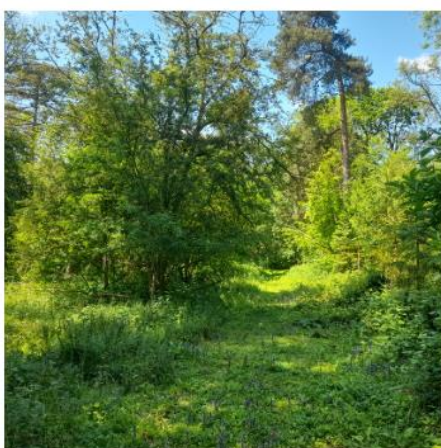


Abbey Home Farm Invertebrate Survey Report

January 2025



Abbey Home Farm
Burford Road
Cirencester
GL7 5HF

Report by

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Table of Contents

EXECUTIVE SUMMARY	4
1.0 INTRODUCTION	5
1.1 Introductory comments	5
1.2 Site description	5
1.3 Sample areas	6
1.4 Survey limitations	10
2.0 SAMPLING	11
2.1 Survey dates	11
2.2 Sampling methodology	12
2.3 Target groups	13
3.0 RESULTS	14
3.1 Overview	14
3.2 Species of conservation importance	16
3.2.1 Section 41 species	20
3.2.2 Endangered species	23
3.2.3 Vulnerable species	25
3.2.4 Nationally Rare species	26
3.2.5 Nationally Scarce species	30
3.2.6 Nationally Local species	42
3.2.7 Other species	52
3.3 Pantheon analysis	55
4.0 DISCUSSION	56
4.1 Overview	56
4.2 Sample areas	57
4.2.1 Coronation Wood	58
4.2.2 Hedgerow	59
4.2.3 Long Bottom Camp & Wiggold Wood	60
4.2.4 Oxlays Pond	64
4.2.5 Rat's Castle	67
4.2.6 Round Hill Bank	69
4.2.7 Totem Pole Wall	71
4.2.8 Veg Gardens	72
4.2.9 Veg Plots	77
4.2.10 Well Ground Pond	80
4.2.11 Yellow School Strip	82
4.2.12 Yellow School Wood	83
5.0 SUMMARY	86
6.0 IDENTIFICATION KEYS	86
7.0 REFERENCES	89

EXECUTIVE SUMMARY

Liam Olds (trading as Colliery Spoil Biodiversity Initiative) was commissioned by **Will Chester-Master** in 2024 to undertake an invertebrate survey at Abbey Home Farm, Burford Road, Cirencester, GL7 5HF. The purpose of this survey was to generate a baseline understanding of the invertebrate species and assemblages present at Abbey Home Farm, including the presence of any species of 'conservation importance'. This survey was conducted over 6 daytime visits, one visit in each of the months between April and September 2024, and utilised a variety of active sampling techniques in 12 sample areas in an effort to encounter as many invertebrate species as possible.

A total of **681** invertebrate species were recorded during the survey, **77** (~11%) of which are deemed to be species of 'conservation importance'. This includes: **3** x Section 41 species; **2** x Endangered (EN or RDB 1) species; **1** x Vulnerable (RDB 2) species; **6** x Nationally Rare (NR or RDB 3) species; **25** x Nationally Scarce (Na, Nb, Notable, NS or pNS) species; **35** x Nationally Local species; and **5** x Other species. Of particular significance is the presence of the Endangered and Nationally Rare tortoise beetle *Cassida denticollis*, which is known from very few sites in Britain and is at threat of extinction. At least **18** of these species of 'conservation importance' appear to have not been recorded in the vice-county of East Gloucestershire (VC 33) previously, while significantly more have also likely not been recorded in the Cotswold District previously.

The semi-natural habitats present at Abbey Home Farm – such as pastures, woodlands, ponds and hedgerows – provide an **important refuge for a number of rare and scarce invertebrates which are declining in the wider countryside and/or habitat specialists with restricted distributions in Britain**. The ability of Abbey Home Farm to support these species while operating as a commercial farm is both commendable and encouraging, and it seems reasonable to presume that some of these species would be absent at Abbey Home Farm if it was managed more traditionally and was not organic.

In light of the survey results, I am of the professional opinion that Abbey Home Farm is an **important site for invertebrate conservation in the unitary authority area of Gloucestershire and Cotswolds District**. As such, it is considered an **important site for invertebrate conservation in the local, county and regional context**. It is important, therefore, that semi-natural habitats at Abbey Home Farm are **appropriately managed to conserve their existing invertebrate interest**, and **opportunities are sought to further enhance these habitats** wherever possible. For instance, within the woodlands at Abbey Home Farm, the presence of standing and fallen dead wood is deemed especially important for saproxylic invertebrates (species dependent upon dead or decaying wood, or upon wood-inhabiting fungi or other saproxylics). This highlights the need to **retain dead and decaying wood of all ages (both standing and fallen) in-situ wherever possible** – including attached limbs/branches/twigs and fallen trees/limbs – and **avoid removal**.

1.0 INTRODUCTION

1.1 Introductory comments

Liam Olds (trading as Colliery Spoil Biodiversity Initiative) was commissioned by **Will Chester-Master** in 2024 to undertake an invertebrate survey at Abbey Home Farm, Burford Road, Cirencester, GL7 5HF. The purpose of this survey was to generate a baseline understanding of the invertebrate species and assemblages present at Abbey Home Farm, including the presence of any species of 'conservation importance' (i.e. species considered to be Nationally Local, Scarce or Rare, and/or listed under Section 41 of the NERC Act 2006 as species of 'principal importance for the conservation of biodiversity in England'). All invertebrate sampling and identification was undertaken by the author of this report (Liam Olds) – an experienced entomologist who has been working as a freelance entomological consultant since 2017 alongside his role as Conservation Officer at the national invertebrate conservation charity Buglife.

This report details the results of that survey, which was conducted over 6 daytime visits between the period of April and September 2024. It is envisaged that the results of this survey could be used as a means to engage farm visitors and the wider public with the benefits of organic farming practices at Abbey Home Farm for invertebrates; these results could also be used to inform and refine land management practises at Abbey Home Farm to further benefit invertebrates.

1.2 Site description

Abbey Home Farm is a 650 hectare (ha) farm located north-east of the market town of Cirencester, Gloucestershire, England; an approximate central Ordnance Survey (OS) grid reference is SP044041. Will and Hilary Chester-Master assumed management of the farm in 1990, implementing an organic farming system with the goal of achieving both environmental and financial sustainability.

The farm features a diverse range of land uses, including:

- **Arable cropland** (around 300 ha), dedicated to cereal production;
- **Vegetable plots and gardens** (around 10 ha), used to grow vegetables, soft fruits, flowers, and herbs;
- **Permanent pasture** for livestock, such as cows and sheep, for milk and meat production.

In addition, Abbey Home Farm contains about 87 ha of mixed woodland, much of it established by Jane Master in the early 1800s, with further conifer planting carried out during the 1960s and 1970s by Richard Chester-Master.

Since 2006, the farm has participated in Stewardship Agreements, including Organic Entry Level Stewardship and Higher Level Stewardship. Will and Hilary are committed to preserving biodiversity, implementing initiatives such as pond

restoration and creation, enhanced hedgerow management, beetle bank installation, Cotswold dry stone wall restoration, and permanent headland margin establishment.

The farm's modern boundary encompasses land acquired, owned, and transferred over the past 450 years, with many field layouts remaining largely unchanged for over 250 years. Abbey Home Farm supports a variety of wildlife habitats, including:

- **Grasslands** (permanent pasture, meadows, and fallow land);
- **Arable crops and field margins;**
- **Gardens and orchards;**
- **Hedgerows;**
- **Dry stone walls, ditches, and boundary banks;**
- **Ponds;** and
- **Mixed woodlands.**

1.3 Sample areas

The invertebrate survey in 2024 aimed to achieve as a comprehensive understanding of the farm's invertebrate biodiversity as possible. Recognising the varied habitat requirements of invertebrates, the survey strategically sampled across multiple habitat types (encompassing both aquatic and terrestrial environments) to maximise the likelihood of encountering a wide array of invertebrate species at Abbey Home Farm.

Invertebrate sampling concentrated primarily on **12** areas – referred to as 'sample areas' – that reflect the diversity of habitats found at Abbey Home Farm. This includes:

- **Coronation Wood** (OS grid reference centered at SP04610411) – a mixed woodland that was planted around the time of Queen Elizabeth II's Coronation (Will Chester-Master, personal communication) (**Figure 1**);
- **Hedgerow** (OS grid reference centered at SP04890386) – a thick, mature hedgerow located between Lower Ground and Round Hill/Round Hill Bank (**Figure 1**);
- **Long Bottom Camp** (OS grid reference centered at SP04460523) and **Wiggold Wood** (OS grid reference centered at SP04380537) – a mixed woodland (Wiggold Wood) with a high proportion of broadleaved trees (**Figure 2**), and a meadow with Shepherds Huts and a log circle (**Figure 2**). Wiggold Wood supports among the oldest trees at Abbey Home Farm, which were planted in the 1820s (Will Chester-Master, pers. comm.);
- **Oxlays Pond** (OS grid reference centered at SP04430482) – a freshwater pond towards the southeast corner of the arable field known as Oxlays (**Figure 3**). This pond was created around 10 years ago (Will Chester-Master, pers. comm.);
- **Rat's Castle** (OS grid reference centered at SP04180395) – a mixed woodland with a high proportion of broadleaved trees and a series of paths/rides and open glades;

- **Round Hill Bank** (OS grid reference centered at SP05060373) – flower-rich semi-natural grassland on calcareous soils that is sited on south and west facing banks around Round Hill (**Figure 4**);
- **Totem Pole Wall** (OS grid reference centered at SP04730371) – a dry stone wall between the field compartments of Yellow Schools and Downs Bank (**Figure 5**), not far from the camp site and totem pole;
- **Veg Gardens** (OS grid reference centered at SP04370374) – as the name suggests, this area is used to grow organic fruit and vegetables. In addition to a series of vegetable plots, it also supports a glasshouse, polytunnels, an orchard, a formal garden, and hedgerows (**Figure 6**);
- **Veg Plots** (OS grid reference centered at SP04360352) – again, as the name suggests, this area is used to grow organic fruit and vegetables. It supports a series of large vegetable plots as well as an orchard, meadows, ‘rough’ grassland, scrub and hedgerows (**Figure 7**);
- **Well Ground Pond** (OS grid reference centered at SP05020511) – a long-established freshwater pond within a mixed woodland (**Figure 5**) at the northeast end of the field compartment known as Well Ground;
- **Yellow School Strip** (OS grid reference centered at SP04490384) – a linear strip of mixed woodland along the eastern side of the road (a former railway line) which divides Abbey Home Farm. This woodland supports a high proportion of broadleaved trees and an old, silted pond (**Figure 8**) which has become dominated by Bulrush (*Typha latifolia*); and
- **Yellow School Wood** (OS grid reference centered at SP04580355) – a mixed woodland with a high proportion of broadleaved trees (**Figure 8**), including a few rather old ancient/veteran trees along its western boundary with the road. There is a footpath through much of the centre of the wood, extending from the northwest to southeast.

Invertebrate sampling was primarily concentrated within these **12** sample areas as they were deemed to collectively reflect both the diversity and geographical spread of semi-natural habitats at Abbey Home Farm. Despite this, some limited invertebrate sampling was also undertaken in areas additional to these, such as along the road between the Farm Shop and Veg Gardens, which supported tree species such as Leylandii (*Cupressus x leylandii*) that are largely absent from the semi-natural habitats on the farm; as such, these trees were targeted on several occasions in an effort to locate invertebrates that may have not yet been encountered at Abbey Home Farm. Often, however, sampling outside of the forementioned **12** sample areas simply involved recording a small number of invertebrates species that were encountered when travelling to/from a sample area on-foot and which could be readily identified in the field; very few invertebrates that required collection and microscopic examination for identification were collected outside of the **12** sample areas unless the species was deemed likely to be ‘significant’ (i.e. noteworthy as a scarce or rare species).

Figure 1. (Left): Coronation Wood, as photographed on 18th August 2024. (Right): Hedgerow, as photographed on 19th May 2024.



Figure 2. (Left): Long Bottom Camp, as photographed on 19th May 2024. (Right): Wiggold Wood, as photographed on 28th September 2024.



Figure 3. Oxlays Pond, as photographed on 14th July (left) and 28th September 2024 (right).



Figure 4. Round Hill Bank, as photographed on 14th July 2024.



Figure 5. (Left): Totem Pole Wall, as photographed on 28th September 2024. (Right): Well Ground Pond, as photographed on 16th June 2024.



Figure 6. Veg Gardens, as photographed on 20th April (left) and 18th August 2024 (right).



Figure 7. Veg Plots, as photographed on 16th June 2024 and 18th August 2024 (bottom right).



Figure 8. (Left): Yellow School Strip, as photographed on 20th April 2024. (Right): Yellow School Wood, as photographed on 28th September 2024.



1.4 Survey limitations

There are two main limitations to the survey, the first of which concerns the weather presented throughout much of the survey period. April 2024 saw near average UK temperatures but it was a wet month, with UK rainfall 55% above average (Met Office, 2024a); the month was quite dull also, with sunshine hours 21% below average. Though May 2024 proved to be the warmest on record in the UK, rainfall was 16% above average and sunshine hours were 17% below average (Met Office, 2024b). June 2024 was cooler than average, but with rainfall 29% below average

and sunshine hours 4% above average (Met Office, 2024c). July 2024 was again cooler than average, but with rainfall near average and sunshine hours 11% below average (Met Office, 2024d). August 2024 saw temperatures slightly above average, and rainfall and sunshine hours near average (Met Office, 2024e). September 2024 saw below average temperatures, rainfall slightly above average, and sunshine hours below average (Met Office, 2024f).

As invertebrates are generally most active in warm, dry and sunny conditions, the largely cool and dull conditions across much of the survey period, with generally above average rainfall, will have likely reduced the abundance of invertebrates at Abbey Home Farm in 2024; at least anecdotally (from my own experience and personal communication with other entomologists), the weather conditions in 2024 significantly reduced invertebrate abundance across much of England and Wales and may have made some species difficult to detect. Fewer invertebrate species may have, therefore, been encountered during this survey as a result of this. As such, the results of this survey should be considered a mere baseline.

The second limitation concerns the challenge presented in surveying such a large and varied site as the sole surveyor. Owing to the significant number of sample areas at Abbey Home Farm and their large collective size, only limited time (frequently no more than 1-2 hours) could be spent at a sample area on any given visit. As such, invertebrate species will have undoubtedly been missed during some of the visits. To counteract this, however, sample areas were visited on more than one occasion (where possible) to ensure they were sampled more thoroughly, and to also account for the seasonal activity of some invertebrates.

Despite these limitations, the survey was conducted over multiple visits across spring, summer and autumn, meeting good practise guidelines (as recommended by [Buglife – The Invertebrate Conservation Trust](#)). Furthermore, all visits to Abbey Home Farm were undertaken in dry and generally sunny conditions (i.e. the best available weather conditions). As such, **the results presented in this report are considered to be the best that could be achieved under the circumstances.**

2.0 SAMPLING

2.1 Survey dates

The invertebrate survey at Abbey Home Farm was conducted over 6 daytime visits between the period of April and September 2024. The first visit was made on 20th April, the second on 19th May, the third on 16th June, the fourth on 14th July, the fifth on 18th August, and the sixth and final visit on 28th September 2024.

The weather conditions presented on the survey dates, along with the sample areas visited on these dates (in the order in which they were visited on those dates), are provided in **Table 1** below. The sampling techniques deployed during the survey are discussed in Section 2.2.

Table 1. Weather conditions on the survey dates in 2024.

Survey Date	Survey Times	Sample Area(s)	Weather conditions
20th April 2024	09:55 to 15:35	<ul style="list-style-type: none"> • Rat's Castle • Yellow School Strip • Yellow School Wood • Veg Gardens • Oxlays Pond 	Dry, clear and sunny. Maximum air temperature of 12°C. Gentle breeze with wind speeds of 5 to 8 miles per hour (MPH) from the north.
19th May 2024	09:50 to 16:00	<ul style="list-style-type: none"> • Round Hill Bank • Hedgerow • Long Bottom Camp and Wiggold Wood • Oxlays Pond 	Dry, clear and sunny. Maximum air temperature of 23°C. Gentle breeze with wind speeds of 10 to 12 MPH coming from an east to northeast direction.
16th June 2024	09:30 to 16:10	<ul style="list-style-type: none"> • Yellow School Wood • Veg Gardens • Veg Plots • Well Ground Pond 	Dry with sunny intervals. Maximum air temperature of 18°C. Gentle breeze with wind speeds of 9 to 11 MPH coming from the west.
14th July 2024	09:30 to 15:45	<ul style="list-style-type: none"> • Round Hill Bank • Oxlays Pond 	Dry and largely sunny. Maximum air temperature of 19°C. Light breeze with wind speeds of 5 to 7 MPH coming from a southwest direction.
18th August 2024	09:10 to 15:45	<ul style="list-style-type: none"> • Veg Plots • Well Ground Pond • Coronation Wood • Veg Gardens 	Dry, clear and sunny. Maximum air temperature of 20°C. Gentle breeze with wind speeds of 10 to 11 MPH coming from a west to northwest direction.
28th September 2024	09:00 to 15:40	<ul style="list-style-type: none"> • Long Bottom Camp • Long Bottom Camp and Wiggold Wood • Oxlays Pond • Totem Pole Wall • Yellow School Wood 	Dry with sunny intervals. Maximum air temperature of 14°C. Light breeze with wind speeds of 6 MPH coming from a west to northwest direction.

2.2 Sampling methodology

Aquatic and terrestrial invertebrates were sampled using a variety of active sampling techniques including:

- **Aerial netting** – a lightweight 40cm diameter net mounted on a meter long pole was used to catch flying insects as and when encountered.

- **Beating** – a beating tray, consisting of a white cloth sheet supported by a frame, was positioned below branches of trees and bushes which were subsequently tapped with a stick to dislodge insects within the foliage. Target species were then selectively removed using an aspirator (or pooter).
- **Hand searching** – this involved looking under stones, within and beneath dead wood, among leaf litter, etc., for invertebrates that may be feeding, resting or sheltering.
- **Pond netting** – a heavy-duty pond net with woven 1 mm mesh was swept in a figure of eight in ponds to capture aquatic invertebrates living within (e.g. water beetles) and on the surface (e.g. pond skaters) of these water bodies. The catch was subsequently transferred to a large white tray and target species either identified in the field or selectively removed.
- **Suction sampling** (i.e. vacuum sampling) – a modified leaf-blower was used to collect invertebrates from habitats that would otherwise be difficult to sample from using a sweep net (e.g. very short or very long vegetation). This method is particularly effective at catching species which do not fly readily or which live in deep vegetation. Samples were emptied into a large white tray and target species selectively removed using an aspirator.
- **Sweep netting** – a sturdy 40 cm diameter net mounted on a meter long pole was moved vigorously through long vegetation to dislodge invertebrates. Target species were then selectively removed from the sweep net using an aspirator.
- **Visual searching** – insects were observed foraging, basking, nesting, hunting, mating, etc., in their associated habitats without the need to deploy other sampling techniques (e.g. sweep netting).

2.3 Target groups

The survey aimed to target as many different invertebrate groups as possible, with particular attention paid to the following:

- **Coleoptera** → Apionidae (seed weevils), Carabidae (ground beetles), Chrysomelidae (leaf beetles), Curculionidae ('true' weevils), Dytiscidae (predaceous diving beetles) and Hydrophilidae (water beetles);
- **Diptera** → Cylindrotomidae (damselfly crane flies), Dolichopodidae (long-legged flies), Limoniidae (short-palped crane flies), Pediciidae (hairy-eyed crane flies), Sciomyzidae (snail-killing flies), Stratiomyidae (Soldierflies), Syrphidae (hoverflies), Tachinidae (tachinid flies), Tephritidae (fruit flies) and Tipulidae (long-palped crane flies);
- **Hemiptera** → Auchenorrhyncha (froghoppers, leafhoppers and planthoppers) and Heteroptera ('true bugs');
- **Hymenoptera** → Aculeata (bees, wasps, and ants); and
- **Lepidoptera** (butterflies and day-flying moths) → multiple families.

These target groups were chosen as they support species with varied life histories that could be presumed to be present in the aquatic and terrestrial environments at Abbey Home Farm; these groups also partly reflect the expertise of the surveyor (Liam Olds). Incidental records of other invertebrate groups were also recorded

when encountered, such as Araneae (spiders), Odonata (dragonflies and damselflies), and Pulmonata (slugs and snails).

Where practical, invertebrates were identified in the field using a x10 or x20 hand lens. Where this was not possible, representative specimens were collected and later identified using a x45 binocular microscope. Specimen collection was kept to a minimum to avoid any adverse effects on invertebrate populations and avoided the collection of species that could be readily identified in the field, especially those species with a restricted distribution and/or a threatened conservation status. All specimen collection followed the *Code of Conduct for Collecting Insects and Other Invertebrates* (Invertebrate Link, 2002). Samples were either stored dry and later pinned to aid identification (e.g. bees, wasps and flies), or stored in 70 to 90% isopropyl alcohol (e.g. ants, leafhoppers, planthoppers, spiders and most beetles). Invertebrate identification was to species level wherever possible. All fieldwork, and the subsequent identification of specimens, was undertaken by Liam Olds using the most appropriate and up-to-date identification keys (see Section 6.0) and confirmed using verified comparable voucher material (i.e. specimens) wherever possible.

3.0 RESULTS

3.1 Overview

A total of **681** invertebrate species across a broad range of invertebrate groups were recorded at Abbey Home Farm in 2024 (**Appendix 1; Table 2**). Coleoptera (**171** species), Diptera (**149** species) and Hemiptera (**128** species) proved to be the most speciose (species-rich) groups.

Table 2. A breakdown of the invertebrate species recorded at Abbey Home Farm in 2024 into their respective groups.

Invertebrate taxa	Number of species
Arachnida (spiders and harvestman)	52
Chilopoda (centipedes)	6
Coleoptera (beetles)	171
Diplopa (millipedes)	6
Diptera (flies)	149
Hemiptera (true bugs)	128
Hymenoptera (bees, wasps and ants)	64
Isopoda (woodlice)	6
Lepidoptera (butterflies and moths)	41
Odonata (dragonflies and damselflies)	6
Orthoptera (grasshoppers and crickets)	7
Psocoptera (barkflies)	10
Pulmonata (slugs and snails)	18
Other taxa	16
Species of 'conservation importance'	77

The number of invertebrate species recorded in a sample area varied considerably across the **12** sample areas at Abbey Home Farm (**Table 3**), with:

- **39** species at Coronation Wood (**Appendix 2**);
- **41** species at Hedgerow (**Appendix 3**);
- **148** species at Long Bottom Camp and Wiggold Wood (**Appendix 4**);
- **140** species at Oxlays Pond (**Appendix 5**);
- **54** species at Rat's Castle (**Appendix 6**);
- **133** species at Round Hill Bank (**Appendix 7**);
- **11** species at Totem Pole Wall (**Appendix 8**);
- **102** species at Veg Gardens (**Appendix 9**);
- **175** species at Veg Plots (**Appendix 10**);
- **106** species at Well Ground Pond (**Appendix 11**);
- **36** species at Yellow School Strip (**Appendix 12**); and
- **148** species at Yellow School Wood (**Appendix 13**).

Table 3. Summary of the invertebrate survey results.

	No of species recorded	No of species of 'conservation importance'	% of species of 'conservation importance'
Coronation Wood	39	1	2.6
Hedgerow	41	1	2.4
Long Bottom Camp & Wiggold Wood	148	9	6.1
Oxlays Pond	140	14	10
Rat's Castle	54	3	5.6
Round Hill Bank	133	22	16.5
Totem Pole Wall	11	0	0
Veg Gardens	102	11	10.8
Veg Plots	175	12	6.9
Well Ground Pond	106	8	7.5
Yellow School Strip	36	2	5.6
Yellow School Wood	148	14	9.5
All Areas*	681	77	11

* after accounting for duplicates and a small number of species recorded outside of the **12** sample areas.

It should be noted, however, that the number of species recorded in a sample area is not necessarily reflective of its invertebrate conservation value, and is sometimes simply reflective of the amount of survey effort an area has received. For instance, the challenge of surveying a site as large and varied as Abbey Home Farm as the sole surveyor meant that sample areas deemed likely to be of greatest invertebrate conservation value had to be prioritised for sampling; this meant that some of the **12**

sample areas – such as Coronation Wood, Hedgerow, Rat’s Castle, Totem Pole Wall and Yellow School Strip – were visited on only one, rather brief, occasion in 2024. It is no coincidence that significantly fewer invertebrate species were recorded at such sample areas in comparison to areas that were visited on more than one occasion (all of the remaining sample areas).

3.2 Species of conservation importance

Of the **681** invertebrate species recorded during the survey in 2024, at least **77** (~11%) are considered to be of ‘conservation importance’*. This includes:

- 3 x **Section 41** species;
- 2 x **Endangered (EN or RDB 1)** species;
- 1 x **Vulnerable (RDB 2)** species;
- 6 x **Nationally Rare (NR or RDB 3)** species;
- 25 x **Nationally Scarce (Na, Nb, Notable, NS or pNS)** species;
- 35 x **Nationally Local** species; and
- 5 x **Other** species.

* Please note that some invertebrate groups (e.g. true bugs, and bees, wasps and ants) have not received periodic review of their conservation status in Britain and, as such, the corresponding conservation status used in this report may, in some instances, not reflect the current situation for that species. For instance, the mirid bug *Lygus pratensis* is categorised as Red Data Book 3 (RDB 3) – now referred to as Nationally Rare – in Kirby (1992) but it has increased in abundance and expanded its range since the 1990s, and is now a widespread species throughout much of England. This suggests that its status requires review and downgrading, as it is no longer considered rare in Britain. In the absence of an up-to-date status review for some invertebrate groups, their current conservation status (even if outdated) has remained unchanged in this report but a comment (based upon professional judgment) is included in the species’ corresponding profile if its status is considered incorrect.

The **77** species of ‘conservation importance’ are summarised in **Table 4** and discussed in further detail in the sections below, which separates the species according their conservation status. The conservation statuses used are explained in **Appendix 1**.

Table 4. List of species of ‘conservation importance’ recorded at Abbey Home Farm in 2024 (ordered alphabetically by Order, Family and then Species), including their Common Name and conservation status.

Species	Common Name*	Family	Order	Conservation status
<i>Cyclosa conica</i>	an orb spider	Araneidae	Araneae	Local
<i>Nigma puella</i>	Bleeding Heart Spider	Dictynidae	Araneae	NS
<i>Piratula latitans</i>	a pirate wolf spider	Lycosidae	Araneae	Local
<i>Tetragnatha nigrita</i>	a long-jawed orb-weaver spider	Tetragnathidae	Araneae	Local
<i>Diaea dorsata</i>	Green Crab-spider	Thomisidae	Araneae	Local
<i>Diplapion confluens/stolidum agg.</i>	a seed weevil	Apionidae	Coleoptera	Local
<i>Protapion difforme</i>	a seed weevil	Apionidae	Coleoptera	Nb
<i>Protapion filirostre</i>	a seed weevil	Apionidae	Coleoptera	Nb
<i>Rhopalapion longirostre</i>	Hollyhock Weevil	Apionidae	Coleoptera	Local; New to VC
<i>Malthinus balteatus</i>	a soldier beetle	Cantharidae	Coleoptera	Local
<i>Bembidion octomaculatum</i>	a ground beetle	Carabidae	Coleoptera	NS; New to VC
<i>Cassida denticollis</i>	a tortoise beetle	Chrysomelidae	Coleoptera	EN; NR; New to VC
<i>Cassida nebulosa</i>	a tortoise beetle	Chrysomelidae	Coleoptera	NS
<i>Cassida nobilis</i>	a tortoise beetle	Chrysomelidae	Coleoptera	NS
<i>Chaetocnema picipes</i>	a flea beetle	Chrysomelidae	Coleoptera	Local
<i>Chrysolina oricalcia</i>	Cow Parsely Leaf Beetle	Chrysomelidae	Coleoptera	Local
<i>Donacia thalassina</i>	a reed beetle	Chrysomelidae	Coleoptera	NS
<i>Prasocuris glabra</i>	a leaf beetle	Chrysomelidae	Coleoptera	Local
<i>Cionus nigritarsis</i>	a weevil	Curculionidae	Coleoptera	Na
<i>Hypera meles</i>	a weevil	Curculionidae	Coleoptera	Nb
<i>Stenocarus ruficornis</i>	a weevil	Curculionidae	Coleoptera	Nb
<i>Tychius junceus</i>	a weevil	Curculionidae	Coleoptera	Local
<i>Berosus affinis</i>	a water scavenger beetle	Hydrophilidae	Coleoptera	Local
<i>Sinodendron cylindricum</i>	Rhinoceros Beetle	Lucanidae	Coleoptera	Local
<i>Anthocomus fasciatus</i>	a soft-winged flower beetle	Malachiidae	Coleoptera	NS
<i>Mordellistena pseudoparvula</i>	a tumbling flower beetle	Mordellidae	Coleoptera	NR

<i>Mordellistena pumila</i>	a tumbling flower beetle	Mordellidae	Coleoptera	Local
<i>Oedemera femoralis</i>	a false blister beetle	Oedemeridae	Coleoptera	NS
<i>Anaspis pulicaria</i>	a false flower beetle	Scraptiidae	Coleoptera	Local
<i>Villa cingulata</i>	Downland Villa	Bombyliidae	Diptera	NR
<i>Bellardia bayeri</i>	Bayer's Emerald-bottle	Calliphoridae	Diptera	Other; New to VC
<i>Myopa pellucida</i>	Pale-palped Spring Bee-grabber	Conopidae	Diptera	RDB 3
<i>Dolichopus arbustorum</i>	a long-legged fly	Dolichopodidae	Diptera	NS
<i>Dolichopus virgultorum</i>	a long-legged fly	Dolichopodidae	Diptera	NS; New to VC
<i>Sarcophaga hirticrus</i>	Coastal Flesh Fly	Sarcophagidae	Diptera	Local; New to VC
<i>Chorisops nagatomii</i>	Bright Four-spined Legionnaire	Stratiomyidae	Diptera	Local
<i>Odontomyia tigrina</i>	Black Colonel	Stratiomyidae	Diptera	Local
<i>Brachyopa scutellaris</i>	Orange-shouldered Sap Hoverfly	Syrphidae	Diptera	Local
<i>Eumerus ornatus</i>	Woodland Roundface	Syrphidae	Diptera	Local
<i>Sphaerophoria taeniata</i>	Broad-banded Globetail	Syrphidae	Diptera	Local
<i>Campiglossa malaris</i>	a fruit fly	Tephritidae	Diptera	RDB 1
<i>Chaetorellia loricata</i>	a fruit fly	Tephritidae	Diptera	RDB 2; New to VC
<i>Tephritis formosa</i>	a fruit fly	Tephritidae	Diptera	Local
<i>Urophora solstitialis</i>	a fruit fly	Tephritidae	Diptera	RDB 3
<i>Geophilus electricus</i>	a centipede	Geophilidae	Geophilomorpha	Local; New to VC
<i>Geophilus osquidatum</i>	a centipede	Geophilidae	Geophilomorpha	NS; New to VC
<i>Eupteryx atropunctata</i>	a leafhopper	Cicadellidae	Hemiptera	Local; New to VC
<i>Lamprotettix nitidulus</i>	a leafhopper	Cicadellidae	Hemiptera	Local
<i>Hesperocorixa moesta</i>	a water boatman	Corixidae	Hemiptera	Local; New to VC
<i>Euconomelus lepidus</i>	a planthopper	Delphacidae	Hemiptera	Local
<i>Megamelodes quadrimaculatus sensu stricto</i>	a planthopper	Delphacidae	Hemiptera	Local; New to VC
<i>Peritrechus lundii</i>	a ground bug	Lygaeidae	Hemiptera	Local; New to VC
<i>Calocoris (Calocoris) alpestris</i>	a mirid bug	Miridae	Hemiptera	Local
<i>Lygus pratensis</i>	a mirid bug	Miridae	Hemiptera	RDB 3

<i>Orthocephalus saltator</i>	a mirid bug	Miridae	Hemiptera	Local
<i>Miridius quadrivirgatus</i>	a mirid bug	Miridae	Hemiptera	Local
<i>Rhopalus (Rhopalus) parumpunctatus</i>	a scentless plant bug	Rhopalidae	Hemiptera	NS
<i>Saldula pallipes</i>	a shore bug	Saldidae	Hemiptera	NS
<i>Catoplatus fabricii</i>	a lace bug	Tingidae	Hemiptera	Nb
<i>Andrena labiata</i>	Red-girdled Mining Bee	Andrenidae	Hymenoptera	Na
<i>Andrena nitidiuscula</i>	Carrot Mining Bee	Andrenidae	Hymenoptera	RDB 3; New to VC
<i>Nomada striata</i>	Blunt-jawed Nomad Bee	Apidae	Hymenoptera	Local
<i>Callaspidia defonscolombeii</i>	a figitid wasp	Figitidae	Hymenoptera	Other; New to VC
<i>Lasius brunneus</i>	Brown Tree Ant	Formicidae	Hymenoptera	Na
<i>Myrmica sabuleti</i>	a red ant	Formicidae	Hymenoptera	Local
<i>Temnothorax nylanderi</i>	an acorn ant	Formicidae	Hymenoptera	Local
<i>Lasioglossum malachurum</i>	Sharp-collared Furrow Bee	Halictidae	Hymenoptera	Nb
<i>Lasioglossum pauxillum</i>	Lobe-spurred Furrow Bee	Halictidae	Hymenoptera	Na
<i>Osmia bicolor</i>	Red-tailed Mason Bee	Megachilidae	Hymenoptera	Nb
<i>Priocnemis agilis</i>	Red-legged Spotwing	Pompilidae	Hymenoptera	Nb; New to VC
<i>Tiphia minuta</i>	Small Tiphia	Tiphiidae	Hymenoptera	Nb
<i>Erynnis tages</i>	Dingy Skipper	Hesperiidae	Lepidoptera	Section 41 Priority Species
<i>Cupido minimus</i>	Small Blue	Lycaenidae	Lepidoptera	Section 41 Priority Species; NT
<i>Coenonympha pamphilus</i>	Small Heath	Nymphalidae	Lepidoptera	Section 41 Priority Species; VU
<i>Bertkauia lucifuga</i>	a barkfly	Epipsocidae	Psocodea	Other; New to VC
<i>Mesopsocus laticeps</i>	a barkfly	Mesopsocidae	Psocodea	Other; New to VC
<i>Trichopsocus brincki</i>	a barkfly	Trichopsocidae	Psocoptera	Other

* Please note that Common Names follow those used on the NBN Atlas or in Steven Falk's Flickr albums of British insects. Some of these names are infrequently used and/or have only recently been created and are sometimes not widely accepted.

3.2.1 Section 41 species

Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006 includes a statutory list of species deemed to be of 'principal importance for the conservation of biodiversity in England'.

Three species recorded during the survey are listed under Section 41 of the NERC Act 2006. These species are discussed below (ordered alphabetically by Order, Family and then Species).

***Erynnis tages* (Lepidoptera: Hesperiidae), Dingy Skipper, Section 41**

Dingy Skipper (**Figure 9**) can be found in a variety of habitats including dunes, coastal cliffs, heathland and woodland glades, however the largest colonies occur on sunny, south-facing downland slopes. The main larval foodplant is Common Bird's-foot-trefoil (*Lotus corniculatus*), but Greater Bird's-foot-trefoil (*L. pedunculatus*) and Horseshoe Vetch (*Hippocrepis comosa*) are also used. It requires its larval foodplants close to areas of bare ground, which provide warm conditions for egg development, hence the species has a strong affiliation with brownfield sites and disturbed areas of downland.

Figure 9. Dingy Skipper (*Erynnis tages*). Please note this is an archive photograph and is not an individual seen during this survey.



Though Dingy Skipper has shown signs of recovery in the past decade and is categorised as 'Least Concern' in the recently revised Butterfly Red List for Great Britain (Fox et al. 2022), it is included in Section 41 of the NERC Act 2006 owing to

decades of decline prior to this; nevertheless, it remains a rather uncommon and localised butterfly in many areas.

During the survey, adults were encountered at several locations on 19th May 2024 including: **Oxlays Pond**, where they were seen visiting the edges of the pond; **Round Hill Bank**, where they were seen visiting muddy puddles around a cattle drinking trough (Figure 10) at OS grid reference SP0488603814; **Hedgerow** (i.e. the hedgerow between Lower Ground and Round Hill/Round Hill Bank) around OS grid reference SP048803820, which is just the other side of the fence from the forementioned cattle drinking trough.

Figure 10. Wet mud and puddles around a cattle drinking trough along the west fence line of Round Hill Bank, as photographed on 19th May 2024.

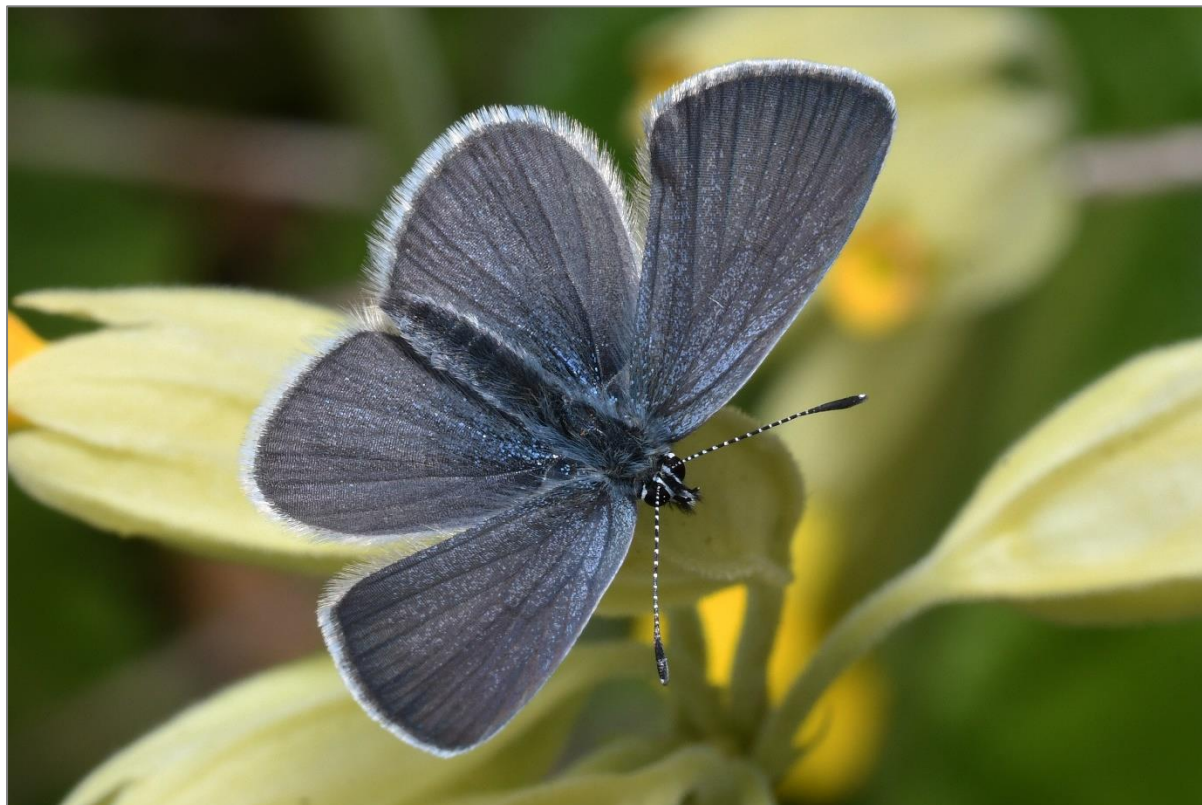


***Cupido minimus* (Lepidoptera: Lycaenidae), Small Blue, NT, Section 41**

Although it is widespread across Britain, Small Blue (**Figure 11**) is rather rare and localised (Butterfly Conservation, 2025a). It can be found on warm, sheltered grassland supporting Kidney Vetch (*Anthyllis vulneraria*), its sole larval foodplant. It is known to use a variety of habitats including chalk and limestone grassland, coastal grasslands, sand dunes, and brownfield sites. Although some large populations are known, it typically forms small, discrete colonies and is normally highly sedentary, with adults rarely moving more than 40 metres. Adults usually fly from mid-May to late June, with a smaller second brood in late July and August. It is categorised as

'Near Threatened' in the recently revised Butterfly Red List for Great Britain (Fox et al. 2022).

Figure 11. Small Blue (*Cupido minimus*). Please note this is an archive photograph and is not an individual seen during this survey.



During the survey, numerous adults were encountered at **Oxlays Pond** on 19th May 2024 where they were observed visiting the edges of the pond, and at **Round Hill Bank** (on the same date) where they were observed visiting muddy puddles around a cattle drinking trough (**Figure 10**). While no Kidney Vetch was noted around Oxlays Pond, it must be present in the vicinity. In contrast, **Kidney Vetch was found be abundant on the west facing slope of Round Hill Bank and its continued presence here is essential for the conservation of Small Blue.**

***Coenonympha pamphilus* (Lepidoptera: Nymphalidae), Small Heath, VU, Section 41**

Small Heath (**Figure 12**) has experienced dramatic declines over the past several decades, which has included a 37% decrease in distribution between 2010 and 2019, and it is categorised as 'Vulnerable' in the recently revised Butterfly Red List for Great Britain (Fox et al. 2022). It can be found in a variety of habitats, though it is typically found in open areas, such as grassland and heathland; adults prefer a short grass sward (Butterfly Conservation, 2025b). The main larval foodplants are bent grasses (*Agrostis* spp.), fescues (*Festuca* spp.) and meadow grasses (*Poa* spp.). Adults nectar on a variety of flowers including bramble (*Rubus* spp.), buttercups (*Ranunculus* spp.), Devil's-bit Scabious (*Succisa pratensis*), Tormetil (*Potentilla erecta* spp.), and Yarrow (*Achillea millefolium*).

Figure 12. Small Heath (*Coenonympha pamphilus*). Please note this is an archive photograph and is not an individual seen during this survey.



During the survey, a single adult was encountered at **Round Hill Bank** at OS grid reference SP0491603783 on 14th July 2024. It is anticipated that more individuals are present at Round Hill Bank than the single individual that was seen.

3.2.2 Endangered species

Two species recorded during the survey are considered Endangered (EN or RDB 1). These species are discussed below (ordered alphabetically by Order, Family and then Species).

***Cassida denticollis* (Coleoptera: Chrysomelidae), a tortoise beetle, EN, NR, New to VC**

The tortoise beetle *Cassida denticollis* (**Figure 13**) is a rare and very sparsely scattered species which has declined to a small number of sites in southern England (Hubble, 2014). Adults and larvae feed on Yarrow, and the beetle has been recorded on roadside verges, in water meadows and along river margins. It is currently known from only four hectads (an hectad being an area 10 km x 10 km square) since 1990, which equates to four different locations. As such, it is categorised as Endangered (EN) and Nationally Rare (NR) in Hubble (2014).

Figure 13. The tortoise beetle *Cassida denticollis*.



During the survey, a single adult was encountered in the **Veg Gardens** on 16th June 2024 by sweeping ground vegetation. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).** Though the exact location at which it was found within the Veg Gardens was not recorded, it is believed to have been within the grassland alongside the orchard trees around OS grid reference SP04370369 (as shown in **Figure 6**).

The discovery of the tortoise beetle *Cassida denticollis* at Abbey Home Farm is considered significant given its national rarity and endangered status. In an effort to conserve this species, **Yarrow should be encouraged to grow within the Veg Gardens, and elsewhere at Abbey Home Farm, wherever possible.**

***Campiglossa malaris* (Diptera: Tephritidae), a fruit fly, RDB 1**

The fruit fly *Campiglossa malaris* was categorised as Endangered (RDB 1) in Falk (1991a), but it has since become much more widespread and is now found widely across England and in South Wales. As such, its Endangered status is now much outdated and requires review and downgrading. It remains, however, a very local species in southeast and southern England on ragworts (*Senecio* spp.) (Clements, 2020), where the larvae probably develop within the flower heads.

During the survey, an adult male was encountered at **Oxlays Pond** on 14th July 2024 by sweeping vegetation within the area around the pond.

3.2.3 Vulnerable species

One species recorded during the survey is considered Vulnerable (RDB 2).

***Chaetorellia loricata* (Diptera: Tephritidae), a fruit fly, RDB 2, New to VC**

The fruit fly *Chaetorellia loricata* (**Figure 14**) was categorised as Vulnerable (RDB 2) in Falk (1991a) and though its status has not been reviewed for over 30 years, it appears to have remained a rather rare species in Britain with just 27 records visible on the [NBN Atlas](#) at the time of writing. It is considered by Clements (2020) to be a very rare species in southeast and southern England on Greater Knapweed (*Centaurea scabiosa*), with the larvae developing in the flower heads.

Figure 14. The fruit fly *Chaetorellia loricata*.



During the survey, an adult male was encountered at **Round Hill Bank** on 14th July 2024 by sweeping vegetation along the west facing slope (as shown in the left image in **Figure 4**) around OS grid reference SP04910382; a number of Greater Knapweed plants were seen within the grass sward during the visit on 14th July 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

The discovery of the fruit fly *Chaetorellia loricata* at Abbey Home Farm is considered significant given its national rarity and vulnerable status; **it is deemed important, therefore, to encourage Greater Knapweed at Round Hill Bank (and elsewhere at Abbey Home Farm wherever possible) in an effort to conserve this species.**

3.2.4 Nationally Rare species

Six species recorded during the survey are considered ‘Nationally Rare’ (NR or RDB 3). These species are discussed below (ordered alphabetically by Order, Family and then Species).

***Mordellistena pseudoparvula* (Coleoptera: Mordellidae), a tumbling flower beetle, NR, New to VC**

The tumbling flower beetle *Mordellistena pseudoparvula* is a recent colonist that was first detected in Britain in 1983 and is found on thistles (*Cirsium* spp.), with the larvae developing in the stem (Duff, 2020). It is categorised as Nationally Rare (NR) in Alexander, Dodd & Denton (2014). Although there are only a few widely scattered records, it is suggested that the species may actually be quite widely distributed in East Anglia and southeast England.

During the survey, an adult was encountered at **Round Hill Bank** on 14th July 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Myopa pellucida* (Diptera: Conopidae), Pale-palped Spring Bee-grabber, RDB 3**

Pale-palped Spring Bee-grabber (**Figure 15**) was once considered a rare species but is becoming one of the most frequent *Myopa* bee-grabber species in southern England (Falk, 2025a). Like other *Myopa* species, its larvae develop inside the abdomen of bees (typically over a period of 10-12 days), and Ashy Mining Bee (*Andrena cineraria*) is considered an important host.

Pale-palped Spring Bee-grabber has been recorded using coastal scrub, blossom-rich farmland, woodland rides and clearings, and sometimes urban greenspace and gardens. It can be found in spring on blossom such as willows, Blackthorn (*Prunus spinosa*), Cherry Laurel (*P. laurocerasus*), Crab Apple (*Malus sylvestris*) and Hawthorn (*Crataegus monogyna*); also on flowers such as dandelions, forget-me-nots (*Myosotis* spp.), Wood Spurge (*Euphorbia amygdaloides*), Bluebell (*Hyacinthoides non-scripta*) and Garlic Mustard (*Alliaria petiolata*).

During the survey, an adult male was encountered at **Veg Gardens** on 20th April 2024 close to the blossoming orchard trees; Ashy Mining Bee (a known host species) was present within the Veg Gardens at the time, along with several other mining bee species which could potentially be used as hosts.

***Villa cingulata* (Diptera: Bombyliidae), Downland Villa, NR**

Downland Villa (**Figure 16**) is a scarce southern species of bee-fly which is typically associated with chalk and limestone grassland (especially south-facing, scrubby grassland) and large clearings in calcareous woods (Falk, 2025b). The biology is unknown but caterpillars of a noctuid moth associated with calcareous grassland may prove to be its host. Adults fly from late June until late August and visit flowers of umbellifers such as Hogweed (*Heracleum sphondylium*) and Wild Parsnip (*Pastinaca sativa*). It is considered Nationally Rare (NR) by Drake (2017), though

Figure 15. Pale-palped Spring Bee-grabber (*Myopa pellucida*).



Figure 16. Downland Villa (*Villa cingulata*). Please note this is an archive photograph and is not an individual seen during this survey.



there is increasing evidence that its population is undergoing a significant expansion in range and increasing in abundance, though it previously had a much wider range and populations may well fluctuate as it has in the past.

During the survey, two adult females were encountered at **Round Hill Bank** on 14th July 2024; both individuals were encountered close to the hedgerow along the southern perimeter of the field (at OS grid reference SP0491603783 and SP0507203691) where they were observed foraging on umbellifer flowers.

***Urophora solstitialis* (Diptera: Tephritidae), a fruit fly, RDB 3**

The fruit fly *Urophora solstitialis* is categorised as Nationally Rare (RDB 3) in Falk (1991a) but appears to have been recorded more widely since its last status review over 30 years ago, suggesting this conservation status requires downgrading; it is nevertheless a rather uncommon and scarce species. The larvae form galls within Musk Thistle (*Carduus nutans*) and the fly can be found almost anywhere that Musk Thistle is found (NatureSpot, 2025a).

During the survey, an adult female was encountered at **Veg Plots** on 18th August 2024; it is unclear where this individual was encountered within the Veg Plots or where its host plant (Musk Thistle) is located.

***Lygus pratensis* (Hemiptera: Miridae), a mirid bug, RDB 3**

The mirid bug *Lygus pratensis* was a previously rare species that was mostly confined to heaths in southern Britain, but it has undergone a rapid range expansion in recent decades and is now widespread and patchily distributed throughout much of Britain (NatureSpot, 2025b). As such, its RDB 3 status requires downgrading.

During the survey, a female was encountered at **Veg Gardens** on 18th August 2024 by sweeping ground vegetation, and a male was encountered at **Oxlays Pond** on 28th September 2024 by sweeping vegetation in the area around the pond.

***Andrena nitidiuscula* (Hymenoptera: Andrenidae), Carrot Mining Bee, RDB 3, New to VC**

Carrot Mining Bee (**Figure 17**) is a scarce bee of southern England and South Wales that collects pollen exclusively from umbellifers (Falk & Lewington, 2015), showing a particularly preference for Wild Carrot (*Daucus carota*). Categorised as Nationally Rare (RDB 3) in Falk (1991b), it can be found in a variety of umbellifer-rich habitats including chalk downland and soft-rock cliffs (Falk & Lewington, 2015). Adults fly from June to September, with nesting occurring in sparsely vegetated ground, possibly with a preference for dry, clay-rich soils.

During the survey, a single adult female was encountered at **Veg Gardens** on 18th August 2024 visiting the flowers of the annual plant *Ammi visnaga* within the formal garden (**Figure 17**). **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

Figure 17. (Above): Carrot Mining Bee (*Andrena nitidiuscula*). Please note that this is an archive photograph and not the individual seen during this survey. (Below): a patch of *Ammi visnaga* within the formal garden from which the bee was recorded.



3.2.5 Nationally Scarce species

A total of **25** species recorded during the survey are considered 'Nationally Scarce'. This includes Notable, Notable A (Na), Notable B (Nb), Nationally Scarce (NS), and provisionally Nationally Scarce (pNS) species. These species are discussed below (ordered alphabetically by Order, Family and then Species).

***Nigma puella* (Araneae: Dictynidae), a mesh-webbed spider, NS**

The mesh-webbed spider *Nigma puella* occurs in the foliage of bushes and low growing broadleaved trees in hedgerows and gardens, but also sometimes in scrub and open woodland, where it spins a small web on the surface of leaves (Spider & Harvestman Recording Scheme, 2025a). Most records are between May and July.

During the survey, an adult was encountered at **Long Bottom Camp** on 28th September by sweeping the foliage of broadleaved trees at the edge of Wiggold Wood at OS grid reference SP0442605246.

***Protapion difforme* (Coleoptera: Apionidae), a seed weevil, Nb**

The seed weevil *Protapion difforme* is a local and frequent species in central and southern England and South Wales in damp grassland (Duff, 2016). Its biology is unknown but in continental Europe, it is associated with various clovers (*Trifolium* spp.).

During the survey, an adult female was encountered at **Round Hill Bank** on 14th July 2024.

***Protapion filirostre* (Coleoptera: Apionidae), a seed weevil, Nb**

The seed weevil *Protapion filirostre* is a localised species in central and southern England, and very local species in Wales, that is found in dry grassland and brownfield sites, often on calcareous soils (Duff, 2016). In continental Europe, it is associated with Lucerne (*Medicago sativa*) and medicks (*Medicago* spp.), with the larvae frequenting the flower heads.

During the survey, a female was encountered at **Round Hill Bank** on 14th July 2024.

***Bembidion octomaculatum* (Coleoptera: Carabidae), a ground beetle, NS, New to VC**

The ground beetle *Bembidion octomaculatum* (**Figure 18**) is an extremely local species in southern England that is found on bare mud near fresh water (Luff, 2007).

During the survey, two adults were encountered at **Oxylays Pond**, one on each of the visits of 15th May and 14th July 2024; on both occasions, adults were encountered at the edges of the pond (within the transition zone) beneath debris. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

Figure 18. The ground beetle *Bembidion octomaculatum*.



***Cassida nebulosa* (Coleoptera: Chrysomelidae), a tortoise beetle, NS**

The tortoise beetle *Cassida nebulosa* (**Figure 19**) is a scarce and localised species in south and east England (Duff, 2016). It is usually found feeding on the leaves of various species of Amaranthaceae – including oraches (*Atriplex* spp), Beet (*Beta vulgaris*) and goosefoots (*Chenopodium* spp.) – on sandy soils; it is also sometimes found on knotgrasses (*Polygonum* spp.).

During the survey, an adult was encountered at **Veg Plots** on 18th August 2024 by sweeping and suction-sampling at the edges of one of the vegetable plots (as shown in **Figure 19**) at OS grid reference SP0431503565.

***Cassida nobilis* (Coleoptera: Chrysomelidae), a tortoise beetle, NS**

The tortoise beetle *Cassida nobilis* is a local species in central and southern England and Wales, and very local species elsewhere, that is usually found on Fat-hen (*Chenopodium album*), glassworts (*Salicornia* spp.), oraches, and Corn Spurrey (*Spergula arvensis*), often on sandy or chalky soils (Duff, 2016).

During the survey, an adult was encountered at **Veg Plots** on 18th August 2024 by sweeping and suction-sampling at the edges of one of the vegetable plots (as shown in **Figure 19**) at OS grid reference SP0431503565.

Figure 19. (Above): The tortoise beetle *Cassida nebulosa*. (Below): the location at which the tortoise beetle was found in the Veg Plots on 18th August 2024.



***Donacia thalassina* (Coleoptera: Chrysomelidae), a reed beetle, NS**

The reed beetle *Donacia thalassina* is a local species in England (Duff, 2016) that is associated with various freshwater plants such as species of *Typha*, *Schoenoplectus*, *Eleocharis*, *Carex*, *Bolboschoenus*, *Scirpus* and *Iris* (Hackson, 2023).

During the survey, an adult male was encountered at **Oxlays Pond** on 19th May 2024 by sweeping freshwater plants around the edges of the pond.

***Cionus nigratarsis* (Coleoptera: Curculionidae), a weevil, Na**

The weevil *Cionus nigratarsis* (**Figure 20**) is found on mulleins (*Verbascum* spp.), and is very local in central and southeast England and South Wales (Duff, 2016).

Figure 20. The weevil *Cionus nigratarsis*.



During the survey, an adult male was encountered at **Veg Gardens** on 16th June 2024. It seems likely that it was found within the formal garden.

***Hypera meles* (Coleoptera: Curculionidae), a weevil, Nb**

The weevil *Hypera meles* is a local species in England that is apparently increasing (Duff, 2016). It is found on clovers (*Trifolium* spp.), usually Red Clover (*T. pratense*), in grasslands.

During the survey, an adult was encountered at **Round Hill Bank** on 19th May 2024.

***Stenocarus ruficornis* (Coleoptera: Curculionidae), a weevil, Nb**

The weevil *Stenocarus ruficornis* is a local species in England, and very local elsewhere, that is found on Common Poppy (*Papaver rhoeas*) and possibly other *Papaver* species (Duff, 2016).

During the survey, an adult was encountered at **Round Hill Bank** on 14th July 2024.

***Anthocomus fasciatus* (Coleoptera: Malachiidae), a soft-winged flower beetle, NS**

The soft-winged flower beetle *Anthocomus fasciatus* (**Figure 21**) is a local species in central and southeast England, and very local species in southwest England and Wales, that is found on vegetation in grassy places (Duff, 2016). The adults are predatory on small insects, while the larvae are said to be predatory on the larvae of wood-boring beetles under bark (NatureSpot, 2025c).

Figure 21. The soft-winged flower beetle *Anthocomus fasciatus*.



During the survey, an adult was encountered at **Veg Gardens** on 16th June 2024.

***Oedemera femoralis* (Coleoptera: Oedemeridae), a false blister beetle, NS**

The false blister beetle *Oedemera femoralis* is found on flowers – often at ivy (*Hedera* spp.) or willow (*Salix* spp.) blossom – in wooded areas and is local throughout much of southern England and Wales (Duff, 2016).

During the survey, an adult was encountered at **Yellow School Wood** on 29th September 2024 by sweeping the foliage of an Ash (*Fraxinus excelsior*) tree.

***Dolichopus arbustorum* (Diptera: Dolichopodidae), a long-legged fly, NS, New to VC**

The long-legged fly *Dolichopus arbustorum* (**Figure 22**) has a historically sparse distribution from the southern English coast (Kent to Dorset) northward to a line from the Humber to the Mersey, but with no records for the East Midlands or East Anglia (Drake, 2018). There is a single old record for Wales (Glamorganshire). The distribution appears to have contracted southwards since 1990, with frequent populations only in Kent and sparse records westwards to Worcestershire. The occupied habitats have little in common, and include wet and dry woodlands possibly with streams, but mainly open habitats such as wet or dry grasslands, including chalk grassland, reedbeds, and tall vegetation at still-water margins. It has been reared from a rotting oak stump.

Figure 22. The long-legged fly *Dolichopus arbustorum*.



During the survey, an adult female was encountered at **Yellow School Wood** on 16th June, with a further adult female encountered at **Round Hill Bank** on 14th July 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Dolichopus virgultorum* (Diptera: Dolichopodidae), a long-legged fly, NS, New to VC**

The long-legged fly *Dolichopus virgultorum* has a southern distribution in Britain that includes southern England and South Wales, suggesting it is at the northern edge of its range but it may spread northwards with the warming climate (Drake, 2018). It is likely to be associated mainly with damp (but not saturated) ground or water margins in broadleaved woodland and scrub rather than more open habitats, but records include grassland, acid mire and brackish lagoon.

During the survey, an adult male and female were encountered at **Well Ground Pond** on 16th June and 18th August 2024 respectively. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Geophilus osquidatum* (Geophilomorpha: Geophilidae), a centipede, NS, New to VC**

The centipede *Geophilus osquidatum* is a scarce species which can be found in both coastal and inland habitats – including woodland, churchyards and gardens – where it can be found under stones and dead wood (British Myriapod & Isopod Group, 2025b). It is most abundant in south-west Ireland and south-west Britain, but there are scattered records elsewhere.

During the survey, an adult was encountered at **Yellow School Wood** on 16th June 2024 beneath the bark of standing dead conifer tree (**Figure 23**) at OS grid reference SP0446503563. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Rhopalus parumpunctatus* (Hemiptera: Rhopalidae), a scentless plant bug, NS**

The scentless plant bug *Rhopalus parumpunctatus* is a localised species of southern England and the coast of Wales (Falk, 2025c). It is found in dry sandy habitats such as coastal dunes and sandy heathland, where it can be associated with various plants including mouse-ears (*Cerastium* spp.) and St John's-worts (*Hypericum* spp.).

During the survey, an adult male was encountered at **Veg Plots** on 18th August 2024. **This appears to be the second recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33)**, with the other record from Gloucestershire Wildlife Trust's Snows Farm Nature Reserve, near Stroud.

***Saldula pallipes* (Hemiptera: Saldidae), a shore bug, NS, New to VC**

The shore bug *Saldula pallipes* is widespread across Britain – at least as far north as southern Scotland – and is found by inland pools and in flooded gravel pits (British Bugs, 2025a).

Figure 23. A standing dead conifer tree at Yellow School Wood which was found to support the centipede *Geophilus osquidatum* beneath its loose bark, as photographed on 16th June 2024.



During the survey, an adult male was encountered at **Oxlays Pond** on 14th July 2024 at the edge of the pond. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Catoplatus fabricii* (Hemiptera: Tingidae), a lace bug, Nb**

The lace bug *Catoplatus fabricii* is a scarce species that is mainly confined to southern England and South Wales, and is associated with Ox-eye Daisy (*Leucanthemum vulgare*) growing in dry, sunny situations, frequently on calcareous soils (British Bugs, 2025b). Adults hibernate in moss close to the foodplant.

During the survey, an adult was encountered at **Round Hill Bank** on 14th July 2024.

***Andrena labiata* (Hymenoptera: Andrenidae), Red-girdled Mining Bee, Na**

Red-girdled Mining Bee is a widespread and rather scarce species in southern Britain but is increasing in some areas such as the Midlands (Falk, 2025d). It occurs in a variety of flowery habitats including unimproved grasslands, assorted coastal habitats, brownfield sites, gardens and the flowery parts of public parks. Adults mostly fly in May and June, and visit various flowers but show a particular fondness for Germander Speedwell (*Veronica chamaedrys*), Daisy (*Bellis perennis*), dandelions, and forget-me-nots (*Myosotis* spp.). Nesting occurs in short or sparse vegetation on a range of soils, sometimes in large aggregations (Falk & Lewington, 2015).

During the survey, an adult female was encountered at **Veg Gardens** on 20th April 2024 within the formal garden (as shown in the right image in **Figure 6**).

***Lasius brunneus* (Hymenoptera: Formicidae), Brown Tree Ant, Na**

Brown Tree Ant (**Figure 24**) is a locally common species that is found in southeast England, the Wye valley, East Anglia and parts of Wales (Hoy & Fox, 2024). It nests in trees and seems to prefer large, old trees with some damaged parts – especially living oak (*Quercus* spp.) trees – but is occasionally found in dead wood and even in the timber of buildings. Most activity occurs in bark crevices or tunnels under the bark where the ants tend large tree aphids (such as those of the genus *Stomaphis*) and feed on their honeydew excreta, which forms the majority of their diet. Though previously considered scarce, its distribution has increased markedly in recent years and its Notable A (Na) status – now known as Nationally Scarce – requires review and downgrading.

During the survey, workers were encountered at **Wiggold Wood** on 28th September 2024 by hand searching among dead wood at the base of a standing dead tree (**Figure 25**) at OS grid reference SP0437805340, and at **Yellow School Wood** (on the same date) by also hand searching among dead wood at the base of a standing dead tree (**Figure 25**).

Figure 24. Brown Tree Ant (*Lasius brunneus*) worker.



Figure 25. Standing dead trees at Wiggold Wood (left) and Yellow School Wood (right) found to support Brown Tree Ant (*Lasius brunneus*) workers on 28th September 2024.



***Lasioglossum malachurum* (Hymenoptera: Halictidae), Sharp-collared Furrow Bee, Nb**

Sharp-collared Furrow Bee is a widely distributed species in southern Britain. Once considered scarce, it has experienced a dramatic increase in abundance and distribution in recent decades and is now locally common across much of southern England north to the Midlands (Falk, 2025e). As such, it is no longer worthy of the Notable B (Nb) status given in Falk (1991b) and its conservation status should be downgraded.

It occurs in a variety of habitats, especially where dry clay-rich soils are present, and will visit a wide variety of flowering plant species (Falk, 2025e). Nesting occurs along well-trodden paths and tracks and south-facing slopes that are sparsely vegetated or short-cropped (Falk & Lewington, 2015). The flight period extends from March to October.

During the survey, three adult males and one female were encountered at **Veg Plots** on 18th August 2024.

***Lasioglossum pauxillum* (Hymenoptera: Halictidae), Lobe-spurred Furrow Bee, Na**

Lobe-spurred Furrow Bee was formerly a scarce species of southern England but it has undergone a substantial range increase in recent decades and can now be found over much of England as far north as the Midlands (Falk, 2025f). It is categorised as Notable A (Na) in Falk (1991b) but owing to its recent range expansion, it is no longer worthy of this conservation status, which should be downgraded.

It occurs in a wide range of dry habitats but appears to especially favour calcareous grassland and brownfield sites (Falk, 2025f). Adults fly from April to October and visit plants of various families including buttercups, umbellifers, and a variety of composites; nesting occurs in bare or sparsely vegetated light soils (Falk & Lewington, 2015).

During the survey, adults were encountered at several locations across Abbey Home Farm including: a female at **Round Hill Bank** on 19th May and 14th July 2024 respectively; a male at **Oxlays Pond** on 28th September 2024; and a male at **Veg Gardens** on 18th August 2024.

***Osmia bicolor* (Hymenoptera: Megachilidae), Red-tailed Mason Bee, Nb**

Red-tailed Mason Bee (**Figure 26**) is predominantly a species of calcareous habitats in southern Britain, especially chalk and limestone grasslands, calcareous brownfield sites, and calcareous coastal dunes (Falk, 2025g). The flight period extends from early April to early July and nesting occurs in empty snail shells, including those of *Cepaea hortensis*, *C. nemoralis*, *Helix pomatia*, and *Monacha cantiana* (Else & Edwards, 2018). Females show a preference to nest on warm, sunny, south-facing

slopes with short turf or sparse, open swards (Falk, 2025g). It collects pollen largely from Kidney Vetch, Common Bird's-foot-trefoil and Horseshoe Vetch. It is categorised as Notable B (Nb) in Falk (1991b).

Figure 26. Red-tailed Mason Bee (*Osmia bicolor*). Please note this is an archive photograph and is not the individual seen during this survey.



During the survey, an adult female was encountered near the entrance of the field compartment **Beetle's Piece** (at OS grid reference SP0450705228) on 19th May 2024 when visiting Long Bottom Camp.

***Priocnemis agilis* (Hymenoptera: Pompilidae), Red-legged Spotwing, Nb, New to VC**

Red-legged Spotwing is a localised species of spider-hunting wasp, with most records from southern Britain (Falk, 2025h). It favours dry, sparsely vegetated or short-cropped habitats such as chalk and limestone grassland, heathland, and old quarries or sandpits. Nesting is thought to occur in pre-existing cavities in the ground. Prey spiders in Britain include ground spiders in the genus *Drassodes*, wolf spiders in the genus *Alopecosa*, and long-jawed orb-weaver spiders in the genus *Metellina*. Adults fly from May to October, with a pronounced late summer peak. They visit umbellifer flowers such as Wild Carrot. It is categorised as Notable B (Nb) in Falk (1991b).

During the survey, an adult female was encountered at **Round Hill Bank** on 14th July 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Tiphia minuta* (Hymenoptera: Tiphidae), Small Tiphia, Nb**

Small Tiphia is a scarce but widespread solitary wasp that is mostly recorded from southern England but with a few Welsh and Scottish records (Falk, 2025i). It is possibly under-recorded as it is usually encountered when sweeping but very rarely observed in the field. It may be associated with dung beetles or possibly one of the smaller chafer beetles such as Garden Chafer (*Phyllopertha horticola*). It can occur in a variety of open habitats.

During the survey, an adult male was encountered at **Veg Plots** on 16th June 2024.

3.2.6 Nationally Local species

A total of **35** species recorded during the survey are considered 'Nationally Local', **16** of which are discussed below; these species are ordered alphabetically by Order, Family and then Species.

***Diaea dorsata* (Araneae: Thomisidae), Green Crab Spider, Local**

Green Crab Spider (**Figure 27**) is widespread but local in southern Britain, becoming scattered in the west and north as far as Yorkshire (Spider & Harvestman Recording Scheme, 2025b). It is strongly associated with woodland, perhaps with a preference for evergreens and conifers, and is found on the leaves of oaks, Box (*Buxus sempervirens*), Yew (*Taxus baccata*) and other conifers; it can, however, also be found in leaf litter and occasionally in the field layer of undisturbed scrubby grassland. Adults of both sexes are found mainly in May and June, females persisting occasionally into the autumn.

During the survey, individuals were encountered in the following woodlands at Abbey Home Farm, typically by sweeping the foliage of broadleaved or coniferous trees:

Rat's Castle on 20th April; **Well Ground Pond** on 18th August; **Wiggold Wood** on 19th May and 28th September; **Yellow School Strip** on 20th April; and **Yellow School Wood** on 28th September 2024.

***Rhopalapion longirostre* (Coleoptera: Apionidae), Hollyhock Weevil, Local, New to VC**

Hollyhock Weevil (**Figure 28**) is a very local species in southeast England that was first detected as an established population in Britain in Surrey in 2006 and was probably an introduction via the horticultural trade (Duff, 2016). As its common name suggests, it is associated with Hollyhock (*Alcea rosea*) in gardens.

During the survey, an adult female was encountered at **Veg Gardens** on 16th June 2024 by sweeping within the formal garden (as shown in the right image in **Figure 6**). **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33)**, although it was recorded at another location in the vice-county (at Childswickham) on 18th June 2024.

Figure 27. Green Crab Spider (*Diaea dorsata*). Please note this is an archive photograph and is not one of the individuals seen during this survey.



Figure 28. Hollyhock Weevil (*Rhopalapion longirostre*).



***Malthinus balteatus* (Coleoptera: Cantharidae), a soldier beetle, Local**

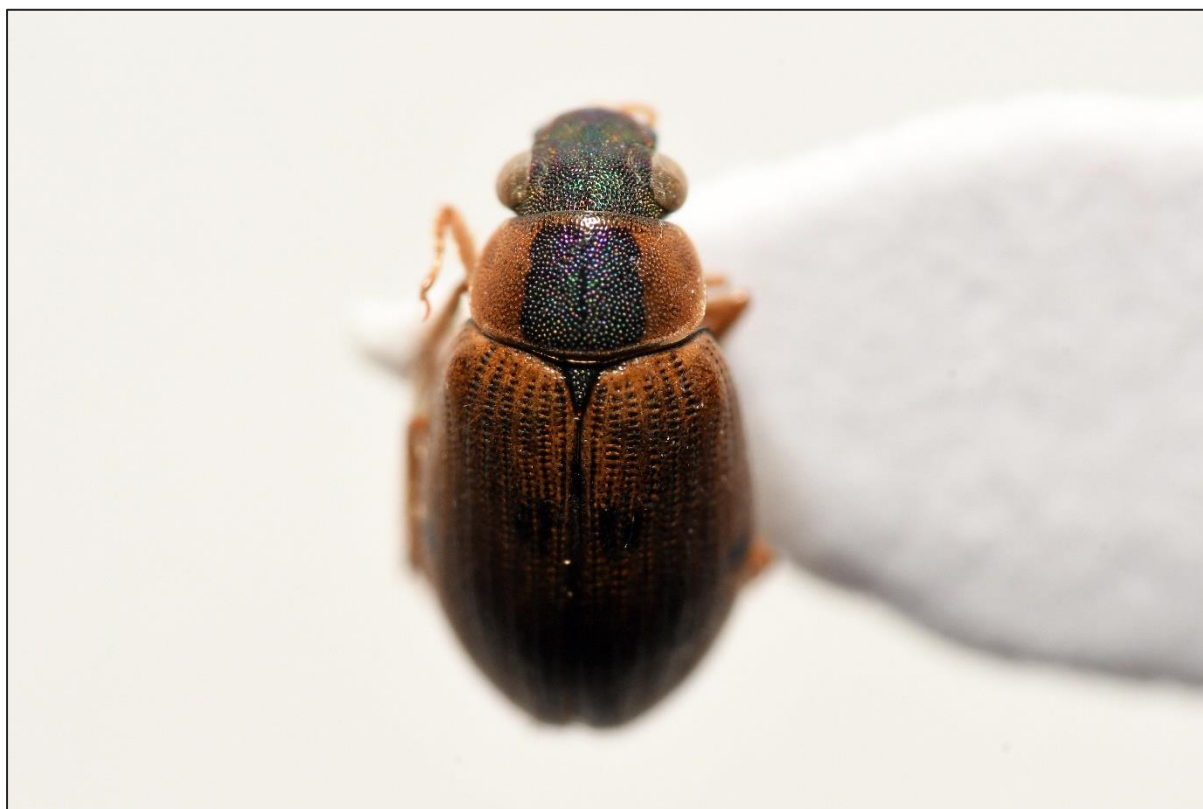
The soldier beetle *Malthinus balteatus* is a local species in southern England, and very local species elsewhere, that is found on vegetation in damp broadleaved woods and carr (Duff, 2016).

During the survey, two adults were encountered at **Veg Plots** on 18th August, with a further adult (female) encountered at **Yellow School Wood** on 16th June 2024.

***Berosus affinis* (Coleoptera: Hydrophilidae), a water scavenger beetle, Local**

The water scavenger beetle *Berosus affinis* (**Figure 29**) is a widespread but rather local species in southern Britain that is found in ponds and other marshy habitats (NatureSpot, 2025d).

Figure 29. The water scavenger beetle *Berosus affinis*.



During the survey, an adult was encountered at **Oxlays Pond** on 28th September and at **Well Ground Pond** on 16th June 2024 by pond netting within these freshwater ponds.

***Sinodendron cylindricum* (Coleoptera: Lucanidae), Rhinoceros Beetle, Local**

Rhinoceros Beetle (**Figure 30**) is a local species found throughout Britain in dead wood of various broadleaved trees (Duff, 2020). Adults of both sexes dig branching burrows in dead wood, the female laying eggs in the burrows which are filled with fine wood dust. Adults are largely nocturnal but sometimes fly during the day in early summer.

Figure 30. Rhinoceros Beetle (*Sinodendron cylindricum*).



During the survey, one female and two males were encountered at **Yellow School Wood** on 16th June 2024 beneath the loose bark of a fallen tree (believed to be Ash) at grid reference SP0447703546.

***Sarcophaga hirticrus* (Diptera: Sarcophagidae), Coastal Flesh Fly, Local, New to VC**

Coastal Flesh Fly is a widespread but seemingly rather local species in southern Britain that is mostly recorded from coastal areas, especially cliff-top grassland, dune grassland and vegetated shingle, but can occasionally be found well inland (Falk, 2025j); inland, it is usually found in old quarries or brownfield sites, suggesting it may be quite thermophilic (warmth-loving). The larvae are parasitoids of helcid snails such as *Helix aspersa* but have also been reared from dead swallows. Adults fly from April to September.

During the survey, an adult male was encountered at **Round Hill Bank** on 14th July 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33)**, and is one of seemingly few inland records of this species in Britain.

***Odontomyia tigrina* (Diptera: Stratiomyidae), Black Colonel, Local**

Black Colonel (**Figure 31**) is a widespread species in southern England and Wales that is most common on coastal grazing marsh (and much rarer inland) where it can be found in association with swampy water margins, ditches and canals (Falk, 2025k). The larvae develop in ditches and other wet areas with plentiful emergent

and floating vegetation, and appear to prefer relatively small and narrow ditches. Adults peak in May and June and visit the flowers of umbellifers like Hemlock Water-dropwort (*Oenanthe crocata*) and Cow Parsley (*Anthriscus sylvestris*).

Figure 31. Black Colonel (*Odontomyia tigrina*). Please note this is an archive photograph and is not the individual seen during this survey.



During the survey, an adult female was encountered at **Well Ground Pond** on 16th June 2024 on umbellifers at the edge of the pond.

***Brachyopa scutellaris* (Diptera: Syrphidae), Orange-shouldered Sap Hoverfly, Local**

Orange-shouldered Sap Hoverfly (**Figure 32**) is a widespread but localised hoverfly in Britain. It is typically encountered in woodland, both ancient and relatively young, and occasionally other habitats such as gardens and parks (Falk, 2025I). The larvae develop in sap runs and sappy wounds of various broadleaved trees. Adults fly from April to August and will visit the blossoms of Wild Cherry (*Prunus avium*), Cherry Laurel and Hawthorn.

During the survey, an adult female was encountered at **Rat's Castle** on 20th April 2024.

Figure 32. Orange-shouldered Sap Hoverfly (*Brachyopa scutellaris*). Please note this is an archive photograph and is not the individual seen during this survey.



***Eumerus ornatus* (Diptera: Syrphidae), Woodland Roundface, Local**

Woodland Roundface (**Figure 33**) is a widely recorded hoverfly in southern Britain north to Cumbria, but is scarce and largely confined to well-wooded areas where it is found in dappled light along rides, in clearings, and at the margins of ancient broadleaved woodland (Falk, 2025m). Adults fly from May to September, peaking in June and July.

During the survey, an adult male was encountered at **Yellow School Wood** on 16th June 2024.

***Eupteryx atropunctata* (Hemiptera: Cicadellidae), a leafhopper, Local, New to VC**

The leafhopper *Eupteryx atropunctata* (**Figure 34**) is a local species found across central and southern England, primarily on Mallow (*Malva sylvestris*), Potato (*Solanum tuberosum*) and Sage (*Salvia officinalis*) (British Bugs, 2025c).

During the survey, an adult female was encountered at **Veg Gardens** on 18th August 2024 by sweeping within the formal garden. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

Figure 33. Woodland Roundface (*Eumerus ornatus*). Please note this is an archive photograph and is not the individual seen during this survey.



Figure 34. The leafhopper *Eupteryx atropunctata*.



***Hesperocorixa moesta* (Hemiptera: Corixidae), a water boatman, Local, New to VC**

The water boatman *Hesperocorixa moesta* is a local species with a scattered distribution throughout England and Wales (Aquatic Heteroptera Recording Scheme for Britain & Ireland, 2025). It can be found in woodland detritus ponds where much of the vegetation may consist of flooded grass and other situations where grass and/or moss are submerged, often in temporary habitats.

During the survey, adults were encountered at **Oxlays Pond** on 14th July and 28th September 2024 by pond netting within the pond. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Megamelodes quadrimaculatus* (Hemiptera: Delphacidae), a planthopper, Local, New to VC**

The planthopper *Megamelodes quadrimaculatus* is a local species found in marshy areas across southern England and South Wales (British Bugs, 2025d). It is often associated with rushes, sedges and grasses, with most reliable records of host plant relating to *Festuca* species.

During the survey, an adult male was encountered at **Veg Plots** on 18th August 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Peritrechus lundii* (Hemiptera: Lygaeidae), a ground bug, Local, New to VC**

The ground bug *Peritrechus lundii* (**Figure 35**) is a widespread but local species across Britain, although it is absent from upland areas and is commoner in the south (British Bugs, 2025e). It is associated with dry grasslands, heaths and dunes, probably feeding on a range of host plants, but is often strongly associated with Common Stork's-bill (*Erodium cicutarium*).

During the survey, an adult was encountered at **Yellow School Wood** on 20th April 2024 by suction-sampling at the edge of the wood (around OS grid reference SP04710354). **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Calocoris alpestris* (Hemiptera: Miridae), a mirid bug, Local**

The mirid bug *Calocoris alpestris* is a local species found on nettles (*Urtica dioica*) in upland or northern areas (including hills in southern England), favouring damp woodlands (British Bugs, 2025f).

During the survey, adults were encountered at **Wiggold Wood** on 19th May, and at **Yellow School Wood** on 16th June 2024.

Figure 35. The ground bug *Peritrechus lundii*.



***Nomada striata* (Hymenoptera: Apidae), Blunt-jawed Nomad Bee, Local**

Blunt-jawed Nomad Bee is a widespread but rather localised species that is the specialist cleptoparasite (or cuckoo) of Wilke's Mining Bee (*Andrena wilkella*), and occurs in the same habitats (grasslands, heathland and open woodland) supporting plentiful bird's-foot-trefoils and clovers (Falk, 2025m). It is much scarcer than its host and adults typically fly from May to July.

During the survey, an adult male was encountered at **Round Hill Bank** on 14th July 2024.

***Temnothorax nylanderi* (Hymenoptera: Formicidae), an acorn ant, Local**

The acorn ant *Temnothorax nylanderi* occurs locally throughout southern England and Wales and inhabits parks and woodland, where it generally nests in hollow spaces such as cavities in sticks and rotting branches, in tree stumps, at the base of tree trunks and under bark (Orledge, 2006; Skinner & Jarman, 2025). It contrast to other *Temnothorax* species, it favours shaded, sheltered positions.

During the survey, several workers were encountered at **Wiggold Wood** on 28th September 2024 by hand searching among dead wood at the base of a standing dead conifer (**Figure 36**) at OS grid reference SP0437805340.

Figure 36. A standing dead conifer tree at Wiggold Wood found to support the acorn ant *Temnothorax nylanderi*, as photographed on 28th September 2024.



3.2.7 Other species

Five other species of ‘conservation importance’ were also recorded during the survey. This includes: one species which is a relatively recent addition to the British fauna and so has only been infrequently recorded to date; one species which has been infrequently recorded but is widespread and probably under-recorded; two species which are said to be scarce in Britain but currently have no formal conservation status; and one species which is said to be rare in Britain but also has no formal conservation status at present.

***Bellardia bayeri* (Diptera: Calliphoridae), Bayer's Emerald-bottle, New to VC**

Bayer's Emerald-bottle (**Figure 37**) is a relatively recent addition to Britain and is spreading, with records extending north to Edinburgh (Falk, 2025n). The larvae are earthworm parasites under the bark of old or fallen trees and can occur in a variety of habitats including woodland and urban gardens. It is potentially common and under-recorded.

Figure 37. Bayer's Emerald-bottle (*Bellardia bayeri*).



During the survey, an adult male was encountered at **Rat's Castle** on 20th April 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Callaspidia defonscolombei* (Hymenoptera: Figitidae), a figitid wasp, New to VC**

The figitid wasp *Callaspidia defonscolombei* (**Figure 38**) is a parasite of aphidophagous (aphid-feeding) hoverfly larvae. There is little open-access information about this species online but it appears to have been widely recorded across Britain, albeit infrequently probably due to under-recording.

During the survey, an adult was encountered at **Well Ground Pond** on 16th June 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Bertkauia lucifuga* (Psocodea: Epipsocidae), a barkfly, New to VC**

The barkfly *Bertkauia lucifuga* (**Figure 39**) is found in leaf litter or under stones/dead wood and is very rarely found on trees, unlike most barkflies (National Barkfly Recording Scheme, 2025a). It is said to be scarce in Britain.

During the survey, two adults were encountered at **Coronation Wood** on 18th August 2024 beneath lying dead wood. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Mesopsocus laticeps* (Psocodea: Mesopsocidae), a barkfly, New to VC**

The barkfly *Mesopsocus laticeps* is said to be rare and has been found on Broom (*Cytisus scoparius*) and Hawthorn (National Barkfly Recording Scheme, 2025b).

During the survey, an adult female was encountered at **Wiggold Wood** on 19th May 2024. **This appears to be the first recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33).**

***Trichopsocus brincki* (Psocodea: Trichopsocidae), a barkfly**

The barkfly *Trichopsocus brincki* is a scarce species in England and Wales that has been found mainly on coniferous/evergreen branches (National Barkfly Recording Scheme, 2025c).

During the survey, two adults were swept from *Leylandii* growing along the road near to the Farm Shop. **This appears to be the second recorded occurrence of this species in the vice-county of East Gloucestershire (VC 33)**, with the other record from Strawberry Banks, near Stroud, in 2017.

Figure 38. The figitid wasp *Callaspidia defonscolombei*.



Figure 39. The barkfly *Bertkauia lucifuga*. Please note this is an archive photograph and is not an individual seen during this survey.



3.3 Pantheon analysis

The list of **681** invertebrate species recorded at Abbey Home Farm in 2024 was entered into the novel invertebrate assemblage analysis tool Pantheon (see description below). This allowed for analysis of the invertebrate species list to determine habitat associations, feeding guilds, assemblages, etc.

What is Pantheon? – Pantheon is an analytical tool developed by Natural England and the Centre for Ecology and Hydrology (CEH) to assist invertebrate nature conservation. Users import lists of invertebrates into Pantheon, which can then be used to analyse the species, associated habitats and resources, conservation statuses and other data.

Pantheon analysis found that the invertebrate species recorded at Abbey Home Farm have no less than **9** habitat associations (**Table 5**).

Table 5. The habitat associations of invertebrate species recorded at Abbey Home Farm in 2024, as determined using Pantheon.

Broad biotope	Habitat	No. of species	% representation of national species pool	Species Quality Index (SQI)
open habitats	tall sward & scrub	264	10	126
open habitats	short sward & bare ground	69	5	135
wetland	marshland	61	7	125
tree-associated	arboreal	50	4	100
tree-associated	shaded woodland floor	48	2	100
tree-associated	decaying wood	42	4	114
wetland	acid & sedge peats	28	3	109
wetland	running water	8	<1	-
wetland/tree-associated	wet woodland	4	2	-

The largest invertebrate assemblage at Abbey Home Farm, supporting **264** species, is associated with tall sward and scrub habitat, defined in Pantheon as ‘*Areas of dense herbage or partial shade where a humid microclimate is maintained at ground level. Dominance by woody plants is limited by exposure, grazing or cutting of vegetation, but they often form an important component of the habitat*’. This includes at least **24** species of ‘conservation importance’ at Abbey Home Farm including the Endangered tortoise beetle ***Cassida denticollis***, the Vulnerable fruit fly ***Chaetorellia loricate***, and the Nationally Rare fruit fly ***Urophora solstitialis***.

The second largest invertebrate assemblage at Abbey Home Farm, comprising **69** species, is associated with short sward and bare ground habitat, defined in Pantheon as '*In lowland habitats where disturbance removes vegetation to create areas of bare or sparsely vegetated ground. Habitat continuity is often associated with nutrient-deficient soils or exposure regimes that deflect ecological succession*'. This includes at least **19** species of 'conservation importance' at Abbey Home Farm including the Section 41 listed **Small Heath butterfly**, the Nationally Rare **Carrot Mining Bee**, and the Nationally Scarce **Red-legged Spotwing**.

The third largest invertebrate assemblage at Abbey Home Farm, comprising **61** species, is associated with marshland habitat, defined in Pantheon as '*...still open water bodies and littoral areas on mineral substrates that may be subject to repeated disturbance, for example by flooding or grazing*'. This includes at least **6** species of 'conservation importance' at Abbey Home Farm including the Nationally Scarce ground beetle ***Bembidion octomaculatum***, reed beetle ***Donacia thalassina***, and shore bug ***Saldula pallipes***.

A mix of habitats are clearly present at Abbey Home Farm, the maintenance of which is key to encouraging rich invertebrate assemblages.

4.0 DISCUSSION

4.1 Overview

A total of **681** invertebrate species were recorded at Abbey Home Farm in 2024 (**Appendix 1**). In light of the generally poor weather conditions for invertebrates in spring and summer 2024, especially for thermophilic (warmth-loving) species such as pollinating insects (e.g. butterflies, bees), **this is considered a very respectable total. A diverse invertebrate fauna is therefore clearly present.**

Of the **681** invertebrate species recorded in 2024, an impressive 77 species (~11%) are deemed to be of 'conservation importance' (**Table 3**). This includes:

- 3 x **Section 41** species;
- 2 x **Endangered (EN or RDB 1)** species;
- 1 x **Vulnerable (RDB 2)** species;
- 6 x **Nationally Rare (NR or RDB 3)** species;
- 25 x **Nationally Scarce (Na, Nb, Notable, NS or pNS)** species;
- 35 x **Nationally Local** species; and
- 5 x **Other** species.

The presence of **77** species of 'conservation importance' suggests that the semi-natural habitats at Abbey Home Farm – such as pastures, woodlands, ponds and hedgerows – provide an **important refuge for rare and scarce invertebrates that are declining in the wider countryside and/or habitat specialists with restricted distributions in Britain**. The ability of Abbey Home Farm to support such species alongside its operations as a working farm is both commendable and encouraging, and it is unlikely to be coincidental that these species persist on an organic farm

where the use of synthetic agrochemicals (a known contributor to invertebrate decline) and other pressures are largely absent.

Of the **77** species of 'conservation importance' at Abbey Home Farm, at least **18** appear to have not been recorded in the vice-county of East Gloucestershire (VC 33) previously, while several others are known from only one or two other vice-county locations. In a more local context, a significant proportion of the invertebrate species are likely to have not been recorded in the Cotswold District previously.

In light of these results, I am of the professional opinion that Abbey Home Farm is an **important site for invertebrate conservation in the unitary authority area of Gloucestershire and Cotswolds District**.

4.2 Sample areas

The conservation 'importance' of an area is typically determined by the total number of invertebrate species recorded in that area, the number of these species which are of 'conservation importance' (i.e. have a conservation status), and the 'quality' of the habitat(s) present in that area. Much variation was noted in the total number of invertebrate species recorded, and the number of species of 'conservation importance', across the **12** sample areas at Abbey Home Farm (**Table 3**). While sampling (i.e. survey) effort was a significant determinant of this, based on current data, not all sample areas at Abbey Home Farm can be considered equal in terms of their invertebrate conservation value, with some being clearly more significant than others (though, collectively, all are important for invertebrate conservation).

In light of this, a professional judgement was made as to the invertebrate conservation value of each of the **12** sample areas at Abbey Home Farm, with each denoted one of three categories (**Table 6**), these being:

- **High value** – an area deemed to be of greatest importance for invertebrate conservation at Abbey Home Farm.
- **Moderate value** – an area deemed to be of moderate importance for invertebrate conservation at Abbey Home Farm. This area is considered less significant than an area of 'high value' but of greater significance than an area of 'low value'.
- **Low value** – an area deemed to be of low or negligible invertebrate conservation importance at Abbey Home Farm. These areas typically support poor-quality invertebrate habitats and/or a low number of species of 'conservation importance'.

The rationale for the assignment of each sample area with its respective invertebrate conservation value category is discussed in the sections below. It is important to note, however, that this assignment is based upon current available data (additional invertebrate data in the future could further improve understanding of invertebrates at each of the sample areas) and the extent and condition of existing habitats at the time of writing (which could change, for example, following a change in

management). As such, the invertebrate conservation value of a sample area is not fixed and could be the subject of change in the future.

Table 6. The invertebrate conservation value of each of the **12** sample areas at Abbey Home Farm in 2024.

Sample area	Invertebrate conservation value
Coronation Wood	Low
Hedgerow	Low
Long Bottom Camp & Wiggold Wood	Moderate
Oxlays Pond	Moderate
Rat's Castle	Low
Round Hill Bank	High
Totem Pole Wall	Low
Veg Gardens	High
Veg Plots	Moderate
Well Ground Pond	Low
Yellow School Strip	Low
Yellow School Wood	Moderate

4.2.1 Coronation Wood

A total of **39** invertebrate species were recorded at Coronation Wood in 2024, many of which are associated with well-wooded areas such as: the Buzzing Spider (*Anyphaena accentuata*), which hunt and mate on the leaves of trees and bushes; the lacewing *Hemerobius micans*, which feeds on aphids on deciduous trees; and the short-palped crane fly *Limonia nubeculosa*, whose larvae develop in woodland soil, near tree bases or other cover. The woodland understory is floristically-poor (which is likely a consequence of nutrient-rich soils and the young age of the wood) and, subsequently, supports an impoverished invertebrate fauna that includes the leafhopper *Eupteryx urticae*, and the mirid bugs *Liocoris tripustulatus* and *Plagiognathus arbustorum*, all of which feed on nettles. The caddisflies *Glyptotaelius pellucidus* and *Limnephilus lunatus* were also recorded, the former of which develops in temporary pools and streams, while the latter is associated with various wetlands; both species are likely utilising temporary pools within Coronation Wood.

Of the **39** species recorded at Coronation Wood in 2024, just **1** species is considered to be of 'conservation importance' – the barkfly *Bertkauia lucifuga* (**Figure 39**). While limited invertebrate sampling was undoubtedly a contributing factor to the low diversity of species recorded at Coronation Wood, it is nonetheless considered to be of **low invertebrate conservation value** owing to the dominance of common and widespread species, the low number of species of 'conservation importance', and the relatively poor quality habitat (which supports generally young trees, at least half of which are conifers, and a shaded, floristically-poor woodland understory).

4.2.2 Hedgerow

A total of **41** invertebrate species were recorded at Hedgerow in 2024. This includes a mix of species associated with: arboreal habitat, such as the lace bug *Physatocheila dumetorum* (**Figure 40**), which is associated with lichen-covered trees (especially Hawthorn); decaying wood, such as the longhorn beetle *Grammoptera ruficornis* (**Figure 40**), the larvae of which develop in fungus-infected small branches of broadleaved trees, and the Variable Longhorn (*Stenocorus meridianus*) (**Figure 40**), whose larvae develop in the dead roots of various broadleaved trees; and tall sward grassland and scrub, such as the Woundwort Shieldbug (*Eysarcoris venustissimus*) (**Figure 40**), the nymphs of which feed on Hedge Woundwort (*Stachys sylvatica*) and sometimes other plants in the Lamiaceae family.

Figure 40. A selection of invertebrates encountered at Hedgerow in 2024. (Top left): the lace bug *Physatocheila dumetorum*. (Top right): the longhorn beetle *Grammoptera ruficornis*. (Bottom left): Variable Longhorn. (Bottom right): Woundwort Shieldbug.



Of the **41** species recorded at Hedgerow in 2024, just **1** species is considered to be of 'conservation importance' – Dingy Skipper butterfly (**Figure 9**), which is associated with bare and sparsely vegetated ground and is clearly not dependent upon the hedgerow. While limited invertebrate sampling was undoubtedly a contributing factor to the low diversity of species recorded at Hedgerow, it is nonetheless considered to be of **low invertebrate conservation value** owing to the dominance of common and widespread species, and the absence of any species of 'conservation importance' which are directly reliant upon the hedgerow habitat.

Nonetheless, this hedgerow is tall, broad and supports a mix of tree species, thereby providing a variety of niches for invertebrates; it is therefore deemed an **important landscape feature**. Though predominately benefiting common and widespread species, this hedgerow nonetheless provides arboreal habitat, decaying wood, and a source of blossom and hedge plants for invertebrates, as well as shelter from prevailing winds and bad weather events.

Species-rich hedgerows are an important invertebrate habitat and over-management is one of the biggest problems facing its associated species. Annual cutting using a mechanical flail can be especially damaging, creating a uniform and species-poor hedgerow that is of little value to invertebrates and wider wildlife. Management should seek to **maintain structural diversity** and achieve **broad, tall hedges composed of a variety of tree species at different heights**. This creates more habitat niches for invertebrates, with **herb-rich bottoms and wide margins** further increasing the niches available. Hedges should not be cut annually unless there is an access issue. Instead, **adopt a rotational management regime** where only a portion of a hedgerow is cut in any given year (ideally in late winter), ensuring that some areas are always left intact for overwintering species. **A rotational cycle of three or more years** will achieve the best hedgerow structure and allow hedge plants to produce flowers and berries. On a large site such as Abbey Home Farm, it may prove more practical to manage entire hedgerows on a rotational basis instead of sections of individual hedgerows, which may have the same effect.

Cutting or ploughing too close to hedges will eliminate hedge plants, while deep ploughing can damage the roots of hedgerow trees. As such, **a wide buffer should be adopted around hedgerows**, especially when the hedgerow supports ancient or veteran trees. It is also recommended that **opportunities are sought to reinstate lost hedgerows and/or restore those in poor condition at Abbey Home Farm**, the ultimate aim of which should be to achieve broad, tall hedges composed of a variety of tree species at different heights.

4.2.3 Long Bottom Camp & Wiggold Wood

A total of **148** invertebrate species were recorded at Long Bottom Camp and Wiggold Wood in 2024 – the joint-second highest species total of the **12** sample areas visited. This includes a mix of species associated with: arboreal habitat, such as Orange Ladybird (*Halyzia sedecimguttata*) (**Figure 41**), which is often found on trees, particularly Sycamore (*Acer pseudoplatanus*) and Ash, feeding on mildews in the canopy; decaying wood, such as the Red-headed Cardinal Beetle (*Pyrochroa serraticornis*), whose larvae (**Figure 41**) develop under the bark of dead wood from a range of broadleaved trees, and the rove beetle *Scaphidium quadrimaculatum* (**Figure 41**), which is found beneath fungus-infected logs; shaded woodland, such as the Eyed Flat-back Millipede (*Nanogona polydesmoides*) and the harvestman *Nemastoma bimaculatum*; marshland, such as the caddisflies *Limnephilus auricula* and *L. vittatus*, whose larvae develop in temporary pools, ponds and ditches; and tall sward grassland and scrub, such as Common Carder Bee (*Bombus pascuorum*) and the snail-killing fly *Coremacera marginata* (**Figure 41**).

Figure 41. A selection of invertebrates encountered at Long Bottom Camp and Wiggold Wood in 2024. (Top left): Orange Ladybird. (Top right): the larva of the Red-headed Cardinal Beetle. (Bottom left): the rove beetle *Scaphidium quadrimaculatum*. (Bottom right): the snail-killing fly *Coremacera marginata*.



Of the **148** species recorded at Long Bottom Camp and Wiggold Wood in 2024, **9** are considered to be of ‘conservation importance’ (**Table 7**). This includes: **2** x Nationally Scarce species; **6** x Nationally Local species; and **1** x Other species. Almost all of these species of ‘conservation importance’ were found either on or in trees within Wiggold Wood (or at the edge of the wood) and are **strongly associated with woodlands**.

Two of these species – Brown Tree Ant and the acorn ant *Temnothorax nylanderi* – are associated with decaying wood and were found within dead wood at the base of standing dead trees (**Figures 25 & 36**). This emphasises the **importance of retaining dead and decaying wood of all ages, both standing and fallen**. Where dead wood occurs naturally, it should ideally be **left in situ** where it is found (including within freshwater habitats). **Seek to retain attached, dead and decaying limbs/branches/twigs of all sizes**; if their removal is necessary for public safety, then pruning is preferable to removal. Fallen trees, limbs and vegetation should be **left to decay where they lie and not removed**. If fallen dead wood restricts access or presents a health and safety risk, it should be moved **only as far as is absolutely necessary** and **kept as intact as possible** to retain integrity of any habitats within; avoid chipping where possible. Avoid stacking fallen dead wood against tree trunks as this can disrupt lichens on the bark.

Table 7. Species of ‘conservation importance’ recorded at Long Bottom Camp and Wiggold Wood in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Cyclosa conica</i>	an orb spider	Araneae	Local	arboreal
<i>Nigma puella</i>	a mesh-web spider	Araneae	NS	arboreal
<i>Diaea dorsata</i>	Green Crab Spider	Araneae	Local	arboreal
<i>Geophilus electricus</i>	a centipede	Geophilomorpha	Local; New to VC	tall sward & scrub
<i>Lamprotettix nitidulus</i>	a leafhopper	Hemiptera	Local	arboreal
<i>Calocoris alpestris</i>	a mirid bug	Hemiptera	Local	shaded woodland floor
<i>Lasius brunneus</i>	Brown Tree Ant	Hymenoptera	Na	decaying wood
<i>Temnothorax nylanderi</i>	an acorn ant	Hymenoptera	Local	decaying wood
<i>Mesopsocus laticeps</i>	a barkfly	Psocodea	Other; New to VC	

The meadow at Long Bottom Camp supports rather few wildflowers and could benefit from **management to create a more open, flower-rich sward**. This would benefit saproxylic invertebrates utilising dead and decaying wood within the adjacent Wiggold Wood, since the adult stages of many saproxylic insect species only use saproxylic habitats in their larval form and require pollen and nectar as adults. **High soil nutrient levels are currenting supressing wildflowers**, giving coarse grasses the competitive advantage, and so there is a **need to lift nutrients from the system**.

This could be achieved through a **programme of annual cutting, with the arisings removed** to prevent soil enrichment; these arisings can be piled up in specific areas to create ‘habitat piles’. These ‘habitat piles’ will help to create additional habitat for invertebrates, both in terms of decaying organic matter, plus nutrient-hungry plants like umbellifers that provide valuable forage, as well as offer additional wildlife benefits such as egg-laying sites for Grass Snake (*Natrix natrix*) and hibernation sites for Hedgehog (*Erinaceus europaeus*). These should not be constructed where their decomposition may result in leachate entering water courses, nor should they be stacked right up against tree trunks or against hedges. Ideally, piles should be sited where they are in sun for part of the day and will not get disturbed.

Alternatively, the meadow could be managed through grazing; high livestock numbers may be required initially to control coarse grasses and remove the thatch, with numbers reduced as the quality of the meadow improves over time. Regardless of the management technique, there should ideally be **no cutting or grazing in spring and summer, or at least until most of the plants have finished flowering and set seed**. Instead, cutting or grazing should ideally be undertaken as **late as possible** (autumn or winter) to allow wildflowers to finish flowering and set seed, and

invertebrates to complete their lifecycles. Initially, however, more frequent cutting or grazing may be required to remove nutrients from the system and to speed-up the meadow restoration process.

Within the meadow at Long Bottom Camp are a series of logs arranged into a circle and which are used as a seating area for farm visitors. These logs are utilised by various common and widespread invertebrates, such as Plaited Door Snail (*Cochlodina laminata*), Nettle Field Slug (*Deroceras reticulatum*), the harvestman *Nemastoma bimaculatum*, and Budapest Keeled Slug (*Tandonia budapestensis*). Despite being largely beneficial to common invertebrates, the localised centipede *Geophilus electricus* was found beneath one of the logs on 28th September 2024 – this centipede is associated with rural woodlands and grasslands and does not appear to have been recorded in the vice-county of East Gloucestershire (VC 33) previously. Furthermore, an adult Great Crested Newt (*Triturus cristatus*) – a species which is legally protected under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2017 – was found beneath one of these logs on the same date (**Figure 42**). As such, it is recommended that this **log circle is retained and the constituent logs replenished as they progressively decay and break-up**. Furthermore, it is recommended that this log circle **continues to be composed of large, heavy logs** that are not easily moved (thus minimising disturbance to invertebrates and other wildlife beneath them) and to also discourage these logs becoming burnt on the camp fire.

Figure 42. An adult Great Crested Newt found beneath one of the logs forming the log circle at Long Bottom Camp on 28th September 2024.



Long Bottom Camp and Wiggold Wood is considered to be of **moderate invertebrate conservation value** owing to its respectable diversity of invertebrates (comparative to other sample areas), which includes **9** species of ‘conservation importance’. There are opportunities, however, to further enhance this sample area for invertebrates by applying the forementioned recommendations.

4.2.4 Oxlays Pond

A total of **140** invertebrate species were recorded at Oxlays Pond in 2024. Of these, at least **51** (~36%) are deemed to be reliant upon the pond itself; this includes a mix of aquatic, semi-aquatic and terrestrial species. Among the aquatic and semi-aquatic invertebrates are:

- **7** x species of diving beetle (*Agabus bipustulatus*, *A. nebulosus*, *Colymbetes fuscus*, *Hydroporus planus*, *Hygrotus inaequalis*, *Hyphydrus ovatus* and *Ilybius* sp.);
- **4** x species of water scavenger beetle (*Berosus affinis*, *Enochrus melanocephalus*, *Helophorus brevipalpis* and *Hydrobius fuscipes*);
- **1** x species of burrowing water beetle (*Noterus clavicornis*);
- **4** x species of water boatmen (*Corixa punctata*, *Hesperocorixa moesta*, *H. sahlbergi* and *Sigara dorsalis*);
- **3** x species of pond skater (*Gerris lacustris*, *G. odontogaster* and *G. thoracicus*);
- **1** x species of water scorpion (*Nepa cinerea*);
- **2** x species of backswimmer (*Notonecta glauca* and *N. viridis*);
- **1** x species of pygmy backswimmer (*Plea minutissima*);
- **1** x species of alderfly (*Sialis lutaria*);
- **5** x species of dragonfly and damselfly (though more species are likely present); and
- **3** x species of caddisfly (*Athripsodes aterrimus*, *Limnephilus affinis* and *L. vittatus*).

A selection of these species are shown in **Figure 42**. Among the aquatic/semi-aquatic invertebrates utilising the pond are several species associated with ponds rich in organic matter (i.e. dead leaves and muddy sediment) and vegetation; this includes the diving beetle *Hyphydrus ovatus*, pond skater *Gerris odontogaster* and water boatman *Hesperocorixa sahlbergi*. As such, it is reasonable to presume that Oxlays Pond is rather nutrient-rich.

The emergent wetland vegetation at Oxlays Pond also supports several invertebrates, including the localised planthopper *Euconomelus lepidus* (which feeds on *Eleocharis* sedges) and the Nationally Scarce reed beetle *Donacia thalassina* (which is associated with various freshwater plants). The pond is prone to large fluctuations in depth (as is seen in **Figure 3**) in response to evaporation and precipitation (rainfall). The drawdown zone (the area around the pond that dries out in the summer and is flooded in the winter) provides important invertebrate habitat, supporting a number of ground beetles such as *Bembidion biguttatum*, *B. lunulatum*,

B. octomaculatum and *Pterostichus nigrita*, the shore bugs *Saldula pallipes* and *S. saltatoria*, and the muscid fly *Lispe tentaculata*. This drawdown zone is also utilised by wolf spiders such as *Pardosa amentata* and *Piratula latitans*.

Figure 42. A selection of aquatic/semi-aquatic invertebrates found at Oxlays Pond in 2024. (Top left): the diving beetle *Agabus nebulosus*. (Top right): the pond skater *Gerris lacustris*. (Bottom left): the backswimmer *Notonecta viridis*. (Bottom right): the pygmy backswimmer *Plea minutissima*.



Beyond the pond, areas of tall grassland and scrub (especially bramble) support a suite of predominantly common and widespread invertebrate species. A series of standing and lying dead tree trunks are also present and provide nesting habitat for solitary bees and wasps which utilise pre-existing cavities in dead wood (such as old beetle burrows); this includes the spider-hunting wasp *Dipogon subintermedius*, Patchwork Leafcutter Bee (*Megachile centuncularis*) and Slender Wood Borer Wasp (*Trypoxylon attenuatum*). These tree trunks will provide further opportunities for invertebrates with saproxylic larval stages.

Of the **140** invertebrate species recorded at Oxlays Pond in 2024, **14** are considered to be of 'conservation importance' (**Table 8**). This includes: **2** x Section 41 species; **1** x Endangered species; **1** x Nationally Rare species; **4** x Nationally Scarce species; and **6** x Nationally Local species. Of these **14** species of 'conservation importance', **8** are reliant upon the pond (whether this be its emergent wetland vegetation, drawdown zone, or freshwater itself). Of particular significance is the presence of the Nationally Scarce ground beetle *Bembidion octomaculatum* (**Figure 18**), which is

predominantly found in eastern England, with Abbey Home Farm being among the furthest west it has been recorded in Britain to date.

Table 8. Species of ‘conservation importance’ recorded at Oxlays Pond in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Piratula latitans</i>	a pirate wolf spider	Araneae	Local	acid & sedge peats
<i>Tetragnatha nigrita</i>	a long-jawed orb-weaver spider	Araneae	Local	acid & sedge peats
<i>Bembidion octomaculatum</i>	a ground beetle	Coleoptera	NS; New to VC	marshland
<i>Donacia thalassina</i>	a reed beetle	Coleoptera	NS	marshland
<i>Berosus affinis</i>	a water scavenger beetle	Coleoptera	Local	marshland
<i>Campiglossa malaris</i>	a fruit fly	Diptera	RDB 1	short sward & bare ground; tall sward & scrub
<i>Tephritis formosa</i>	a fruit fly	Diptera	Local	short sward & bare ground; tall sward & scrub
<i>Hesperocorixa moesta</i>	a water boatman	Hemiptera	Local; New to VC	marshland
<i>Euconomelus lepidus</i>	a planthopper	Hemiptera	Local	
<i>Lygus pratensis</i>	a mirid bug	Hemiptera	RDB 3	
<i>Saldula pallipes</i>	a shore bug	Hemiptera	NS; New to VC	marshland
<i>Lasioglossum pauxillum</i>	Lobe-spurred Furrow Bee	Hymenoptera	Na	short sward & bare ground
<i>Erynnis tages</i>	Dingy Skipper	Lepidoptera	Section 41 Priority Species	short sward & bare ground
<i>Cupido minimus</i>	Small Blue	Lepidoptera	Section 41 Priority Species; NT	tall sward & scrub

The Section 41 listed Dingy Skipper and Small Blue butterflies were encountered at the edge of Oxlays Pond on a hot day on 19th May 2024; suitable habitat for these butterflies does not appear to be present at Oxlays Pond and it is likely that these butterflies were drawn to the pond from nearby areas simply for drinking water, highlighting the additional wildlife benefits of freshwater ponds such as Oxlays Pond.

The remaining species of ‘conservation importance’ are associated either with bare ground and short sward grassland or tall sward grassland and scrub; this includes species such as the Endangered fruit fly *Campiglossa malaris*, whose larvae develop

in the flower heads of ragworts (*Senecio* spp.), and the Nationally Scarce Lobe-spurred Furrow Bee, which nests in bare or sparsely vegetated light soils.

Oxlays Pond is considered to be of **moderate invertebrate conservation value** owing to its respectable diversity of invertebrates (comparative to other sample areas), which includes **14** species of 'conservation importance' (the joint second highest total of such species). As it is still a relatively new pond, having been created around 10 years ago, it is envisaged that invertebrates will continue to naturally colonise the pond over time, thereby increasing the number of associated invertebrates; this may also include further species of 'conservation importance'.

4.2.5 Rat's Castle

A total of **54** invertebrate species were recorded at Rat's Castle in 2024. This includes a mix of species associated with: arboreal habitat, such as the hoverfly *Epistrophe eligans* (**Figure 43**), whose larvae are feed on aphids on a range of trees and shrubs; Orange-shouldered Sap Hoverfly (**Figure 32**), whose larvae develop in sap runs and sappy wounds of various broadleaved trees; bare ground and short sward grassland, such as the Chocolate Mining Bee (*Andrena scotica*) (**Figure 43**); and tall sward grassland and scrub (which account for the majority of invertebrates at Rat's Castle), such as the Cricket-bat Orb-weaver Spider (*Mangora acalypha*) (**Figure 43**) and Garden Bumblebee (*Bombus hortorum*) (**Figure 43**).

Figure 43. A selection of invertebrates found at Rat's Castle in 2024. (Top left): the hoverfly *Epistrophe eligans*. (Top right): Chocolate Mining Bee. (Bottom left): Cricket-bat Orb-weaver Spider. (Bottom right): Garden Bumblebee.



Of the **54** invertebrate species recorded at Rat's Castle in 2024, **3** are considered to be of 'conservation importance' – Green Crab Spider (**Figure 27**), Orange-shouldered Sap Hoverfly (**Figure 32**) and Bayer's Emerald-bottle (**Figure 37**). This includes: **2** x Nationally Local species; and **1** x Other species. While limited invertebrate sampling was undoubtedly a contributing factor to the low diversity of species recorded at Rat's Castle, it is nonetheless considered to be of **low invertebrate conservation value** at present owing to the dominance of common and widespread species and the low number of species of 'conservation importance'.

It is envisaged, however, that **Rat's Castle will be of greater invertebrate conservation value than the survey results currently suggest** owing to its mix of: open rides and glades, which extend sunny conditions into the heart of the wood, lined with wildflowers and blossoming shrubs that will provide valuable foraging opportunities for pollinators and the adult stages of saproxylic insects; dead wood associated with living trees or dead standing trees, dead fallen trees, detached branches or old stumps, which provide vital habitat for saproxylic larval development and nesting pollinators (e.g. solitary bees and wasps); and areas of closed canopy woodland with accumulations of leaf litter, which will support species that occur in or under leaf litter and are either saprophagous (feeding on or obtaining nourishment from decaying organic matter) or predaceous. As such, additional invertebrate sampling at Rat's Castle may be warranted.

Woodland rides and glades play a crucial role in supporting invertebrate populations, particularly pollinators, by extending sunny, warm conditions into the heart of wooded areas. Since many pollinators, for instance, will not fly through shady woodland interiors, **the network of paths at Rat's Castle likely act as valuable corridors** along which insects can move through the woodland – as well as providing valuable foraging and nesting opportunities – and **should therefore be managed to maintain and maximise their invertebrate value. These rides should feature a blend of habitats**, including bare ground, grassland, scrub, and tall herbs, to support as wide a range of species as possible. **Encourage blossoming shrubs and trees** (such as sallows, Blackthorn, gorse, hawthorns, Wild Cherry and Crab Apple) **along the edges of rides and clearings** (especially in areas that get the most sun), **along with brambles, roses and taller flowers such as Hogweed and thistles**. Management techniques such as 'scaloping' edges through tree and shrub clearance, and regular coppicing, can be used to create rides of varying widths containing sheltered glades or embayment's. These rides and glades must be **sufficiently large and sheltered to maintain their warmth and floral richness**, as smaller rides tend to become shaded by surrounding trees, reducing their value. Managing rides (both cutting of woody material and mowing of grassland areas) in rotation and in relatively short sections at a time will produce more diverse conditions, and ensure that woody species do not shade out other habitats. It is **important not to mow or cut the entire ride system in a single year**; a 3 to 5 year mowing rotation is ideal. **Aim to achieve a well-connected network of these sunlit rides and clearings** to allow insects to move easily through the woodland, accessing crucial breeding and foraging areas.

It is deemed important to **maintain a variety and good amount of dead wood habitat**, both standing and fallen. **Seek to retain attached, dead and decaying limbs/branches/twigs of all sizes**; if their removal is necessary for public safety, then pruning is preferable to removal. Fallen trees, limbs and vegetation should be **left to decay where they lie and not removed**. If fallen dead wood restricts access or presents a health and safety risk, it should be moved **only as far as is absolutely necessary** and **kept as intact as possible** to retain integrity of any habitats within; avoid chipping where possible. Avoid stacking fallen dead wood against tree trunks as this can disrupt lichens on the bark.

4.2.6 Round Hill Bank

A total of **133** invertebrate species were recorded at Round Hill Bank in 2024. The majority of these species are associated with either: tall sward grassland and scrub, such as the mirid bug *Miridius quadrivirgatus* and the snail-killing fly *Pherbellia cinerella*; or bare ground and short sward grassland, such as Dingy Skipper butterfly and the seed weevil *Protopion filirostre*. A small number of species were found to be associated with other habitats such as decaying wood (e.g. the longhorn beetle *Rutpela maculata*, whose larvae develop within rotten wood, and the crabronid wasp, which nests in cavities in dead wood); these species are likely utilising the hedgerows surrounding Round Hill Bank.

Of the **133** species recorded at Round Hill Bank in 2024, an impressive **22** are considered to be of 'conservation importance' (**Table 9**). This includes: **3** x Section 41 species; **1** x Vulnerable (RDB 2) species; **2** x Nationally Rare species; **8** x Nationally Scarce species; and **7** x Nationally Local species. The larval and/or adult stages of **almost all of these species are dependent upon the grassland at Round Hill Bank**, either directly or indirectly. For instance, the larval stages of these species include herbivores that are feeding directly upon the wildflowers present within the grassland (such as the mirid bug *Orthocephalus saltator* and Small Blue butterfly), or parasitoids that feed on other invertebrates utilising the grassland (such as Coastal Flesh Fly and Downland Villa bee-fly). The adults stages of these species are predominantly herbivores or nectivores. Among these species of 'conservation importance' (and, indeed, the wider invertebrate fauna at Round Hill Bank), there is a **clear preference for dry, open habitats** (e.g. the ground beetle *Microlestes maurus* and Red-legged Spotwing) **and/or calcareous soils** (e.g. the lace bug *Catoplatus fabricii* and the weevil *Tychius junceus*).

Supporting an impressive **22** species of 'conservation importance' – the highest number of such species recorded across all **12** sample areas in 2024 – Round Hill Bank **Round Hill Bank is clearly an important location for invertebrate conservation at Abbey Home Farm**. Among these **22** species is a significant number of nationally scarce, rare and/or threatened species. Of particular note is the presence of the Vulnerable (RDB 2) fruit fly *Chaetorellia loricata*, which appears to be a very rare species in Britain. In light of these results, Round Hill Bank is considered to be of **high invertebrate conservation value** and warrants special attention to conserve its associated invertebrates.

Table 9. Species of 'conservation importance' recorded at Round Hill Bank in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Diplapion confluens/stolidum</i> agg.	a seed weevil	Coleoptera	Local	
<i>Protapion difforme</i>	a seed weevil	Coleoptera	Nb	tall sward & scrub
<i>Protapion filirostre</i>	a seed weevil	Coleoptera	Nb	short sward & bare ground
<i>Prasocuris glabra</i>	a leaf beetle	Coleoptera	Local	tall sward & scrub
<i>Hypera meles</i>	a weevil	Coleoptera	Nb	tall sward & scrub
<i>Stenocarus ruficornis</i>	a weevil	Coleoptera	Nb	short sward & bare ground
<i>Tychius junceus</i>	a weevil	Coleoptera	Local	short sward & bare ground
<i>Mordellistena pseudoparvula</i>	a tumbling flower beetle	Coleoptera	NR	
<i>Villa cingulata</i>	Downland Villa	Diptera	NR	tall sward & scrub
<i>Dolichopus arbustorum</i>	a long-legged fly	Diptera	NS; New to VC	marshland; running water
<i>Sarcophaga hirticrus</i>	Coastal Flesh Fly	Diptera	Local; New to VC	
<i>Sphaerophoria taeniata</i>	a hoverfly	Diptera	Local	
<i>Chaetorellia loricata</i>	a fruit fly	Diptera	RDB 2; New to VC	tall sward & scrub
<i>Miridius quadrivirgatus</i>	a mirid bug	Hemiptera	Local	tall sward & scrub
<i>Orthocephalus saltator</i>	a mirid bug	Hemiptera	Local	short sward & bare ground
<i>Catoplatus fabricii</i>	a lace bug	Hemiptera	Nb	short sward & bare ground
<i>Nomada striata</i>	Blunt-jawed Nomad Bee	Hymenoptera	Local	short sward & bare ground
<i>Lasioglossum pauxillum</i>	Lobe-spurred Furrow Bee	Hymenoptera	Na	short sward & bare ground
<i>Priocnemis agilis</i>	Red-legged Spotwing	Hymenoptera	Nb; New to VC	short sward & bare ground; tall sward & scrub
<i>Erynnis tages</i>	Dingy Skipper	Lepidoptera	Section 41 Priority Species	short sward & bare ground

<i>Cupido minimus</i>	Small Blue	Lepidoptera	Section 41 Priority Species; NT	tall sward & scrub
<i>Coenonympha pamphilus</i>	Small Heath	Lepidoptera	Section 41 Priority Species; VU	short sward & bare ground

To my knowledge, Round Hill Bank is currently managed through livestock grazing and it is recommended that this management practise is continued into the future. No livestock were seen at Round Hill Bank during the visits on 19th May and 14th July 2024, suggesting livestock are removed during the spring and summer months (or at least in the months of May, June and July). **The absence of grazing during these critical months for most invertebrates likely explains the presence of a considerable number of species of ‘conservation importance’** at Round Hill Bank, several of which are dependent upon flowering plants as a pollen/nectar source or as a direct food source (such as the forementioned fruit fly *Chaetorellia loricata*, which forms galls in the flower head of Greater Knapweed). It is **recommended, therefore, that livestock continue to be removed from Round Hill Bank during the spring and summer months** (from at least May to August) or **until at least most of the plants have finished flowering and set seed**. Ideally, **reintroduce grazing as late as possible** (autumn or winter). **Livestock numbers should, however, be closely monitored to avoid overgrazing or excessive poaching. Grazing should seek to achieve a diverse vegetation structure of varying sward heights** including areas of bare ground, short turf and tall grass – this can be achieved by **carefully managing the timing and length of grazing. Rotational grazing should continue to be deployed** to ensure that Round Hill Bank is grazed for a short period but then rested when livestock are moved to another area.

Supplementary stock feeding should also be avoided or limited (unless absolutely essential) **at Round Hill Bank** as this can lead to eutrophication (nutrient-enrichment of the soil) as well as excessive localised poaching. Any supplementary feeding of livestock should instead be done away from this area. It should be noted, however, that **some poaching is beneficial** to invertebrates by creating bare ground for hunting (for predators such as ground beetles and wolf spiders) and nesting (for solitary bees and wasps); poaching in wet areas also creates muddy pools that are ideal for invertebrates seeking moisture during warm weather or those that develop within such temporary water bodies. For instance, the poaching around the cattle drinking trough along the west fence line of Round Hill Bank (**Figure 10**) was popular with Dingy Skipper and Small Blue butterflies seeking water during warm weather on 19th May 2024, as well as several species of dung beetle and other insects.

4.2.7 Totem Pole Wall

A total of **11** invertebrate species were recorded at Totem Pole Wall in 2024, none of which are considered to be of ‘conservation importance’. Some of these species appear to be permanent residents in this wall, such as: Rock Snail (*Pyramidula*

umbilicata) (**Figure 44**), which is confined to walls and natural rocks and scree (usually in limestone or chalk areas) and was found to be abundant beneath stones on the top of the wall; and Muslin Footman (*Nudaria mundana*) (**Figure 44**), the caterpillars of which feed on lichens, including those growing on dry stone walls, and were found also found in numbers beneath stones on the top of the wall. Other species are likely utilising the wall for shelter or hunting, such as: the ground beetle *Leistus spinibarbis* (**Figure 44**), a specialist predators of springtails (Collembola); and the mirid bug *Phytocoris tiliae* (**Figure 44**), which feed on small insects and mites on a range of deciduous trees.

Figure 44. A selection of invertebrates found at Totem Pole Wall in 2024. (Top left): Rock Snail. (Top right): Muslin Footman caterpillar. (Bottom left): the ground beetle *Leistus spinibarbis*. (Bottom right): the mirid bug *Phytocoris tiliae*.



While limited invertebrate sampling was undoubtedly a contributing factor to the low diversity of species recorded at Totem Pole Wall, and so it is considered to be of **low invertebrate conservation value**, it is nonetheless considered an **important landscape feature** that is no doubt utilised by a far greater diversity of invertebrates (and other wildlife) than was recorded during this survey. It is **recommended that this wall is maintained** and **opportunities are sought to repair or restore any similar walls** that have become damaged or have been lost at Abbey Home Farm.

4.2.8 Veg Gardens

A total of **102** invertebrate species were recorded at Veg Gardens in 2024. This includes a mix of species associated with: arboreal habitat, such as 10-spot Ladybird (*Adalia decempunctata*) (**Figure 45**), which is usually found on deciduous trees and hedgerows and feeds on aphids (as both larvae and adults); decaying wood, such as the soft-winged flower beetle *Anthocomus fasciatus*, the larvae of which are predators of wood-boring beetle larvae under bark; bare ground and short sward grassland, such as Furry-claspered Furrow Bee (*Lasioglossum lativentre*) (**Figure 45**), which nests in bare and sparsely vegetated soil; tall sward grassland and scrub (which accounts for the majority of invertebrates at Veg Gardens), such as Bishop's Mitre Shieldbug (*Aelia acuminata*) (**Figure 45**) and Roesel's Bush-cricket (*Roeseliana roeselii*) (**Figure 45**); and marshland, such as the long-legged fly *Dolichopus festivus*. Some of the species recorded at Veg Gardens have clearly developed in other nearby areas of the farm e.g. the larvae of the muscid fly *Morellia hortorum* are coprophagous (dung feeders) in cowpats.

Figure 45. A selection of invertebrates found at Veg Gardens in 2024. (Top left): 10-spot Ladybird. (Top right): Furry-claspered Furrow Bee. (Bottom left): Bishop's Mitre Shieldbug. (Bottom right): Roesel's Bush-cricket.

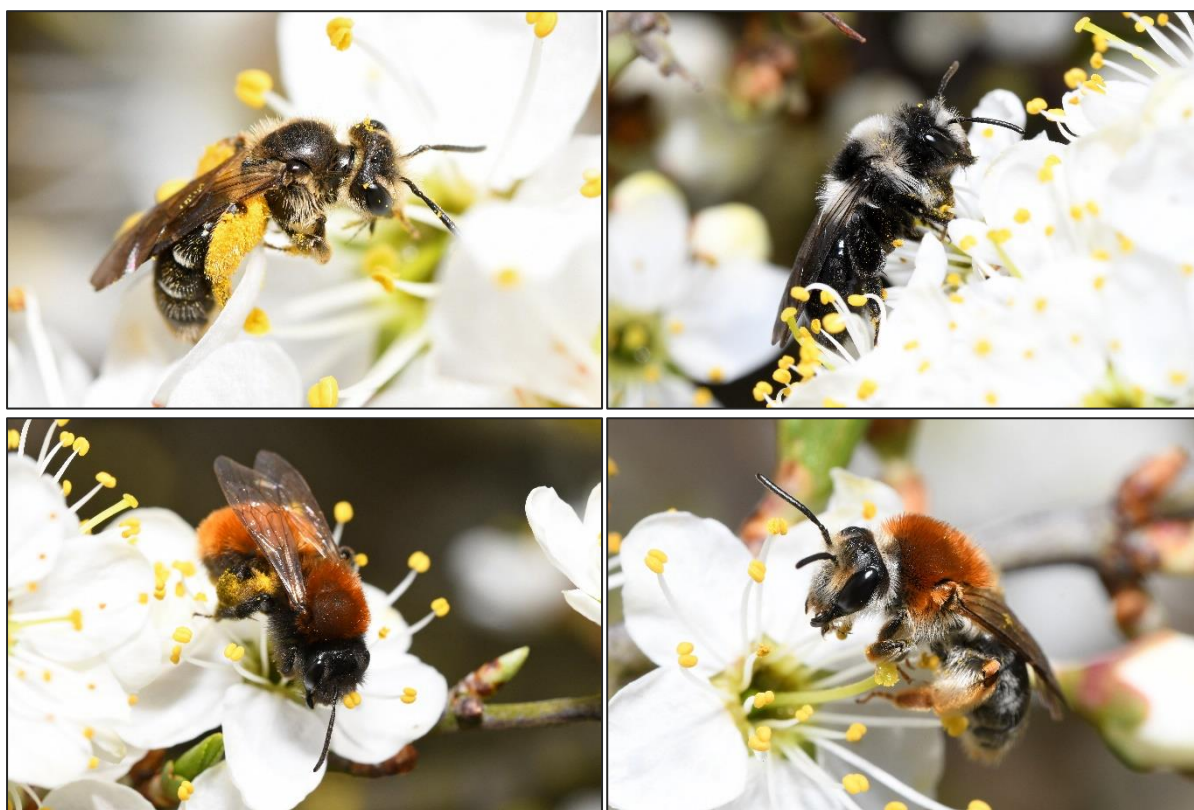


The formal garden (as shown in **Figure 6**), as well as providing a visually attractive space for farm visitors and a source of garden herbs, supports several local or scarce species that are otherwise absent from the more 'natural' habitats at Abbey Home Farm. For instance, Sage growing within this garden was found to support three species of *Eupteryx* leafhopper, including *E. atropunctata* (**Figure 34**), *E.*

decemnotata and *E. melissae*; while *E. melissae* is the commonest leafhopper to occur on Sage and is virtually ubiquitous on it in southern England, *E. atropunctata* is an uncommon and localised species, and *E. decemnotata* is increasing across southern Britain having been first recorded from the London area in 2002. The very localised, albeit non-native, Hollyhock Weevil (**Figure 28**) was also encountered in the formal garden and, as the name suggests, is associated with Hollyhock. The Nationally Scarce (but increasing) Red-girdled Mining Bee was also found here. Surprising, the Nationally Rare Carrot Mining Bee was encountered visiting the flowers of the annual plant *Ammi visnaga* within this formal garden (**Figure 17**); this bee has seemingly not been recorded in the vice-county of East Gloucestershire (VC 33) previously and Abbey Home Farm is near the northern limit of its known range in Britain.

In spring, the blossoming orchard trees within Veg Gardens (as well as those within the surrounding hedgerows) provide valuable pollen and nectar sources for insects, especially solitary bees (**Figure 46**) such as Hawthorn Mining Bee (*Andrena chrysosceles*), Ashy Mining Bee (*Andrena cineraria*), Tawny Mining Bee (*Andrena fulva*) and Orange-tailed Mining Bee (*A. haemorrhoa*); Ashy Mining Bee is the likely host of the Nationally Rare (but increasing) Pale-palped Spring Bee-grabber, which was also recorded at Veg Gardens. The abundance of dandelions in spring (as shown in **Figure 6**) are provide important pollen and nectar sources for insects, again especially for solitary bees but also bumblebee queens.

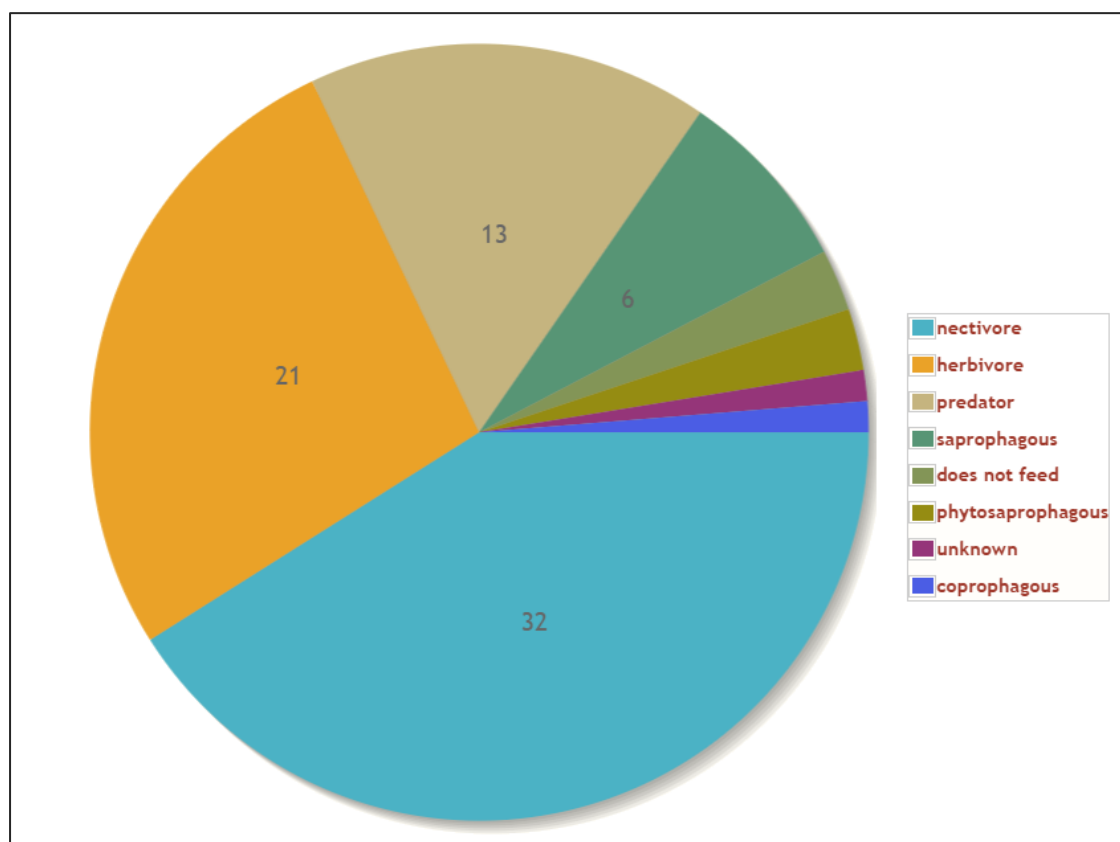
Figure 46. A selection of solitary bees recorded on or around blossoming orchard trees at Veg Gardens. (Top left): Hawthorn Mining Bee. (Top right): Ashy Mining Bee. (Bottom left): Tawny Mining Bee. (Bottom right): Orange-tailed Mining Bee.



Yarrow is a particular important wildflower within Veg Gardens since it supports the Endangered and Nationally Rare tortoise beetle *Cassida denticollis* – **the rarest and most threatened invertebrate recorded during the survey in 2024**. As such, it is important that **Yarrow is encouraged to grow here** and efforts are sought to increase its abundance.

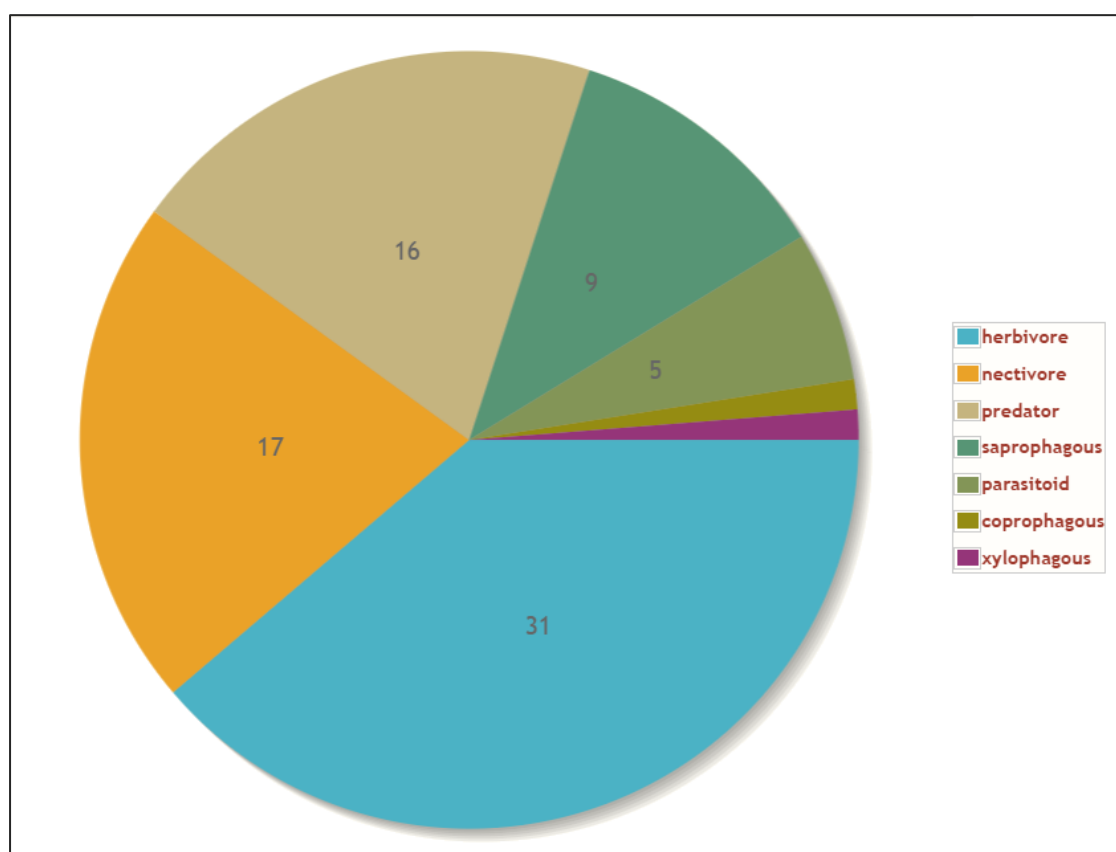
Pantheon analysis suggests that the Veg Gardens support a mix of invertebrates with varying feeding habits as adults and larvae. As adults, Pantheon suggests that **32 species are nectivores, 21 are herbivores, 13 are predators, 6 are saprophagous** (feeding on decaying organic matter), **2 do not feed, 2 are phytosaprophagous** (feeding on decaying plant matter), **1 is coprophagous** (feeding on dung), and the feeding guild of **1 species is unknown** (**Figure 47**).

Figure 47. The number of species at Veg Gardens in each adult feeding guild.



As larvae, Pantheon suggests that **31 species are herbivores, 17 are nectivores, 16 are predatory, 9 are saprophagous, 5 are parasitoides, 1 is coprophagous, and 1 is xylophagous** (feeding on or boring into wood) (**Figure 48**).

Figure 48. The number of species at Veg Gardens in each larval feeding guild.



While it should be noted that not all of the invertebrates recorded at Veg Gardens in 2024 have a corresponding feeding guild in Pantheon (the software is outdated and incomplete), the results nonetheless demonstrate that **Veg Gardens is able to support invertebrates with contrasting life-histories**. It is clear that Veg Gardens support a diverse range of predatory and parasitic invertebrates, including: ladybirds; spiders; hoverflies; and snail-killing flies such as *Limnia unguicornis* and flesh flies such as *Sarcophaga haemorrhhoa*, both of which are parasitoides of various terrestrial snails. The ability of Veg Gardens to support such predators and parasites is essential as a means to protect crops from potential pest species, and is likely achieved through actions such as the wildflower strip planting, beetle bank creation, planting trees within the vegetable cropping areas, and maintaining areas of 'rough' vegetation (especially at the edges), all of which probably provide safe-havens for some of these species.

Of the **101** species recorded at Veg Gardens in 2024, **11** are considered to be of 'conservation importance' (**Table 10**). This includes: **1** x Endangered species; **3** x Nationally Rare species; **4** x Nationally Scarce species; and **3** x Nationally Local species. Based almost solely on the presence of the tortoise beetle *Cassida denticollis*, but also other nationally significant species such as Carrot Mining Bee and the weevil *Cionus nigratarsis*, the Veg Gardens is considered of **High invertebrate conservation value**.

Table 10. Species of ‘conservation importance’ recorded at Veg Gardens in 2024.

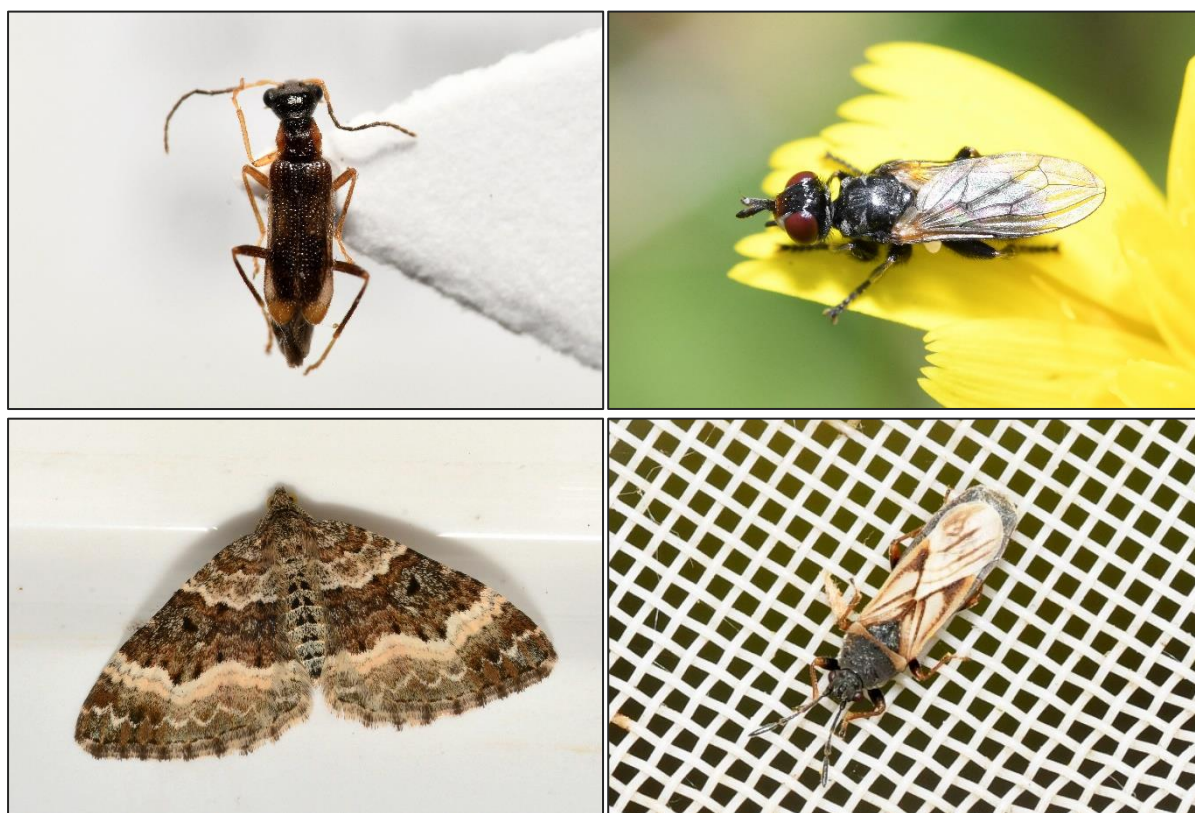
Species	Common Name	Order	Conservation status	Habitat
<i>Rhopalapion longirostre</i>	Hollyhock Weevil	Coleoptera	Local; New to VC	
<i>Cassida denticollis</i>	a tortoise beetle	Coleoptera	EN; NR; New to VC	tall sward & scrub
<i>Cionus nigritarsis</i>	a weevil	Coleoptera	Na	tall sward & scrub
<i>Anthocomus fasciatus</i>	a soft-winged flower beetle	Coleoptera	NS	decaying wood
<i>Myopa pellucida</i>	Pale-palped Spring Bee-grabber	Diptera	RDB 3	tall sward & scrub
<i>Sphaerophoria taeniata</i>	a hoverfly	Diptera	Local	
<i>Eupteryx atropunctata</i>	a planthopper	Hemiptera	Local; New to VC	tall sward & scrub
<i>Lygus pratensis</i>	a mirid bug	Hemiptera	RDB 3	
<i>Andrena labiata</i>	Red-girdled Mining Bee	Hymenoptera	Na	short sward & bare ground
<i>Andrena nitidiuscula</i>	Carrot Mining Bee	Hymenoptera	RDB 3; New to VC	short sward & bare ground
<i>Lasioglossum pauxillum</i>	Lobe-spurred Furrow Bee	Hymenoptera	Na	short sward & bare ground

4.2.9 Veg Plots

A total of **175** invertebrate species were recorded at Veg Plots in 2024 – the highest species total of the **12** sample areas visited. This includes a mix of species associated with: arboreal habitat, such as Vapourer (*Orgyia antiqua*), whose caterpillars feed on a range of deciduous trees and shrubs; decaying wood, such as the crabronid wasp *Passaloecus singularis*, which nests abandoned beetle borings in wood (though it does also nest in pithy plant stems), and the soldier beetle *Malthinus balteatus* (**Figure 49**); bare ground and short sward grassland, such as the ground beetle *Bembidion lampros* and Small Bee-grabber (*Thecophora atra*) (**Figure 49**); tall sward grassland and scrub, such as Common Carpet (*Epirrhoe alternata*) (**Figure 49**), whose caterpillars feed on bedstraws (*Galium* spp.); and marshland, such as European Cinchbug (*Ischnodemus sabuleti*) (**Figure 49**).

Pantheon analysis suggests that the invertebrates at Veg Plots have varying feeding habits as adults and larvae. As adults, Pantheon suggests that **54** species are herbivores, **42** are nectivores, **28** are predators, **12** are saprophagous, **2** do not feed, **1** is phytosaprophagous, and the feeding guild of **1** species is unknown (**Figure 50**). As larvae, **69** species are herbivores, **42** are predators, **11** are saprophagous, **10** are parasitoides, **8** are nectivores, **1** is coprophagous, and **1** is xylophagous (**Figure 51**). The Veg Plots, therefore, clearly **support a diverse range of invertebrates with contrasting life-histories**.

Figure 49. A selection of invertebrates found at Veg Plots 2024. (Top left): the soldier beetle *Malthinus balteatus*. (Top right): Small Bee-grabber. (Bottom left): Common Carpet. (Bottom right): European Cinchbug.



Among these invertebrates are a number of predatory and parasitic species, including (but not limited to): spiders; ground beetles; ladybirds; robberflies; long-legged flies; flesh-flies; snail-killing flies; damsel bugs; and lacewings. The ability to support such predators and parasites is essential as a means to protect crops from potential pest species at Veg Plots, and is likely achieved through actions such as: wildflower strip planting; beetle bank creation; the practise of planting trees within the vegetable cropping areas; and maintaining areas of meadow, scrub and otherwise 'rough' vegetation (especially at the edges); all of which likely provide safe-havens for such species.

Of the **175** species recorded at Veg Plots in 2024, **12** are considered to be of 'conservation importance' (**Table 11**). This includes: **1** x Nationally Rare species; **5** x Nationally Scarce species; and **6** x Nationally Local species. Of particular significance is the presence of the Nationally Rare fruit fly *Urophora solstitialis*, whose larvae form galls within Musk Thistle; it is unclear if Musk Thistle is present at Veg Plots or if the adult encountered in 2024 originates from elsewhere at Abbey Home Farm. The Nationally Scarce tortoise beetles *Cassida nebulosa* and *C. nobilis* were also notable finds, both of which were found at the edges of one of the vegetable plots (**Figure 19**), highlighting the value of what could be considered 'weeds' within the vegetable plots.

Figure 50. The number of species at Veg Plots in each adult feeding guild.

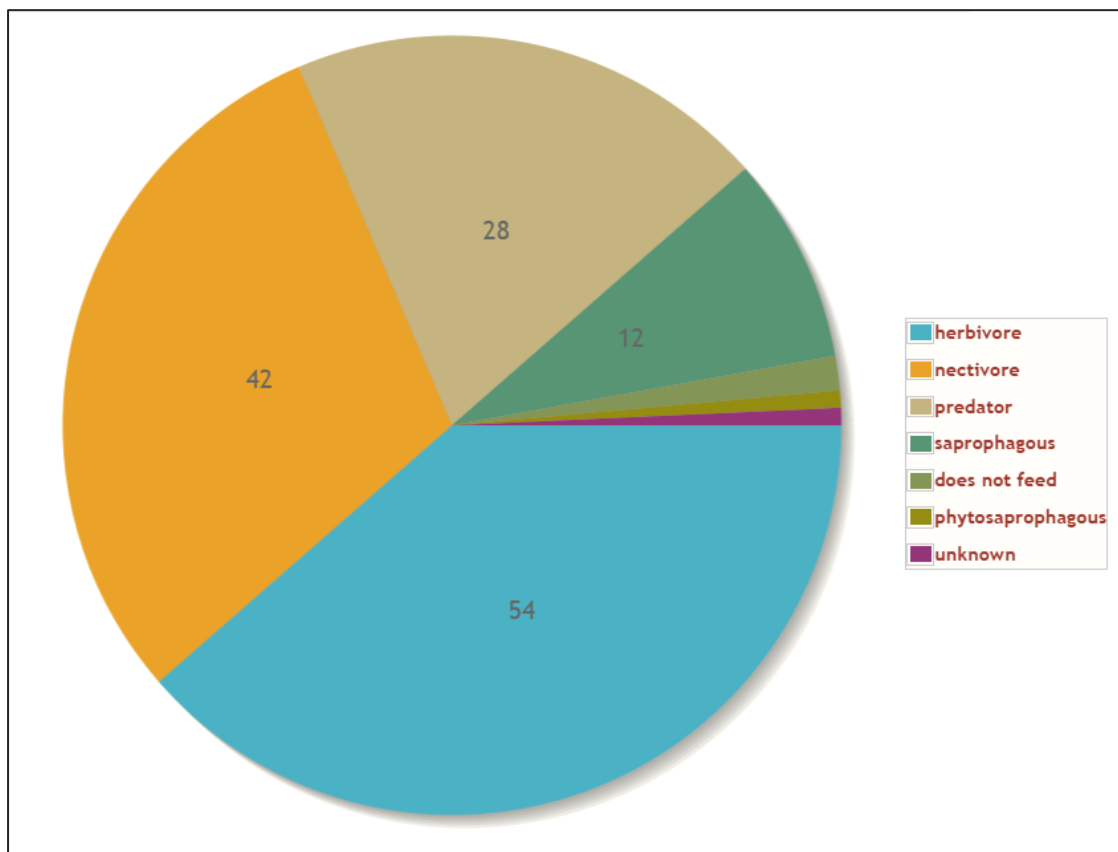


Figure 51. The number of species at Veg Plots in each larval feeding guild.

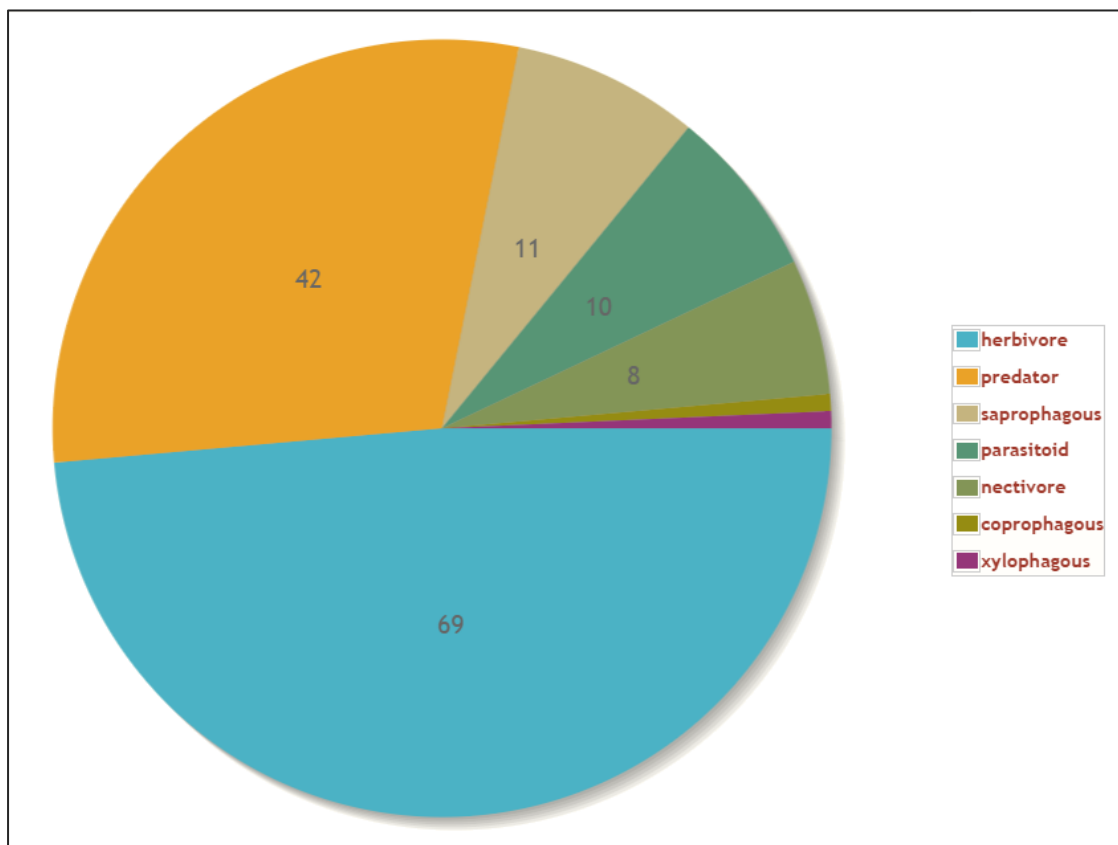


Table 11. Species of ‘conservation importance’ recorded at Veg Plots in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Malthinus balteatus</i>	a soldier beetle	Coleoptera	Local	decaying wood
<i>Cassida nebulosa</i>	a tortoise beetle	Coleoptera	NS	short sward & bare ground
<i>Cassida nobilis</i>	a tortoise beetle	Coleoptera	NS	tall sward & scrub
<i>Chaetocnema picipes</i>	a flea beetle	Coleoptera	Local	tall sward & scrub
<i>Mordellistena pumila</i>	a tumbling flower beetle	Coleoptera	Local	
<i>Sphaerophoria taeniata</i>	a hoverfly	Diptera	Local	
<i>Urophora solstitialis</i>	a fruit fly	Diptera	RDB 3	tall sward & scrub
<i>Megamelodes quadrimaculatus sensu stricto</i>	a planthopper	Hemiptera	Local; New to VC	
<i>Rhopalus (Rhopalus) parumpunctatus</i>	a scentless plant bug	Hemiptera	NS	short sward & bare ground
<i>Myrmica sabuleti</i>	a red ant	Hymenoptera	Local	short sward & bare ground
<i>Lasioglossum malachurum</i>	Sharp-collared Furrow Bee	Hymenoptera	Nb	short sward & bare ground
<i>Tiphia minuta</i>	Small Tiphia	Hymenoptera	Nb	short sward & bare ground

On the basis of these results – with both a respectable diversity of species and number of species of ‘conservation importance’ – Veg Plots is considered to be of **Moderate invertebrate conservation value**. It is recommended that current management practices at Veg Plots – such as the use of green manures, wildflower strips, etc. – continue to be implemented at Veg Gardens for the benefit of invertebrates.

4.2.10 Well Ground Pond

A total of **106** invertebrate species were recorded at Well Ground Pond in 2024. This includes a mix of species associated with: arboreal habitat, such as Ash Bud Moth (*Prays fraxinella*) (**Figure 52**), whose larvae mine the leaves, and later the buds, of Ash; decaying wood, such as Common Malachite Beetle (*Malachius bipustulatus*) (**Figure 52**), whose larvae are predacious on smaller insects living under the loose bark of trees; marshland, such as the whirligig beetle *Gyrinus substriatus* (**Figure 52**), which is found in ponds and pools; bare ground and short sward grassland, such as the ground bug *Taphropeltus contractus* (**Figure 52**); shaded woodland, such as the lauxaniid fly *Meiosimyza decempunctata*; and tall sward grassland and scrub, such as the weevil *Leiosoma deflexum*.

Figure 52. A selection of invertebrates found at Well Ground Pond in 2024. (Top left): Ash Bud Moth. (Top right): Common Malachite Beetle. (Bottom left): the whirligig beetle *Gyrinus substriatus*. (Bottom right): the ground bug *Taphropeltus contractus*.



The freshwater of Well Ground Pond supports several aquatic or semi-aquatic invertebrates, including: the whirligig beetle *Gyrinus substriatus*; the water scavenger beetle *Berosus affinis* (**Figure 29**); Black Colonel (**Figure 31**); Southern Hawker (*Aeshna cyanea*); and the caddisfly *Glyptotendipes pallidus*. In addition to the water itself supporting invertebrates, the ponds emergent wetland vegetation supports species such as Iris Flea Beetle (*Aphthona nonstriata*), while the drawdown zone supports the likes of the ground beetle *Bembidion lunulatum*, Semaphore Fly (*Poecilobothrus nobilitatus*), and the phantom crane fly *Ptychoptera contaminata*.

The majority of invertebrates at Well Ground Pond are, however, associated with the woodland. This includes species which are utilising the: foliage or canopy of broadleaved/coniferous trees, such as Oak Bush-cricket (*Meconema thalassinum*); trunks and branches (including flowers), such as the false flower beetles *Anaspis maculata* and *A. pulicaria*; sward/field layer, such as the mirid bug *Grypocoris stysi*; and litter and ground layer, such as the red ant *Myrmica rubra*.

Of the **106** species recorded at Well Ground Pond in 2024, **8** are considered to be of 'conservation importance' (**Table 12**). This includes: **1** x Nationally Scarce species; **6** x Nationally Local species; and **1** x Other species. Of greatest significance is the presence of the Nationally Scarce long-legged fly *Dolichopus virgultorum*, which is

likely associated with the damp margins of the pond and has not been encountered in the vice-county of East Gloucestershire (VC 33) previously.

Table 12. Species of ‘conservation importance’ recorded at Well Ground Pond in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Diaea dorsata</i>	Green Crab Spider	Araneae	Local	arboreal
<i>Berosus affinis</i>	a water scavenger beetle	Coleoptera	Local	marshland
<i>Anaspis pulicaria</i>	a false flower beetle	Coleoptera	Local	decaying wood
<i>Dolichopus virgultorum</i>	a long-legged fly	Diptera	NS; New to VC	acid & sedge peats
<i>Chorisops nagatomii</i>	Bright Four-spined Legionnaire	Diptera	Local	tall sward & scrub
<i>Odontomyia tigrina</i>	Black Colonel	Diptera	Local	acid & sedge peats
<i>Lamprotettix nitidulus</i>	a leafhopper	Hemiptera	Local	arboreal
<i>Callaspidia defonscolombeii</i>	a figitid wasp	Hymenoptera	Other; New to VC	

Owing to the relatively low diversity of invertebrates at Well Ground Pond, with the majority of its species of ‘conservation importance’ being of local significance only, this sample area is considered of **Low invertebrate conservation value**. It is envisaged that the habitats at Well Ground Pond are relatively self-sustaining at present and that there is **no urgent need for management intervention** at this moment in time.

4.2.11 Yellow School Strip

A total of **36** invertebrate species were recorded at Yellow School Strip in 2024 – this low diversity can be attributed to limited sampling effort, with just a single visit made to Yellow School Strip (on 20th April) during this survey. These **36** species, however, are associated with a variety of habitats, including: arboreal, such as Parent Bug (*Elasmucha grisea*), which feed on birch and alder; decaying wood, such as the lace-weaver spider *Amaurobius fenestralis*, which can be found in crevices and under loose bark on tree trunks; marshland, such as the ground beetle *Bembidion varium* and shore bug *Chartoscirta cincta*; shaded woodland, such as the centipede *Stigmatogaster subterraneus*; tall sward and scrub, such as the hoverfly *Rhingia campestris*; and bare ground and short sward grassland, such as Flavous Nomad Bee (*Nomada flava*).

The old pond, which has become heavily silted, supports marshland habitat (as shown in the left image in **Figure 8**) that is home to wetland species such as the money spider *Gnathonarium dentatum*, and the crane flies *Dicranophragma*

adjunctum and *Tricyphona immaculata*, as well as the forementioned ground beetle *Bembidion varium* and shore bug *Chartoscirta cincta*.

Of the **36** species recorded at Yellow School Strip in 2024, **2** are considered to be of 'conservation importance': the localised Green Crab Spider and the localised flea beetle *Chaetocnema picipes*. Owing to the low diversity of invertebrates at Yellow School Strip, with just two species of 'conservation importance', this sample area is considered of **Low invertebrate conservation value**.

4.2.12 Yellow School Wood

A total of **148** invertebrate species were recorded at Yellow School Wood in 2024 – the joint-second highest species total of the **12** sample areas visited. This includes a mix of species associated with: arboreal habitat, such as Yellow-spotted Tortrix (*Pseudargyrotoza conwagana*) (**Figure 53**), which feeds on Ash; decaying wood, such as Rhinoceros Beetle (*Sinodendron cylindricum*) (**Figure 53**), which burrows in dead wood; marshland, such the long-legged fly *Dolichopus arbustorum*; shaded woodland, such as the flat-backed millipede *Brachydesmus superus* (**Figure 53**); bare ground and short sward grassland, such as the ground beetle *Agonum muelleri* (**Figure 53**); and tall sward grassland and scrub, such as the weevil *Ceutorhynchus typhae*, which feeds on a variety of brassicas.

Figure 53. A selection of invertebrates found at Yellow School Wood in 2024. (Top left): Yellow-spotted Tortrix. (Top right): Rhinoceros Beetle. (Bottom left): the flat-backed millipede *Brachydesmus superus*. (Bottom right): the ground beetle *Agonum muelleri*.



Of the **148** species recorded at Yellow School Wood in 2024, **14** are considered to be of 'conservation importance' (**Table 13**). This includes: **4** x Nationally Scarce species; and **10** x Nationally Local species. At least **4** of these species – the soldier beetle *Malthinus balteatus*, Rhinoceros Beetle, the centipede *Geophilus osquidatum*, and Brown Tree Ant – are associated with decaying wood. Rhinoceros Beetle (one female and two males) was found beneath the loose bark of a fallen tree (**Figure 54**). The centipede *Geophilus osquidatum* was found beneath the bark of a standing dead conifer tree (**Figure 23**), while Brown Tree Ant workers were found among dead wood at the base of a standing dead tree (**Figure 25**). This emphasises the **importance of retaining dead and decaying wood of all ages at Yellow School Wood, both standing and fallen**. Where dead wood occurs naturally, it should ideally be **left in situ** where it is found (including within freshwater habitats). **Seek to retain attached, dead and decaying limbs/branches/twigs of all sizes**; if their removal is necessary for public safety, then pruning is preferable to removal. Fallen trees, limbs and vegetation should be **left to decay where they lie and not removed**. If fallen dead wood restricts access or presents a health and safety risk, it should be moved **only as far as is absolutely necessary** and **kept as intact as possible** to retain integrity of any habitats within; avoid chipping where possible. Avoid stacking fallen dead wood against tree trunks as this can disrupt lichens on the bark.

Figure 54. Fallen dead tree at Yellow School Wood where several Rhinoceros Beetle adults were found on 16th June 2024 beneath the loose bark.



Table 13. Species of ‘conservation importance’ recorded at Yellow School Wood in 2024.

Species	Common Name	Order	Conservation status	Habitat
<i>Cyclosa conica</i>	an orb spider	Araneae	Local	arboreal
<i>Diaea dorsata</i>	Green Crab Spider	Araneae	Local	arboreal
<i>Malthinus balteatus</i>	a soldier beetle	Coleoptera	Local	decaying wood
<i>Chrysolina oricalcia</i>	Cow Parsely Leaf Beetle	Coleoptera	Local	tall sward & scrub
<i>Sinodendron cylindricum</i>	Rhinoceros Beetle	Coleoptera	Local	decaying wood
<i>Oedemera femoralis</i>	a false blister beetle	Coleoptera	NS	tall sward & scrub
<i>Dolichopus arbustorum</i>	a long-legged fly	Diptera	NS; New to VC	marshland; running water
<i>Chorisops nagatomii</i>	Bright Four-spined Legionnaire	Diptera	Local	tall sward & scrub
<i>Eumerus ornatus</i>	Woodland Roundface	Diptera	Local	shaded woodland floor
<i>Geophilus osquidatum</i>	a centipede	Geophilomorpha	NS; New to VC	tall sward & scrub
<i>Lamprotettix nitidulus</i>	a leafhopper	Hemiptera	Local	arboreal
<i>Peritrechus lundii</i>	a ground bug	Hemiptera	Local; New to VC	tall sward & scrub
<i>Calocoris (Calocoris) alpestris</i>	a mirid bug	Hemiptera	Local	shaded woodland floor
<i>Lasius brunneus</i>	Brown Tree Ant	Hymenoptera	Na	decaying wood

Many of the remaining species of ‘conservation importance’ at Yellow School Wood are associated either with: the foliage of trees, such as the orb spider *Cyclosa conica*, Green Crab Spider, and the leafhopper *Lamprotettix nitidulus*; or understory plants, such as Cow Parsely Leaf Beetle on Cow Parsley and the mirid bug *Calocoris alpestris* on nettles.

The majority of invertebrates at Yellow School Wood were encountered alongside the main footpath through the wood, which likely acts as **a valuable corridor along which insects can move through the woodland**; such woodland rides (as well as glades) play a crucial role in supporting invertebrate populations, particularly pollinators, by extending sunny, warm conditions into the heart of wooded areas. It is recommended that this path is **managed to ensure it does not become too shaded** and remains **sunny and sheltered to maintain its warmth and floral richness**. This could be achieved by **periodic cutting of woody material and scrub** (especially bramble) along the path **in rotation and in relatively short sections** at a time, thereby maximising habitat diversity. It is **important not to mow or cut the entire ride system in a single year**; a 3 to 5 year mowing rotation is ideal. It would also prove beneficial to **create/maintain a series of well-connected**

glades with the wood; such glades are important for species such as the localised Woodland Roundface hoverfly. This would enable insects to move more easily through the woodland, accessing crucial breeding and foraging areas.

Yellow School Wood is considered to be of **moderate invertebrate conservation value** owing to its respectable diversity of invertebrates (comparative to other sample areas), which includes **14** species of 'conservation importance'. There are opportunities, however, to further enhance this sample area for invertebrates by actioning the forementioned recommendations.

5.0 SUMMARY

Though significant scope exists to find additional invertebrate species across all of the **12** sample areas visited in 2024, it is clear from these results that Abbey Home Farm supports a **diverse invertebrate fauna that is no doubt reflective of the contrasting mix of habitats** (and, therefore, niches) available to invertebrates. It seems logical to presume that the organic farming practices at Abbey Home Farm are a further contributory factor to this diverse invertebrate fauna, especially within open habitats (such as those found at Round Hill Bank, Veg Gardens and Veg Plots) that, if the farm was not organic, the associated invertebrates would be subject to negative pressures such as fertiliser and pesticide exposure.

Though a diverse invertebrate fauna could be expected given the contrasting mix of semi-natural habitats available for invertebrates at Abbey Home Farm, the significant number of species of 'conservation importance' is rather surprising, highlighting the significant invertebrate conservation value of the farm. A rather impressive **77** species of 'conservation importance' were recorded during the survey, which includes: 3 x **Section 41** species; 2 x **Endangered (EN or RDB 1)** species; 1 x **Vulnerable (RDB 2)** species; 6 x **Nationally Rare (NR or RDB 3)** species; 25 x **Nationally Scarce (Na, Nb, Notable, NS or pNS)** species; 35 x **Nationally Local** species; and 5 x **Other** species. It is clear, therefore, that Abbey Home Farm is not only functioning as a commercial organic farm, but it is also simultaneously acting as an **important refuge for rare and scarce invertebrates which are declining in the wider countryside and/or habitat specialists with restricted distributions in Britain**. Considering several of these species are of high conservation priority in Britain, plus at least **18** of which appear to have not been recorded in the vice-county of East Gloucestershire (VC 33) previously, Abbey Home Farm is clearly an **important site for invertebrate conservation in the unitary authority area of Gloucestershire and Cotswolds District**. It is envisaged that additional surveys will only further improve our understanding of the local, county and regional invertebrate conservation significance of Abbey Home Farm.

6.0 IDENTIFICATION KEYS

The following identification keys and resources were used to identify invertebrate specimens at Abbey Home Farm, in addition to unpublished keys/information sourced from national recording schemes and reliable websites:

Arachnida

- Bee, L. Oxford, G. and Smith, H. (2017). Britain's spiders - a field guide. Princeton University Press, Oxfordshire.
- Hillyard, P.D. and Sankey, J.H.P. (1989). Harvestmen. Synopses of the British Fauna (New Series) 4 (2nd edition). London: Linnean Society of London.
- Roberts, M.J. (2001). Collins Field Guide to the Spiders of Britain and Northern Europe. London: HarperCollins Publishers Ltd.

Coleoptera

- Duff, A.G. (2012). Beetles of Britain and Ireland, Volume 1: Sphaeriidae to Silphidae. A. G. Publishing.
- Duff, A.G. (2016). Beetles of Britain and Ireland, Volume 4: Cerambycidae to Curculionidae. A. G. Publishing.
- Duff, A.G. (2020). Beetles of Britain and Ireland, Volume 3: Geotrupidae to Scaphitidae. A.G. Duff Publishing.
- Duff, A.G. (2024). Beetles of Britain and Ireland, Volume 2: Staphylinidae. A.G. Duff Publishing.
- Lott, D.A. and Anderson, R. (2011). Handbooks for the identification of British insects, vol. 12, part 7 The Staphylinidae (rove beetles) of Britain and Ireland. Parts 7 & 8: Oxyporinae, Steninae, Euaesthetinae, Pseudopsinae, Paederinae, Staphylininae. Royal Entomological Society.
- Luff, M.L. (2007). The Carabidae (ground beetles) of Britain and Ireland. RES Handbook Volume 4, Part 2 (2nd edition). Shrewsbury: Field Studies Council.

Diptera

- Ball, S. (2017). Sciomyzidae (Diptera). Unpublished.
- Belshaw, R. (1993). Tachinid flies. Diptera: Tachinidae. Handbooks for the identification of British insects 10(4a): 1-169. Keys to British species.
- Clements, D.K. (2020). Keys to British Picture-wing Flies (Diptera: Tephritidae, Ulidiidae, Platystomatidae, Pallopteridae and Opomyzidae). Dipterists Forum workshop handout, version 3. 46pp.
- Drake, C.M. (1993). A review of the British Opomyzidae. British Journal of Entomology and Natural History 6: 159-176.
- Freeman, P. and Lane, R.P (1985). Bibionid and scatopsid flies. Diptera: Bibionidae and Scatopsidae. Handbooks for the identification of British insects 9(7): 1-74. Keys to British species.
- Stubbs, A.E. & Drake, M. (2001). British soldierflies and their allies: an illustrated guide to their identification and ecology. British Entomological and Natural History Society.
- Stubbs, A.E. & Falk, S. (2002). British hoverflies, an illustrated identification guide. Second edition. Reading: British Entomological and Natural History Society.
- Stubbs, A.E. (2021). British Craneflies. British Entomological and Natural History Society. Reading.

- White, I.M. (1988). Handbooks for the Identification of British Insects. Tephritid Flies, Diptera: Tephritidae, 1-134. Vol. X, Part 5(a). Royal Entomological Society London.

Hemiptera

- Biedermann, R. and Niedringhaus, R. (2009). The Plant- and Leafhoppers of Germany – Identification key to all species. Wissenschaftlich Akademischer Buchvertrieb-Fründ, Scheeßel.
- Southwood, T.R.E. and Leston, D. (1959). Land and Water Bugs of the British Isles. Frederick Warne & Co. Ltd.
- Wilson, M., Stewart, A., Biederman, R., Nickel, H. and Niedringhaus, R. (2015). The Planthoppers and Leafhoppers of Britain and Ireland - Identification keys to all families and genera and all British and Irish species not recorded from Germany. Wissenschaftlich Akademischer Buchvertrieb-Fründ, Scheeßel.

Hymenoptera

- Falk, S.J. and Lewington, R. (2015). Field Guide to the Bees of Great Britain and Ireland. British Wildlife Field Guide. London: British Wildlife Publishing.
- Yeo, P.F. and Corbet, S.A. (1995). Naturalists' Handbooks 3: Solitary Wasps. Richmond Publishing Co. Ltd.

Lepidoptera

- Henwood, B., Sterling, P. and Lewington, R. (2020). Field Guide to the Caterpillars of Great Britain and Ireland. Bloomsbury Wildlife Guides.
- Manley, C. (2015). British Moths: A Photographic Guide to the Moths of Britain and Ireland. 2nd edition. Bloomsbury Publishing, London.

Myriapoda

- Barber, A.D. (2009). Centipedes. Synopses of the British Fauna (New Series) 58. Shrewsbury: Field Studies Council.
- Blower, J.G. (1985). Millipedes. Synopses of the British Fauna (New Series) 35. London: The Linnean Society of London.

Neuroptera

- Plant, C.W (1997). A Key to the Adults of British Lacewings and their Allies. Shrewsbury: Field Studies Council.

Plecoptera

- Hynes, H.B.N. (1977). A Key to the Adults and Nymphs of British Stoneflies (Plecoptera) with Notes on their Ecology and Distribution. Ambleside: Freshwater Biological Association.

Trichoptera

- Barnard, P. and Ross, E. (2012). The adult Trichoptera (caddisflies) of Britain and Ireland. Telford: Royal Entomological Society.

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British Bugs. (2025c). *Eupteryx atropunctata*. [online] Available at: https://www.britishbugs.org.uk/homoptera/Cicadellidae/Eupteryx_atropunctata.html [Accessed 13 Jan. 2025].

British Bugs. (2025d). *Megamelodes quadrimaculatus*. [online] Available at: https://www.britishbugs.org.uk/homoptera/Delphacidae/Megamelodes_quadrimaculatus.html [Accessed 13 Jan. 2025].

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- Drake, C.M. (2018). A review of the status of the Dolichopodidae flies of Great Britain - Species Status No. 30. Natural England Commissioned Reports, Number 195.
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<https://www.flickr.com/photos/63075200@N07/albums/72157632826731862/>
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<https://www.flickr.com/photos/63075200@N07/albums/72157679104023986/>
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- Falk, S.J. (2025d). *Andrena labiata* (Red-girdled Mining Bee). [online] Flickr. Available at:
<https://www.flickr.com/photos/63075200@N07/albums/72157640840109505/>
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 [Accessed 13 Jan. 2025].

- Falk, S.J. (2025g). *Osmia bicolor* (Red-tailed Mason Bee). [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157633277037831/> [Accessed 13 Jan. 2025].
- Falk, S.J. (2025h). *Priocnemis agilis* (Red-legged Spotwing). [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72177720302531132/> [Accessed 13 Jan. 2025].
- Falk, S.J. (2025i). *Tiphia minuta* (Small Tiphia). [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157657605634230/> [Accessed 13 Jan. 2025].
- Falk, S.J. (2025j). *Sarcophaga hirticrus* (Coastal Flesh Fly). [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157717960969198/> [Accessed 13 Jan. 2025].
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- Falk, S.J. (2025l). *Brachyopa scutellaris* (Orange-shouldered Sap Hoverfly) [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157629249115950/> [Accessed 13 Jan. 2025].
- Falk, S.J. (2025m). *Nomada striata* (Blunt-jawed Nomad Bee) [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157633464238547/> [Accessed 13 Jan. 2025].
- Falk, S.J. (2025n). *Bellardia bayeri* (Bayer's Emerald-bottle) [online] Flickr. Available at: <https://www.flickr.com/photos/63075200@N07/albums/72157661816591324/> [Accessed 13 Jan. 2025].
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APPENDICES

Appendix 1. Full list of invertebrate species recorded at Abbey Home Farm in 2024. National status codes are explained below.

- **Endangered (EN or RDB 1)** = Species in danger of extinction in Great Britain and whose survival is unlikely if the causal factors continue operating.
- **Nationally Local (Local)** = Species which, whilst fairly common, are evidently less widespread than truly common species, but also not qualifying as Nationally Scarce.
- **Nationally Rare (RDB 3 or NR)** = Species with small populations that are not at present Endangered (EN) or Vulnerable (VU) but are at risk; usually localised within restricted geographical areas or habitats or are thinly scattered over a wider range. Includes species estimated to exist in only 15 or less post-1970 ten-kilometre squares of the British National Grid system or, if more, then in vulnerable habitat.
- **Nationally Scarce (Na, Nb, Notable, NS or pNS)** = Species which do not fall within the threatened (CR, EN or VU) or Red Data Book (RDB) categories but which are none-the-less uncommon in Great Britain and occur within the range of 16 to 100 ten-kilometre squares of the British National Grid system since 1970.
- **New to VC** = Species which appear to have not been previously recorded in the vice-county of East Gloucestershire (VC 33) and therefore may represent new vice-county records. These species may or may not have a formal conservation status (e.g. Nationally Scarce).
- **Other** = Species that are not considered threatened but are otherwise noteworthy (e.g. due to a lack of previous records).
- **Section 41** = Species listed under Section 41 of the NERC Act 2006 as species of 'principal importance for the conservation of biodiversity in England'.
- **Vulnerable (RDB 2 or VU)** = Species considered to be facing a high risk of extinction in the wild.
- Where Status is blank, this species is considered to be common and widespread.

Species	Family	Order	Conservation status	Habitat
<i>Amaurobius fenestralis</i>	Amaurobiidae	Araneae		decaying wood
<i>Anyphaena accentuata</i>	Anyphaenidae	Araneae		arboreal
<i>Agalenatea redii</i>	Araneidae	Araneae		
<i>Araneus diadematus</i>	Araneidae	Araneae		
<i>Araniella cucurbitina sensu stricto</i>	Araneidae	Araneae		
<i>Araniella opisthographa</i>	Araneidae	Araneae		arboreal
<i>Cyclosa conica</i>	Araneidae	Araneae	Local	arboreal
<i>Larinioides cornutus</i>	Araneidae	Araneae		acid & sedge peats
<i>Mangora acalypha</i>	Araneidae	Araneae		tall sward & scrub
<i>Clubiona terrestris</i>	Clubionidae	Araneae		
<i>Dictyna arundinacea</i>	Dictynidae	Araneae		tall sward & scrub
<i>Nigma puella</i>	Dictynidae	Araneae	NS	arboreal

<i>Micaria micans</i>	Gnaphosidae	Araneae		
<i>Ceratinella scabrosa</i>	Linyphiidae	Araneae		tall sward & scrub
<i>Erigone atra</i>	Linyphiidae	Araneae		
<i>Erigone dentipalpis</i>	Linyphiidae	Araneae		
<i>Gnathonarium dentatum</i>	Linyphiidae	Araneae		acid & sedge peats
<i>Lepthyphantes minutus</i>	Linyphiidae	Araneae		arboreal
<i>Linyphia hortensis</i>	Linyphiidae	Araneae		shaded woodland floor
<i>Microlinyphia pusilla</i>	Linyphiidae	Araneae		tall sward & scrub
<i>Alopecosa pulverulenta</i>	Lycosidae	Araneae		tall sward & scrub; upland
<i>Pardosa amentata</i>	Lycosidae	Araneae		acid & sedge peats
<i>Pardosa prativaga</i>	Lycosidae	Araneae		tall sward & scrub
<i>Pardosa pullata</i>	Lycosidae	Araneae		tall sward & scrub
<i>Piratula latitans</i>	Lycosidae	Araneae	Local	acid & sedge peats
<i>Cheiracanthium erraticum</i>	Miturgidae	Araneae		tall sward & scrub
<i>Philodromus aureolus</i>	Philodromidae	Araneae		arboreal
<i>Philodromus cespitum</i>	Philodromidae	Araneae		arboreal
<i>Philodromus dispar</i>	Philodromidae	Araneae		arboreal
<i>Tibellus</i>	Philodromidae	Araneae		
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Metellina menzei</i>	Tetragnathidae	Araneae		
<i>Pachygnatha degeeri</i>	Tetragnathidae	Araneae		
<i>Tetragnatha extensa</i>	Tetragnathidae	Araneae		acid & sedge peats
<i>Tetragnatha montana</i>	Tetragnathidae	Araneae		acid & sedge peats
<i>Tetragnatha nigrita</i>	Tetragnathidae	Araneae	Local	acid & sedge peats
<i>Anelosimus vittatus</i>	Theridiidae	Araneae		arboreal
<i>Enoplognatha latimana</i>	Theridiidae	Araneae		tall sward & scrub
<i>Enoplognatha ovata sensu stricto</i>	Theridiidae	Araneae		
<i>Neottiura bimaculata</i>	Theridiidae	Araneae		tall sward & scrub
<i>Parasteatoda lunata</i>	Theridiidae	Araneae		arboreal
<i>Phylloneta sisypbia</i>	Theridiidae	Araneae		tall sward & scrub
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Misumena vatia</i>	Thomisidae	Araneae		tall sward & scrub
<i>Xysticus</i>	Thomisidae	Araneae		
<i>Nanogona polydesmoides</i>	Craspedosomatidae	Chordeumatida		shaded woodland floor
<i>Anthicus antherinus</i>	Anthicidae	Coleoptera		saltmarsh
<i>Catapion seniculus</i>	Apionidae	Coleoptera		tall sward & scrub

<i>Ceratapion onopordi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Diplapion confluens/stolidum</i> agg.	Apionidae	Coleoptera	Local	
<i>Holotrichapion pisi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Ischnopterapion loti/modestum</i> agg.	Apionidae	Coleoptera		
<i>Ischnopterapion virens</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Oxystoma pomonae</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Perapion curtirostre</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Perapion hydrolapathi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion assimile</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion difforme</i>	Apionidae	Coleoptera	Nb	tall sward & scrub
<i>Protapion filirostre</i>	Apionidae	Coleoptera	Nb	short sward & bare ground
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion nigritarse</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion trifolii</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Rhopalapion longirostre</i>	Apionidae	Coleoptera	Local; New to VC	
<i>Byturus ochraceus</i>	Byturidae	Coleoptera		tall sward & scrub
<i>Cantharis decipiens</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis flavilabris</i> (=nigra auctt.) black scutellum	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis lateralis</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis nigra</i> (=thoracica) red scutellum	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis nigricans</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis rufa</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Malthinus balteatus</i>	Cantharidae	Coleoptera	Local	decaying wood
<i>Malthinus seriepunctatus</i>	Cantharidae	Coleoptera		decaying wood
<i>Malthodes marginatus</i>	Cantharidae	Coleoptera		decaying wood
<i>Rhagonycha fulva</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Rhagonycha lignosa</i>	Cantharidae	Coleoptera		arboreal
<i>Rhagonycha nigriventris</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Abax parallelepipedus</i>	Carabidae	Coleoptera		shaded woodland floor
<i>Agonum muelleri</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Amara aenea</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Amara familiaris</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Badister bullatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Bembidion biguttatum</i>	Carabidae	Coleoptera		marshland

<i>Bembidion lampros</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Bembidion lunulatum</i>	Carabidae	Coleoptera		marshland
<i>Bembidion octomaculatum</i>	Carabidae	Coleoptera	NS; New to VC	marshland
<i>Bembidion quadrimaculatum</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Bembidion varium</i>	Carabidae	Coleoptera		marshland
<i>Calathus rotundicollis</i>	Carabidae	Coleoptera		shaded woodland floor
<i>Clivina fossor</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Leistus spinibarbis</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Microlestes maurus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Microlestes minutulus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Nebria brevicollis</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Notiophilus biguttatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Notiophilus substriatus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Ocys tachysoides</i>	Carabidae	Coleoptera		
<i>Oxypselaphus obscurus</i>	Carabidae	Coleoptera		marshland; shaded woodland floor; wet woodland
<i>Poecilus cupreus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Pterostichus madidus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Pterostichus nigrita</i>	Carabidae	Coleoptera		marshland
<i>Syntomus obscuroguttatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Rutpela maculata</i>	Cerambycidae	Coleoptera		decaying wood
<i>Stenocorus meridianus</i>	Cerambycidae	Coleoptera		decaying wood
<i>Stenurella melanura</i>	Cerambycidae	Coleoptera		decaying wood
<i>Altica oleracea</i>	Chrysomelidae	Coleoptera		short sward & bare ground
<i>Aphthona euphorbiae</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Aphthona nonstriata</i>	Chrysomelidae	Coleoptera		acid & sedge peats
<i>Bruchus loti</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Bruchus rufimanus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Cassida denticollis</i>	Chrysomelidae	Coleoptera	EN; NR; New to VC	tall sward & scrub
<i>Cassida nebulosa</i>	Chrysomelidae	Coleoptera	NS	short sward & bare ground
<i>Cassida nobilis</i>	Chrysomelidae	Coleoptera	NS	tall sward & scrub
<i>Chaetocnema concinna</i>	Chrysomelidae	Coleoptera		tall sward & scrub

<i>Chaetocnema hortensis</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema picipes</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Chrysolina oricalcia</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera		arboreal
<i>Crepidodera fulvicornis</i>	Chrysomelidae	Coleoptera		arboreal
<i>Donacia thalassina</i>	Chrysomelidae	Coleoptera	NS	marshland
<i>Lochmaea crataegi</i>	Chrysomelidae	Coleoptera		arboreal
<i>Oulema obscura</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Phaedon tumidulus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Phyllotreta undulata</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Prasocuris glabra</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Psylliodes chrysocephala</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Psylliodes napi</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Adalia decempunctata</i>	Coccinellidae	Coleoptera		arboreal
<i>Coccidula rufa</i>	Coccinellidae	Coleoptera		acid & sedge peats
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Halyzia sedecimguttata</i>	Coccinellidae	Coleoptera		arboreal
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Propylea quattuordecimpunctata</i>	Coccinellidae	Coleoptera		
<i>Psyllobora vigintiduopunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Rhyzobius litura</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Scymnus frontalis</i>	Coccinellidae	Coleoptera		short sward & bare ground
<i>Subcoccinella vigintiquatuorpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Anthonomus rubi</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Ceutorhynchus pallidactylus</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Ceutorhynchus typhae</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Cionus nigritarsis</i>	Curculionidae	Coleoptera	Na	tall sward & scrub
<i>Euophryum confine</i>	Curculionidae	Coleoptera		decaying wood
<i>Exomias araneiformis</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Exomias pellucidus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Glocianus distinctus</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Hypera meles</i>	Curculionidae	Coleoptera	Nb	tall sward & scrub
<i>Hypera nigrirostris</i>	Curculionidae	Coleoptera		tall sward & scrub

<i>Hypera postica</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Hypera venusta</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Leiosoma deflexum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pyraister</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mogulones asperifoliarum</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Parethelcus pollinarius</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Phyllobius argentatus</i>	Curculionidae	Coleoptera		arboreal
<i>Phyllobius pyri</i>	Curculionidae	Coleoptera		arboreal
<i>Phyllobius roboretanus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Polydrusus pterygomalis</i>	Curculionidae	Coleoptera		
<i>Rhinoncus castor</i> (pre 2014 type revision)	Curculionidae	Coleoptera		
<i>Sitona hispidulus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona lineatus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona obsoletus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona sulcifrons</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Stenocarus ruficornis</i>	Curculionidae	Coleoptera	Nb	short sward & bare ground
<i>Trichosirocalus troglodytes</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Tychius junceus</i>	Curculionidae	Coleoptera	Local	short sward & bare ground
<i>Tychius picirostris</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Dasytes aeratus</i>	Dasytidae	Coleoptera		decaying wood
<i>Agabus bipustulatus</i>	Dytiscidae	Coleoptera		marshland
<i>Agabus nebulosus</i>	Dytiscidae	Coleoptera		marshland
<i>Colymbetes fuscus</i>	Dytiscidae	Coleoptera		marshland
<i>Hydroporus planus</i>	Dytiscidae	Coleoptera		marshland
<i>Hygrotus inaequalis</i>	Dytiscidae	Coleoptera		marshland
<i>Hyphydrus ovatus</i>	Dytiscidae	Coleoptera		marshland
<i>Ilybius</i>	Dytiscidae	Coleoptera		
<i>Athous bicolor</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Athous haemorrhoidalis</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Limonius poneli</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Thryogenes nereis</i>	Eirrhinidae	Coleoptera		acid & sedge peats
<i>Gyrinus substriatus</i>	Gyrinidae	Coleoptera		marshland
<i>Helophorus brevipalpis</i>	Helophoridae	Coleoptera		marshland
<i>Berosus affinis</i>	Hydrophilidae	Coleoptera	Local	marshland
<i>Enochrus melanocephalus</i>	Hydrophilidae	Coleoptera		marshland
<i>Hydrobius fuscipes</i>	Hydrophilidae	Coleoptera		
<i>Brachypterus glaber</i>	Kateretidae	Coleoptera		tall sward & scrub

<i>Cartodere nodifer</i>	Latridiidae	Coleoptera		
<i>Sinodendron cylindricum</i>	Lucanidae	Coleoptera	Local	decaying wood
<i>Anthocomus fasciatus</i>	Malachiidae	Coleoptera	NS	decaying wood
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Mordellistena pseudoparvula</i>	Mordellidae	Coleoptera	NR	
<i>Mordellistena pumila</i>	Mordellidae	Coleoptera	Local	
<i>Mordellochroa abdominalis</i>	Mordellidae	Coleoptera		decaying wood
<i>Noterus clavicornis</i>	Noteridae	Coleoptera		marshland
<i>Oedemera femoralis</i>	Oedemeridae	Coleoptera	NS	tall sward & scrub
<i>Oedemera lurida</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Olibrus corticalis</i>	Phalacridae	Coleoptera		
<i>Pyrochroa serraticornis</i>	Pyrochroidae	Coleoptera		decaying wood
<i>Acrossus luridus</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Agrilinus ater</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Melinopterus prodromus</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Melolontha melolontha</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Otophorus haemorrhoidalis</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Contacyphon palustris</i>	Scirtidae	Coleoptera		running water
<i>Anaspis frontalis</i>	Scaptiidae	Coleoptera		decaying wood
<i>Anaspis garneysi</i>	Scaptiidae	Coleoptera		decaying wood
<i>Anaspis maculata</i>	Scaptiidae	Coleoptera		decaying wood
<i>Anaspis pulicaria</i>	Scaptiidae	Coleoptera	Local	decaying wood
<i>Drusilla canaliculata</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Habrocerus capillaricornis</i>	Staphylinidae	Coleoptera		shaded woodland floor
<i>Paederus littoralis</i>	Staphylinidae	Coleoptera		running water
<i>Scaphidium quadrimaculatum</i>	Staphylinidae	Coleoptera		decaying wood
<i>Tachyporus dispar</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Tachyporus solutus</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Forficula auricularia</i>	Forficulidae	Dermoptera		
<i>Sylvicola punctatus</i>	Anisopodidae	Diptera		
<i>Dioctria atricapilla</i>	Asilidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Leptogaster cylindrica</i>	Asilidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Bibio marci</i>	Bibionidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub

<i>Dilophus femoratus</i>	Bibionidae	Diptera		tall sward & scrub
<i>Bombylius major</i>	Bombyliidae	Diptera		tall sward & scrub
<i>Villa cingulata</i>	Bombyliidae	Diptera	NR	tall sward & scrub
<i>Bellardia bayeri</i>	Calliphoridae	Diptera	Other; New to VC	
<i>Lucilia ampullacea</i>	Calliphoridae	Diptera		shaded woodland floor
<i>Lucilia caesar</i>	Calliphoridae	Diptera		
<i>Melinda viridicyanea</i>	Calliphoridae	Diptera		
<i>Protocalliphora azurea</i>	Calliphoridae	Diptera		
<i>Meromyza bohémica</i>	Chloropidae	Diptera		tall sward & scrub
<i>Myopa pellucida</i>	Conopidae	Diptera	RDB 3	tall sward & scrub
<i>Thecophora atra</i>	Conopidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Dolichopus arbustorum</i>	Dolichopodidae	Diptera	NS; New to VC	marshland; running water
<i>Dolichopus festivus</i>	Dolichopodidae	Diptera		marshland
<i>Dolichopus griseipennis</i>	Dolichopodidae	Diptera		marshland
<i>Dolichopus trivialis</i>	Dolichopodidae	Diptera		marshland; running water
<i>Dolichopus virgultorum</i>	Dolichopodidae	Diptera	NS	acid & sedge peats
<i>Neurigona quadrifasciata</i>	Dolichopodidae	Diptera		
<i>Poecilobothrus nobilitatus</i>	Dolichopodidae	Diptera		marshland
<i>Rhaphium caliginosum</i>	Dolichopodidae	Diptera		running water; shaded woodland floor; wet woodland
<i>Scellus notatus</i>	Dolichopodidae	Diptera		acid & sedge peats
<i>Sciapus platypterus</i>	Dolichopodidae	Diptera		shaded woodland floor
<i>Dryomyza anilis</i>	Dryomyzidae	Diptera		shaded woodland floor
<i>Empis livida</i>	Empididae	Diptera		tall sward & scrub
<i>Empis lutea</i>	Empididae	Diptera		shaded woodland floor; tall sward & scrub
<i>Empis scutellata</i>	Empididae	Diptera		tall sward & scrub
<i>Empis tessellata</i>	Empididae	Diptera		tall sward & scrub
<i>Rhaphomyia atra</i>	Empididae	Diptera		tall sward & scrub
<i>Rhaphomyia sulcata</i>	Empididae	Diptera		shaded woodland floor
<i>Suillia variegata</i>	Heleomyzidae	Diptera		shaded woodland floor
<i>Hybos culiciformis</i>	Hybotidae	Diptera		shaded woodland floor

<i>Ocydromia glabricula</i>	Hybotidae	Diptera		shaded woodland floor
<i>Oedalea</i>	Hybotidae	Diptera		
<i>Tachypeza nubila</i>	Hybotidae	Diptera		decaying wood
<i>Calliopum elisae</i>	Lauxaniidae	Diptera		
<i>Meiosimyza decempunctata</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Meiosimyza platycephala</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Meiosimyza rorida</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Minettia fasciata</i>	Lauxaniidae	Diptera		
<i>Pseudolyciella</i>	Lauxaniidae	Diptera		
<i>Austrolimnophila ochracea</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Dicranomyia mitis sensu strictu</i>	Limoniidae	Diptera		
<i>Dicranomyia modesta</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Dicranophragma adjunctum</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Epiphragma ocellare</i>	Limoniidae	Diptera		decaying wood
<i>Euphylidorea lineola</i>	Limoniidae	Diptera		acid & sedge peats
<i>Limonia nubeculosa</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Neolimonia dumetorum</i>	Limoniidae	Diptera		decaying wood
<i>Ormosia</i>	Limoniidae	Diptera		
<i>Phylidorea ferruginea</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Rhipidia maculata</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Symplecta stictica</i>	Limoniidae	Diptera		acid & sedge peats; brackish pools & ditches; saltmarsh
<i>Eudasyphora cyanella</i>	Muscidae	Diptera		shaded woodland floor
<i>Graphomya maculata</i>	Muscidae	Diptera		acid & sedge peats; decaying wood; marshland; shaded woodland floor; wet woodland
<i>Hydrotaea diabolus</i>	Muscidae	Diptera		shaded woodland floor
<i>Lispe tentaculata</i>	Muscidae	Diptera		marshland
<i>Mesembrina meridiana</i>	Muscidae	Diptera		

<i>Morellia hortorum</i>	Muscidae	Diptera		shaded woodland floor
<i>Morellia simplex</i>	Muscidae	Diptera		
<i>Musca autumnalis</i>	Muscidae	Diptera		
<i>Muscina levida</i>	Muscidae	Diptera		shaded woodland floor
<i>Neomyia viridescens</i>	Muscidae	Diptera		
<i>Geomyza tripunctata</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Opomyza florum</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub
<i>Palloptera saltuum</i>	Pallopteridae	Diptera		tall sward & scrub
<i>Tricyphona immaculata</i>	Pediciidae	Diptera		acid & sedge peats; marshland
<i>Pollenia griseotomentosa</i>	Polleniidae	Diptera		marshland
<i>Pollenia pediculata</i>	Polleniidae	Diptera		
<i>Pollenia rudis</i>	Polleniidae	Diptera		marshland
<i>Ptychoptera contaminata</i>	Ptychopteridae	Diptera		acid & sedge peats; shaded woodland floor; wet woodland
<i>Nyctia halterata</i>	Sarcophagidae	Diptera		tall sward & scrub
<i>Sarcophaga carnaria</i>	Sarcophagidae	Diptera		
<i>Sarcophaga haemorrhoea</i>	Sarcophagidae	Diptera		tall sward & scrub
<i>Sarcophaga hirticrus</i>	Sarcophagidae	Diptera	Local; New to VC	
<i>Sarcophaga incisilobata</i>	Sarcophagidae	Diptera		
<i>Sarcophaga rosellei</i>	Sarcophagidae	Diptera		
<i>Sarcophaga subvicina</i>	Sarcophagidae	Diptera		
<i>Sarcophaga variegata</i>	Sarcophagidae	Diptera		
<i>Norellisoma spinimanum</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Coremacera marginata</i>	Sciomyzidae	Diptera		tall sward & scrub
<i>Hydromya dorsalis</i>	Sciomyzidae	Diptera		marshland
<i>Limnia unguicornis</i>	Sciomyzidae	Diptera		acid & sedge peats; marshland; running water
<i>Pherbellia cinerella</i>	Sciomyzidae	Diptera		tall sward & scrub
<i>Sepsis cynipsea</i>	Sepsidae	Diptera		tall sward & scrub
<i>Sepsis fulgens</i>	Sepsidae	Diptera		tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera		tall sward & scrub

<i>Chorisops nagatomii</i>	Stratiomyidae	Diptera	Local	tall sward & scrub
<i>Microchrysa flavicornis</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Odontomyia tigrina</i>	Stratiomyidae	Diptera	Local	acid & sedge peats
<i>Pachygaster atra</i>	Stratiomyidae	Diptera		shaded woodland floor
<i>Pachygaster leachii</i>	Stratiomyidae	Diptera		shaded woodland floor
<i>Brachyopa scutellaris</i>	Syrphidae	Diptera	Local	decaying wood
<i>Cheilosia lasiopa</i>	Syrphidae	Diptera		shaded woodland floor
<i>Chrysotoxum bicinctum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Epistrophe eligans</i>	Syrphidae	Diptera		arboreal
<i>Episyrphus balteatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Eristalis arbustorum</i>	Syrphidae	Diptera		acid & sedge peats
<i>Eristalis pertinax</i>	Syrphidae	Diptera		acid & sedge peats
<i>Eristalis tenax</i>	Syrphidae	Diptera		rich flower resource
<i>Eumerus ornatus</i>	Syrphidae	Diptera	Local	shaded woodland floor
<i>Ferdinandea cuprea</i>	Syrphidae	Diptera		decaying wood
<i>Helophilus pendulus</i>	Syrphidae	Diptera		acid & sedge peats
<i>Melanostoma mellinum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Melanostoma scalare</i>	Syrphidae	Diptera		tall sward & scrub
<i>Myathropa florea</i>	Syrphidae	Diptera		decaying wood
<i>Neoscia podagrica</i>	Syrphidae	Diptera		
<i>Pipizella viduata</i>	Syrphidae	Diptera		tall sward & scrub
<i>Platycheirus albimanus</i>	Syrphidae	Diptera		
<i>Platycheirus angustatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Platycheirus clypeatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Rhingia campestris</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria scripta</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria taeniata</i>	Syrphidae	Diptera	Local	
<i>Syrirta pipiens</i>	Syrphidae	Diptera		tall sward & scrub
<i>Volucella bombylans</i>	Syrphidae	Diptera		tall sward & scrub
<i>Volucella inanis</i>	Syrphidae	Diptera		
<i>Volucella pellucens</i>	Syrphidae	Diptera		shaded woodland floor
<i>Xanthogramma pedissequum sensu stricto</i>	Syrphidae	Diptera		
<i>Eriothis rufomaculata</i>	Tachinidae	Diptera		

<i>Phasia obesa</i>	Tachinidae	Diptera		
<i>Phasia pusilla</i>	Tachinidae	Diptera		
<i>Siphona</i>	Tachinidae	Diptera		
<i>Tachina fera</i>	Tachinidae	Diptera		
<i>Thelaira solivaga</i>	Tachinidae	Diptera		
<i>Campiglossa malaris</i>	Tephritidae	Diptera	RDB 1	short sward & bare ground; tall sward & scrub
<i>Chaetorellia loricata</i>	Tephritidae	Diptera	RDB 2; New to VC	tall sward & scrub
<i>Chaetostomella cylindrica</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Sphenella marginata</i>	Tephritidae	Diptera		tall sward & scrub
<i>Tephritis bardanae</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Tephritis formosa</i>	Tephritidae	Diptera	Local	short sward & bare ground; tall sward & scrub
<i>Tephritis matricariae</i>	Tephritidae	Diptera		short sward & bare ground
<i>Tephritis neesii</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Tephritis vespertina</i>	Tephritidae	Diptera		tall sward & scrub
<i>Terellia tussilaginis</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Urophora cardui</i>	Tephritidae	Diptera		tall sward & scrub
<i>Urophora jaceana</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Urophora solstitialis</i>	Tephritidae	Diptera	RDB 3	tall sward & scrub
<i>Nephrotoma appendiculata</i>	Tipulidae	Diptera		tall sward & scrub
<i>Nephrotoma cornicina</i>	Tipulidae	Diptera		tall sward & scrub
<i>Nephrotoma flavescens</i>	Tipulidae	Diptera		tall sward & scrub
<i>Nephrotoma quadrifaria</i>	Tipulidae	Diptera		shaded woodland floor
<i>Tipula oleracea</i>	Tipulidae	Diptera		acid & sedge peats
<i>Otites guttatus</i>	Ulidiidae	Diptera		
<i>Pogonognathellus longicornis</i>	Tomoceridae	Entomobryomorpha		
<i>Geophilus electricus</i>	Geophilidae	Geophilomorpha	Local; New to VC	tall sward & scrub
<i>Geophilus osquidatum</i>	Geophilidae	Geophilomorpha	NS; New to VC	tall sward & scrub
<i>Stigmatogaster subterraneus</i>	Himantariidae	Geophilomorpha		shaded woodland floor

<i>Glomeris marginata</i>	Glomeridae	Glomerida		shaded woodland floor
<i>Acanthosoma haemorrhoidale</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Cyphostethus tristriatus</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Elasmucha grisea</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Anthocoris confusus</i>	Anthocoridae	Hemiptera		arboreal
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Buchananiella continua</i>	Anthocoridae	Hemiptera		
<i>Orius (Heterorius) majusculus</i>	Anthocoridae	Hemiptera		
<i>Orius (Orius) laevigatus</i>	Anthocoridae	Hemiptera		
<i>Orius (Orius) niger</i>	Anthocoridae	Hemiptera		tall sward & scrub
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Neophilaenus lineatus</i>	Aphrophoridae	Hemiptera		tall sward & scrub
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Agallia consobrina</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Alebra</i>	Cicadellidae	Hemiptera		
<i>Aphrodes diminuta</i>	Cicadellidae	Hemiptera		
<i>Arthaldeus pascuellus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Balclutha punctata</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Cicadula</i>	Cicadellidae	Hemiptera		
<i>Edwardsiana</i>	Cicadellidae	Hemiptera		
<i>Eupteryx atropunctata</i>	Cicadellidae	Hemiptera	Local; New to VC	tall sward & scrub
<i>Eupteryx aurata</i>	Cicadellidae	Hemiptera		
<i>Eupteryx decemnotata</i>	Cicadellidae	Hemiptera		
<i>Eupteryx florida</i>	Cicadellidae	Hemiptera		
<i>Eupteryx melissae</i>	Cicadellidae	Hemiptera		
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Eupteryx vittata</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Eurhadina concinna</i>	Cicadellidae	Hemiptera		arboreal
<i>Euscelis incisus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Lamprotettix nitidulus</i>	Cicadellidae	Hemiptera	Local	arboreal
<i>Macropsis scutellata sensu stricto</i>	Cicadellidae	Hemiptera		
<i>Macrosteles sexnotatus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Macrosteles viridigriseus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Megophthalmus scanicus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Speudotettix subfuscus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Typhlocyba quercus</i>	Cicadellidae	Hemiptera		arboreal
<i>Zygina flammigera</i>	Cicadellidae	Hemiptera		arboreal

<i>Zyginella pulchra</i>	Cicadellidae	Hemiptera		
<i>Tachycixius pilosus</i>	Cixiidae	Hemiptera		
<i>Coreus marginatus</i>	Coreidae	Hemiptera		tall sward & scrub
<i>Corixa punctata</i>	Corixidae	Hemiptera		marshland
<i>Hesperocorixa moesta</i>	Corixidae	Hemiptera	Local; New to VC	marshland
<i>Hesperocorixa sahlbergi</i>	Corixidae	Hemiptera		marshland
<i>Sigara (Sigara) dorsalis</i>	Corixidae	Hemiptera		marshland
<i>Tritomegas bicolor</i>	Cydnidae	Hemiptera		tall sward & scrub
<i>Euconomelus lepidus</i>	Delphacidae	Hemiptera	Local	
<i>Javesella dubia</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Javesella pellucida</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Kelisia</i>	Delphacidae	Hemiptera		
<i>Kosswigianella exigua</i>	Delphacidae	Hemiptera		short sward & bare ground
<i>Megamelodes quadrimaculatus sensu stricto</i>	Delphacidae	Hemiptera	Local; New to VC	
<i>Stenocranus minutus</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Gerris (Gerris) lacustris</i>	Gerridae	Hemiptera		marshland
<i>Gerris (Gerris) odontogaster</i>	Gerridae	Hemiptera		marshland
<i>Gerris (Gerris) thoracicus</i>	Gerridae	Hemiptera		marshland
<i>Hydrometra stagnorum</i>	Hydrometridae	Hemiptera		marshland
<i>Drymus (Sylvadrymus) sylvaticus</i>	Lygaeidae	Hemiptera		tall sward & scrub
<i>Ischnodemus sabuleti</i>	Lygaeidae	Hemiptera		marshland
<i>Kleidocerys resedae</i>	Lygaeidae	Hemiptera		arboreal
<i>Peritrechus lundii</i>	Lygaeidae	Hemiptera	Local; New to VC	tall sward & scrub
<i>Stygnocoris fuliginous</i>	Lygaeidae	Hemiptera		tall sward & scrub
<i>Taphropeltus contractus</i>	Lygaeidae	Hemiptera		short sward & bare ground
<i>Adelphocoris lineolatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Amblytylus nasutus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Blepharidopterus angulatus</i>	Miridae	Hemiptera		arboreal
<i>Calocoris (Calocoris) alpestris</i>	Miridae	Hemiptera	Local	shaded woodland floor
<i>Calocoris (Calocoris) roseomaculatus</i>	Miridae	Hemiptera		short sward & bare ground
<i>Charagochilus (Charagochilus) gyllenhalii</i>	Miridae	Hemiptera		short sward & bare ground
<i>Closterotomus norwegicus</i>	Miridae	Hemiptera		tall sward & scrub

<i>Closterotomus trivialis</i>	Miridae	Hemiptera		
<i>Deraeocoris</i> (<i>Deraeocoris</i>) <i>flavilinea</i>	Miridae	Hemiptera		
<i>Deraeocoris</i> (<i>Deraeocoris</i>) <i>ruber</i>	Miridae	Hemiptera		tall sward & scrub
<i>Deraeocoris</i> (<i>Knightocapsus</i>) <i>lutescens</i>	Miridae	Hemiptera		arboreal
<i>Dicyphus</i> (<i>Dicyphus</i>) <i>stachydis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Dicyphus</i> (<i>Dicyphus</i>) <i>tamaninii</i>	Miridae	Hemiptera		
<i>Dryophilocoris</i> (<i>Dryophilocoris</i>) <i>flavoquadrinaculatus</i>	Miridae	Hemiptera		arboreal
<i>Grypocoris</i> (<i>Lophyromiris</i>) <i>stysi</i>	Miridae	Hemiptera		tall sward & scrub
<i>Heterotoma</i> <i>planicornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Leptopterna dolabrata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Leptopterna ferrugata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygocoris</i> (<i>Lygocoris</i>) <i>pabulinus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygus pratensis</i>	Miridae	Hemiptera	RDB 3	
<i>Lygus rugulipennis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Megaloceroea</i> <i>recticornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Miridius quadrivirgatus</i>	Miridae	Hemiptera	Local	tall sward & scrub
<i>Notostira elongata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Oncotylus</i> (<i>Oncotylus</i>) <i>viridiflavus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Orthocephalus saltator</i>	Miridae	Hemiptera	Local	short sward & bare ground
<i>Orthops</i> (<i>Orthops</i>) <i>basalis</i>	Miridae	Hemiptera		
<i>Orthops</i> (<i>Orthops</i>) <i>kalmii</i>	Miridae	Hemiptera		tall sward & scrub
<i>Orthotylus</i> (<i>Orthotylus</i>) <i>ochrotrichus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Phylus</i> (<i>Phylus</i>) <i>coryli</i>	Miridae	Hemiptera		arboreal
<i>Phytocoris</i> (<i>Ktenocoris</i>) <i>varipes</i>	Miridae	Hemiptera		tall sward & scrub
<i>Phytocoris</i> (<i>Phytocoris</i>) <i>tiliae</i>	Miridae	Hemiptera		arboreal
<i>Pinalitus cervinus</i>	Miridae	Hemiptera		arboreal
<i>Pithanus maerkelii</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus</i> (<i>Plagiognathus</i>) <i>arbustorum</i>	Miridae	Hemiptera		tall sward & scrub

<i>Plagiognathus</i> (<i>Plagiognathus</i>) <i>chrysanthemi</i>	Miridae	Hemiptera		short sward & bare ground
<i>Psallus</i> (<i>Hylopsallus</i>) <i>perrisi</i>	Miridae	Hemiptera		arboreal
<i>Psallus</i> (<i>Mesopsallus</i>) <i>ambiguus</i>	Miridae	Hemiptera		arboreal
<i>Psallus</i> (<i>Psallus</i>) <i>varians</i>	Miridae	Hemiptera		arboreal
<i>Stenodema</i> (<i>Brachystira</i>) <i>calcarata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Stenodema</i> (<i>Stenodema</i>) <i>laevigata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Stenotus binotatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Himacerus</i> (<i>Aptus</i>) <i>mirmicoides</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nabis</i> (<i>Dolichonabis</i>) <i>limbatus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nabis</i> (<i>Nabis</i>) <i>rugosus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nepa cinerea</i>	Nepidae	Hemiptera		marshland
<i>Notonecta</i> (<i>Notonecta</i>) <i>glauca</i>	Notonectidae	Hemiptera		marshland
<i>Notonecta</i> (<i>Notonecta</i>) <i>viridis</i>	Notonectidae	Hemiptera		marshland
<i>Aelia acuminata</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Eurydema</i> (<i>Eurydema</i>) <i>oleracea</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Eysarcoris</i> <i>venustissimus</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Plea minutissima</i>	Pleidae	Hemiptera		marshland
<i>Cacopsylla peregrina</i>	Psyllidae	Hemiptera		
<i>Psyllopsis fraxini</i>	Psyllidae	Hemiptera		
<i>Corizus hyoscyami</i>	Rhopalidae	Hemiptera		short sward & bare ground
<i>Rhopalus</i> (<i>Rhopalus</i>) <i>parumpunctatus</i>	Rhopalidae	Hemiptera	NS	short sward & bare ground
<i>Rhopalus</i> (<i>Rhopalus</i>) <i>subrufus</i>	Rhopalidae	Hemiptera		tall sward & scrub
<i>Chartoscirta cincta</i>	Saldidae	Hemiptera		marshland
<i>Saldula pallipes</i>	Saldidae	Hemiptera	NS; New to VC	marshland
<i>Saldula saltatoria</i>	Saldidae	Hemiptera		marshland
<i>Eurygaster</i> <i>testudinaria</i>	Scutelleridae	Hemiptera		tall sward & scrub
<i>Catoplatus fabricii</i>	Tingidae	Hemiptera	Nb	short sward & bare ground
<i>Physatocheila confinis</i>	Tingidae	Hemiptera		
<i>Physatocheila</i> <i>dumetorum</i>	Tingidae	Hemiptera		arboreal; decaying wood

<i>Andrena chrysosceles</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena cineraria</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena fulva</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena haemorrhoa</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena labiata</i>	Andrenidae	Hymenoptera	Na	short sward & bare ground
<i>Andrena minutula</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena nitida</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena nitidiuscula</i>	Andrenidae	Hymenoptera	RDB 3; New to VC	short sward & bare ground
<i>Andrena scotica</i>	Andrenidae	Hymenoptera		short sward & bare ground; tall sward & scrub
<i>Andrena semilaevis</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena subopaca</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus hypnorum</i>	Apidae	Hymenoptera		shaded woodland floor; tall sward & scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pratorum</i>	Apidae	Hymenoptera		shaded woodland floor; tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus vestalis</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada flava</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada goodeniana</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada panzeri sensu stricto</i>	Apidae	Hymenoptera		
<i>Nomada striata</i>	Apidae	Hymenoptera	Local	short sward & bare ground
<i>Arge melanochra</i>	Argidae	Hymenoptera		
<i>Colletes hederæ</i>	Colletidae	Hymenoptera		short sward & bare ground
<i>Hylaeus communis</i>	Colletidae	Hymenoptera		tall sward & scrub
<i>Crossocerus annulipes</i>	Crabronidae	Hymenoptera		decaying wood
<i>Crossocerus cetratus</i>	Crabronidae	Hymenoptera		decaying wood
<i>Crossocerus podagricus</i>	Crabronidae	Hymenoptera		decaying wood
<i>Passaloecus singularis</i>	Crabronidae	Hymenoptera		decaying wood

<i>Trypoxylon attenuatum</i>	Crabronidae	Hymenoptera		acid & sedge peats; tall sward & scrub
<i>Trypoxylon clavicerum</i>	Crabronidae	Hymenoptera		tall sward & scrub
<i>Trypoxylon figulus sensu lato</i>	Crabronidae	Hymenoptera		
<i>Callaspidia defonscolombeii</i>	Figitidae	Hymenoptera	Other; New to VC	
<i>Lasius brunneus</i>	Formicidae	Hymenoptera	Na	decaying wood
<i>Lasius niger sensu lato</i>	Formicidae	Hymenoptera		
<i>Myrmica rubra</i>	Formicidae	Hymenoptera		tall sward & scrub
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Myrmica sabuleti</i>	Formicidae	Hymenoptera	Local	short sward & bare ground
<i>Temnothorax nylanderii</i>	Formicidae	Hymenoptera	Local	decaying wood
<i>Halictus rubicundus</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Halictus tumulorum</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum lativentre</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum leucozonium</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum malachurum</i>	Halictidae	Hymenoptera	Nb	short sward & bare ground
<i>Lasioglossum pauxillum</i>	Halictidae	Hymenoptera	Na	short sward & bare ground
<i>Sphecodes ephippius</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Hoplitis claviventris</i>	Megachilidae	Hymenoptera		tall sward & scrub
<i>Megachile centuncularis</i>	Megachilidae	Hymenoptera		decaying wood
<i>Osmia bicolor</i>	Megachilidae	Hymenoptera	Nb	short sward & bare ground
<i>Dipogon subintermedius</i>	Pompilidae	Hymenoptera		decaying wood
<i>Priocnemis agilis</i>	Pompilidae	Hymenoptera	Nb; New to VC	short sward & bare ground; tall sward & scrub
<i>Aglaostigma fulvipes</i>	Tenthredinidae	Hymenoptera		
<i>Ametastegia carpini</i>	Tenthredinidae	Hymenoptera		
<i>Athalia cordata</i>	Tenthredinidae	Hymenoptera		
<i>Dolerus ferrugatus</i>	Tenthredinidae	Hymenoptera		
<i>Dolerus nigratus</i>	Tenthredinidae	Hymenoptera		
<i>Dolerus picipes</i>	Tenthredinidae	Hymenoptera		
<i>Empria sexpunctata</i>	Tenthredinidae	Hymenoptera		
<i>Euura pavidus</i>	Tenthredinidae	Hymenoptera		
<i>Selandria serva</i>	Tenthredinidae	Hymenoptera		

<i>Tomostethus nigritus</i>	Tenthredinidae	Hymenoptera		
<i>Tiphia minuta</i>	Tiphiidae	Hymenoptera	Nb	short sward & bare ground
<i>Vespa crabro</i>	Vespidae	Hymenoptera		decaying wood; shaded woodland floor
<i>Vespula germanica</i>	Vespidae	Hymenoptera		tall sward & scrub
<i>Vespula vulgaris</i>	Vespidae	Hymenoptera		tall sward & scrub
<i>Armadillidium vulgare</i>	Armadillidiidae	Isopoda		
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Platyarthrus hoffmannseggii</i>	Platyarthridae	Isopoda		tall sward & scrub
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Trichoniscus pusillus sensu lato</i>	Trichoniscidae	Isopoda		
<i>Blaniulus guttulatus</i>	Blaniulidae	Julida		tall sward & scrub
<i>Tachypodoiulus niger</i>	Julidae	Julida		
<i>Nemasoma varicorne</i>	Nemasomatidae	Julida		decaying wood
<i>Nemophora degeerella</i>	Adelidae	Lepidoptera		shaded woodland floor
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera		tall sward & scrub
<i>Agriphila tristella</i>	Crambidae	Lepidoptera		
<i>Cataclysta lemnata</i>	Crambidae	Lepidoptera		
<i>Crambus perlella</i>	Crambidae	Lepidoptera		
<i>Pyrausta aurata</i>	Crambidae	Lepidoptera		
<i>Nudaria mundana</i>	Erebidae	Lepidoptera		short sward & bare ground; tall sward & scrub
<i>Orgyia antiqua</i>	Erebidae	Lepidoptera		arboreal
<i>Camptogramma bilineata</i>	Geometridae	Lepidoptera		tall sward & scrub
<i>Epirrhoe alternata</i>	Geometridae	Lepidoptera		tall sward & scrub
<i>Glyphipterix simpliciella</i>	Glyphipterigidae	Lepidoptera		tall sward & scrub
<i>Cameraria ohridella</i>	Gracillariidae	Lepidoptera		
<i>Erynnis tages</i>	Hesperiidae	Lepidoptera	Section 41 Priority Species	short sward & bare ground
<i>Ochlodes sylvanus</i>	Hesperiidae	Lepidoptera		tall sward & scrub
<i>Thymelicus sylvestris</i>	Hesperiidae	Lepidoptera		tall sward & scrub
<i>Cupido minimus</i>	Lycaenidae	Lepidoptera	Section 41 Priority Species; NT	tall sward & scrub
<i>Micropterix aruncella</i>	Micropterigidae	Lepidoptera		arboreal
<i>Autographa gamma</i>	Noctuidae	Lepidoptera		
<i>Diachrysia chrysis</i>	Noctuidae	Lepidoptera		tall sward & scrub
<i>Aphantopus hyperantus</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Coenonympha pamphilus</i>	Nymphalidae	Lepidoptera	Section 41 Priority Species; VU	short sward & bare ground

<i>Maniola jurtina</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Melanargia galathea</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Polygonia c-album</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Pyronia tithonus</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Vanessa atalanta</i>	Nymphalidae	Lepidoptera		
<i>Metalampra italica</i>	Oecophoridae	Lepidoptera		
<i>Anthocharis cardamines</i>	Pieridae	Lepidoptera		tall sward & scrub
<i>Gonepteryx rhamni</i>	Pieridae	Lepidoptera		
<i>Pieris brassicae</i>	Pieridae	Lepidoptera		
<i>Pieris napi</i>	Pieridae	Lepidoptera		
<i>Plutella xylostella</i>	Plutellidae	Lepidoptera		tall sward & scrub
<i>Prays fraxinella</i>	Praydidae	Lepidoptera		arboreal
<i>Cnephasia</i>	Tortricidae	Lepidoptera		
<i>Dichrorampha</i>	Tortricidae	Lepidoptera		
<i>Grapholita compositella</i>	Tortricidae	Lepidoptera		tall sward & scrub
<i>Pammene aurana</i>	Tortricidae	Lepidoptera		tall sward & scrub
<i>Pseudargyrotoza conwagana</i>	Tortricidae	Lepidoptera		arboreal
<i>Thyraylia nana</i>	Tortricidae	Lepidoptera		
<i>Yponomeuta</i>	Yponomeutidae	Lepidoptera		
<i>Lithobius (Lithobius) forficatus</i>	Lithobiidae	Lithobiomorpha		
<i>Lithobius (Lithobius) melanops</i>	Lithobiidae	Lithobiomorpha		short sward & bare ground
<i>Lithobius (Sigibius) microps</i>	Lithobiidae	Lithobiomorpha		shaded woodland floor
<i>Panorpa germanica</i>	Panorpidae	Mecoptera		tall sward & scrub
<i>Sialis lutaria</i>	Sialidae	Megaloptera		running water
<i>Chrysopa perla</i>	Chrysopidae	Neuroptera		arboreal
<i>Chrysoperla carnea sensu stricto</i>	Chrysopidae	Neuroptera		
<i>Nothochrysa capitata</i>	Chrysopidae	Neuroptera		arboreal
<i>Hemerobius micans</i>	Hemerobiidae	Neuroptera		arboreal
<i>Micromus variegatus</i>	Hemerobiidae	Neuroptera		tall sward & scrub
<i>Aeshna cyanea</i>	Aeshnidae	Odonata		marshland
<i>Coenagrion puella</i>	Coenagrionidae	Odonata		marshland
<i>Ischnura elegans</i>	Coenagrionidae	Odonata		marshland
<i>Libellula depressa</i>	Libellulidae	Odonata		marshland
<i>Libellula quadrimaculata</i>	Libellulidae	Odonata		marshland
<i>Sympetrum striolatum</i>	Libellulidae	Odonata		marshland
<i>Nemastoma bimaculatum</i>	Nemastomatidae	Opiliones		shaded woodland floor

<i>Dicranopalpus ramosus sensu lato</i> (pre 2015)	Phalangiidae	Opiliones		arboreal
<i>Leiobunum blackwalli</i>	Phalangiidae	Opiliones		arboreal
<i>Leiobunum rotundum</i>	Phalangiidae	Opiliones		arboreal
<i>Paroligolophus agrestis</i>	Phalangiidae	Opiliones		
<i>Phalangium opilio</i>	Phalangiidae	Opiliones		
<i>Rilaena triangularis</i>	Phalangiidae	Opiliones		shaded woodland floor
<i>Omocestus viridulus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Pseudochorthippus parallelus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Meconema thalassinum</i>	Meconematidae	Orthoptera		arboreal
<i>Leptophyes punctatissima</i>	Phaneropteridae	Orthoptera		tall sward & scrub
<i>Tetrix subulata</i>	Tetrigidae	Orthoptera		acid & sedge peats
<i>Tetrix undulata</i>	Tetrigidae	Orthoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Brachydesmus superus</i>	Polydesmidae	Polydesmida		shaded woodland floor
<i>Valenzuela burmeisteri</i>	Caeciliusidae	Psocodea		
<i>Valenzuela flavidus</i>	Caeciliusidae	Psocodea		
<i>Elipsocus hyalinus</i>	Elipsocidae	Psocodea		
<i>Bertkauia lucifuga</i>	Epipsocidae	Psocodea	Other; New to VC	
<i>Mesopsocus laticeps</i>	Mesopsocidae	Psocodea	Other; New to VC	
<i>Stenopsocus immaculatus sensu stricto</i>	Stenopsocidae	Psocodea		
<i>Ectopsocus briggsi sensu stricto</i>	Ectopsocidae	Psocoptera		
<i>Ectopsocus petersi</i>	Ectopsocidae	Psocoptera		
<i>Graphopsocus cruciatus</i>	Stenopsocidae	Psocoptera		
<i>Trichopsocus brincki</i>	Trichopsocidae	Psocoptera	Other	
<i>Deroceras (Deroceras) invadens</i>	Agriolimacidae	Pulmonata		
<i>Deroceras (Deroceras) reticulatum</i>	Agriolimacidae	Pulmonata		tall sward & scrub
<i>Arion (Arion) flagellus</i>	Arionidae	Pulmonata		tall sward & scrub
<i>Arion (Arion) rufus</i>	Arionidae	Pulmonata		
<i>Clausilia (Clausilia) bidentata</i>	Clausiliidae	Pulmonata		tall sward & scrub
<i>Cochlodina (Cochlodina) laminata</i>	Clausiliidae	Pulmonata		shaded woodland floor
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Cepaea (Cepaea) nemoralis</i>	Helicidae	Pulmonata		tall sward & scrub

<i>Cornu aspersum</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Trochulus (Trochulus) striolatus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Trochulus hispidus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Lehmannia marginata</i>	Limacidae	Pulmonata		tall sward & scrub
<i>Limacus maculatus</i>	Limacidae	Pulmonata		
<i>Tandonia budapestensis</i>	Milacidae	Pulmonata		
<i>Oxychilus (Oxychilus) alliarius</i>	Oxychilidae	Pulmonata		woodland habitat
<i>Oxychilus (Oxychilus) cellarius</i>	Oxychilidae	Pulmonata		tall sward & scrub
<i>Discus (Gonyodiscus) rotundatus</i>	Patulidae	Pulmonata		shaded woodland floor
<i>Pyramidula umbilicata</i>	Pyramidulidae	Pulmonata		short sward & bare ground
<i>Cryptops hortensis</i>	Cryptopidae	Scolopendromorpha		
<i>Athripsodes aterrimus</i>	Leptoceridae	Trichoptera		marshland
<i>Glyphotaelius pellucidus</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus affinis</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus auricula</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus lunatus</i>	Limnephilidae	Trichoptera		lake; marshland; running water
<i>Limnephilus vittatus</i>	Limnephilidae	Trichoptera		marshland

Appendix 2. List of invertebrate species recorded at Coronation Woods in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Anyphaena accentuata</i>	Anyphaenidae	Araneae		arboreal
<i>Catapion seniculus</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion nigritarse</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Malthinus seriepunctatus</i>	Cantharidae	Coleoptera		decaying wood
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Tachyporus solutus</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Ocydromia glabricula</i>	Hybotidae	Diptera		shaded woodland floor
<i>Meiosimyza platycephala</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Limonia nubeculosa</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Neomyia viridescens</i>	Muscidae	Diptera		
<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Pogonognathellus longicornis</i>	Tomoceridae	Entomobryomorpha		
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Agallia consobrina</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Dicyphus (Dicyphus) stachydis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus (Plagiognathus) arbustorum</i>	Miridae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Ametastegia carpini</i>	Tenthredinidae	Hymenoptera		
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Metalampra italica</i>	Oecophoridae	Lepidoptera		
<i>Hemerobius micans</i>	Hemerobiidae	Neuroptera		arboreal
<i>Micromus variegatus</i>	Hemerobiidae	Neuroptera		tall sward & scrub
<i>Leiobunum blackwalli</i>	Phalangidae	Opiliones		arboreal
<i>Leiobunum rotundum</i>	Phalangidae	Opiliones		arboreal

<i>Paroligolophus agrestis</i>	Phalangiidae	Opiliones		
<i>Meconema thalassinum</i>	Meconematidae	Orthoptera		arboreal
<i>Bertkauia lucifuga</i>	Epipsocidae	Psocodea	Other; New to VC	
<i>Graphopsocus cruciatus</i>	Stenopsocidae	Psocoptera		
<i>Cepaea (Cepaea) nemoralis</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Glyphotaelius pellucidus</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus lunatus</i>	Limnephilidae	Trichoptera		lake; marshland; running water

Appendix 3. List of invertebrate species recorded at the Hedgerow in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Araniella opisthographa</i>	Araneidae	Araneae		arboreal
<i>Philodromus</i>	Philodromidae	Araneae		
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Rhagonycha nigriventris</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Stenocorus meridianus</i>	Cerambycidae	Coleoptera		decaying wood
<i>Aphthona euphorbiae</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Bruchus rufimanus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Crepidodera fulvicornis</i>	Chrysomelidae	Coleoptera		arboreal
<i>Lochmaea crataegi</i>	Chrysomelidae	Coleoptera		arboreal
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Propylea quatuordecimpunctata</i>	Coccinellidae	Coleoptera		
<i>Anthonomus rubi</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Parethelcus pollinarius</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Phyllobius pyri</i>	Curculionidae	Coleoptera		arboreal
<i>Phyllobius roboretanus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Limonium poneli</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Brachypterus glaber</i>	Kateretidae	Coleoptera		tall sward & scrub
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Agrilinus ater</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Anaspis maculata</i>	Scraptiidae	Coleoptera		decaying wood
<i>Empis tessellata</i>	Empididae	Diptera		tall sward & scrub
<i>Rhamphomyia atra</i>	Empididae	Diptera		tall sward & scrub
<i>Pseudolyciella</i>	Lauxaniidae	Diptera		
<i>Eudasyphora cyanella</i>	Muscidae	Diptera		shaded woodland floor
<i>Sarcophaga carnaria</i>	Sarcophagidae	Diptera		
<i>Sarcophaga subvicina</i>	Sarcophagidae	Diptera		
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Platycheirus albimanus</i>	Syrphidae	Diptera		
<i>Nephrotoma appendiculata</i>	Tipulidae	Diptera		tall sward & scrub
<i>Eupteryx</i>	Cicadellidae	Hemiptera		
<i>Deraeocoris (Knightocapsus) lutescens</i>	Miridae	Hemiptera		arboreal

<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Eysarcoris venustissimus</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Physatocheila dumetorum</i>	Tingidae	Hemiptera		arboreal; decaying wood
<i>Andrena chrysosceles</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Dolerus nigratus</i>	Tenthredinidae	Hymenoptera		
<i>Glyphipterix simpliciella</i>	Glyphipterigidae	Lepidoptera		tall sward & scrub
<i>Erynnis tages</i>	Hesperiidae	Lepidoptera	Section 41 Priority Species	short sward & bare ground
<i>Gonepteryx rhamni</i>	Pieridae	Lepidoptera		
<i>Chrysoperla carnea sensu stricto</i>	Chrysopidae	Neuroptera		

Appendix 4. List of invertebrate species recorded at Long Bottom Camp and Wiggold Wood in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Araniella cucurbitina sensu stricto</i>	Araneidae	Araneae		
<i>Cyclosa conica</i>	Araneidae	Araneae	Local	arboreal
<i>Nigma puella</i>	Dictynidae	Araneae	NS	arboreal
<i>Ceratinella scabrosa</i>	Linyphiidae	Araneae		tall sward & scrub
<i>Pardosa amentata</i>	Lycosidae	Araneae		acid & sedge peats
<i>Philodromus dispar</i>	Philodromidae	Araneae		arboreal
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Metellina menzei</i>	Tetragnathidae	Araneae		
<i>Tetragnatha montana</i>	Tetragnathidae	Araneae		acid & sedge peats
<i>Anelosimus vittatus</i>	Theridiidae	Araneae		arboreal
<i>Parasteatoda lunata</i>	Theridiidae	Araneae		arboreal
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Nanogona polydesmoides</i>	Craspedosomatidae	Chordeumatida		shaded woodland floor
<i>Ceratapion onopordi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Byturus ochraceus</i>	Byturidae	Coleoptera		tall sward & scrub
<i>Cantharis decipiens</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Malthodes marginatus</i>	Cantharidae	Coleoptera		decaying wood
<i>Abax parallelepipedus</i>	Carabidae	Coleoptera		shaded woodland floor
<i>Oxypselaphus obscurus</i>	Carabidae	Coleoptera		marshland; shaded woodland floor; wet woodland
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Stenocorus meridianus</i>	Cerambycidae	Coleoptera		decaying wood
<i>Aphthona euphorbiae</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema cf concinna</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Lochmaea crataegi</i>	Chrysomelidae	Coleoptera		arboreal
<i>Phyllotreta undulata</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Halyzia sedecimguttata</i>	Coccinellidae	Coleoptera		arboreal
<i>Psyllobora vigintiduopunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Anthonomus rubi</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Exomias pellucidus</i>	Curculionidae	Coleoptera		tall sward & scrub

<i>Hypera venusta</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Phyllobius pyri</i>	Curculionidae	Coleoptera		arboreal
<i>Polydrusus pterygomalis</i>	Curculionidae	Coleoptera		
<i>Athous haemorrhoidalis</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Pyrochroa serraticornis</i>	Pyrochroidae	Coleoptera		decaying wood
<i>Melolontha melolontha</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Anaspis maculata</i>	Scraphiidae	Coleoptera		decaying wood
<i>Scaphidium quadrimaculatum</i>	Staphylinidae	Coleoptera		decaying wood
<i>Tachyporus solutus</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Forficula auricularia</i>	Forficulidae	Dermaptera		
<i>Sylvicola punctatus</i>	Anisopodidae	Diptera		
<i>Lucilia ampullacea</i>	Calliphoridae	Diptera		shaded woodland floor
<i>Lucilia caesar</i>	Calliphoridae	Diptera		
<i>Dolichopus trivialis</i>	Dolichopodidae	Diptera		marshland; running water
<i>Dryomyza anilis</i>	Dryomyzidae	Diptera		shaded woodland floor
<i>Ocydromia glabricula</i>	Hybotidae	Diptera		shaded woodland floor
<i>Calliopum elisae</i>	Lauxaniidae	Diptera		
<i>Meiosimyza rorida</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Minettia fasciata/tubiventris</i>	Lauxaniidae	Diptera		
<i>Austrolimnophila ochracea</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Dicranomyia cf modesta</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Epiphragma ocellare</i>	Limoniidae	Diptera		decaying wood
<i>Limonia nubeculosa</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Ormosia</i>	Limoniidae	Diptera		
<i>Rhipidia maculata</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Mesembrina meridiana</i>	Muscidae	Diptera		
<i>Musca autumnalis</i>	Muscidae	Diptera		
<i>Muscina levida</i>	Muscidae	Diptera		shaded woodland floor
<i>Pollenia griseotomentosa</i>	Polleniidae	Diptera		marshland

<i>Pollenia rudis</i>	Polleniidae	Diptera		marshland
<i>Sarcophaga carnaria</i>	Sarcophagidae	Diptera		
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Coremacera marginata</i>	Sciomyzidae	Diptera		tall sward & scrub
<i>Episyrphus balteatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Platycheirus albimanus</i>	Syrphidae	Diptera		
<i>Rhingia campestris</i>	Syrphidae	Diptera		tall sward & scrub
<i>Siphona</i>	Tachinidae	Diptera		
<i>Nephrotoma quadrifaria</i>	Tipulidae	Diptera		shaded woodland floor
<i>Tipula oleracea</i>	Tipulidae	Diptera		acid & sedge peats
<i>Otites guttatus</i>	Ulidiidae	Diptera		
<i>Geophilus electricus</i>	Geophilidae	Geophilomorpha	Local; New to VC	tall sward & scrub
<i>Glomeris marginata</i>	Glomeridae	Glomerida		shaded woodland floor
<i>Acanthosoma haemorrhoidale</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Cicadula</i>	Cicadellidae	Hemiptera		
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Lamprotettix nitidulus</i>	Cicadellidae	Hemiptera	Local	arboreal
<i>Speudotettix subfuscus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Typhlocyba quercus</i>	Cicadellidae	Hemiptera		arboreal
<i>Zygina</i>	Cicadellidae	Hemiptera		
<i>Tachycixius pilosus</i>	Cixiidae	Hemiptera		
<i>Blepharidopterus angulatus</i>	Miridae	Hemiptera		arboreal
<i>Calocoris (Calocoris) alpestris</i>	Miridae	Hemiptera	Local	shaded woodland floor
<i>Closterotomus trivialis</i>	Miridae	Hemiptera		
<i>Dryophilocoris (Dryophilocoris) flavoquadrimaculatus</i>	Miridae	Hemiptera		arboreal
<i>Himacerus (Aptus) mirmicoides</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nabis (Nabis) rugosus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Rhopalus (Rhopalus) subrufus</i>	Rhopalidae	Hemiptera		tall sward & scrub
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus lucorum/terrestris</i>	Apidae	Hymenoptera		

<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Colletes hederæ</i>	Colletidae	Hymenoptera		short sward & bare ground
<i>Trypoxylon figulus sensu lato</i>	Crabronidae	Hymenoptera		
<i>Lasius brunneus</i>	Formicidae	Hymenoptera	Na	decaying wood
<i>Myrmica rubra</i>	Formicidae	Hymenoptera		tall sward & scrub
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Temnothorax nylanderii</i>	Formicidae	Hymenoptera	Local	decaying wood
<i>Athalia cordata</i>	Tenthredinidae	Hymenoptera		
<i>Vespa crabro</i>	Vespidae	Hymenoptera		decaying wood; shaded woodland floor
<i>Vespula germanica</i>	Vespidae	Hymenoptera		tall sward & scrub
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Trichoniscus pusillus sensu lato</i>	Trichoniscidae	Isopoda		
<i>Tachypodoiulus niger</i>	Julidae	Julida		
<i>Nemasoma varicorne</i>	Nemasomatidae	Julida		decaying wood
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera		tall sward & scrub
<i>Micropterix aruncella</i>	Micropterigidae	Lepidoptera		arboreal
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Polygonia c-album</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Vanessa atalanta</i>	Nymphalidae	Lepidoptera		
<i>Pseudargyrotoza conwagana</i>	Tortricidae	Lepidoptera		arboreal
<i>Lithobius (Lithobius) forficatus</i>	Lithobiidae	Lithobiomorpha		
<i>Lithobius (Lithobius) melanops</i>	Lithobiidae	Lithobiomorpha		short sward & bare ground
<i>Lithobius (Sigibius) microps</i>	Lithobiidae	Lithobiomorpha		shaded woodland floor
<i>Panorpa germanica</i>	Panorpidae	Mecoptera		tall sward & scrub
<i>Chrysopa perla</i>	Chrysopidae	Neuroptera		arboreal
<i>Chrysoperla carnea sensu stricto</i>	Chrysopidae	Neuroptera		
<i>Hemerobius micans</i>	Hemerobiidae	Neuroptera		arboreal
<i>Micromus variegatus</i>	Hemerobiidae	Neuroptera		tall sward & scrub
<i>Nemastoma bimaculatum</i>	Nemastomatidae	Opiliones		shaded woodland floor
<i>Dicranopalpus ramosus sensu lato (pre 2015)</i>	Phalangiidae	Opiliones		arboreal
<i>Paroligolophus agrestis</i>	Phalangiidae	Opiliones		

<i>Meconema thalassinum</i>	Meconematidae	Orthoptera		arboreal
<i>Leptophyes punctatissima</i>	Phaneropteridae	Orthoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Valenzuela burmeisteri</i>	Caeciliusidae	Psocodea		
<i>Valenzuela flavidus</i>	Caeciliusidae	Psocodea		
<i>Mesopsocus laticeps</i>	Mesopsocidae	Psocodea	Other; New to VC	
<i>Stenopsocus immaculatus sensu stricto</i>	Stenopsocidae	Psocodea		
<i>Ectopsocus briggsi sensu stricto</i>	Ectopsocidae	Psocoptera		
<i>Deroceras (Deroceras) reticulatum</i>	Agriolimacidae	Pulmonata		tall sward & scrub
<i>Arion (Arion) flagellus</i>	Arionidae	Pulmonata		tall sward & scrub
<i>Cochlodina (Cochlodina) laminata</i>	Clausiliidae	Pulmonata		shaded woodland floor
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Trochulus hispidus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Tandonia budapestensis</i>	Milacidae	Pulmonata		
<i>Oxychilus (Oxychilus) cellarius</i>	Oxychilidae	Pulmonata		tall sward & scrub
<i>Discus (Gonyodiscus) rotundatus</i>	Patulidae	Pulmonata		shaded woodland floor
<i>Cryptops hortensis</i>	Cryptopidae	Scolopendromorpha		
<i>Limnephilus auricula</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus vittatus</i>	Limnephilidae	Trichoptera		marshland

Appendix 5. List of invertebrate species recorded at Oxlays Pond in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Larinioides cornutus</i>	Araneidae	Araneae		acid & sedge peats
<i>Micaria micans</i>	Gnaphosidae	Araneae		
<i>Ceratinella scabrosa</i>	Linyphiidae	Araneae		tall sward & scrub
<i>Erigone atra</i>	Linyphiidae	Araneae		
<i>Erigone dentipalpis</i>	Linyphiidae	Araneae		
<i>Pardosa amentata</i>	Lycosidae	Araneae		acid & sedge peats
<i>Pardosa prativaga</i>	Lycosidae	Araneae		tall sward & scrub
<i>Pardosa pullata</i>	Lycosidae	Araneae		tall sward & scrub
<i>Piratula latitans</i>	Lycosidae	Araneae	Local	acid & sedge peats
<i>Tibellus</i>	Philodromidae	Araneae		
<i>Pachygnatha degeeri</i>	Tetragnathidae	Araneae		
<i>Tetragnatha extensa</i>	Tetragnathidae	Araneae		acid & sedge peats
<i>Tetragnatha nigrita</i>	Tetragnathidae	Araneae	Local	acid & sedge peats
<i>Enoplognatha latimana</i>	Theridiidae	Araneae		tall sward & scrub
<i>Perapion curtirostre</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Perapion hydrolapathi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Rhagonycha fulva</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Bembidion biguttatum</i>	Carabidae	Coleoptera		marshland
<i>Bembidion lunulatum</i>	Carabidae	Coleoptera		marshland
<i>Bembidion octomaculatum</i>	Carabidae	Coleoptera	NS; New to VC	marshland
<i>Clivina fossor</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Microlestes minutulus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Pterostichus nigrita</i>	Carabidae	Coleoptera		marshland
<i>Syntomus obscuroguttatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Aphthona euphorbiae</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema concinna</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema hortensis</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Donacia thalassina</i>	Chrysomelidae	Coleoptera	NS	marshland
<i>Oulema obscura</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Coccidula rufa</i>	Coccinellidae	Coleoptera		acid & sedge peats
<i>Subcoccinella vigintiquattuorpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub

<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Hypera venusta</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Rhinoncus castor</i> (pre 2014 type revision)	Curculionidae	Coleoptera		
<i>Sitona hispidulus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona obsoletus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Dasytes aeratus</i>	Dasytidae	Coleoptera		decaying wood
<i>Agabus bipustulatus</i>	Dytiscidae	Coleoptera		marshland
<i>Agabus nebulosus</i>	Dytiscidae	Coleoptera		marshland
<i>Colymbetes fuscus</i>	Dytiscidae	Coleoptera		marshland
<i>Hydroporus planus</i>	Dytiscidae	Coleoptera		marshland
<i>Hygrotus inaequalis</i>	Dytiscidae	Coleoptera		marshland
<i>Hyphydrus ovatus</i>	Dytiscidae	Coleoptera		marshland
<i>Ilybius</i>	Dytiscidae	Coleoptera		
<i>Athous bicolor</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Thryogenes nereis</i>	Eirrhinidae	Coleoptera		acid & sedge peats
<i>Helophorus brevipalpis</i>	Helophoridae	Coleoptera		marshland
<i>Berosus affinis</i>	Hydrophilidae	Coleoptera	Local	marshland
<i>Enochrus melanocephalus</i>	Hydrophilidae	Coleoptera		marshland
<i>Hydrobius fuscipes</i>	Hydrophilidae	Coleoptera		
<i>Noterus clavicornis</i>	Noteridae	Coleoptera		marshland
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Paederus littoralis</i>	Staphylinidae	Coleoptera		running water
<i>Melinda viridicyanea</i>	Calliphoridae	Diptera		
<i>Rhaphium caliginosum</i>	Dolichopodidae	Diptera		running water; shaded woodland floor; wet woodland
<i>Phylidorea ferruginea</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Lispe tentaculata</i>	Muscidae	Diptera		marshland
<i>Mesembrina meridiana</i>	Muscidae	Diptera		
<i>Hydromya dorsalis</i>	Sciomyzidae	Diptera		marshland
<i>Chrysotoxum bicinctum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Eristalis pertinax</i>	Syrphidae	Diptera		acid & sedge peats
<i>Melanostoma mellinum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Campiglossa malaris</i>	Tephritidae	Diptera	RDB 1	short sward & bare ground; tall sward & scrub
<i>Chaetostomella cylindrica</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Sphenella marginata</i>	Tephritidae	Diptera		tall sward & scrub

<i>Tephritis formosa</i>	Tephritidae	Diptera	Local	short sward & bare ground; tall sward & scrub
<i>Tephritis matricariae</i>	Tephritidae	Diptera		short sward & bare ground
<i>Urophora cardui</i>	Tephritidae	Diptera		tall sward & scrub
<i>Tipula oleracea</i>	Tipulidae	Diptera		acid & sedge peats
<i>Neophilaenus lineatus</i>	Aphrophoridae	Hemiptera		tall sward & scrub
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Zygina</i>	Cicadellidae	Hemiptera		
<i>Corixa punctata</i>	Corixidae	Hemiptera		marshland
<i>Hesperocorixa moesta</i>	Corixidae	Hemiptera	Local; New to VC	marshland
<i>Hesperocorixa sahlbergi</i>	Corixidae	Hemiptera		marshland
<i>Sigara (Sigara) dorsalis</i>	Corixidae	Hemiptera		marshland
<i>Euconomelus lepidus</i>	Delphacidae	Hemiptera	Local	
<i>Javesella dubia</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Stenocranus minutus</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Gerris (Gerris) lacustris</i>	Gerridae	Hemiptera		marshland
<i>Gerris (Gerris) odontogaster</i>	Gerridae	Hemiptera		marshland
<i>Gerris (Gerris) thoracicus</i>	Gerridae	Hemiptera		marshland
<i>Lygus pratensis</i>	Miridae	Hemiptera	RDB 3	
<i>Lygus rugulipennis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Megaloceroea recticornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Pithanus maerkelii</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus (Plagiognathus) arbustorum</i>	Miridae	Hemiptera		tall sward & scrub
<i>Stenotus binotatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Himacerus (Aptus) mirmicoides</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nepa cinerea</i>	Nepidae	Hemiptera		marshland
<i>Notonecta (Notonecta) glauca</i>	Notonectidae	Hemiptera		marshland
<i>Notonecta (Notonecta) viridis</i>	Notonectidae	Hemiptera		marshland
<i>Plea minutissima</i>	Pleidae	Hemiptera		marshland
<i>Saldula pallipes</i>	Saldidae	Hemiptera	NS; New to VC	marshland
<i>Saldula saltatoria</i>	Saldidae	Hemiptera		marshland
<i>Eurygaster testudinaria</i>	Scutelleridae	Hemiptera		tall sward & scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub

<i>Hylaeus communis</i>	Colletidae	Hymenoptera		tall sward & scrub
<i>Trypoxylon attenuatum</i>	Crabronidae	Hymenoptera		acid & sedge peats; tall sward & scrub
<i>Trypoxylon clavicerum</i>	Crabronidae	Hymenoptera		tall sward & scrub
<i>Myrmica rubra</i>	Formicidae	Hymenoptera		tall sward & scrub
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Lasioglossum pauillum</i>	Halictidae	Hymenoptera	Na	short sward & bare ground
<i>Hoplitis claviventris</i>	Megachilidae	Hymenoptera		tall sward & scrub
<i>Megachile centuncularis</i>	Megachilidae	Hymenoptera		decaying wood
<i>Dipogon subintermedius</i>	Pompilidae	Hymenoptera		decaying wood
<i>Dolerus ferrugatus</i>	Tenthredinidae	Hymenoptera		
<i>Selandria serva</i>	Tenthredinidae	Hymenoptera		
<i>Tomostethus nigrinus</i>	Tenthredinidae	Hymenoptera		
<i>Vespula germanica</i>	Vespidae	Hymenoptera		tall sward & scrub
<i>Vespula vulgaris</i>	Vespidae	Hymenoptera		tall sward & scrub
<i>Armadillidium vulgare</i>	Armadillidiidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Erynnis tages</i>	Hesperiidae	Lepidoptera	Section 41 Priority Species	short sward & bare ground
<i>Ochlodes sylvanus</i>	Hesperiidae	Lepidoptera		tall sward & scrub
<i>Thymelicus sylvestris</i>	Hesperiidae	Lepidoptera		tall sward & scrub
<i>Cupido minimus</i>	Lycaenidae	Lepidoptera	Section 41 Priority Species; NT	tall sward & scrub
<i>Aphantopus hyperantus</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Melanargia galathea</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Pyronia tithonus</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Vanessa atalanta</i>	Nymphalidae	Lepidoptera		
<i>Sialis lutaria</i>	Sialidae	Megaloptera		running water
<i>Coenagrion puella</i>	Coenagrionidae	Odonata		marshland
<i>Ischnura elegans</i>	Coenagrionidae	Odonata		marshland
<i>Libellula depressa</i>	Libellulidae	Odonata		marshland
<i>Libellula quadrimaculata</i>	Libellulidae	Odonata		marshland
<i>Sympetrum striolatum</i>	Libellulidae	Odonata		marshland
<i>Omocestus viridulus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Pseudochorthippus parallelus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Tetrix undulata</i>	Tetrigidae	Orthoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Stenopsocus immaculatus sensu stricto</i>	Stenopsocidae	Psocodea		

<i>Deroceras (Deroceras) reticulatum</i>	Agriolimacidae	Pulmonata		tall sward & scrub
<i>Trochulus hispidus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Athripsodes aterrimus</i>	Leptoceridae	Trichoptera		marshland
<i>Limnephilus affinis</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus vittatus</i>	Limnephilidae	Trichoptera		marshland

Appendix 6. List of invertebrate species recorded at Rat's Castle in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Araniella</i>	Araneidae	Araneae		
<i>Mangora acalypha</i>	Araneidae	Araneae		tall sward & scrub
<i>Clubiona</i>	Clubionidae	Araneae		
<i>Alopecosa pulverulenta</i>	Lycosidae	Araneae		tall sward & scrub; upland
<i>Pardosa pullata</i>	Lycosidae	Araneae		tall sward & scrub
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Metellina menzei</i>	Tetragnathidae	Araneae		
<i>Tetragnatha</i>	Tetragnathidae	Araneae		
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Xysticus</i>	Thomisidae	Araneae		
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion trifolii</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Phaedon tumidulus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Exomias pellucidus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mogulones asperifoliarum</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Rhinoncus castor</i> (pre 2014 type revision)	Curculionidae	Coleoptera		
<i>Cartodere nodifer</i>	Latridiidae	Coleoptera		
<i>Mordellochroa abdominalis</i>	Mordellidae	Coleoptera		decaying wood
<i>Paederus littoralis</i>	Staphylinidae	Coleoptera		running water
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Bombylius major</i>	Bombyliidae	Diptera		tall sward & scrub
<i>Bellardia bayeri</i>	Calliphoridae	Diptera	Other; New to VC	
<i>Dicranophragma adjunctum</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Mesembrina meridiana</i>	Muscidae	Diptera		
<i>Brachyopa scutellaris</i>	Syrphidae	Diptera	Local	decaying wood
<i>Epistrophe eligans</i>	Syrphidae	Diptera		arboreal
<i>Melanostoma mellinum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Melanostoma scalare</i>	Syrphidae	Diptera		tall sward & scrub
<i>Neoscia podagrica</i>	Syrphidae	Diptera		
<i>Rhingia campestris</i>	Syrphidae	Diptera		tall sward & scrub
<i>Nephrotoma</i>	Tipulidae	Diptera		
<i>Otites guttatus</i>	Ulidiidae	Diptera		
<i>Anthocoris confusus</i>	Anthocoridae	Hemiptera		arboreal
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub

<i>Nabis (Nabis) rugosus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Andrena scotica</i>	Andrenidae	Hymenoptera		short sward & bare ground; tall sward & scrub
<i>Andrena subopaca</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Nomada flava</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada goodeniana</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Aglaostigma fulvipes</i>	Tenthredinidae	Hymenoptera		
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Anthocharis cardamines</i>	Pieridae	Lepidoptera		tall sward & scrub
<i>Lithobius (Lithobius) melanops</i>	Lithobiidae	Lithobiomorpha		short sward & bare ground
<i>Trochulus hispidus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Discus (Gonyodiscus) rotundatus</i>	Patulidae	Pulmonata		shaded woodland floor

Appendix 7. List of invertebrate species recorded at Round Hill Bank in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Araneus diadematus</i>	Araneidae	Araneae		
<i>Mangora acalypha</i>	Araneidae	Araneae		tall sward & scrub
<i>Microlinyphia pusilla</i>	Linyphiidae	Araneae		tall sward & scrub
<i>Pardosa pullata</i>	Lycosidae	Araneae		tall sward & scrub
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Pachygnatha degeeri</i>	Tetragnathidae	Araneae		
<i>Catapion seniculus</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Diplapion confluens/stolidum</i> agg.	Apionidae	Coleoptera	Local	
<i>Ischnopterapion loti/modestum</i> agg.	Apionidae	Coleoptera		
<i>Ischnopterapion virens</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion assimile</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion difforme</i>	Apionidae	Coleoptera	Nb	tall sward & scrub
<i>Protapion filirostre</i>	Apionidae	Coleoptera	Nb	short sward & bare ground
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion nigritarse</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Cantharis nigra</i> (=thoracica) red scutellum	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis nigricans</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Rhagonycha fulva</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Amara aenea</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Amara familiaris</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Microlestes maurus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Rutpela maculata</i>	Cerambycidae	Coleoptera		decaying wood
<i>Bruchus rufimanus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema hortensis</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Prasocuris glabra</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Propylea quattuordecimpunctata</i>	Coccinellidae	Coleoptera		
<i>Scymnus frontalis</i>	Coccinellidae	Coleoptera		short sward & bare ground
<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Glocianus distinctus</i>	Curculionidae	Coleoptera		short sward & bare ground

<i>Hypera meles</i>	Curculionidae	Coleoptera	Nb	tall sward & scrub
<i>Hypera nigrirostris</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Hypera postica</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Hypera venusta</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona hispidulus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona lineatus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona obsoletus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona sulcifrons</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Stenocarus ruficornis</i>	Curculionidae	Coleoptera	Nb	short sward & bare ground
<i>Trichosirocalus troglodytes</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Tychius junceus</i>	Curculionidae	Coleoptera	Local	short sward & bare ground
<i>Athous bicolor</i>	Elateridae	Coleoptera		tall sward & scrub
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Mordellistena pseudoparvula</i>	Mordellidae	Coleoptera	NR	
<i>Oedemera lurida</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Olibrus corticalis</i>	Phalacridae	Coleoptera		
<i>Acrossus luridus</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Melinopterus prodromus</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Otophorus haemorrhoidalis</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Paederus littoralis</i>	Staphylinidae	Coleoptera		running water
<i>Tachyporus dispar</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Dilophus femoratus</i>	Bibionidae	Diptera		tall sward & scrub
<i>Villa cingulata</i>	Bombyliidae	Diptera	NR	tall sward & scrub
<i>Protocalliphora azurea</i>	Calliphoridae	Diptera		
<i>Dolichopus arbustorum</i>	Dolichopodidae	Diptera	NS; New to VC	marshland; running water
<i>Graphomya maculata</i>	Muscidae	Diptera		acid & sedge peats; decaying wood; marshland; shaded woodland floor; wet woodland
<i>Hydrotaea diabolus</i>	Muscidae	Diptera		shaded woodland floor
<i>Mesembrina meridiana</i>	Muscidae	Diptera		
<i>Neomyia viridescens</i>	Muscidae	Diptera		
<i>Geomyza tripunctata</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub

<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub
<i>Pollenia pediculata</i>	Polleniidae	Diptera		
<i>Sarcophaga carnaria</i>	Sarcophagidae	Diptera		
<i>Sarcophaga hirticrus</i>	Sarcophagidae	Diptera	Local; New to VC	
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Limnia unguicornis</i>	Sciomyzidae	Diptera		acid & sedge peats; marshland; running water
<i>Pherbellia cinerella</i>	Sciomyzidae	Diptera		tall sward & scrub
<i>Sepsis cynipsea</i>	Sepsidae	Diptera		tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Helophilus pendulus</i>	Syrphidae	Diptera		acid & sedge peats
<i>Melanostoma mellinum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Pipizella viduata</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria scripta</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria taeniata</i>	Syrphidae	Diptera	Local	
<i>Syritta pipiens</i>	Syrphidae	Diptera		tall sward & scrub
<i>Eriothrix rufomaculata</i>	Tachinidae	Diptera		
<i>Phasia pusilla</i>	Tachinidae	Diptera		
<i>Chaetorellia loricata</i>	Tephritidae	Diptera	RDB 2; New to VC	tall sward & scrub
<i>Tephritis matricariae</i>	Tephritidae	Diptera		short sward & bare ground
<i>Tephritis neesii</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Tephritis vespertina</i>	Tephritidae	Diptera		tall sward & scrub
<i>Stigmatogaster subterraneus</i>	Himantariidae	Geophilomorpha		shaded woodland floor
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Aphrodes diminuta</i>	Cicadellidae	Hemiptera		
<i>Arthaldeus pascuellus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Euscelis incisus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Megophthalmus scanicus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Kosswigianella exigua</i>	Delphacidae	Hemiptera		short sward & bare ground
<i>Stygnocoris fuliginus</i>	Lygaeidae	Hemiptera		tall sward & scrub
<i>Adelphocoris lineolatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Calocoris (Calocoris) roseomaculatus</i>	Miridae	Hemiptera		short sward & bare ground
<i>Closterotomus norvegicus</i>	Miridae	Hemiptera		tall sward & scrub

<i>Deraeocoris</i> (<i>Deraeocoris</i>) <i>flavilinea</i>	Miridae	Hemiptera		
<i>Heterotoma</i> <i>planicornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Leptopterna dolabrata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Leptopterna ferrugata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Megaloceroea</i> <i>recticornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Miridius quadrivirgatus</i>	Miridae	Hemiptera	Local	tall sward & scrub
<i>Orthocephalus saltator</i>	Miridae	Hemiptera	Local	short sward & bare ground
<i>Plagiognathus</i> (<i>Plagiognathus</i>) <i>arbustorum</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus</i> (<i>Plagiognathus</i>) <i>chrysanthemi</i>	Miridae	Hemiptera		short sward & bare ground
<i>Stenotus binotatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Catoplatus fabricii</i>	Tingidae	Hemiptera	Nb	short sward & bare ground
<i>Andrena minutula</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena semilaevis</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Nomada striata</i>	Apidae	Hymenoptera	Local	short sward & bare ground
<i>Hylaeus communis</i>	Colletidae	Hymenoptera		tall sward & scrub
<i>Crossocerus cetratus</i>	Crabronidae	Hymenoptera		decaying wood
<i>Crossocerus</i> <i>podagricus</i>	Crabronidae	Hymenoptera		decaying wood
<i>Lasius niger</i>	Formicidae	Hymenoptera		short sward & bare ground
<i>Halictus rubicundus</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Halictus tumulorum</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum</i> <i>lativentre</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum</i> <i>leucozonium</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum</i> <i>pauillum</i>	Halictidae	Hymenoptera	Na	short sward & bare ground
<i>Priocnemis agilis</i>	Pompilidae	Hymenoptera	Nb; New to VC	short sward & bare ground; tall sward & scrub
<i>Dolerus picipes</i>	Tenthredinidae	Hymenoptera		
<i>Armadillidium vulgare</i>	Armadillidiidae	Isopoda		
<i>Platyarthus</i> <i>hoffmannseggii</i>	Platyarthridae	Isopoda		tall sward & scrub
<i>Erynnis tages</i>	Hesperiidae	Lepidoptera	Section 41 Priority Species	short sward & bare ground

<i>Cupido minimus</i>	Lycaenidae	Lepidoptera	Section 41 Priority Species; NT	tall sward & scrub
<i>Autographa gamma</i>	Noctuidae	Lepidoptera		
<i>Coenonympha pamphilus</i>	Nymphalidae	Lepidoptera	Section 41 Priority Species; VU	short sward & bare ground
<i>Maniola jurtina</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Melanargia galathea</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Plutella xylostella</i>	Plutellidae	Lepidoptera		tall sward & scrub
<i>Lithobius (Sigibius) microps</i>	Lithobiidae	Lithobiomorpha		shaded woodland floor
<i>Pseudochorthippus parallelus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Deroceras (Deroceras) reticulatum</i>	Agriolimacidae	Pulmonata		tall sward & scrub

Appendix 8. List of invertebrate species recorded at Totem Pole Wall in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Leistus spinibarbis</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Paederus littoralis</i>	Staphylinidae	Coleoptera		running water
<i>Phytocoris</i> (<i>Phytocoris</i>) <i>tiliae</i>	Miridae	Hemiptera		arboreal
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Tachypodoiulus niger</i>	Julidae	Julida		
<i>Nudaria mundana</i>	Erebidae	Lepidoptera		short sward & bare ground; tall sward & scrub
<i>Clausilia</i> (<i>Clausilia</i>) <i>bidentata</i>	Clausiliidae	Pulmonata		tall sward & scrub
<i>Trochulus</i> (<i>Trochulus</i>) <i>striolatus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Pyramidula umbilicata</i>	Pyramidulidae	Pulmonata		short sward & bare ground

Appendix 9. List of invertebrate species recorded at Veg Gardens in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Araniella</i>	Araneidae	Araneae		
<i>Larinioides cornutus</i>	Araneidae	Araneae		acid & sedge peats
<i>Mangora acalypha</i>	Araneidae	Araneae		tall sward & scrub
<i>Clubiona</i>	Clubionidae	Araneae		
<i>Dictyna arundinacea</i>	Dictynidae	Araneae		tall sward & scrub
<i>Philodromus cespitum</i>	Philodromidae	Araneae		arboreal
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Pachygnatha degeeri</i>	Tetragnathidae	Araneae		
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Rhopalapion longirostre</i>	Apionidae	Coleoptera	Local; New to VC	
<i>Notiophilus substriatus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Stenurella melanura</i>	Cerambycidae	Coleoptera		decaying wood
<i>Cassida denticollis</i>	Chrysomelidae	Coleoptera	EN; NR; New to VC	tall sward & scrub
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera		arboreal
<i>Phaedon tumidulus</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Adalia decempunctata</i>	Coccinellidae	Coleoptera		arboreal
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Rhyzobius litura</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Ceutorhynchus pallidactylus</i>	Curculionidae	Coleoptera		short sward & bare ground
<i>Cionus nigritarsis</i>	Curculionidae	Coleoptera	Na	tall sward & scrub
<i>Sitona obsoletus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Anthocomus fasciatus</i>	Malachiidae	Coleoptera	NS	decaying wood
<i>Oedemera lurida</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Bibio marci</i>	Bibionidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Melinda viridicyanea</i>	Calliphoridae	Diptera		
<i>Meromyza bohemica</i>	Chloropidae	Diptera		tall sward & scrub
<i>Myopa pellucida</i>	Conopidae	Diptera	RDB 3	tall sward & scrub
<i>Dolichopus festivus</i>	Dolichopodidae	Diptera		marshland
<i>Rhamphomyia sulcata</i>	Empididae	Diptera		shaded woodland floor

<i>Morellia hortorum</i>	Muscidae	Diptera		shaded woodland floor
<i>Musca autumnalis</i>	Muscidae	Diptera		
<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub
<i>Sarcophaga haemorrhoea</i>	Sarcophagidae	Diptera		tall sward & scrub
<i>Norellisoma spinimanum</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Limnia unguicornis</i>	Sciomyzidae	Diptera		acid & sedge peats; marshland; running water
<i>Sepsis fulgens</i>	Sepsidae	Diptera		tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Pachygaster leachii</i>	Stratiomyidae	Diptera		shaded woodland floor
<i>Cheilosia lasiopa</i>	Syrphidae	Diptera		shaded woodland floor
<i>Epistrophe eligans</i>	Syrphidae	Diptera		arboreal
<i>Eristalis arbustorum</i>	Syrphidae	Diptera		acid & sedge peats
<i>Helophilus pendulus</i>	Syrphidae	Diptera		acid & sedge peats
<i>Melanostoma mellinum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria taeniata</i>	Syrphidae	Diptera	Local	
<i>Syrirta pipiens</i>	Syrphidae	Diptera		tall sward & scrub
<i>Phasia pusilla</i>	Tachinidae	Diptera		
<i>Nephrotoma cornicina</i>	Tipulidae	Diptera		tall sward & scrub
<i>Nephrotoma flavescens</i>	Tipulidae	Diptera		tall sward & scrub
<i>Orius (Orius) laevigatus</i>	Anthocoridae	Hemiptera		
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Eupteryx atropunctata</i>	Cicadellidae	Hemiptera	Local; New to VC	tall sward & scrub
<i>Eupteryx aurata</i>	Cicadellidae	Hemiptera		
<i>Eupteryx decemnotata</i>	Cicadellidae	Hemiptera		
<i>Eupteryx melissae</i>	Cicadellidae	Hemiptera		
<i>Macrosteles sexnotatus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Macrosteles viridigriseus</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Adelphocoris lineolatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Amblytylus nasutus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Closterotomus norwegicus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygus pratensis</i>	Miridae	Hemiptera	RDB 3	

<i>Notostira elongata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Orthops (Orthops) kalmii</i>	Miridae	Hemiptera		tall sward & scrub
<i>Phytocoris (Ktenocoris) varipes</i>	Miridae	Hemiptera		tall sward & scrub
<i>Psallus (Hylopsallus) perrisi</i>	Miridae	Hemiptera		arboreal
<i>Himacerus (Aptus) mirmicoides</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Aelia acuminata</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Rhopalus (Rhopalus) subrufus</i>	Rhopalidae	Hemiptera		tall sward & scrub
<i>Andrena chrysosceles</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena cineraria</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena fulva</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena haemorrhoa</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena labiata</i>	Andrenidae	Hymenoptera	Na	short sward & bare ground
<i>Andrena nitida</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Andrena nitidiuscula</i>	Andrenidae	Hymenoptera	RDB 3; New to VC	short sward & bare ground
<i>Andrena scotica</i>	Andrenidae	Hymenoptera		short sward & bare ground; tall sward & scrub
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus hypnorum</i>	Apidae	Hymenoptera		shaded woodland floor; tall sward & scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pratorum</i>	Apidae	Hymenoptera		shaded woodland floor; tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus vestalis</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada goodeniana</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada panzeri sensu stricto</i>	Apidae	Hymenoptera		
<i>Passaloecus singularis</i>	Crabronidae	Hymenoptera		decaying wood
<i>Lasioglossum lativentre</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum pauxillum</i>	Halictidae	Hymenoptera	Na	short sward & bare ground

<i>Euura pavid</i>	Tenthredinidae	Hymenoptera		
<i>Selandria serva</i>	Tenthredinidae	Hymenoptera		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera		tall sward & scrub
<i>Pyrausta aurata</i>	Crambidae	Lepidoptera		
<i>Diachrysia chrysitis</i>	Noctuidae	Lepidoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata		tall sward & scrub

Appendix 10. List of invertebrate species recorded at Veg Plots in 2024. National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Agalenatea redii</i>	Araneidae	Araneae		
<i>Araneus diadematus</i>	Araneidae	Araneae		
<i>Araniella cucurbitina sensu stricto</i>	Araneidae	Araneae		
<i>Larinioides cornutus</i>	Araneidae	Araneae		acid & sedge peats
<i>Mangora acalypha</i>	Araneidae	Araneae		tall sward & scrub
<i>Cheiracanthium erraticum</i>	Miturgidae	Araneae		tall sward & scrub
<i>Philodromus cespitum</i>	Philodromidae	Araneae		arboreal
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Tetragnatha extensa</i>	Tetragnathidae	Araneae		acid & sedge peats
<i>Phylloneta sisypchia</i>	Theridiidae	Araneae		tall sward & scrub
<i>Misumena vatia</i>	Thomisidae	Araneae		tall sward & scrub
<i>Anthicus antherinus</i>	Anthicidae	Coleoptera		saltmarsh
<i>Ceratapion onopordi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion trifolii</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Cantharis flavilabris</i> (=nigra auctt.) black scutellum	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis lateralis</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Cantharis rufa</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Malthinus balteatus</i>	Cantharidae	Coleoptera	Local	decaying wood
<i>Bembidion lampros</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Bembidion quadrimaculatum</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Notiophilus biguttatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Altica cf oleracea</i>	Chrysomelidae	Coleoptera		short sward & bare ground
<i>Bruchus loti</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Cassida nebulosa</i>	Chrysomelidae	Coleoptera	NS	short sward & bare ground
<i>Cassida nobilis</i>	Chrysomelidae	Coleoptera	NS	tall sward & scrub
<i>Chaetocnema concinna</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema picipes</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera		arboreal
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub

<i>Psylliodes chrysocephala</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Coccinella septempunctata</i>	Coccinellidae	Coleoptera		
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Propylea quattuordecimpunctata</i>	Coccinellidae	Coleoptera		
<i>Psyllobora vigintiduopunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Subcoccinella vigintiquatuorpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pyraeter</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Parethelcus pollinarius</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sitona lineatus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Trichosirocalus troglodytes</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Tychius picirostris</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Mordellistena pumila</i>	Mordellidae	Coleoptera	Local	
<i>Oedemera lurida</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Oedemera nobilis</i>	Oedemeridae	Coleoptera		tall sward & scrub
<i>Dioctria atricapilla</i>	Asilidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Leptogaster cylindrica</i>	Asilidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Meromyza</i>	Chloropidae	Diptera		
<i>Thecophora atra</i>	Conopidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Dolichopus festivus</i>	Dolichopodidae	Diptera		marshland
<i>Dolichopus griseipennis</i>	Dolichopodidae	Diptera		marshland
<i>Scellus notatus</i>	Dolichopodidae	Diptera		acid & sedge peats
<i>Sciapus platypterus</i>	Dolichopodidae	Diptera		shaded woodland floor
<i>Empis livida</i>	Empididae	Diptera		tall sward & scrub
<i>Hybos culiciformis</i>	Hybotidae	Diptera		shaded woodland floor
<i>Morellia simplex</i>	Muscidae	Diptera		
<i>Musca autumnalis</i>	Muscidae	Diptera		
<i>Neomyia viridescens</i>	Muscidae	Diptera		
<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub

<i>Pollenia pediculata</i>	Polleniidae	Diptera		
<i>Pollenia rudis</i>	Polleniidae	Diptera		marshland
<i>Nyctia halterata</i>	Sarcophagidae	Diptera		tall sward & scrub
<i>Sarcophaga incisilobata</i>	Sarcophagidae	Diptera		
<i>Sarcophaga rosellei</i>	Sarcophagidae	Diptera		
<i>Sarcophaga variegata</i>	Sarcophagidae	Diptera		
<i>Coremacera marginata</i>	Sciomyzidae	Diptera		tall sward & scrub
<i>Limnia unguicornis</i>	Sciomyzidae	Diptera		acid & sedge peats; marshland; running water
<i>Sepsis fulgens</i>	Sepsidae	Diptera		tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Pachygaster atra</i>	Stratiomyidae	Diptera		shaded woodland floor
<i>Chrysotoxum bicinctum</i>	Syrphidae	Diptera		tall sward & scrub
<i>Eristalis arbustorum</i>	Syrphidae	Diptera		acid & sedge peats
<i>Eristalis pertinax</i>	Syrphidae	Diptera		acid & sedge peats
<i>Eristalis tenax</i>	Syrphidae	Diptera		rich flower resource
<i>Melanostoma scalare</i>	Syrphidae	Diptera		tall sward & scrub
<i>Neoscia podagrica</i>	Syrphidae	Diptera		
<i>Pipizella viduata</i>	Syrphidae	Diptera		tall sward & scrub
<i>Platycheirus albimanus</i>	Syrphidae	Diptera		
<i>Platycheirus angustatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Platycheirus clypeatus</i>	Syrphidae	Diptera		tall sward & scrub
<i>Sphaerophoria taeniata</i>	Syrphidae	Diptera	Local	
<i>Syrirta pipiens</i>	Syrphidae	Diptera		tall sward & scrub
<i>Volucella inanis</i>	Syrphidae	Diptera		decaying wood
<i>Eriothrix rufomaculata</i>	Tachinidae	Diptera		
<i>Phasia obesa</i>	Tachinidae	Diptera		
<i>Tachina fera</i>	Tachinidae	Diptera		
<i>Thelaira solivaga</i>	Tachinidae	Diptera		
<i>Sphenella marginata</i>	Tephritidae	Diptera		tall sward & scrub
<i>Urophora solstitialis</i>	Tephritidae	Diptera	RDB 3	tall sward & scrub
<i>Nephrotoma flavescens</i>	Tipulidae	Diptera		tall sward & scrub
<i>Tipula oleracea/paludosa</i>	Tipulidae	Diptera		acid & sedge peats
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Buchananiella continua</i>	Anthocoridae	Hemiptera		

<i>Orius (Orius) cf laevigatus</i>	Anthocoridae	Hemiptera		
<i>Orius (Orius) niger</i>	Anthocoridae	Hemiptera		tall sward & scrub
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Neophilaenus lineatus</i>	Aphrophoridae	Hemiptera		tall sward & scrub
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Alebra</i>	Cicadellidae	Hemiptera		
<i>Eupteryx cf urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Eurhadina cf concinna</i>	Cicadellidae	Hemiptera		arboreal
<i>Zygina flammigera</i>	Cicadellidae	Hemiptera		arboreal
<i>Zyginella pulchra</i>	Cicadellidae	Hemiptera		
<i>Coreus marginatus</i>	Coreidae	Hemiptera		tall sward & scrub
<i>Tritomegas bicolor</i>	Cydnidae	Hemiptera		tall sward & scrub
<i>Javesella dubia</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Javesella pellucida</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Megamelodes quadrimaculatus sensu stricto</i>	Delphacidae	Hemiptera	Local; New to VC	
<i>Stenocranus cf minutus</i>	Delphacidae	Hemiptera		tall sward & scrub
<i>Drymus (Sylvadrymus) sylvaticus</i>	Lygaeidae	Hemiptera		tall sward & scrub
<i>Ischnodemus sabuleti</i>	Lygaeidae	Hemiptera		marshland
<i>Amblytylus nasutus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Closterotomus norvegicus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Deraeocoris (Deraeocoris) ruber</i>	Miridae	Hemiptera		tall sward & scrub
<i>Deraeocoris (Knightocapsus) lutescens</i>	Miridae	Hemiptera		arboreal
<i>Dicyphus (Dicyphus) cf tamaninii</i>	Miridae	Hemiptera		
<i>Leptopterna dolabrata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygocoris (Lygocoris) pabulinus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygus rugulipennis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Notostira elongata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Oncotylus (Oncotylus) viridiflavus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Orthops (Orthops) basalis</i>	Miridae	Hemiptera		
<i>Orthotylus (Orthotylus) cf ochrotrichus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Phylus (Phylus) coryli</i>	Miridae	Hemiptera		arboreal
<i>Phytocoris (Ktenocoris) varipes</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus (Plagiognathus) arbustorum</i>	Miridae	Hemiptera		tall sward & scrub

<i>Stenodema (Brachystira) calcarata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Stenodema (Stenodema) laevigata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Stenotus binotatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Himacerus (Aptus) mirmicoides</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nabis (Dolichonabis) limbatus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Nabis (Nabis) rugosus</i>	Nabidae	Hemiptera		tall sward & scrub
<i>Dolycoris baccarum</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Corizus hyoscyami</i>	Rhopalidae	Hemiptera		short sward & bare ground
<i>Rhopalus (Rhopalus) parumpunctatus</i>	Rhopalidae	Hemiptera	NS	short sward & bare ground
<i>Eurygaster testudinaria</i>	Scutelleridae	Hemiptera		tall sward & scrub
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus lapidarius</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus pratorum</i>	Apidae	Hymenoptera		shaded woodland floor; tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Arge melanochra</i>	Argidae	Hymenoptera		
<i>Hylaeus communis</i>	Colletidae	Hymenoptera		tall sward & scrub
<i>Passaloecus singularis</i>	Crabronidae	Hymenoptera		decaying wood
<i>Myrmica sabuleti</i>	Formicidae	Hymenoptera	Local	short sward & bare ground
<i>Lasioglossum lativentre</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Lasioglossum malachurum</i>	Halictidae	Hymenoptera	Nb	short sward & bare ground
<i>Sphecodes ephippius</i>	Halictidae	Hymenoptera		short sward & bare ground
<i>Athalia cordata</i>	Tenthredinidae	Hymenoptera		
<i>Tiphia minuta</i>	Tiphiidae	Hymenoptera	Nb	short sward & bare ground
<i>Agriphila tristella</i>	Crambidae	Lepidoptera		
<i>Crambus perlella</i>	Crambidae	Lepidoptera		
<i>Orgyia antiqua</i>	Erebidae	Lepidoptera		arboreal
<i>Epirrhoe alternata</i>	Geometridae	Lepidoptera		tall sward & scrub
<i>Maniola jurtina</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Pieris brassicae</i>	Pieridae	Lepidoptera		
<i>Dichrorampha</i>	Tortricidae	Lepidoptera		
<i>Grapholita compositella</i>	Tortricidae	Lepidoptera		tall sward & scrub
<i>Pammene aurana</i>	Tortricidae	Lepidoptera		tall sward & scrub

<i>Hemerobius micans</i>	Hemerobiidae	Neuroptera		arboreal
<i>Micromus variegatus</i>	Hemerobiidae	Neuroptera		tall sward & scrub
<i>Paroligolophus agrestis</i>	Phalangiidae	Opiliones		
<i>Phalangium opilio</i>	Phalangiidae	Opiliones		
<i>Omocestus viridulus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Pseudochorthippus parallelus</i>	Acrididae	Orthoptera		tall sward & scrub
<i>Tetrix subulata</i>	Tetrigidae	Orthoptera		acid & sedge peats
<i>Tetrix undulata</i>	Tetrigidae	Orthoptera		tall sward & scrub
<i>Roeseliana roeselii</i>	Tettigoniidae	Orthoptera		tall sward & scrub
<i>Valenzuela flavidus</i>	Caeciliusidae	Psocodea		

Appendix 11. List of invertebrate species recorded at Well Ground Pond in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Clubiona terrestris</i>	Clubionidae	Araneae		
<i>Erigone atra</i>	Linyphiidae	Araneae		
<i>Erigone dentipalpis</i>	Linyphiidae	Araneae		
<i>Pardosa pullata</i>	Lycosidae	Araneae		tall sward & scrub
<i>Philodromus aureolus</i>	Philodromidae	Araneae		arboreal
<i>Enoplognatha ovata sensu stricto</i>	Theridiidae	Araneae		
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Protapion apricans</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion assimile</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Bembidion lunulatum</i>	Carabidae	Coleoptera		marshland
<i>Notiophilus substriatus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Aphthona nonstriata</i>	Chrysomelidae	Coleoptera		acid & sedge peats
<i>Crepidodera aurata</i>	Chrysomelidae	Coleoptera		arboreal
<i>Psylliodes napi</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Psyllobora vigintiduopunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Tytthaspis sedecimpunctata</i>	Coccinellidae	Coleoptera		tall sward & scrub
<i>Leiosoma deflexum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Phyllobius pyri</i>	Curculionidae	Coleoptera		arboreal
<i>Rhinoncus castor</i> (pre 2014 type revision)	Curculionidae	Coleoptera		
<i>Gyrinus substriatus</i>	Gyrinidae	Coleoptera		marshland
<i>Berosus affinis</i>	Hydrophilidae	Coleoptera	Local	marshland
<i>Malachius bipustulatus</i>	Malachiidae	Coleoptera		decaying wood
<i>Pyrochroa serraticornis</i>	Pyrochroidae	Coleoptera		decaying wood
<i>Contacyphon palustris</i>	Scirtidae	Coleoptera		running water
<i>Anaspis maculata</i>	Scaptiidae	Coleoptera		decaying wood
<i>Anaspis pulicaria</i>	Scaptiidae	Coleoptera	Local	decaying wood
<i>Drusilla canaliculata</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Tachyporus solutus</i>	Staphylinidae	Coleoptera		tall sward & scrub
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Dolichopus virgultorum</i>	Dolichopodidae	Diptera	NS; New to VC	acid & sedge peats
<i>Poecilobothrus nobilitatus</i>	Dolichopodidae	Diptera		marshland

<i>Sciapus platypterus</i>	Dolichopodidae	Diptera		shaded woodland floor
<i>Empis livida</i>	Empididae	Diptera		tall sward & scrub
<i>Meiosimyza decempunctata</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Meiosimyza rorida</i>	Lauxaniidae	Diptera		shaded woodland floor
<i>Euphylidorea lineola</i>	Limoniidae	Diptera		acid & sedge peats
<i>Phylidorea ferruginea</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Musca autumnalis</i>	Muscidae	Diptera		
<i>Geomyza tripunctata</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Opomyza florum</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Pollenia rudis</i>	Polleniidae	Diptera		marshland
<i>Ptychoptera contaminata</i>	Ptychopteridae	Diptera		acid & sedge peats; shaded woodland floor; wet woodland
<i>Scathophaga stercoraria</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Chorisops nagatomii</i>	Stratiomyidae	Diptera	Local	tall sward & scrub
<i>Microchrysa flavicornis</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Odontomyia tigrina</i>	Stratiomyidae	Diptera	Local	acid & sedge peats
<i>Volucella bombylans</i>	Syrphidae	Diptera		tall sward & scrub
<i>Xanthogramma pedissequum sensu stricto</i>	Syrphidae	Diptera		
<i>Tephritis bardanae</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Terellia tussilaginis</i>	Tephritidae	Diptera		short sward & bare ground; tall sward & scrub
<i>Nephrotoma flavescens</i>	Tipulidae	Diptera		tall sward & scrub
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Orius (Heterorius) majusculus/vicinus</i>	Anthocoridae	Hemiptera		
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Balclutha punctata</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Edwardsiana</i>	Cicadellidae	Hemiptera		
<i>Eupteryx florida</i>	Cicadellidae	Hemiptera		
<i>Eupteryx vittata</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Lamprotettix nitidulus</i>	Cicadellidae	Hemiptera	Local	arboreal

<i>Macropsis scutellata sensu stricto</i>	Cicadellidae	Hemiptera		
<i>Zygina flammigera</i>	Cicadellidae	Hemiptera		arboreal
<i>Corixa punctata</i>	Corixidae	Hemiptera		marshland
<i>Kelisia</i>	Delphacidae	Hemiptera		
<i>Hydrometra stagnorum</i>	Hydrometridae	Hemiptera		marshland
<i>Taphropeltus contractus</i>	Lygaeidae	Hemiptera		short sward & bare ground
<i>Deraeocoris</i> (<i>Deraeocoris</i>) <i>flavilinea</i>	Miridae	Hemiptera		
<i>Grypocoris</i> (<i>Lophyromiris</i>) <i>stysi</i>	Miridae	Hemiptera		tall sward & scrub
<i>Heterotoma planicornis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Lygocoris</i> (<i>Lygocoris</i>) <i>pabulinus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Plagiognathus</i> (<i>Plagiognathus</i>) <i>arbustorum</i>	Miridae	Hemiptera		tall sward & scrub
<i>Psallus</i>	Miridae	Hemiptera		
<i>Stenodema</i> (<i>Stenodema</i>) <i>laevigata</i>	Miridae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Physatocheila confinis</i>	Tingidae	Hemiptera		
<i>Crossocerus annulipes</i>	Crabronidae	Hymenoptera		decaying wood
<i>Callaspidia defonscolombeii</i>	Figitidae	Hymenoptera	Other; New to VC	
<i>Myrmica rubra</i>	Formicidae	Hymenoptera		tall sward & scrub
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Armadillidium vulgare</i>	Armadillidiidae	Isopoda		
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera		tall sward & scrub
<i>Cataclysta lemnata</i>	Crambidae	Lepidoptera		
<i>Campptogramma bilineata</i>	Geometridae	Lepidoptera		tall sward & scrub
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Pieris napi</i>	Pieridae	Lepidoptera		
<i>Prays fraxinella</i>	Praydidae	Lepidoptera		arboreal
<i>Pseudargyrotoza conwagana</i>	Tortricidae	Lepidoptera		arboreal
<i>Yponomeuta</i>	Yponomeutidae	Lepidoptera		
<i>Chrysoperla carnea sensu stricto</i>	Chrysopidae	Neuroptera		
<i>Aeshna cyanea</i>	Aeshnidae	Odonata		marshland

<i>Dicranopalpus ramosus sensu lato (pre 2015)</i>	Phalangiidae	Opiliones		arboreal
<i>Leiobunum rotundum</i>	Phalangiidae	Opiliones		arboreal
<i>Paroligolophus agrestis</i>	Phalangiidae	Opiliones		
<i>Meconema thalassinum</i>	Meconematidae	Orthoptera		arboreal
<i>Leptophyes punctatissima</i>	Phaneropteridae	Orthoptera		tall sward & scrub
<i>Graphopsocus cruciatus</i>	Stenopsocidae	Psocoptera		
<i>Lehmanna marginata</i>	Limacidae	Pulmonata		tall sward & scrub
<i>Limacus maculatus</i>	Limacidae	Pulmonata		
<i>Glyphotaelius pellucidus</i>	Limnephilidae	Trichoptera		marshland

Appendix 12. List of invertebrate species recorded at Yellow School Strip in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Amaurobius fenestralis</i>	Amaurobiidae	Araneae		decaying wood
<i>Anyphaena accentuata</i>	Anyphaenidae	Araneae		arboreal
<i>Araniella</i>	Araneidae	Araneae		
<i>Gnathonarium dentatum</i>	Linyphiidae	Araneae		acid & sedge peats
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion trifolii</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Cantharis decipiens</i>	Cantharidae	Coleoptera		tall sward & scrub
<i>Bembidion varium</i>	Carabidae	Coleoptera		marshland
<i>Chaetocnema picipes</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Harmonia axyridis</i>	Coccinellidae	Coleoptera		
<i>Phyllobius argentatus</i>	Curculionidae	Coleoptera		arboreal
<i>Sitona lineatus</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Melinopterus prodromus</i>	Scarabaeidae	Coleoptera		tall sward & scrub
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Dicranophragma adjunctum</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Tricyphona immaculata</i>	Pediciidae	Diptera		acid & sedge peats; marshland
<i>Norellisoma spinimanum</i>	Scathophagidae	Diptera		tall sward & scrub
<i>Rhingia campestris</i>	Syrphidae	Diptera		tall sward & scrub
<i>Stigmatogaster subterraneus</i>	Himantariidae	Geophilomorpha		shaded woodland floor
<i>Elasmucha grisea</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Drymus (Sylvadrymus) sylvaticus</i>	Lygaeidae	Hemiptera		tall sward & scrub
<i>Kleidocerys resedae</i>	Lygaeidae	Hemiptera		arboreal
<i>Liocoris tripustulatus</i>	Miridae	Hemiptera		tall sward & scrub
<i>Palomena prasina</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Chartoscirta cincta</i>	Saldidae	Hemiptera		marshland
<i>Bombus pascuorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Nomada flava</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Aglaostigma fulvipes</i>	Tenthredinidae	Hymenoptera		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Trichoniscus pusillus sensu lato</i>	Trichoniscidae	Isopoda		

<i>Blaniulus guttulatus</i>	Blaniulidae	Julida		tall sward & scrub
<i>Oxychilus (Oxychilus) alliarius</i>	Oxychilidae	Pulmonata		woodland habitat

Appendix 13. List of invertebrate species recorded at Yellow School Wood in 2024.
National status codes are explained in **Appendix 1**.

Species	Family	Order	Conservation status	Habitat
<i>Anyphaena accentuata</i>	Anyphaenidae	Araneae		arboreal
<i>Cyclosa conica</i>	Araneidae	Araneae	Local	arboreal
<i>Lepthyphantes minutus</i>	Linyphiidae	Araneae		arboreal
<i>Linyphia hortensis</i>	Linyphiidae	Araneae		shaded woodland floor
<i>Pisaura mirabilis</i>	Pisauridae	Araneae		tall sward & scrub
<i>Metellina mengei</i>	Tetragnathidae	Araneae		
<i>Enoplognatha ovata sensu stricto</i>	Theridiidae	Araneae		
<i>Neottiura bimaculata</i>	Theridiidae	Araneae		tall sward & scrub
<i>Diaea dorsata</i>	Thomisidae	Araneae	Local	arboreal
<i>Holotrichapion pisi</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Oxystoma pomonae</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion fulvipes</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Protapion trifolii</i>	Apionidae	Coleoptera		tall sward & scrub
<i>Byturus ochraceus</i>	Byturidae	Coleoptera		tall sward & scrub
<i>Malthinus balteatus</i>	Cantharidae	Coleoptera	Local	decaying wood
<i>Malthinus seriepunctatus</i>	Cantharidae	Coleoptera		decaying wood
<i>Malthodes</i>	Cantharidae	Coleoptera		
<i>Rhagonycha lignosa</i>	Cantharidae	Coleoptera		arboreal
<i>Agonum muelleri</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Badister bullatus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Bembidion quadrimaculatum</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Calathus rotundicollis</i>	Carabidae	Coleoptera		shaded woodland floor
<i>Leistus spinibarbis</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Nebria brevicollis</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Ocys tachysoides</i>	Carabidae	Coleoptera		
<i>Poecilus cupreus</i>	Carabidae	Coleoptera		short sward & bare ground
<i>Pterostichus madidus</i>	Carabidae	Coleoptera		tall sward & scrub
<i>Grammoptera ruficornis</i>	Cerambycidae	Coleoptera		decaying wood
<i>Aphthona euphorbiae</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chaetocnema hortensis</i>	Chrysomelidae	Coleoptera		tall sward & scrub
<i>Chrysolina oricalcia</i>	Chrysomelidae	Coleoptera	Local	tall sward & scrub
<i>Phyllotreta vittula</i>	Chrysomelidae	Coleoptera		tall sward & scrub

<i>Propylea quattuordecimpunctata</i>	Coccinellidae	Coleoptera		
<i>Ceutorhynchus typhae</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Euophryum confine</i>	Curculionidae	Coleoptera		decaying wood
<i>Exomias araneiformis</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Mecinus pascuorum</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Parethelcus pollinarius</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Tychius picirostris</i>	Curculionidae	Coleoptera		tall sward & scrub
<i>Sinodendron cylindricum</i>	Lucanidae	Coleoptera	Local	decaying wood
<i>Oedemera femoralis</i>	Oedemeridae	Coleoptera	NS	tall sward & scrub
<i>Pyrochroa serraticornis</i>	Pyrochroidae	Coleoptera		decaying wood
<i>Anaspis frontalis</i>	Scraptiidae	Coleoptera		decaying wood
<i>Anaspis garneysi</i>	Scraptiidae	Coleoptera		decaying wood
<i>Anaspis maculata</i>	Scraptiidae	Coleoptera		decaying wood
<i>Habrocerus capillaricornis</i>	Staphylinidae	Coleoptera		shaded woodland floor
<i>Dilophus febrilis</i>	Bibionidae	Diptera		tall sward & scrub
<i>Dolichopus arbustorum</i>	Dolichopodidae	Diptera	NS; New to VC	marshland; running water
<i>Dolichopus trivialis</i>	Dolichopodidae	Diptera		marshland; running water
<i>Neurigona quadrifasciata</i>	Dolichopodidae	Diptera		
<i>Scellus notatus</i>	Dolichopodidae	Diptera		acid & sedge peats
<i>Sciapus platypterus</i>	Dolichopodidae	Diptera		shaded woodland floor
<i>Empis livida</i>	Empididae	Diptera		tall sward & scrub
<i>Empis lutea</i>	Empididae	Diptera		shaded woodland floor; tall sward & scrub
<i>Empis scutellata</i>	Empididae	Diptera		tall sward & scrub
<i>Suillia variegata</i>	Heleomyzidae	Diptera		shaded woodland floor
<i>Oedalea</i>	Hybotidae	Diptera		
<i>Tachypeza nubila</i>	Hybotidae	Diptera		decaying wood
<i>Austrolimnophila ochracea</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Dicranomyia mitis sensu strictu</i>	Limoniidae	Diptera		
<i>Dicranophragma adjunctum</i>	Limoniidae	Diptera		acid & sedge peats; marshland
<i>Limonia nubeculosa</i>	Limoniidae	Diptera		decaying wood; shaded woodland floor
<i>Neolimonia dumetorum</i>	Limoniidae	Diptera		decaying wood

<i>Symplecta stictica</i>	Limoniidae	Diptera		acid & sedge peats; brackish pools & ditches; saltmarsh
<i>Muscina levida</i>	Muscidae	Diptera		shaded woodland floor
<i>Opomyza florum</i>	Opomyzidae	Diptera		shaded woodland floor; tall sward & scrub
<i>Opomyza germinationis</i>	Opomyzidae	Diptera		tall sward & scrub
<i>Palloptera saltuum</i>	Pallopteridae	Diptera		tall sward & scrub
<i>Pollenia pediculata</i>	Polleniidae	Diptera		
<i>Sepsis fulgens</i>	Sepsidae	Diptera		tall sward & scrub
<i>Chloromyia formosa</i>	Stratiomyidae	Diptera		tall sward & scrub
<i>Chorisops nagatomii</i>	Stratiomyidae	Diptera	Local	tall sward & scrub
<i>Eristalis pertinax</i>	Syrphidae	Diptera		acid & sedge peats
<i>Eumerus ornatus</i>	Syrphidae	Diptera	Local	shaded woodland floor
<i>Ferdinandea cuprea</i>	Syrphidae	Diptera		decaying wood
<i>Myathropa florea</i>	Syrphidae	Diptera		decaying wood
<i>Platycheirus albimanus</i>	Syrphidae	Diptera		
<i>Rhingia campestris</i>	Syrphidae	Diptera		tall sward & scrub
<i>Volucella pellucens</i>	Syrphidae	Diptera		shaded woodland floor
<i>Otites guttatus</i>	Ulidiidae	Diptera		
<i>Geophilus osquidatum</i>	Geophilidae	Geophilomorpha	NS; New to VC	tall sward & scrub
<i>Elasmucha grisea</i>	Acanthosomatidae	Hemiptera		arboreal
<i>Anthocoris nemorum</i>	Anthocoridae	Hemiptera		
<i>Aphrophora alni</i>	Aphrophoridae	Hemiptera		
<i>Philaenus spumarius</i>	Aphrophoridae	Hemiptera		
<i>Agallia consobrina</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Eupteryx urticae</i>	Cicadellidae	Hemiptera		tall sward & scrub
<i>Lamprotettix nitidulus</i>	Cicadellidae	Hemiptera	Local	arboreal
<i>Peritrechus lundii</i>	Lygaeidae	Hemiptera	Local; New to VC	tall sward & scrub
<i>Calocoris (Calocoris) alpestris</i>	Miridae	Hemiptera	Local	shaded woodland floor
<i>Charagochilus (Charagochilus) gyllenhalii</i>	Miridae	Hemiptera		short sward & bare ground
<i>Dicyphus (Dicyphus) stachydis</i>	Miridae	Hemiptera		tall sward & scrub
<i>Grypocoris (Lophyromiris) stysi</i>	Miridae	Hemiptera		tall sward & scrub
<i>Pinalitus cervinus</i>	Miridae	Hemiptera		arboreal
<i>Psallus (Mesopsallus) ambiguus</i>	Miridae	Hemiptera		arboreal

<i>Psallus (Psallus) varians</i>	Miridae	Hemiptera		arboreal
<i>Eurydema (Eurydema) oleracea</i>	Pentatomidae	Hemiptera		tall sward & scrub
<i>Cacopsylla peregrina</i>	Psyllidae	Hemiptera		
<i>Psyllopsis fraxini</i>	Psyllidae	Hemiptera		
<i>Andrena minutula</i>	Andrenidae	Hymenoptera		short sward & bare ground
<i>Bombus hortorum</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus terrestris</i>	Apidae	Hymenoptera		tall sward & scrub
<i>Bombus vestalis</i>	Apidae	Hymenoptera		short sward & bare ground
<i>Nomada flava/panzeri</i>	Apidae	Hymenoptera		
<i>Lasius brunneus</i>	Formicidae	Hymenoptera	Na	decaying wood
<i>Myrmica ruginodis</i>	Formicidae	Hymenoptera		shaded woodland floor
<i>Aglaostigma fulvipes</i>	Tenthredinidae	Hymenoptera		
<i>Empria sexpunctata</i>	Tenthredinidae	Hymenoptera		
<i>Oniscus asellus</i>	Oniscidae	Isopoda		
<i>Philoscia muscorum</i>	Philosciidae	Isopoda		
<i>Porcellio scaber</i>	Porcellionidae	Isopoda		
<i>Trichoniscus pusillus sensu lato</i>	Trichoniscidae	Isopoda		
<i>Tachypodoiulus niger</i>	Julidae	Julida		
<i>Nemophora degeerella</i>	Adelidae	Lepidoptera		shaded woodland floor
<i>Anthophila fabriciana</i>	Choreutidae	Lepidoptera		tall sward & scrub
<i>Pararge aegeria</i>	Nymphalidae	Lepidoptera		tall sward & scrub
<i>Anthocharis cardamines</i>	Pieridae	Lepidoptera		tall sward & scrub
<i>Gonepteryx rhamni</i>	Pieridae	Lepidoptera		
<i>Pseudargyrotoza conwagana</i>	Tortricidae	Lepidoptera		arboreal
<i>Lithobius (Lithobius) forficatus</i>	Lithobiidae	Lithobiomorpha		
<i>Lithobius (Sigibius) microps</i>	Lithobiidae	Lithobiomorpha		shaded woodland floor
<i>Panorpa germanica</i>	Panorpidae	Mecoptera		tall sward & scrub
<i>Nothochrysa capitata</i>	Chrysopidae	Neuroptera		arboreal
<i>Nemastoma bimaculatum</i>	Nemastomatidae	Opiliones		shaded woodland floor
<i>Paroligolophus agrestis</i>	Phalangidae	Opiliones		
<i>Rilaena triangularis</i>	Phalangidae	Opiliones		shaded woodland floor
<i>Leptophyes punctatissima</i>	Phaneropteridae	Orthoptera		tall sward & scrub
<i>Tetrix subulata</i>	Tetrigidae	Orthoptera		acid & sedge peats

<i>Brachydesmus superus</i>	Polydesmidae	Polydesmida		shaded woodland floor
<i>Valenzuela flavidus</i>	Caeciliusidae	Psocodea		
<i>Elipsocus hyalinus</i>	Elipsocidae	Psocodea		
<i>Ectopsocus petersi</i>	Ectopsocidae	Psocoptera		
<i>Graphopsocus cruciatus</i>	Stenopsocidae	Psocoptera		
<i>Deroceras (Deroceras) invadens</i>	Agriolimacidae	Pulmonata		
<i>Deroceras (Deroceras) reticulatum</i>	Agriolimacidae	Pulmonata		tall sward & scrub
<i>Arion (Arion) cf rufus</i>	Arionidae	Pulmonata		
<i>Clausilia (Clausilia) bidentata</i>	Clausiliidae	Pulmonata		tall sward & scrub
<i>Cochlodina (Cochlodina) laminata</i>	Clausiliidae	Pulmonata		shaded woodland floor
<i>Cepaea (Cepaea) hortensis</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Cepaea (Cepaea) nemoralis</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Cornu aspersum</i>	Helicidae	Pulmonata		tall sward & scrub
<i>Trochulus (Trochulus) striolatus</i>	Hygromiidae	Pulmonata		tall sward & scrub
<i>Lehmanna marginata</i>	Limacidae	Pulmonata		tall sward & scrub
<i>Limacus maculatus</i>	Limacidae	Pulmonata		
<i>Oxychilus (Oxychilus) cellarius</i>	Oxychilidae	Pulmonata		tall sward & scrub
<i>Glyphotaelius pellucidus</i>	Limnephilidae	Trichoptera		marshland
<i>Limnephilus auricula</i>	Limnephilidae	Trichoptera		marshland
<i>Thyraylia nana</i>	Tortricidae	Lepidoptera		