleoptera (Beetles)	Lucanidae	<i>Lucanus cervus</i>	Stag Beetle	4	Legal Protection; NS; NT (European); S41 Priority Species	A211	Locally frequent in south-east England and very localised in central England and south Wales. Saproxylic, larvae develop in partially buried decaying wood in parks, gardens and woodland. Adults crepuscular.	1	0	0
Coleoptera (Beetles)	Melyridae	<i>Anthocomus fasciatus</i>	a beetle	4	NS	A212	Predominately central and south east England, very local in south west England and Wales. Saproxylic. Adults in grassy places in woods, grasslands and rural gardens etc.	1	1	1
Coleoptera (Beetles)	Mordellidae	<i>Mordellistena humeralis</i>	a beetle	4	NS		Very locally distributed in southern England. Larval biology uncertain,	0	1	0

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
							Adults on flowers, esp. Apiaceae, and on foliage in woodlands and hedgerows.			
Dictyoptera	Blattellidae	<i>Ectobius lapponicus</i>	Dusky cockroach	4	NS	F001	A mainly southern species. Typically found among scrub and coarse vegetation on woodland margins, commons and road verges. Omnivorous.	0	0	1
Diptera (two-winged flies)	Asilidae	<i>Eutolmus rufibarbis</i>	a robberfly	4	NS	F111	A scarce species of heathland districts in south-east England with strongholds in the East Anglian Brecks and scattered colonies in the Suffolk Sandlings, New Forest, Weald and Dorset heaths. There is also one site in Oxfordshire. A preference for sandy soils occurring in grasslands as well as heather-rich areas. Adults fly from June to August. Recorded prey includes horseflies, blowflies, fleshflies, parasitic Hymenoptera, Honey Bees, even a much larger darter dragonfly. Eggs are inserted into the sheaths of grasses. Larvae are presumed to develop as predators of other insect larvae in sandy soils.	0	0	1

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
Diptera (two-winged flies)	Tephritidae	<i>Acinia corniculata</i>	Scarce Knapweed Fly	16	[RDB 1]		Recorded from scattered localities in southern England, in Falk's (1991) review of the group there were only three known post 1960 sites. It is not one of the tephritid species that has shown a dramatic increase in range in recent years but it is certainly more frequently encountered than previously and a NR or NS status is probably more realistic. Occuring in grassland habitats where the host plant Common Knapweed <i>Centaurea nigra</i> is present. Like most British tephritids this species has a life cycle where larvae develop in 20-40 days, pupating in the host tissue, in this case the dry fruit heads (capitula) which need to be retained throughout winter. Extensive areas of knapweed should be left uncut each year to ensure continuity.	0	0	1

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
Diptera (two-winged flies)	Tephritidae	<i>Oxyna flavipennis</i>	Clouded Yarrow Fly	4	[N]		Recorded from scattered localities in southern and south-east England from North Cornwall to the East Anglian Brecks. Occuring in grassland habitats where the host plant Yarrow <i>Achillea millefolium</i> is present. Larvae feed with root nodule galls below ground. Adults found by general sweeping of host plant and surrounding vegetation.	1	0	0
Hymenoptera: Aculeata (Ants)	Formicidae	<i>Lasius brunneus</i>	an ant	4	[Na]	A211	<i>Lasius brunneus</i> has only been recorded from central and southern English counties, from Essex to Shropshire. It is widespread and common in the south-east region. A saproxylic species building its nest in trees with internal decay. Workers are seldom found away from the host tree where they tend large tree aphid species and scavenge under bark. Several notable myrmecophilous coleopterans are associated with the species.	1	1	1

Order	Family	Taxon	Vernacular	SQS	Status	SAT	Comment	SG	LH	WG&P
Hymenoptera: Aculeata (Bees)	Melittidae	<i>Dasypoda hirtipes</i>	Pantaloan Bee	1	[Nb]	F002, F111	A mainly southern species with records concentrated into south-east England and extending thinly north to north Wales, Staffordshire and Norfolk. Ground nesting, often in large aggregations, and associated with sandy habitats such as dunes, heathland, sandpits, sandy brownfield sites and saltmarsh edge. Pollen is collected almost exclusively from yellow flowered composites in the asteraceae family.	0	0	1

## Pantheon Output

- 4.11 Two Specific Assemblage Types (SATs) were found to be in Favourable condition by SSSI standards. The SAT for heartwood decay A211 is represented by 7 qualifying saproxylic species of which 4 species have a conservation designation resulting in Favourable condition status despite a relatively low number of qualifying species. Some of the qualifying species were recorded at all of the sites, but most were predominately at Shamley Green, Duck Pond Green.
- 4.12 In the previous survey the SAT bark & sapwood decay A212 was found to be in Favourable condition as this also included woodland compartments and greater focus on saproxylic wood decay specialists under bark and similar. This is now complemented by an additional wood decay SAT being found in Favourable condition and strongly suggests that the area is important for saproxylic species, notably Coleoptera (beetles).
- 4.13 The SAT scrub edge F001 is once again found to be in Favourable condition and is represented by 15 qualifying species across all grassland areas and with 2 species with a conservation status. This is comparable to the 2021 survey result of Favourable condition with 15 qualifying species (1 with a conservation designation). The NS Dusky Cockroach was recorded in both surveys. This suggests that the current grassland management is

---

favourable as there is a soft interface, or ecotone, between scrub / woodland edges and open grassland habitat.

- 4.14 The 2021 survey found rich flower resource F002 to be in Favourable condition. This was not the case in 2024. However, as previously mentioned a succession of cool, wet springs and meteorologically unpredictable summers have had a deleterious effect on the abundance of many flying insects and pollinators such as solitary bees and hoverflies. The rich flower resource is present across the sites but the species utilising these resources are in dire need of recovery. Conversely, many of the saproxylic species recorded require a flower resource in their adult phase but this dual resource requirement is not currently acknowledged in Pantheon.

## Conclusions & Recommendations

- 4.15 The complex of grassland sites within Wonersh Parish support a rich and diverse range of invertebrates and are clearly of at least local importance and provide a rich flower resource for pollinators such as solitary bees and butterflies as well as the saproxylic communities associated with mature to veteran trees and woodlands in the Parish. The continued relaxation of mowing regimes will enhance the biodiversity of the sites. The most significant area of grassland is situated at The Platt in Wonersh. The grassland is fairly herb-rich with wet and dry areas and sheltered by trees and scrub at the periphery, this grassland / scrub interface is a hot spot for invertebrate diversity. Ideal management would be to cut and collect arisings late in the season, e.g. October, ideally leaving a proportion uncut in any one year, particularly leaving areas where Common Knapweed *Centaurea nigra* dominates to allow the Scarce Knapweed Fly *Acinia corniculata* to develop, along with several other species of picture winged fly that use the same host. The scarce robberfly *Eutolmus rufibarbis* was recorded at The Platt, this is a species more usually associated with heathland edge habitats and occasionally calcareous grasslands. The record at Wonersh is unusual but may signify the beginnings of a range expansion and increased habitat plasticity as I have recorded this species at several atypical sites over the past two years.
- 4.16 Wonersh Green grassland is still fairly botanically species poor and dominated by coarse grasses compared to The Platt. The wildflower bunds are more established and are attracting pollinators, including the scarce Pantaloon Bee *Dasypoda hirtipes*, again being a species more typical of acid grassland and heathland on sandy soils. The presence of plants in the Brassicaceae family (cabbage family) also enhances biodiversity with several invertebrates specific to this plant family being recorded. The young planted hedgerow remains immature but overtime will mature and provide a further element of grassland / scrub interface and spring blossoms.
- 4.17 Shamley Green's Duck Pond Green is partially cut in the middle of the season to facilitate a village event, and this is not ideal for developing invertebrates. If this should continue the mowing pattern should be carefully planned to push animals, e.g. developing grasshopper nymphs etc, towards

---

the refuge areas that will remain uncut until later in the season. The green itself is quite damp and rushes *Juncus* sp. dominate in some areas. The pond and ditch edges also exhibit wetland vegetation, which in turn support different invertebrates adapted to these plants and conditions. However, the pond itself is a dedicated duck pond, so will always remain ecologically limited. The open grown Pedunculate Oak *Quercus robur* trees are a feature of interest and continue to support a number of saproxylic invertebrates, some notable, and with species such as the the Steely Blue Beetle *Korynetes caeruleus* and the soldier beetle *Malthinus frontalis* being rather rare in Surrey. Other trees, such as non-native Horse Chestnut *Aesculus hippocastanum* have little value for invertebrates, the most prominent species being the recently established leaf mining micro moth *Cameraria ohridella*. Any future tree plantings would ideally be Pedunculate Oak and flowering rosaceous shrubs such as Whitebeam *Sorbus aria* and Hawthorn *Craetagus monogyna*. Any tree maintenance should take the saproxylic fauna into consideration and processes such as 'dead-wooding' trees are discouraged. Shamley Green's Duck Pond Green is increasingly botanically diverse in certain areas, likely a wildflower seed mix, and plays an important role in sustaining the adult phase of many saproxylic beetles associated with the open grown, mature to veteran trees on the green, and potentially the timbers of some of the older half-timbered houses in the case of *Korynetes caeruleus*.

- 4.18 Lordshill is largely the same as in 2021 with the western side of the road tended for amenity value. However, the western boundary does provide some degree of scrub edge habitat that contributes to the overall Favourable condition of this SAT. The best part of the uncut areas is still the south-east grassland block with frequent Common Knapweed *Centaurea nigra* agg., Bird's-foot Trefoil *Lotus corniculatus*, Yarrow *Achillea millefolium* and Germander Speedwell *Veronica chamaedrys*. However, Bird's-foot Trefoil does appear to be more frequent in the north-east area and the grassland / scrub interface is significant. Willows *Salix* spp. in this scrub edge component yielded the Nationally Scarce weevil *Elleucus bipunctatus*, a scarce species with only a handful of modern records for Surrey. Management should continue late season cut and collect mowing.

---

## 5. References & Bibliography

- Alexander, K.N.A. (2013). **A review of the beetles of Great Britain – The soldier beetles and their allies**. Species Status No. 16. Natural England Commissioned Report NECR134.
- Alexander, K.N.A., Dodd, S.G. & Denton J.S. (2014). **A review of the beetles of Great Britain – The darkling beetles and their allies**. Species Status No. 18. Natural England. Commissioned Reports NECR148.
- Bantock, T. (2016). **A review of the Hemiptera of Great Britain: The shieldbugs and allied families: Species Status No.26**. Natural England Commissioned Reports, Number190.
- Cox, M.L. (2007). **Atlas of the seed and leaf beetles of Britain and Ireland**. Berkshire: Pisces Publications.
- Davis, A.M. (2012). **A review of the status of microlepidoptera in Britain**. Butterfly Conservation Report S12-02.
- Daguet, C., French, G. & Taylor, P. (eds.). (2008). **The Odonata Red Data List for Great Britain**. *Species Status Assessment* No 11, ISSN 1470-0154, Joint Nature Conservation Committee, Peterborough.
- Drake, C.M., Lott, D.A., Alexander, K.N.A. & Webb, J. (2007a). **Surveying terrestrial and freshwater invertebrates for conservation evaluation. Natural England Research Report NERR005**. Peterborough: Natural England.
- Drake, C.M., Lott, D.A. & Lee, P. (2007b). **Ducan's Marsh survey report**. Unpublished survey report.
- Drake, C.M. 2017. **A review of the status of Larger Brachycera flies of Great Britain - Species Status No.29**. Natural England Commissioned Reports, Number192.
- Falk, S. (1991). **A review of the scarce and threatened bees, wasps and ants of Great Britain**. Peterborough: Joint Nature Conservancy Council.
- Falk, S.J., Ismay, J.W. & Chandler, P.J. (2016). **A Provisional Assessment of the Status of Acalypterae flies in the UK**. Natural England Commissioned Reports, Number217.
- Falk, S.J. & Pont, A.C. (2017). **A Provisional Assessment of the Status of Calypterate flies in the UK**. Natural England. Commissioned Reports, Number234
- Foster, G.N. (2010). **A review of the scarce and threatened Coleoptera of Great Britain Part (3): Water beetles of Great Britain**. *Species Status* 1. Joint Nature Conservation Committee, Peterborough.
- Fox, R., Warren, M.S. and Brereton, T.M. (2010). **A new Red List of British Butterflies**, *Species Status* 12; 1-32. Joint Nature Conservation Committee, Peterborough
- Fry, R. & Lonsdale, D. (eds.) (1991). **Habitat conservation for insects – a neglected green issue**. Amateur Entomological Society.
- Harvey, P. *et al.* (2017). **A review of the scarce and threatened spiders (Araneae) of Great Britain: Species Status** No.22. NRW Evidence Report 11.
- Hawkins, R. (2003). **Shieldbugs of Surrey**. Pirbright: Surrey Wildlife Trust Atlas Project.
- Hubble,D.S. (2014). **A review of the beetles of Great Britain: The leaf beetles and their allies: Chrysomelidae, Megalopodidae & Orsodacnidae: Species Status No.19**. Natural England Commissioned Reports, Number 161.

- 
- Hyman, P.S. (*revised and updated by Parsons, M.S.*) 1992. **A review of the scarce and threatened Coleoptera of Great Britain (Part 3)**. Peterborough: Joint Nature Conservancy Council.
- Kerney, M. (1999). **Atlas of the land and freshwater molluscs of Britain and Ireland**. Colchester: Harley Books.
- Kirby, P. (2001). **Habitat management for invertebrates: A practical handbook**. Bedfordshire: Royal Society for the Protection of Birds.
- Lott, D.A. (2008). **Synopsis of ISIS 2009 and its use in Common Standards Monitoring. ISIS development report**. Leicestershire: Stenus Research.
- Shirt, D.B. (ed.) 1987. **British Red Data Books: 2. Insects**. Peterborough: Nature Conservancy Council.
- Stubbs, A.E. & Falk, S.J. (2002). **British Hoverflies: An illustrated identification guide**. Berkshire: British Entomological and Natural History Society.
- Sutton, P.G. (2015). **A review of the Orthoptera (Grasshoppers & Crickets) and allied species of Great Britain**. Species Status No.21. Natural England Commissioned Reports, Number 187.
- Telfer, M.G. (2016). **A review of the beetles of Great Britain: Ground Beetles (Carabidae): Species Status No.25**. Natural England Commissioned Reports, Number 189.
- Webb, J.R. & Lott, D.A. (2006). The development of ISIS: a habitat-based invertebrate assemblage classification system for assessing conservation interest in England. **Journal of Insect Conservation**. 10: 179 - 188.

<http://www.brc.ac.uk/pantheon/> - Accessed 19/11/2024

## 6. Appendix 1: Species List

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Arachnida: Araneae	Agelenidae	<i>Agelena labyrinthica</i>	Labyrinth Spider		1	F001	1	0	1	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Anyphaenidae	<i>Anyphaena accentuata</i>	Buzzing Spider		1		1	0	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Araneidae	<i>Araneus diadematus</i>	Garden Spider		1		1	1	1				predator	predator
Arachnida: Araneae	Araneidae	<i>Araniella cucurbitina sens. lat.</i>	Cucumber Spider				0	1	1				predator	predator
Arachnida: Araneae	Araneidae	<i>Araniella opisthographa</i>	a spider		1		0	1	0	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Araneidae	<i>Mangora acalypha</i>	a spider		1		1	1	1	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Araneidae	<i>Neoscona adianta</i>	a spider		1	F003	1	1	0	open habitats			predator	predator
Arachnida: Araneae	Araneidae	<i>Zygiella atrica</i>	a spider		1		1	0	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Araneidae	<i>Zygiella x-notata</i>	a spider		1		1	1	0				predator	predator
Arachnida: Araneae	Clubionidae	<i>Clubiona comta</i>	a spider		1		0	1	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Dictynidae	<i>Dictyna arundinacea</i>	a spider		1		1	1	0	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Dictynidae	<i>Dictyna uncinata</i>	a spider		1		0	1	0	tree-associated	arboreal		predator	predator
<b>Arachnida: Araneae</b>	<b>Dictynidae</b>	<b><i>Nigma puella</i></b>	<b>a spider</b>	<b>NS</b>	<b>4</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>tree-associated</b>	<b>arboreal</b>		<b>predator</b>	<b>predator</b>
Arachnida: Araneae	Linyphiidae	<i>Tenuiphantes tenuis</i>	a spider		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Lycosidae	<i>Pardosa pullata</i>	a spider		1		0	0	1	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Philodromidae	<i>Philodromus albidus</i>	a spider		1		1	0	0	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Philodromidae	<i>Philodromus aureolus</i>	a spider		1		1	1	0	tree-associated	arboreal		predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Arachnida: Araneae	Philodromidae	<i>Philodromus cespitum</i>	a spider		1		0	0	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Philodromidae	<i>Philodromus rufus sens. str.</i>	a spider				0	1	0				predator	predator
Arachnida: Araneae	Pisauridae	<i>Pisaura mirabilis</i>	a spider		1		1	1	1	open habitats	tall sward & scrub		predator	predator
<b>Arachnida: Araneae</b>	<b>Salticidae</b>	<b><i>Ballus chalybeius</i></b>	<b>a spider</b>	<b>NS</b>	<b>4</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>tree-associated</b>	<b>arboreal</b>		<b>predator</b>	<b>predator</b>
Arachnida: Araneae	Salticidae	<i>Heliophanus cupreus</i>	a spider		1	F001	0	0	1	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Tetragnathidae	<i>Metellina mengei</i>	a spider		1		1	1	1				predator	predator
Arachnida: Araneae	Tetragnathidae	<i>Pachygnatha degeeri</i>	a spider		1		1	0	1				predator	predator
Arachnida: Araneae	Tetragnathidae	<i>Tetragnatha extensa</i>	a spider		1		1	0	0	wetland	acid & sedge peats		predator	predator
Arachnida: Araneae	Tetragnathidae	<i>Tetragnatha montana</i>	a spider		1		0	1	0	wetland	acid & sedge peats		predator	predator
Arachnida: Araneae	Theridiidae	<i>Anelosimus vittatus</i>	a spider		1		1	1	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Theridiidae	<i>Enoplognatha ovata sens. str.</i>	a spider		1		1	1	1				predator	predator
Arachnida: Araneae	Theridiidae	<i>Neottiura bimaculata</i>	a spider		1		1	0	0	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Theridiidae	<i>Paidiscura pallens</i>	a spider		1		1	1	1	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Theridiidae	<i>Platnickina tincta</i>	a spider		1		0	1	0	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Theridiidae	<i>Theridion mystaceum</i>	a spider		1		1	0	0	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Theridiidae	<i>Theridion varians</i>	a spider		1		0	1	0	tree-associated	arboreal		predator	predator
Arachnida: Araneae	Thomisidae	<i>Misumena vatia</i>	a spider		1		1	0	1	open habitats	tall sward & scrub		predator	predator
Arachnida: Araneae	Thomisidae	<i>Xysticus cristatus</i>	a spider		1		1	1	1				predator	predator
Arachnida: Opiliones	Leiobunidae	<i>Dicranopalpus ramosus</i>	a harvestman		1		1	1	1				predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Arachnida: Opiliones	Leiobunidae	<i>Leiobunum rotundum</i>	a harvestman		1		1	1	0	tree-associated	arboreal		predator	predator
Coleoptera	Anthicidae	<i>Notoxus monoceros</i>	Monoceros Beetle		1	F111	1	1	0	open habitats	short sward & bare ground		saprophagous	saprophagous
Coleoptera	Apionidae	<i>Eutrichapion ervi</i>	a weevil		1		0	1	1	open habitats	tall sward & scrub	Vicia	herbivore	herbivore
Coleoptera	Apionidae	<i>Ischnopterapion loti</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Lotus corniculatus	herbivore	herbivore
Coleoptera	Apionidae	<i>Oxystoma craccae</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Vicia	herbivore	herbivore
Coleoptera	Apionidae	<i>Oxystoma pomonae</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Vicia	herbivore	herbivore
Coleoptera	Apionidae	<i>Perapion curtirostre</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Rumex	herbivore	herbivore
Coleoptera	Apionidae	<i>Perapion violaceum</i>	a weevil		1		1	1	0	open habitats	tall sward & scrub	Rumex	herbivore	herbivore
Coleoptera	Apionidae	<i>Protapion apricans</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Trifolium	herbivore	herbivore
Coleoptera	Apionidae	<i>Protapion assimile</i>	a weevil		1		1	1	0	open habitats	tall sward & scrub	Trifolium	herbivore	herbivore
Coleoptera	Apionidae	<i>Protapion fulvipes</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Trifolium	herbivore	herbivore
Coleoptera	Apionidae	<i>Protapion trifolii</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Trifolium	herbivore	herbivore
Coleoptera	Buprestidae	<i>Agrilus laticornis</i>	a jewel beetle		1	A212	0	1	0	tree-associated	decaying wood	Quercus	xylophagous	does not feed?
Coleoptera	Byturidae	<i>Byturus tomentosus</i>	Raspberry Beetle		1		0	1	1	open habitats	tall sward & scrub	Rubus	herbivore	herbivore
Coleoptera	Cantharidae	<i>Cantharis cryptica</i>	a soldier beetle		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Coleoptera	Cantharidae	<i>Cantharis rustica</i>	a soldier beetle		1		1	1	1	open habitats	tall sward & scrub		predator	nectivore
<b>Coleoptera</b>	<b>Cantharidae</b>	<b><i>Malthinus frontalis</i></b>	<b>a soldier beetle</b>	<b>NS</b>	<b>4</b>	<b>A211</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>tree-associated</b>	<b>decaying wood</b>	<b>Saproxylic</b>	predator	
Coleoptera	Cantharidae	<i>Malthinus seriepunctatus</i>	a soldier beetle		1	A212	0	1	1	tree-associated	decaying wood	Saproxylic	predator	
Coleoptera	Cantharidae	<i>Rhagonycha fulva</i>	a soldier beetle		1		1	1	1	open habitats	tall sward & scrub		predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Cantharidae	<i>Rhagonycha lignosa</i>	a soldier beetle		1		0	1	1	tree-associated	arboreal		predator	predator
Coleoptera	Cantharidae	<i>Rhagonycha nigriventris</i>	a soldier beetle		1		1	1	1	open habitats	tall sward & scrub		predator	predator
Coleoptera	Carabidae	<i>Acupalpus dubius</i>	a ground beetle		1		1	0	0	wetland	acid & sedge peats		predator	predator
Coleoptera	Carabidae	<i>Amara familiaris</i>	a ground beetle		1		1	0	0	open habitats	tall sward & scrub	Seed feeder	herbivore	
Coleoptera	Carabidae	<i>Demetrius atricapillus</i>	a ground beetle		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Coleoptera	Carabidae	<i>Paradromius linearis</i>	a ground beetle		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Coleoptera	Carabidae	<i>Syntomus foveatus</i>	a ground beetle		1		0	1	0	open habitats	short sward & bare ground		predator	predator
Coleoptera	Carabidae	<i>Syntomus obscuroguttatus</i>	a ground beetle		1		1	1	1	open habitats	tall sward & scrub		predator	predator
Coleoptera	Cerambycidae	<i>Grammoptera ruficornis</i>	a longhorn beetle		1	A212	0	1	1	tree-associated	decaying wood	Saproxyllic	xylophagous	
Coleoptera	Cerambycidae	<i>Stenurella melanura</i>	a longhorn beetle		1	A212	1	0	0	tree-associated	decaying wood	Saproxyllic	xylophagous	
<b>Coleoptera</b>	<b>Chrysomelidae</b>	<b><i>Agelastica alni</i></b>	<b>Alder Leaf Beetle</b>	<b>DD; NR</b>	<b>8</b>		<b>0</b>	<b>1</b>	<b>1</b>	<b>tree-associated</b>	<b>arboreal</b>	<b>Alnus, Corylus, Salix</b>	<b>herbivore</b>	<b>herbivore</b>
Coleoptera	Chrysomelidae	<i>Altica lythri</i>	a leaf beetle		1		0	0	1	open habitats	tall sward & scrub	Epilobium	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Bruchus atomarius</i>	a bean beetle		1		1	0	0	open habitats	tall sward & scrub	Lathyrus, Vicia	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Bruchus loti</i>	a bean beetle		1		0	1	0	open habitats	tall sward & scrub	Lathyrus, Vicia	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Bruchus rufimanus</i>	a bean beetle		1		0	0	1	open habitats	tall sward & scrub	Lathyrus, Vicia	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Cassida rubiginosa</i>	Thistle Tortoise Beetle		1		0	0	1	open habitats	tall sward & scrub	Cirsium	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Cassida vibex</i>	Knapweed Tortoise Beetle		1	F112	1	0	1	open habitats	short sward & bare ground	Centaurea	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Chrysomelidae	<i>Cassida viridis</i>	Green Tortoise Beetle		1		1	0	0	open habitats	tall sward & scrub	Lamiaceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Chaetocnema concinna</i>	a leaf beetle		1		0	1	0	open habitats	tall sward & scrub	Polygonaceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Crepidodera aurata</i>	a leaf beetle		1		0	1	0	tree-associated	arboreal	Salix	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Crepidodera fulvicornis</i>	a leaf beetle		1		1	1	0	tree-associated	arboreal	Salix	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Crepidodera plutus</i>	a leaf beetle		1		1	0	0	tree-associated	arboreal	Salix	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Cryptocephalus pusillus</i>	a pot beetle		1		0	1	0	tree-associated	arboreal		herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Gastrophysa viridula</i>	Green Dock Beetle		1		1	0	0	open habitats	tall sward & scrub	Rumex	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Lochmaea crataegi</i>	Hawthorn Leaf Beetle		1		0	1	0	tree-associated	arboreal	Crataegus	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Longitarsus rubiginosus</i>	a leaf beetle		1		0	1	0	open habitats	tall sward & scrub	Convolvulaceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Neocrepidodera transversa</i>	a leaf beetle		1		1	0	0	open habitats	tall sward & scrub	Asteraceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Phaedon tumidulus</i>	Celery Leaf Beetle		1		1	0	1	open habitats	tall sward & scrub	Apiaceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Phyllotreta nigripes</i>	a leaf beetle		1		0	0	1	open habitats	tall sward & scrub	Brassicaceae	herbivore	herbivore
Coleoptera	Chrysomelidae	<i>Plagiodera versicolora</i>	a leaf beetle		1		0	1	1	tree-associated	arboreal	Salix & Populus	herbivore	herbivore
<b>Coleoptera</b>	<b>Cleridae</b>	<b><i>Korynetes caeruleus</i></b>	<b>Steely Blue Beetle</b>	<b>NS</b>	<b>4</b>	<b>A211</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>tree-associated</b>	<b>decaying wood</b>	<b>Saproxyllic</b>	<b>predator</b>	<b>predator</b>
Coleoptera	Coccinellidae	<i>Adalia bipunctata</i>	2-spot Ladybird		1		1	0	0			Aphididae	predator	predator
Coleoptera	Coccinellidae	<i>Adalia decempunctata</i>	10-spot Ladybird		1		1	1	1	tree-associated	arboreal	Aphididae	predator	predator
Coleoptera	Coccinellidae	<i>Calvia quattuordecimguttata</i>	Cream-spot Ladybird		1		0	1	0	tree-associated	arboreal	Aphididae	predator	predator
Coleoptera	Coccinellidae	<i>Coccinella septempunctata</i>	7-spot Ladybird		1		1	1	1			Aphididae	predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Coccinellidae	<i>Halyzia sedecimguttata</i>	Orange Ladybird		1		0	1	1	tree-associated	arboreal	Stachybotrys	herbivore	
Coleoptera	Coccinellidae	<i>Harmonia axyridis</i>	Harlequin Ladybird				1	1	1				predator	predator
<b>Coleoptera</b>	<b>Coccinellidae</b>	<b><i>Nephus quadrimaculatus</i></b>	<b>Ivy Ladybird</b>	<b>[RDB 2]</b>	<b>8</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>tree-associated</b>	<b>arboreal</b>	<b>Coccidae, Hedera helix</b>	<b>predator</b>	<b>predator</b>
Coleoptera	Coccinellidae	<i>Propylea quatuordecimpunctata</i>	14-spot Ladybird		1		1	1	1				predator	predator
Coleoptera	Coccinellidae	<i>Psyllobora vigintiduopunctata</i>	22-spot Ladybird		1		1	0	0	open habitats	tall sward & scrub		saprophagous	saprophagous
Coleoptera	Coccinellidae	<i>Rhyzobius chrysomeloides</i>	a ladybird				0	1	0	tree-associated	arboreal	Aphididae	predator	predator
Coleoptera	Coccinellidae	<i>Rhyzobius litura</i>	a ladybird		1		1	1	1	open habitats	tall sward & scrub		saprophagous	saprophagous
Coleoptera	Coccinellidae	<i>Subcoccinella vigintiquatuor punctata</i>	24-spot Ladybird		1		1	1	1	open habitats	tall sward & scrub		predator	predator
Coleoptera	Coccinellidae	<i>Tytthaspis sedecimpunctata</i>	16-spot Ladybird		1		1	1	1	open habitats	tall sward & scrub		saprophagous	saprophagous
Coleoptera	Curculionidae	<i>Anthonomus rubi</i>	Strawberry Blossom Weevil		1	F001	0	1	0	open habitats	tall sward & scrub	Rosaceae	herbivore	herbivore
Coleoptera	Curculionidae	<i>Archarius salicivorus</i>	Willow Gall Weevil		1		0	1	0	tree-associated	arboreal	Salix	herbivore	herbivore
Coleoptera	Curculionidae	<i>Ceutorhynchus obstrictus</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Brassicaceae	herbivore	herbivore
Coleoptera	Curculionidae	<i>Curculio glandium</i>	Acorn Weevil		1		1	1	1	tree-associated	arboreal	Quercus	herbivore	herbivore
<b>Coleoptera</b>	<b>Curculionidae</b>	<b><i>Ellescus bipunctatus</i></b>	<b>a weevil</b>	<b>[Nb]</b>	<b>4</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>tree-associated</b>	<b>arboreal</b>	<b>Salix</b>	<b>herbivore</b>	<b>herbivore</b>
<b>Coleoptera</b>	<b>Curculionidae</b>	<b><i>Hypera meles</i></b>	<b>a weevil</b>	<b>[Nb]</b>	<b>4</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>open habitats</b>	<b>tall sward &amp; scrub</b>	<b>Trifolium</b>	<b>herbivore</b>	<b>herbivore</b>
Coleoptera	Curculionidae	<i>Mecinus pascuorum</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Plantago	herbivore	herbivore
Coleoptera	Curculionidae	<i>Mecinus pyraster</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Plantago	herbivore	herbivore
Coleoptera	Curculionidae	<i>Nedyus quadrimaculatus</i>	4-spot Nettle Weevil		1		1	0	0	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Curculionidae	<i>Orchestes pilosus</i>	a weevil		1		0	1	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Coleoptera	Curculionidae	<i>Parethelcus pollinarius</i>	a weevil		1		0	0	1	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore
Coleoptera	Curculionidae	<i>Phyllobius pyri</i>	Common Leaf Weevil		1		0	1	1	tree-associated	arboreal	Polyphagous	herbivore	herbivore
Coleoptera	Curculionidae	<i>Phyllobius roboretanus</i>	Small Green Nettle Weevil		1		0	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
<b>Coleoptera</b>	<b>Curculionidae</b>	<b><i>Polydrusus formosus</i></b>	<b>a weevil</b>	<b>[Na]</b>	<b>4</b>		<b>1</b>	<b>0</b>	<b>0</b>	<b>tree-associated</b>	<b>arboreal</b>	<b>Polyphagous</b>	<b>herbivore</b>	<b>herbivore</b>
Coleoptera	Curculionidae	<i>Rhinoncus pericarpus</i>	a weevil				1	1	0			Rumex	herbivore	herbivore
Coleoptera	Curculionidae	<i>Sitona lineatus</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Vicia	herbivore	herbivore
Coleoptera	Curculionidae	<i>Strophosoma melanogrammum</i>	Nut Leaf Weevil		1		1	0	1	tree-associated	arboreal	Polyphagous	herbivore	herbivore
Coleoptera	Curculionidae	<i>Trichosirocalus troglodytes</i>	a weevil		1		1	1	1	open habitats	tall sward & scrub	Plantago	herbivore	herbivore
Coleoptera	Dermestidae	<i>Anthrenus verbasci</i>	Carpet Beetle		1		1	0	1				saprophagous	nectivore
Coleoptera	Elateridae	<i>Agriotes pallidulus</i>	a click beetle		1		0	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	does not feed
Coleoptera	Elateridae	<i>Agriotes sputator</i>	a click beetle		1		1	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	does not feed
Coleoptera	Elateridae	<i>Agrypnus murinus</i>	a click beetle		1	F112	0	0	1	open habitats	short sward & bare ground	Polyphagous	herbivore	unknown
Coleoptera	Elateridae	<i>Athous haemorrhoidalis</i>	a click beetle		1		1	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	does not feed
Coleoptera	Elateridae	<i>Dalopius marginatus</i>	a click beetle		1		1	1	0	open habitats	tall sward & scrub	Polyphagous	herbivore	does not feed
Coleoptera	Elateridae	<i>Prosternon tessellatum</i>	Chequered Click Beetle		1	F003	0	0	1	open habitats		Polyphagous		
Coleoptera	Helophoridae	<i>Helophorus flavipes</i>	a water beetle		1		0	0	1	wetland	acid & sedge peats; lake		predator	herbivore
Coleoptera	Histeridae	<i>Onthophilus striatus</i>	a beetle		1		0	0	1	open habitats	tall sward & scrub	Dung	predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Kateretidae	<i>Brachypterus glaber</i>	a beetle		1		1	0	1	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore
Coleoptera	Lucanidae	<i>Dorcus parallelipedus</i>	Lesser Stag Beetle		1	A211	1	0	0	tree-associated	decaying wood	Saproxylic	saprophagous	does not feed?
Coleoptera	Lucanidae	<i>Lucanus cervus</i>	Stag Beetle	Legal Protection; NS; S41 Priority Species	4	A211	1	0	0	tree-associated	decaying wood	Saproxylic	saprophagous	does not feed?
<b>Coleoptera</b>	<b>Melyridae</b>	<b><i>Anthocomus fasciatus</i></b>	<b>a beetle</b>	<b>NS</b>	<b>4</b>	<b>A212</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>tree-associated</b>	<b>decaying wood</b>	<b>Anobiinae, Saproxylic</b>	<b>predator</b>	
Coleoptera	Melyridae	<i>Axinotarsus marginalis</i>	a beetle		1	A212	1	0	1	tree-associated	decaying wood	Saproxylic	predator	
Coleoptera	Melyridae	<i>Dasytes aeratus</i>	a beetle		1	A212	1	1	0	tree-associated	decaying wood	Saproxylic	predator	
Coleoptera	Melyridae	<i>Malachius bipustulatus</i>	Malachite Beetle			A212	1	1	1	tree-associated	decaying wood	Saproxylic	predator	predator
Coleoptera	Melyridae	<i>Sphinginus lobatus</i>	a beetle		1	A212	1	0	0	tree-associated	decaying wood	Saproxylic	predator	unknown
<b>Coleoptera</b>	<b>Mordellidae</b>	<b><i>Mordellistena humeralis</i></b>	<b>a beetle</b>	<b>NS</b>	<b>4</b>		<b>0</b>	<b>1</b>	<b>0</b>	<b>tree-associated</b>	<b>decaying wood</b>	<b>Saproxylic</b>	<b>unknown</b>	<b>nectivore</b>
Coleoptera	Nitidulidae	<i>Meligethes aeneus</i>	Common Pollen Beetle				1	1	1					nectivore
Coleoptera	Oedemeridae	<i>Oedemera lurida</i>	Sage Green Beetle		1		1	1	1	open habitats	tall sward & scrub		predator	nectivore
Coleoptera	Oedemeridae	<i>Oedemera nobilis</i>	Swollen-thighed Beetle		1		1	1	1	open habitats	tall sward & scrub		herbivore	nectivore
Coleoptera	Phalacridae	<i>Olibrus affinis</i>	a beetle				1	0	0	open habitats				nectivore
Coleoptera	Phalacridae	<i>Olibrus liquidus</i>	a beetle				0	0	1	open habitats				nectivore
Coleoptera	Ptinidae	<i>Anobium inexpectatum</i>	a woodworm beetle		1	A212	1	0	0	tree-associated	decaying wood	Hedera helix, Saproxylic	xylophagous	does not feed?
Coleoptera	Scarabaeidae	<i>Calamosternus granarius</i>	a dung beetle		1		1	0	0	open habitats	tall sward & scrub	Dung	coprophagous	does not feed

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Coleoptera	Scirtidae	<i>Microcara testacea</i>	a beetle		1		1	0	0	wetland	marshland		saprophagous	saprophagous
Coleoptera	Scraptiidae	<i>Anaspis fasciata</i>	a beetle		1	A212	0	1	1	tree-associated	decaying wood	Saproxylic	predator	nectivore
Coleoptera	Scraptiidae	<i>Anaspis maculata</i>	a beetle		1	A212	0	1	0	tree-associated	decaying wood	Saproxylic	predator	nectivore
Coleoptera	Staphylinidae	<i>Ocyopus olens</i>	Devil's Coach-horse		1		1	0	0	open habitats	tall sward & scrub		predator	predator
Coleoptera	Staphylinidae	<i>Stenus aceris</i>	a rove beetle		1		0	0	1	open habitats	tall sward & scrub		predator	predator
Coleoptera	Staphylinidae	<i>Stenus flavipes</i>	a rove beetle		1		1	0	0	tree-associated; wetland	shaded woodland floor; wet woodland		predator	predator
Coleoptera	Staphylinidae	<i>Stenus picipes</i>	a rove beetle		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Coleoptera	Tenebrionidae	<i>Lagria hirta</i>	a darkling beetle		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Dermaptera	Forficulidae	<i>Forficula auricularia</i>	Common Earwig		1		1	1	1					
<b>Dictyoptera</b>	<b>Blattellidae</b>	<b><i>Ectobius lapponicus</i></b>	<b>Dusky cockroach</b>	<b>NS</b>	<b>4</b>	<b>F001</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>open habitats</b>	<b>tall sward &amp; scrub</b>		<b>omnivore</b>	<b>omnivore</b>
Diptera	Agromyzidae	<i>Phytomyza ilicis</i>	a leaf-miner fly				0	0	1	tree-associated	arboreal	Ilex	herbivore	nectivore
Diptera	Anthomyiidae	<i>Pegomya solennis</i>	a leaf-miner fly				0	1	1	tree-associated	shaded woodland floor	Rumex	herbivore	nectivore
Diptera	Asilidae	<i>Dioctria rufipes</i>	a robberfly		1	F001	0	0	1	open habitats	tall sward & scrub		predator	predator
Diptera	Asilidae	<i>Dysmachus trigonus</i>	a robberfly		1	F111	1	0	0	open habitats	short sward & bare ground; tall sward & scrub		predator	predator
<b>Diptera</b>	<b>Asilidae</b>	<b><i>Eutolmus rufibarbis</i></b>	<b>a robberfly</b>	<b>NS</b>	<b>4</b>	<b>F111</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>open habitats</b>	<b>short sward &amp; bare ground; tall sward &amp; scrub</b>		<b>predator</b>	<b>predator</b>

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Diptera	Asilidae	<i>Machimus atricapillus</i>	a robberfly		1		1	0	1	open habitats	short sward & bare ground; tall sward & scrub		predator	predator
Diptera	Bibionidae	<i>Dilophus febrilis</i>	a fly		1		0	1	0	open habitats	tall sward & scrub		herbivore	nectivore
Diptera	Bibionidae	<i>Dilophus femoratus</i>	a fly		1		0	1	1	open habitats	tall sward & scrub		herbivore	nectivore
Diptera	Calliphoridae	<i>Lucilia sericata</i>	Common Greenbottle		1		0	0	1				saprophagous	saprophagous
Diptera	Conopidae	<i>Sicus ferrugineus</i>	a fly		1		0	0	1	open habitats	short sward & bare ground	Bombus	parasitoid	nectivore
Diptera	Dolichopodidae	<i>Dolichopus trivialis</i>	a fly		1		1	0	1	wetland	marshland; running water		saprophagous	predator
Diptera	Empididae	<i>Empis livida</i>	a fly		1		1	0	0	open habitats	tall sward & scrub		predator	predator
Diptera	Empididae	<i>Empis tessellata</i>	a fly		1		0	0	1	open habitats	tall sward & scrub		predator	predator
Diptera	Muscidae	<i>Helina confinis</i>	a fly		1		0	0	1	tree-associated; wetland	running water; shaded woodland floor; wet woodland		saprophagous	nectivore
Diptera	Opomyzidae	<i>Opomyza germinationis</i>	a picture-winged fly		1		0	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	saprophagous
Diptera	Platystomatidae	<i>Rivellia syngenesiae</i>	a picture-winged fly		1		1	1	0	open habitats; wetland	tall sward & scrub			saprophagous
Diptera	Rhagionidae	<i>Rhagio tringarius</i>	a snipe fly		1		0	1	0	open habitats; wetland	tall sward & scrub			saprophagous
Diptera	Rhinophoridae	<i>Rhinophora lepida</i>	a woodlouse fly				0	1	0	open habitats	tall sward & scrub	Isopoda	parasitoid	nectivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Diptera	Sarcophagidae	<i>Sarcophaga carnaria</i>	a flesh fly		1		1	1	1			Lumbricidae	predator	saprophagous
Diptera	Scathophagidae	<i>Scathophaga stercoraria</i>	Yellow Dung Fly		1		0	0	1	open habitats	tall sward & scrub	Bos, Diptera	predator	predator
Diptera	Sciomyzidae	<i>Limnia unguicornis</i>	a snail-killing fly		1		0	0	1	wetland	acid & sedge peats; marshland; running water	Succinea	parasitoid	saprophagous
Diptera	Stratiomyidae	<i>Pachygaster atra</i>	a soldier fly		1		1	1	0	tree-associated	shaded woodland floor		saprophagous	saprophagous
Diptera	Stratiomyidae	<i>Pachygaster leachii</i>	a soldier fly		1		1	1	0	tree-associated	shaded woodland floor		saprophagous	saprophagous
Diptera	Syrphidae	<i>Chrysogaster solstitialis</i>	a hoverfly		1		0	1	0	tree-associated; wetland	acid & sedge peats; running water; shaded woodland floor; wet woodland		saprophagous	nectivore
Diptera	Syrphidae	<i>Episyrphus balteatus</i>	a hoverfly		1		1	1	1	open habitats	tall sward & scrub	Aphididae	predator	nectivore
Diptera	Syrphidae	<i>Eristalis pertinax</i>	a hoverfly		1		1	1	1	wetland	acid & sedge peats		saprophagous	nectivore
Diptera	Syrphidae	<i>Melanostoma mellinum</i>	a hoverfly		1		1	1	1	open habitats	tall sward & scrub		predator	nectivore
Diptera	Syrphidae	<i>Myathropa florea</i>	a hoverfly		1	A211	0	0	1	tree-associated	decaying wood	Saproxylic	saprophagous	nectivore
Diptera	Syrphidae	<i>Platycheirus albimanus</i>	a hoverfly		1		1	0	0			Aphididae	predator	nectivore
Diptera	Syrphidae	<i>Sphaerophoria scripta</i>	a hoverfly		1		1	1	1	open habitats	tall sward & scrub	Aphididae	predator	nectivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Diptera	Syrphidae	<i>Syrirta pipiens</i>	a hoverfly		1		0	0	1	open habitats	tall sward & scrub	Aphididae	saprophagous	nectivore
Diptera	Syrphidae	<i>Volucella pellucens</i>	a hoverfly		1		0	1	0	tree-associated	shaded woodland floor	Vespula nests	predator	nectivore
Diptera	Tachinidae	<i>Estheria cristata</i>	a parasitic fly				1	0	0	open habitats		<i>Phyllopertha horticola</i> (Garden Chafer)	parasitoid	nectivore
Diptera	Tephritidae	<i>Acinia corniculata</i>	Scarce Knapweed Fly	[RDB 1]	16		0	0	1	open habitats	tall sward & scrub	<i>Centaurea nigra</i> sens. lat. (=nigra/debeauxii)	herbivore	nectivore
Diptera	Tephritidae	<i>Oxya flavipennis</i>	Clouded Yarrow Fly	[Notable]	4		1	0	0	open habitats	short sward & bare ground; tall sward & scrub	<i>Achillea millefolium</i>	herbivore	nectivore
Diptera	Tephritidae	<i>Tephritis neesii</i>	a picture-winged fly		1		1	0	1	open habitats	short sward & bare ground; tall sward & scrub	<i>Leucanthemum vulgare</i>	herbivore	nectivore
Diptera	Tephritidae	<i>Tephritis vespertina</i>	a picture-winged fly		1		0	0	1	open habitats	tall sward & scrub	<i>Hypochaeris radicata</i>	herbivore	nectivore
Diptera	Tephritidae	<i>Urophora quadrifasciata</i>	a picture-winged fly		1		1	1	1	open habitats	short sward & bare ground; tall sward & scrub	<i>Centaurea nigra</i> sens. lat. (=nigra/debeauxii)	herbivore	nectivore
Diptera	Tipulidae	<i>Nephrotoma appendiculata</i>	a tiger crane-fly		1		0	0	1	open habitats	tall sward & scrub		herbivore	does not feed
Heteroptera	Acanthosomatidae	<i>Acanthosoma haemorrhoidale</i>	Hawthorn Shieldbug		1		0	1	1	tree-associated	arboreal	<i>Crataegus</i>	herbivore	herbivore
Heteroptera	Anthocoridae	<i>Anthocoris confusus</i>	a predatory bug		1		1	1	1	tree-associated	arboreal	Acari, Aphididae	predator	predator
Heteroptera	Anthocoridae	<i>Anthocoris nemoralis</i>	a predatory bug		1		1	1	1	tree-associated	arboreal	Acari, Aphididae	predator	predator

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Heteroptera	Anthocoridae	<i>Anthocoris nemorum</i>	a predatory bug		1		1	1	1			Acari, Aphididae		
Heteroptera	Anthocoridae	<i>Cardiastethus fasciventris</i>	a predatory bug		1	A215	1	0	0	tree-associated	arboreal; decaying wood	Acari, Aphididae	predator	
Heteroptera	Anthocoridae	<i>Temnostethus gracilis</i>	a predatory bug		1		1	0	0			Acari, Aphididae		
Heteroptera	Aradidae	<i>Aneurus avenius</i>	a flat bug		1	A212	0	1	0	tree-associated	decaying wood	Saproxylic	fungivore	
Heteroptera	Coreidae	<i>Coreus marginatus</i>	Dock Bug		1		1	1	1	open habitats	tall sward & scrub	Rumex	herbivore	herbivore
Heteroptera	Coreidae	<i>Gonocerus acuteangulatus</i>	Box Bug		1		0	1	0	tree-associated	arboreal	Buxus, Crataegus	herbivore	herbivore
Heteroptera	Coreidae	<i>Syromastus rhombeus</i>	Rhombic Leatherbug		1	F112	0	1	0	open habitats	short sward & bare ground	Caryophyllaceae	herbivore	herbivore
Heteroptera	Lygaeidae	<i>Cymus melanocephalus</i>	a ground bug		1		1	0	0	open habitats	tall sward & scrub	Juncus, Lythrum salicaria, Trifolium	herbivore	herbivore
Heteroptera	Lygaeidae	<i>Drymus sylvaticus</i>	a ground bug		1		0	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Heteroptera	Lygaeidae	<i>Heterogaster urticae</i>	Nettle Ground Bug		1		1	0	0	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore
Heteroptera	Lygaeidae	<i>Scolopostethus thomsoni</i>	a ground bug		1		1	0	0	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore
Heteroptera	Miridae	<i>Acetropis gimmerthalii</i>	a plant bug		1		0	1	1	open habitats	tall sward & scrub		herbivore	herbivore
Heteroptera	Miridae	<i>Amblytulus nasutus</i>	a plant bug		1		0	1	0	open habitats	tall sward & scrub		herbivore	herbivore
Heteroptera	Miridae	<i>Campyloneura virgula</i>	a plant bug		1		1	0	0	tree-associated	arboreal	Corylus, Crataegus, Quercus	herbivore	herbivore
Heteroptera	Miridae	<i>Capsus ater</i>	a plant bug		1		0	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Closterotomus norwegicus</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Heteroptera	Miridae	<i>Closterotomus trivialis</i>	a plant bug				0	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Heteroptera	Miridae	<i>Deraeocoris flavilinea</i>	a plant bug				0	1	1	tree-associated	arboreal		herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Heteroptera	Miridae	<i>Deraeocoris lutescens</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub		herbivore	herbivore
Heteroptera	Miridae	<i>Deraeocoris ruber</i>	a plant bug		1		1	0	0	tree-associated	arboreal		herbivore	herbivore
Heteroptera	Miridae	<i>Dicyphus epilobii</i>	a plant bug		1		1	0	0	open habitats	tall sward & scrub	Epilobium hirsutum	herbivore	herbivore
Heteroptera	Miridae	<i>Dicyphus escalerae</i>	a plant bug				0	0	1	open habitats	tall sward & scrub	Antrirhinum	herbivore	herbivore
Heteroptera	Miridae	<i>Harpocera thoracica</i>	a plant bug		1		1	1	1	tree-associated	arboreal	Quercus		
Heteroptera	Miridae	<i>Leptopterna dolabrata</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Liocoris tripustulatus</i>	a plant bug		1		1	1	0	open habitats	tall sward & scrub	Urtica dioica	herbivore	herbivore
Heteroptera	Miridae	<i>Lopus decolor</i>	a plant bug		1		1	0	0	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Lygus pratensis</i>	a plant bug		1	F003	0	1	1	open habitats			herbivore	herbivore
Heteroptera	Miridae	<i>Megacoelum infusum</i>	a plant bug		1		1	0	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Heteroptera	Miridae	<i>Megalocoleus molliculus</i>	a plant bug		1		1	0	0	open habitats	tall sward & scrub	Achillea millefolium	herbivore	herbivore
Heteroptera	Miridae	<i>Notostira elongata</i>	a plant bug		1		1	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Oncotylus viridiflavus</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Centaurea	herbivore	herbivore
Heteroptera	Miridae	<i>Orthops kalmii</i>	a plant bug		1		1	0	0	open habitats	tall sward & scrub	Apiaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Orthotylus marginalis</i>	a plant bug		1		0	1	0	tree-associated	arboreal	Salix	predator	predator
Heteroptera	Miridae	<i>Phytocoris varipes</i>	a plant bug		1		1	0	1	open habitats	tall sward & scrub		herbivore	herbivore
Heteroptera	Miridae	<i>Pilophorus perplexus</i>	a plant bug		1		0	1	1	tree-associated	arboreal	Aphididae, Quercus	predator	predator
Heteroptera	Miridae	<i>Plagiognathus arbustorum</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Urtica	herbivore	herbivore
Heteroptera	Miridae	<i>Plagiognathus chrysanthemi</i>	a plant bug		1		1	1	1	open habitats	short sward & bare ground	Asteraceae	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Heteroptera	Miridae	<i>Psallus confusus</i>	a plant bug		1		0	1	0	tree-associated	arboreal	Populus, Quercus	herbivore	
Heteroptera	Miridae	<i>Rhodomiris striatellus</i>	a plant bug		1		1	0	1	tree-associated	arboreal	Quercus	herbivore	herbivore
Heteroptera	Miridae	<i>Stenodema laevigata</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Miridae	<i>Stenotus binotatus</i>	a plant bug		1		1	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Nabidae	<i>Himacerus apterus</i>	a predatory bug		1		1	1	0	open habitats	tall sward & scrub		predator	predator
Heteroptera	Nabidae	<i>Himacerus mirmicoides</i>	a predatory bug		1		1	0	1	tree-associated	arboreal	Acari, Aphididae	predator	predator
Heteroptera	Nabidae	<i>Nabis rugosus</i>	a predatory bug		1		0	1	0	open habitats	tall sward & scrub		predator	predator
Heteroptera	Pentatomidae	<i>Aelia acuminata</i>	Bishop's Mitre Shieldbug		1		0	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Heteroptera	Pentatomidae	<i>Dolycoris baccarum</i>	Hairy Shieldbug		1		1	0	1	open habitats	tall sward & scrub	Asteraceae	herbivore	herbivore
Heteroptera	Pentatomidae	<i>Eurydema oleracea</i>	Crucifer Shieldbug		1		0	0	1	open habitats	tall sward & scrub	Brassicaceae	herbivore	herbivore
Heteroptera	Pentatomidae	<i>Palomena prasina</i>	Common Green Shieldbug		1		1	1	1	open habitats	tall sward & scrub		herbivore	herbivore
Heteroptera	Pentatomidae	<i>Pentatoma rufipes</i>	Red-legged Shieldbug		1		1	1	1	tree-associated	arboreal	Quercus	herbivore	herbivore
Heteroptera	Pentatomidae	<i>Piezodorus lituratus</i>	Gorse Shieldbug		1	F001, F003	0	1	1	open habitats		Ulex	herbivore	herbivore
Heteroptera	Pentatomidae	<i>Troilus luridus</i>	Bronze Shieldbug		1		0	0	1	tree-associated	arboreal			predator
Heteroptera	Rhopalidae	<i>Corizus hyoscyami</i>	a true bug		1	F111	0	0	1	open habitats	short sward & bare ground		herbivore	herbivore
Heteroptera	Rhopalidae	<i>Rhopalus subrufus</i>	a true bug		1	F001	0	0	1	open habitats	tall sward & scrub	Hypericum	herbivore	herbivore
Heteroptera	Scutelleridae	<i>Eurygaster testudinaria</i>	Tortoise Shieldbug		1		0	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Heteroptera	Tingidae	<i>Physatocheila dumetorum</i>	a lace bug		1	A215	0	1	0	tree-associated	arboreal; decaying wood		herbivore	
Homoptera: Auchenorrhyncha	Aphrophoridae	<i>Aphrophora alni</i>	a froghopper		1		1	1	1			Polyphagous	herbivore	herbivore
Homoptera: Auchenorrhyncha	Aphrophoridae	<i>Neophilaenus lineatus</i>	a froghopper		1		1	0	0	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Allygus modestus</i>	a leafhopper		1	F001	0	0	1	tree-associated	arboreal	Polyphagous	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Anoscopus serratulae</i>	a leafhopper		1		0	0	1	open habitats	short sward & bare ground	Poaceae	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Aphrodes makarovi</i>	a leafhopper		1		1	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Eupteryx aurata</i>	a leafhopper		1		1	0	0			Polyphagous	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>lassus lanio</i>	a leafhopper		1		1	0	1	tree-associated	arboreal	Quercus	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Idiocerus lituratus</i>	a leafhopper		1		0	1	0	tree-associated	arboreal	Salix	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Ledra aurita</i>	a leafhopper		1		1	0	0	tree-associated	arboreal		herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Oncopsis flavicollis</i>	a leafhopper		1		0	1	0	tree-associated	arboreal	Betula	herbivore	herbivore
Homoptera: Auchenorrhyncha	Cicadellidae	<i>Populicerus confusus</i>	a leafhopper		1		0	1	1	tree-associated	arboreal	Salix	herbivore	herbivore
Homoptera: Auchenorrhyncha	Delphacidae	<i>Dicranotropis hamata</i>	a planthopper		1		0	1	0	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Homoptera: Auchenorrhyncha	Delphacidae	<i>Javesella dubia</i>	a planthopper		1		0	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	herbivore
Homoptera: Sternorrhyncha	Aphididae	<i>Tuberolachnus salignus</i>	Giant Willow Aphid				1	0	0	tree-associated	arboreal	Salix	herbivore	herbivore
Homoptera: Sternorrhyncha	Psyllidae	<i>Psyllopsis fraxini</i>	a psyllid bug				0	1	1	tree-associated	arboreal	Fraxinus	herbivore	herbivore
Hymenoptera: Aculeata	Andrenidae	<i>Andrena minutula</i>	Common Mini-miner		1	F002	0	1	0	open habitats	short sward & bare ground		nectivore	nectivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Hymenoptera: Aculeata	Apidae	<i>Anthophora bimaculata</i>	Green-eyed Flower Bee		1	F002	1	0	1	open habitats	short sward & bare ground		nectivore	nectivore
Hymenoptera: Aculeata	Apidae	<i>Apis mellifera</i>	Western Honey Bee		1	F002	1	1	1	open habitats				
Hymenoptera: Aculeata	Apidae	<i>Bombus lucorum/terrestris</i>	White-tailed/Buff-tailed Bumblebee				0	0	1					
Hymenoptera: Aculeata	Apidae	<i>Bombus pascuorum</i>	Common Carder Bumblebee		1	F002	1	1	1	open habitats	tall sward & scrub		nectivore	nectivore
Hymenoptera: Aculeata	Apidae	<i>Bombus pratorum</i>	Early Bumblebee		1	F002	0	0	1	open habitats; tree-associated	shaded woodland floor; tall sward & scrub		nectivore	
Hymenoptera: Aculeata	Apidae	<i>Bombus vestalis</i>	Vestal Cuckoo Bee		1	F002	0	0	1	open habitats	short sward & bare ground	<i>Bombus terrestris</i>	nectivore	nectivore
Hymenoptera: Aculeata	Bethylidae	<i>Bethylus fuscicornis</i>	a solitary wasp		4		0	1	0	open habitats	tall sward & scrub	Tineidae		
Hymenoptera: Aculeata	Crabronidae	<i>Ectemnius continuus</i>	a digger wasp		1	A212, F001	0	0	1	open habitats; tree-associated	decaying wood		parasitoid	nectivore
Hymenoptera: Aculeata	Formicidae	<i>Formica fusca</i>	an ant		1		1	0	0					
<b>Hymenoptera: Aculeata</b>	<b>Formicidae</b>	<b><i>Lasius brunneus</i></b>	<b>an ant</b>	<b>[Na]</b>	<b>4</b>	<b>A211</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>tree-associated</b>	<b>decaying wood</b>			
Hymenoptera: Aculeata	Formicidae	<i>Lasius flavus</i>	an ant		1	F112	1	0	0	open habitats	short sward & bare ground			
Hymenoptera: Aculeata	Formicidae	<i>Lasius fuliginosus</i>	an ant		1	A211, F001	1	0	0	open habitats; tree-associated	decaying wood			

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Hymenoptera: Aculeata	Formicidae	<i>Lasius niger</i>	an ant		1		1	1	1	open habitats	short sward & bare ground			
Hymenoptera: Aculeata	Formicidae	<i>Lasius platythorax</i>	an ant		1		1	0	0	open habitats	short sward & bare ground			
Hymenoptera: Aculeata	Formicidae	<i>Myrmica ruginodis</i>	an ant		1		0	0	1	tree-associated	shaded woodland floor		predator	predator
Hymenoptera: Aculeata	Formicidae	<i>Myrmica scabrinodis</i>	an ant		1		0	1	1	open habitats	tall sward & scrub		predator	predator
Hymenoptera: Aculeata	Megachilidae	<i>Osmia bicornis</i>	Red Mason Bee		1	F002	1	0	1	open habitats; tree-associated	shaded woodland floor; tall sward & scrub		nectivore	
Hymenoptera: Aculeata	Megachilidae	<i>Osmia spinulosa</i>	Spined Mason Bee		1	F002, F111	0	0	1	open habitats	short sward & bare ground		nectivore	nectivore
<b>Hymenoptera: Aculeata</b>	<b>Melittidae</b>	<b><i>Dasygaster hirtipes</i></b>	<b>Pantaloony Bee</b>	<b>[Nb]</b>	<b>1</b>	<b>F002, F111</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>open habitats</b>	<b>short sward &amp; bare ground</b>	<b>Asteraceae</b>	<b>nectivore</b>	<b>nectivore</b>
Hymenoptera: Aculeata	Vespidae	<i>Dolichovespula media</i>	Median Wasp		1	F001	0	0	1	open habitats; tree-associated	arboreal		predator	
Hymenoptera: Aculeata	Vespidae	<i>Vespula vulgaris</i>	Common Wasp		1		0	0	1	open habitats	tall sward & scrub		predator	nectivore
Hymenoptera: Parasitica	Cynipidae	<i>Andricus kollari</i>	a gall wasp				1	0	1	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Cynipidae	<i>Andricus lignicolus</i>	a gall wasp				0	1	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Cynipidae	<i>Andricus quercuscalicis</i>	a gall wasp				1	1	1	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Cynipidae	<i>Biorhiza pallida</i>	Gall causer				0	1	1	tree-associated	arboreal	Quercus	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Hymenoptera: Parasitica	Cynipidae	<i>Cynips quercusfolii</i>	Gall causer				0	1	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Cynipidae	<i>Neuroterus numismalis</i>	Gall causer				1	1	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Cynipidae	<i>Neuroterus quercusbaccarum</i>	Gall causer				0	1	0	tree-associated	arboreal	Quercus	herbivore	herbivore
Hymenoptera: Parasitica	Torymidae	<i>Torymus varians</i>	a chalcid				0	1	0	tree-associated	arboreal	Cynipidae	parasitoid	
Hymenoptera: Symphyta	Tenthredinidae	<i>Macrophya annulata</i>	a sawfly				0	0	1	open habitats	tall sward & scrub	Rosaceae	herbivore	
Hymenoptera: Symphyta	Tenthredinidae	<i>Rhogogaster viridis</i>	a sawfly				0	1	0			Populus tremulae	herbivore	
Hymenoptera: Symphyta	Tenthredinidae	<i>Selandria serva</i>	a sawfly				1	0	0	open habitats	tall sward & scrub	Poaceae, Juncus, Carex	herbivore	
Hymenoptera: Symphyta	Tenthredinidae	<i>Tenthredo zona</i>	a sawfly				1	0	0	open habitats	tall sward & scrub	Hypericum	herbivore	
Hymenoptera: Symphyta	Tenthredinidae	<i>Tenthredopsis nassata</i>	a sawfly				0	0	1	open habitats	tall sward & scrub	Poaceae	herbivore	
Isopoda	Armadillidiidae	<i>Armadillidium vulgare</i>	Common Pill Woodlouse		1		1	0	1				saprophagous	saprophagous
Isopoda	Oniscidae	<i>Oniscus asellus</i>	Common Shiny Woodlouse		1		1	0	0				saprophagous	saprophagous
Isopoda	Philosciidae	<i>Philoscia muscorum</i>	Common Striped Woodlouse		1		1	0	0				saprophagous	saprophagous
Isopoda	Porcellionidae	<i>Porcellio scaber</i>	Common Rough Woodlouse		1		1	0	1				saprophagous	saprophagous
Lepidoptera	Argyresthiidae	<i>Argyresthia goedartella</i>	a moth		1		0	1	0	tree-associated	arboreal	Alnus, Betula	herbivore	nectivore
Lepidoptera	Erebidae	<i>Eilema lurideola</i>	Common Footman		1		0	1	0			Lichens	herbivore	nectivore
Lepidoptera	Erebidae	<i>Rivula sericealis</i>	Straw Dot		1		1	0	0	open habitats	tall sward & scrub	Poaceae	herbivore	nectivore
Lepidoptera	Glyphipterigidae	<i>Glyphipterix fuscoviridella</i>	a moth		1		1	1	1	open habitats	tall sward & scrub	Luzula campestris	herbivore	nectivore
Lepidoptera	Glyphipterigidae	<i>Glyphipterix thrasonella</i>	a moth		1		0	1	0	wetland	marshland	Juncus	herbivore	nectivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Lepidoptera	Gracillariidae	<i>Cameraria ohridella</i>	a moth		1		0	1	0			Aesculus hippocastanum	herbivore	nectivore
Lepidoptera	Gracillariidae	<i>Phyllonorycter coryli</i>	Nut Leaf Blister Moth				0	1	0	tree-associated	arboreal	Corylus	herbivore	nectivore
Lepidoptera	Lycaenidae	<i>Polyommatus icarus</i>	Common Blue		1		1	0	0	open habitats	short sward & bare ground	Lotus corniculatus, Lotus pedunculatus, Medicago lupulina, Ononis repens, Trifolium dubium, Trifolium repens	herbivore	nectivore
Lepidoptera	Noctuidae	<i>Autographa gamma</i>	Silver Y		1		0	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	nectivore
Lepidoptera	Noctuidae	<i>Orthosia cerasi</i>	Common Quaker		1		0	1	1	tree-associated	arboreal	Polyphagous	herbivore	nectivore
Lepidoptera	Nolidae	<i>Nola cucullatella</i>	Short-cloaked Moth		1		0	0	0	tree-associated	arboreal	Crataegus monogyna, Prunus spinosa	herbivore	nectivore
Lepidoptera	Notodontidae	<i>Phalera bucephala</i>	Buff-tip		1		0	0	1	tree-associated	arboreal	Polyphagous	herbivore	does not feed
Lepidoptera	Nymphalidae	<i>Aglais io</i>	Peacock		1		0	0	1	open habitats	tall sward & scrub	Humulus lupulus, Urtica	herbivore	nectivore
Lepidoptera	Nymphalidae	<i>Maniola jurtina</i>	Meadow Brown		1		1	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	nectivore
Lepidoptera	Nymphalidae	<i>Pararge aegeria</i>	Speckled Wood		1	F001	1	1	0	open habitats	tall sward & scrub	Poaceae	herbivore	nectivore
Lepidoptera	Nymphalidae	<i>Pyronia tithonus</i>	Gatekeeper		1	F001	0	1	1	open habitats	tall sward & scrub	Poaceae	herbivore	nectivore
Lepidoptera	Pieridae	<i>Anthocharis cardamines</i>	Orange-tip		1		1	1	0	open habitats	tall sward & scrub	Brassicaceae	herbivore	nectivore
Lepidoptera	Pieridae	<i>Pieris brassicae</i>	Large White		1		0	0	1	open habitats		Brassicaceae	herbivore	nectivore
Lepidoptera	Pieridae	<i>Pieris rapae</i>	Small White		1		1	0	1	open habitats		Brassicaceae	herbivore	nectivore
Lepidoptera	Psychidae	<i>Luffia lapidella</i>	a moth		1		0	1	0	open habitats	short sward & bare ground	Algae, Ascomycota, Lichens	herbivore	does not feed
Lepidoptera	Pyralidae	<i>Acrobasis advenella</i>	a moth		1		0	1	0			Crataegus monogyna	herbivore	nectivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Lepidoptera	Tortricidae	<i>Dichrorampha alpinana</i>	a moth		1		0	0	1	open habitats	short sward & bare ground	Achillea millefolium, Achillea ptarmica, Tanacetum vulgare	herbivore	nectivore
Lepidoptera	Tortricidae	<i>Pammene regiana</i>	a moth				0	1	0	tree-associated	arboreal	Acer	herbivore	nectivore
Mollusca: Pulmonata	Arionidae	<i>Arion ater</i>	Large Black Slug		1		1	1	0	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Mollusca: Pulmonata	Helicidae	<i>Cepaea hortensis</i>	White-lipped Snail		1		0	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Mollusca: Pulmonata	Helicidae	<i>Cornu aspersum</i>	Garden Snail		1		0	0	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Mollusca: Pulmonata	Hygromiidae	<i>Monacha cantiana</i>	Kentish Snail		1		0	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Mollusca: Pulmonata	Limacidae	<i>Limacus maculatus</i>	Green Cellar Slug		1		1	0	0			Polyphagous		
Mollusca: Pulmonata	Oxychilidae	<i>Aegopinella nitidula</i>	Smooth Glass Snail		1		1	0	0	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Mollusca: Pulmonata	Oxychilidae	<i>Oxychilus alliarius</i>	Garlic Snail		1		1	0	0	conifer or broadleaved	woodland habitat	Polyphagous	herbivore	herbivore
Myriapoda: Julida	Julidae	<i>Cylindroiulus punctatus</i>	Blunt-tailed Snake-millipede		1		1	0	0	tree-associated	shaded woodland floor		saprophagous	saprophagous
Myriapoda: Julida	Julidae	<i>Tachypodoiulus niger</i>	White-legged Snake-millipede		1		0	0	1				saprophagous	saprophagous
Myriapoda: Lithobiomorpha	Lithobiidae	<i>Lithobius forficatus</i>	a centipede		1		1	0	0				predator	predator
Myriapoda: Lithobiomorpha	Lithobiidae	<i>Lithobius variegatus</i>	Variiegated Centipede		1		1	0	0	tree-associated	shaded woodland floor		predator	predator
Odonata	Coenagriidae	<i>Ischnura elegans</i>	Blue-tailed Damselfly		1		1	0	0	wetland	marshland		predator	predator
Orthoptera	Acrididae	<i>Chorthippus brunneus</i>	Common Field Grasshopper		1		1	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore
Orthoptera	Acrididae	<i>Chorthippus parallelus</i>	Meadow Grasshopper		1		1	1	1	open habitats	tall sward & scrub	Polyphagous	herbivore	herbivore

Order	Family	Taxon	Vernacular	Status	SQS	SAT	SG	LH	WG&P	Broad biotope	Habitat	Associations	Larval feeding guild	Adult feeding guild
Orthoptera	Meconematidae	<i>Meconema meridionale</i>	Southern Oak Bush Cricket				1	1	1	tree-associated	arboreal		omnivore	omnivore
Orthoptera	Meconematidae	<i>Meconema thalassinum</i>	Oak Bush Cricket		1	F001	1	1	1	open habitats; tree-associated	arboreal		omnivore	omnivore
Orthoptera	Phaneropteridae	<i>Leptophyes punctatissima</i>	Speckled Bush Cricket		1	F001	1	1	1	open habitats	tall sward & scrub		omnivore	omnivore
Orthoptera	Tettigoniidae	<i>Metrioptera roeselii</i>	Roesel's Bush Cricket		1		1	1	1	open habitats	tall sward & scrub		omnivore	omnivore
Plecoptera	Nemouridae	<i>Nemoura cinerea</i>	a stone fly		1		1	0	0	wetland	marshland			does not feed
Psocoptera	Ectopsocidae	<i>Ectopsocus petersi</i>	a bark fly				1	1	1	tree-associated	arboreal		herbivore	herbivore
Psocoptera	Elipsocidae	<i>Elipsocus hyalinus</i>	a bark fly				0	0	1	tree-associated	arboreal		herbivore	herbivore
Psocoptera	Philotarsidae	<i>Philotarsus parviceps</i>	a bark fly				1	0	0	tree-associated	arboreal		herbivore	herbivore
Psocoptera	Psocidae	<i>Metylophorus nebulosus</i>	a bark fly				0	1	0	tree-associated	arboreal		herbivore	herbivore
Psocoptera	Stenopsocidae	<i>Graphopsocus cruciatus</i>	a bark fly				1	1	0	tree-associated	arboreal		herbivore	herbivore
Psocoptera	Stenopsocidae	<i>Stenopsocus immaculatus</i>	a bark fly				0	1	0	tree-associated	arboreal		herbivore	herbivore
							189	187	196					

## 7. Appendix 2. Status categories for Rare and Notable species

### Red Data Book Category 1 (RDB 1) – Endangered

**Definition.**

Taxa in danger of extinction *in Great Britain* and whose survival is unlikely if the causal factors continue operating.

Included are those taxa whose numbers have been reduced to a critical level or whose habitats have been so dramatically reduced that they are deemed to be in immediate danger of extinction. Also included are *some* taxa that are *possibly* extinct.

**Criteria.**

Species which are known *or believed to occur* as only a single population within one 10 km square of the National Grid.

Species which only occur in habitats known to be especially vulnerable.

Species which have shown a rapid or continuous decline over the last twenty years and are now *estimated* to exist in five or fewer 10 km squares.

Species which are *possibly* extinct *but have been recorded this century* and if rediscovered would need protection.

### Red Data Book Category 2 (RDB 2) - Vulnerable

**Definition.**

Taxa *believed* likely to move into the endangered category in the near future if the causal factors continue operating.

Included are taxa of which most or all of the populations are decreasing because of *over-exploitation*, extensive destruction of habitat or other environmental disturbance; taxa with populations that have been seriously depleted and whose ultimate security is not yet assured; and taxa with populations that are still abundant but are under threat from serious adverse factors throughout their range.

**Criteria.**

Species declining throughout their range.

Species in vulnerable habitats.

### Red Data Book Category 3 (RDB 3) – Rare

**Definition.**

Taxa with small populations *in Great Britain* that are not at present endangered or vulnerable, but are at risk.

---

These taxa are usually localised within restricted geographical areas or habitats or are thinly scattered over a more extensive range.

**Criterion.**

Species which are estimated to exist in only fifteen or fewer 10 km squares. *This criterion may be relaxed where populations are likely to exist in over fifteen 10 km squares but occupy small areas of especially vulnerable habitat*

**Nationally Scarce Category A - Notable A (Na)**

**Definition.**

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in 30 or fewer 10 km squares of the National Grid or, for less well recorded groups, within seven or fewer vice-counties.

**Nationally Scarce Category B - Notable B (Nb)**

**Definition.**

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 31 and 100 10 km squares of the National Grid or, for less well recorded groups, within eight and twenty vice-counties.

**Nationally Scarce - Notable (N)**

**Definition.**

Taxa which do not fall within **RDB** categories but which are none-the-less uncommon in Great Britain and are thought to occur in between 16 to 100 10 km squares of the National Grid. Species within this category are often too poorly known for their status to be more precisely estimated.

**Summary of the IUCN categories and criteria.**

- **REGIONALLY EXTINCT (RE)**

A taxon is Extinct when there is no reasonable doubt that the last individual has died. In this review the last date for a record is set at fifty years before publication.

- **CRITICALLY ENDANGERED (CR)**

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered.

- **ENDANGERED (EN)**

A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered.

- **VULNERABLE (VU)**

A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable.

- **NEAR THREATENED (NT)**

---

A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.

- **LEAST CONCERN (LC)**

A taxon is Least Concern when it has been evaluated against the criteria and does not qualify for Critically Endangered, Endangered, Vulnerable or Near Threatened. Widespread and abundant taxa are included in this category.

- **DATA DEFICIENT (DD)**

A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate.

- **NOT EVALUATED (NE)**

A taxon is Not Evaluated when it has not yet been evaluated against the criteria.

### **GB Rarity Status categories and criteria**

- **Nationally Rare (NR)**

Native species which have not been recorded from more than 15 British hectads since 31st December 1979 and where there is reasonable confidence that exhaustive recording would not find them in more than 15 hectads. This category includes species which are probably extinct.

- **Nationally Scarce (NS)**

Native species which are not regarded as Nationally Rare AND which have not been recorded from more than 100 British hectads since 31st December 1979 and where there is reasonable confidence that exhaustive recording would not find them in more than 100 hectads.

### **Other species status terminology.**

- **Local.** Species that are restricted in distribution either geographically or by habitat. Also used for species that are widespread but infrequently encountered, e.g. encountered in no more than 300 10km squares of the national Ordnance Survey grid since 1970. Or those species listed as such, based upon modern geographical data, by ISIS (2010) and/or relevant recording schemes.
- **Widely Scattered.** Generally distributed but at low densities.
- **Southern.** Mainly or completely confined to southern England and/or its westerly or easterly regions – as indicated.
- **Common.** Generally widespread throughout the UK.
- **Unknown.** Usually indicates a lack of available data for difficult taxa but may also imply recent taxonomic confusion.

