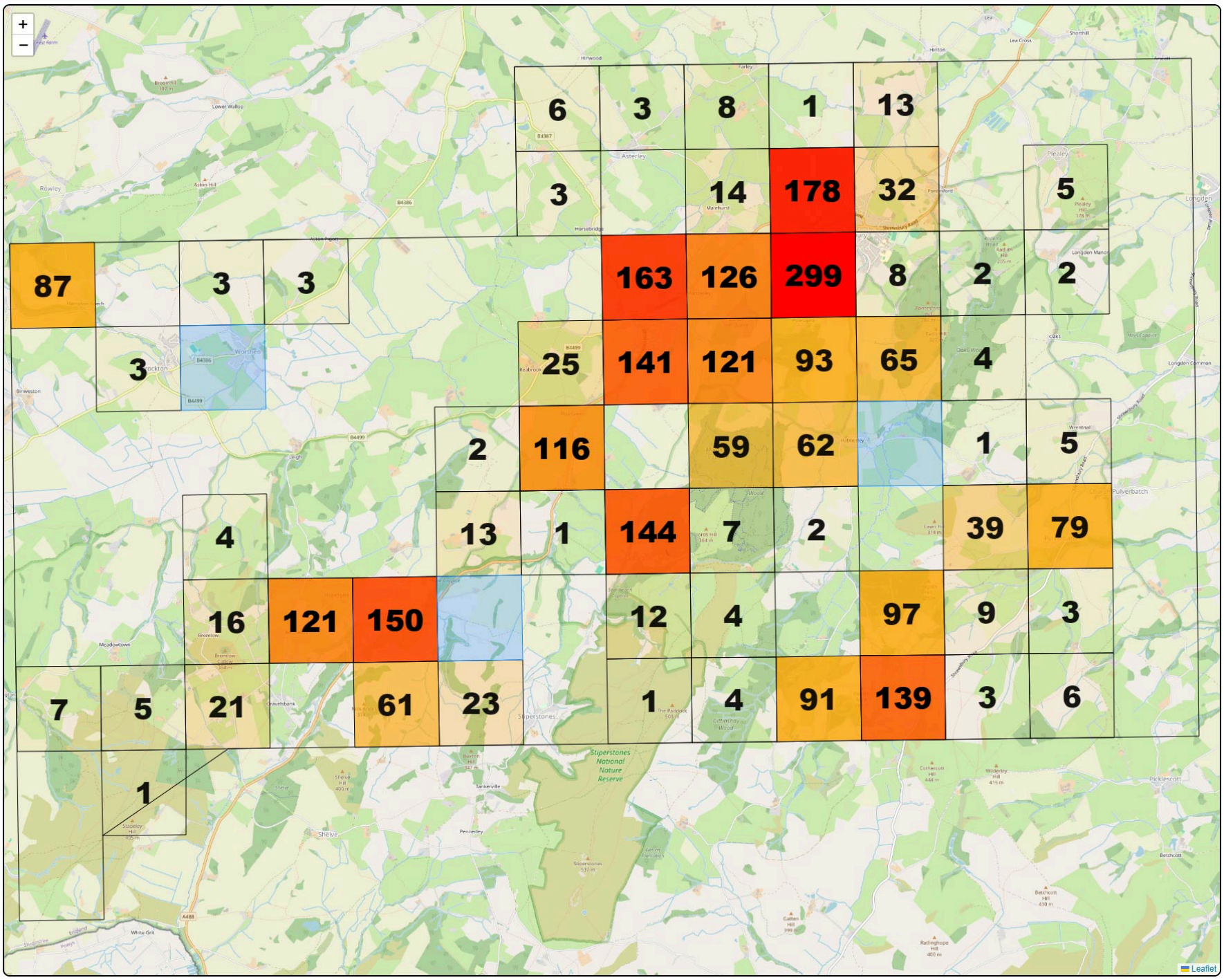
iRecord results Q2 2024

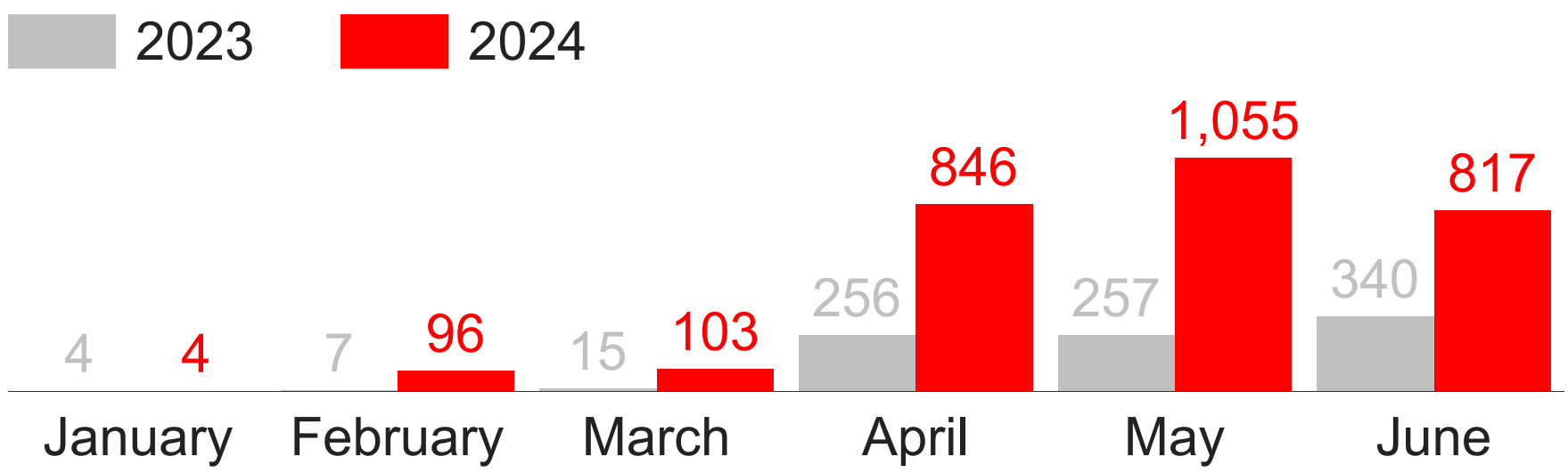
As winter eased its icy grip on the Rea Valley, and the hedgerows began to fill with early spring plants, our intrepid wildlife recorders took to the fields and footpaths, submitting records with increasing frequency.

During April, May and June, 46 people collected 2,718 non-avian wildlife records; their casual observations and methodical surveys taking place in 61 of the 104 squares that make up the Rea Valley recording area. In April and May alone we made more records, recorded more species and visited more of our area, than in the whole of last year!

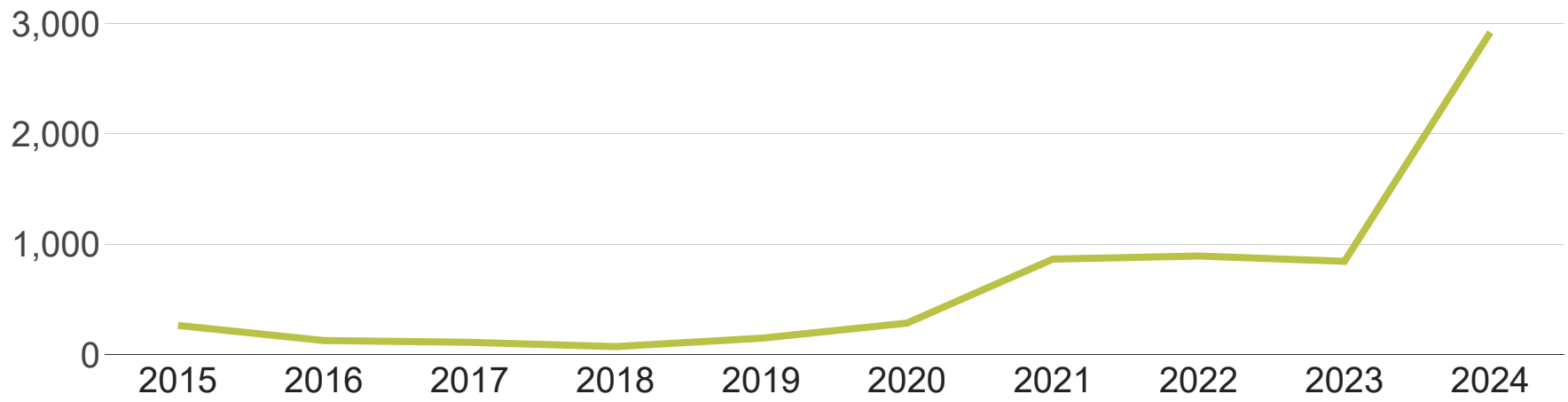
The following heat map shows the monads (1km x 1km squares) we visited, with the number of records collected in each. Blue squares without a number, we visited in the last quarter but not this.



The bar chart below shows the number of records collected each month, this year compared to last year.



The line chart below shows the number of records collected between January and June, for our survey area, for each of the past 10 years.



Our Local Wildlife

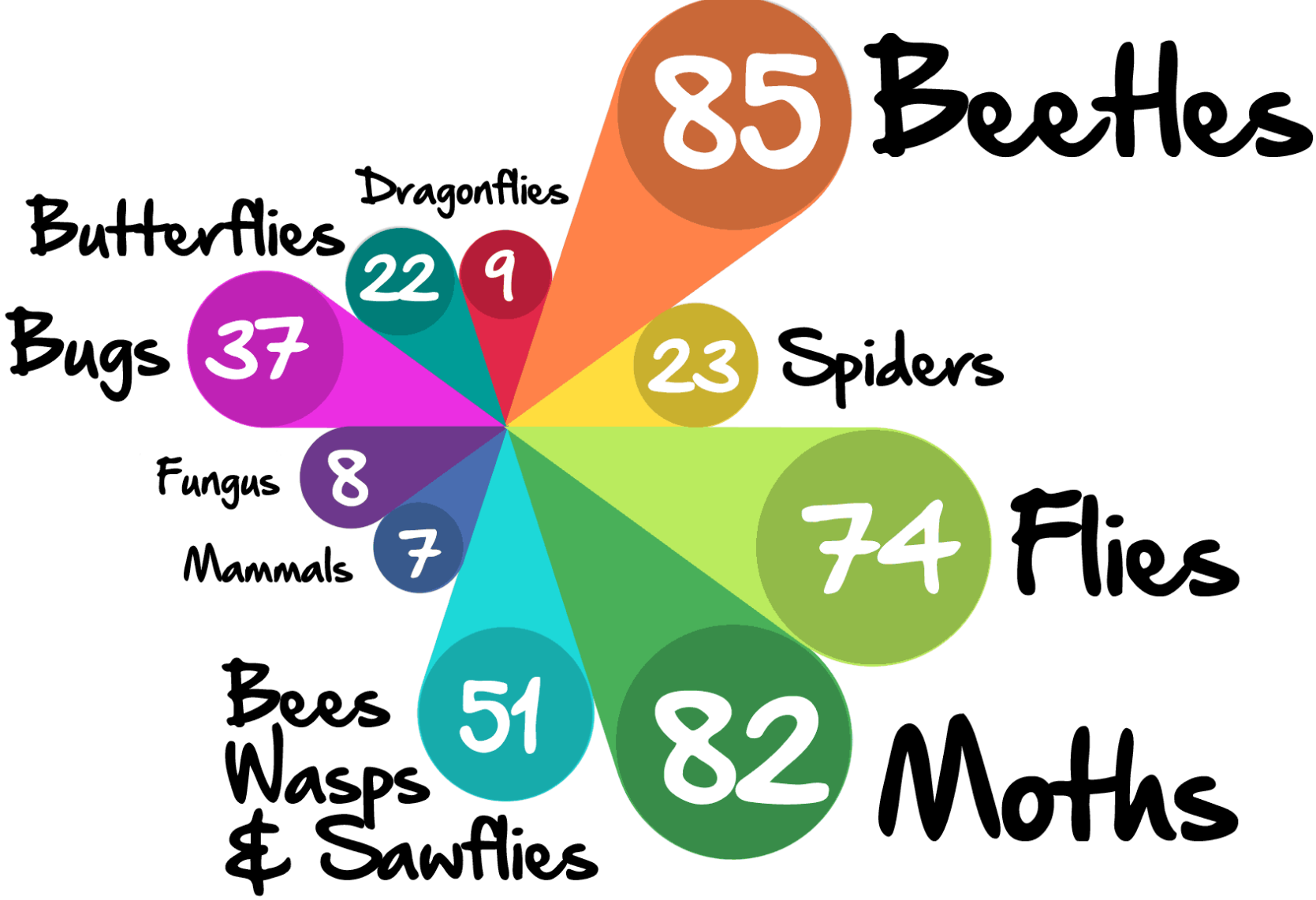
We recorded 792 different wildlife species in the

Rea Valley last quarter, up from 327 in the same quarter last year! Our total species for the year now stands at 874.

For the Stepping Stones action plan we received records for both Upland Dragonflies and Yellow Mountain Pansy.

66% of the records collected last quarter were for flowering plants, more if we include ferns.

For everything not botanical, the diagram below shows the number of species we recorded for each wildlife group - limited to the 10 largest groups.



There were plenty of weird and wonderful beetles, our favourites being *Cassida rubiginosa* Thistle Tortoise Beetle, the master of disguise, *Clytus arietis* Wasp Beetle, and the amazing *Agapanthia villosoviridescens* Golden-bloomed Grey Longhorn Beetle (see below).

Flies, bees, wasps and sawflies ranged from the common *Scathophaga stercoraria* Yellow Dung Fly to the decidedly uncommon *Pamphilius inanitus* Belted Rose Spinner.

We had some good moths, both larvae and on the wing, with names like *Anchoscelis lunosa* Lunar Underwing, *Nemophora degeerella* Yellow-barred Long-horn and *Thyatira batis* Peach Blossom.

Mammals and reptiles included *Vulpes vulpes* Red fox, *Capreolus capreolus* Roe Deer, *Muntiacus reevesi* Chinese Muntjac, *Erinaceus europaeus* Hedgehog, *Anguis fragilis* Slow-worm and *Zootoca vivipara* Common Lizard.

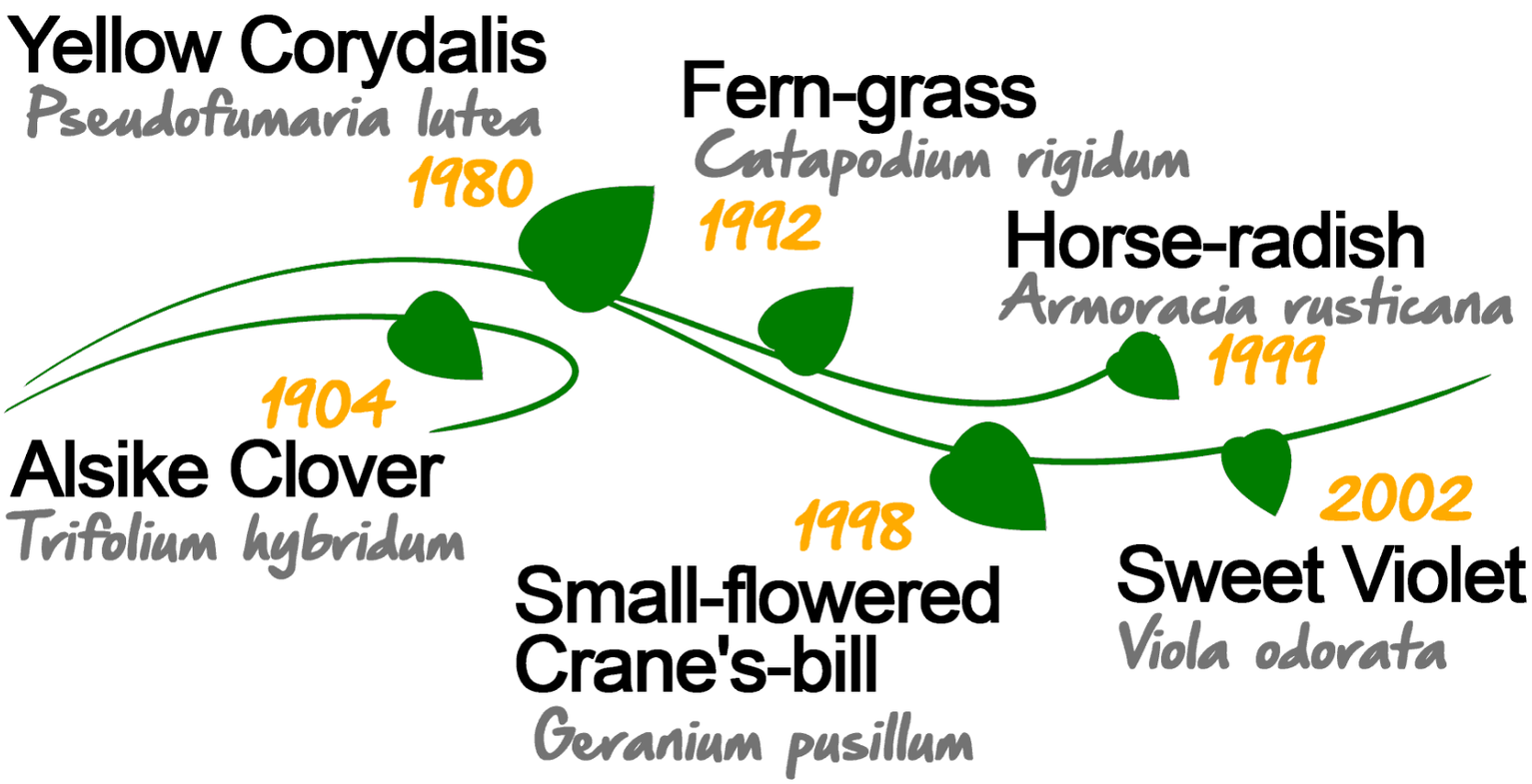
We found a whole platoon of soldier beetle species. Five types of mining bees: Chocolate, Orange-tailed, Ashy, Hawthorn and Tawny. Six types of Shieldbug: Green, Hawthorn, Hairy, Red-legged, Gorse and Cabbage Bug. While Ladybirds turned up in 2, 7, 10, 14, 16, 18, 22 and 24 spotted varieties, as well as Harlequin, Eyed, Pine, Larch, Meadow and Ivy!

Plants, Ferns & Horsetails

Among the botanical finds were some wonderful species, as you will see below. Records for the early, tiny flowers of Dog's Mercury and Bitter-cress were quickly followed by golden Lesser Celandines, purple Dog-violets and dozens more, as spring began to bloom.

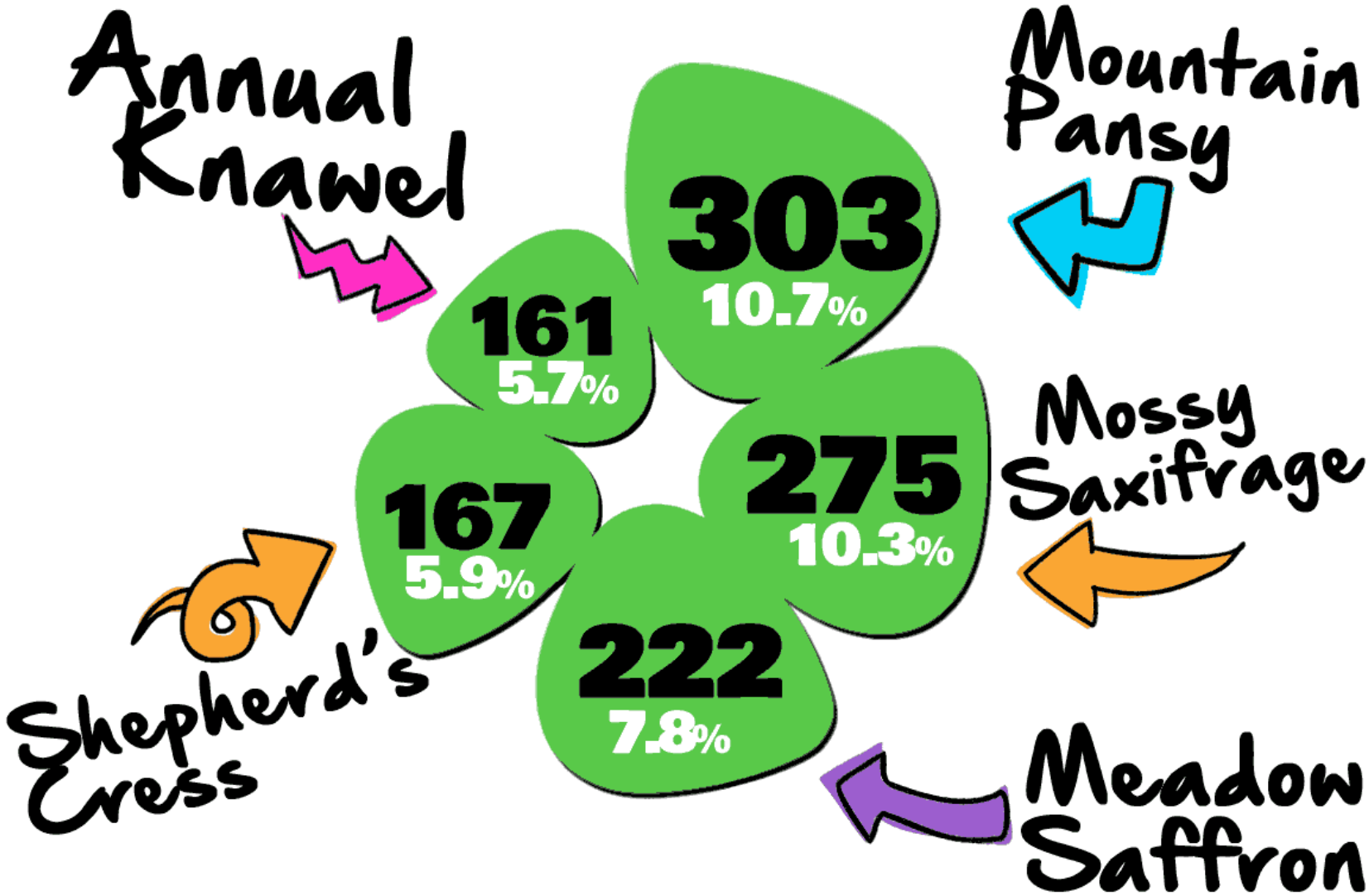
In the first half of 2024 our botanising identified 367 species of flowering plants, ferns and horsetails. This means we have already found 84 more than last year!

Of the 148 species of plants that we iRecorded this year but not last year, the imge below shows those where we have to go back 20 years or more to find the last record showing in the National Biodiversity Network database (NBN).



Uncommon Plants

The five least common plants we received records for, according to hectad data publish by BSBI - Botanical Society of Britain and Ireland, are shown in the diagram below. The number shows how many (and what percentage of) British hectads that species has been reported in. In total there are 2,845 British hectads - 10km x 10km squares. Our survey area includes two thirds of hectad SJ30, a third of SJ40 and a fraction of SO39.



Non-Native Plants

The majority of the flowering plants we received records for were native species. That is, they have been growing in Britain for many thousands of years. But among our finds are a number of plants that are non-native. They can be divided into the following categories:

Archaeophyte colonists are plants that were introduced by humans intentionally or unintentionally, some time after the Neolithic period but before 1500 AD. We found:

Black-bindweed, Common Poppy, Petty Spurge, Red Dead-nettle, Shepherd's-purse, Sun Spurge

Archaeophyte denizens are similar to Archaeophyte colonists except the plant is naturalized and behaves like a native plant. We found:

Common Mallow, Cut-leaved Crane's-bill, Feverfew, Field Forget-me-not, Greater Celandine, Ground-elder, Hedge Mustard, Hemlock, Ivy-leaved Speedwell, Prickly Lettuce, White Dead-nettle

Neophyte naturalized are plants considered non-native, having first arrived after 1500 AD. We found:

Alsike Clover, American Willowherb, Butterfly-bush, Cherry Laurel, Common Field-speedwell, Creeping Comfrey, Early Crocus, Fox-and-cubs, Fringecups, Giant Hogweed, Gooseberry, Greater Periwinkle, Green Alkanet, Hedgerow Crane's-bill, Himalayan Balsam, Hoary Cress, Honesty, Horse-chestnut, Ivy-leaved Toadflax, Kerria, Lungwort, Norway Maple, Peach-leaved Bellflower, Perennial Cornflower, Pineappleweed, Procumbent Yellow-sorrel, Purple Toadflax, Red Valerian, Slender Rush, Slender Speedwell, Snowberry, Snowdrop, Sycamore, Trailing Bellflower, Yellow Corydalis

64 Possible New Species!

Among our finds in the second quarter of 2024, there may be some first records for the Rea Valley.

Some insects were not able to be identified beyond their genus or family, so it is not possible to say whether or not they were new to our area. A few examples include a Spring Stonefly, Rolled-winged Stonefly and a Perlodid Stonefly, two types of Rove beetle from the family *Staphylinidae*, a bright blue *Rhynchitidae* Tooth-nosed snout weevil, a Zebra Spider - a type of jumping spider from the genus *Salticus*, a very small Yellow swarming fly from the genus *Thaumatomyia*, and a bright red Seed weevil - a beetle with an amazing walk, from the genus *Apion*.

Even without a known species, genus and family records are useful to have and well worth iRecording. We *have* included a few where we don't know the species, but only if NBN has no records for any species in the genus.

The NBN database holds records for approximately 4,500 different wildlife species in our survey area. At the time of writing, the following species (verified and unverified, correctly or incorrectly identified) are not among them. There will be records yet to be published from the past year or two. But until we hear otherwise, we may consider the following species possible new finds:

1 *Staphylinus caesareus*

You know you have found something uncommon when the main authority website starts with, 'The biology is largely unknown'. A type of Rove beetle, they prey on other insects. There are 39 UK records on NBN, including one previous for Shropshire.

2 Scarce Londonpride

Saxifraga umbrosa x hirsuta = S. x geum

This non-native hybrid is yet to be confirmed by the county recorder, but would be a first Shropshire record on NBN.

3 Hoary Cress

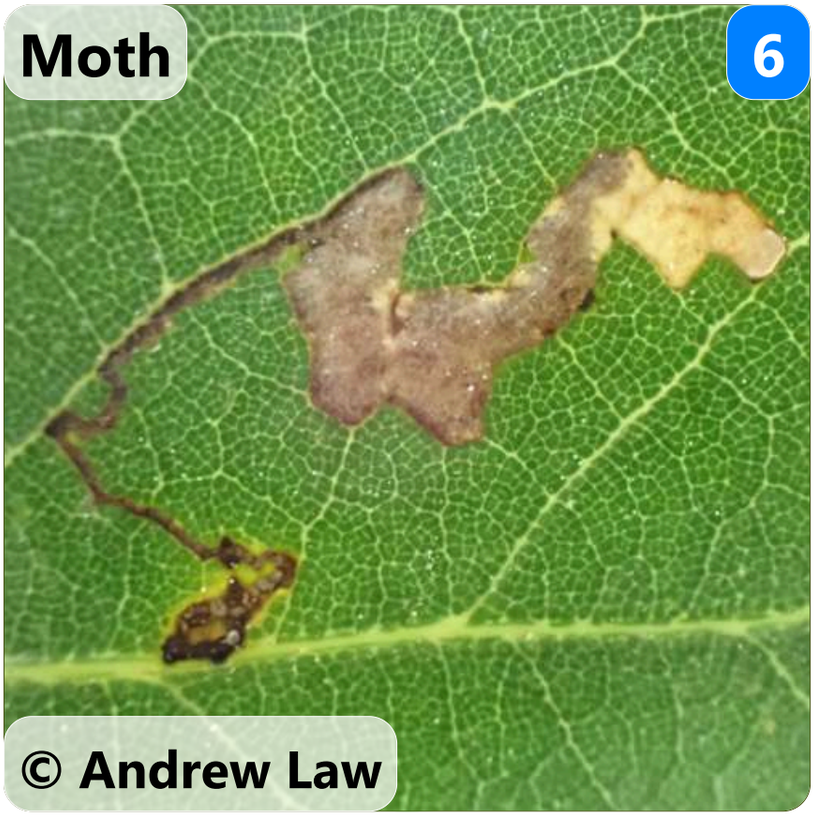
Lepidium draba

A perennial herb with white flowers that has four petals. Part of the same family as cabbage and mustard. Its introduction is said to be linked to the Napoleonic Wars - the story is worth a search on your favourite search engine.

4 Slender Rush

Juncus tenuis

A neophyte plant, it is thought to have originally come from North America. In the UK it is widely introduced but only locally common. This specimen was found growing in Eastridge Wood.



5 Procumbent Yellow-sorrel

Oxalis corniculata

A rapidly spreading species that quickly colonises cracks in the pavement, with dark purple leaves and bright yellow flowers.

6 Ectoedemia heringella

A species of leaf mining moth first recorded in England in 1996. It is currently classed as a nationally scarce B insect. And this is a first record for Shropshire! Young larvae feed on oak leaves. There are a couple more leaf mining species below. When you start looking at leaves at this time of year, you will be amazed how many have mines in them.

7 Philodromus dispar

A species of crab spider, the male is quite distinctive black edged white. They do not make webs, instead wander around looking for prey.

8 Euleia heraclei

A species of fruit fly with very distinctive wings. Not visible in this image, they also have bright green eyes. Favours plants like hogweed.

9 Poecilus versicolor

A common species of ground beetle (especially on the path between Pontesbury and Minsterley). Relatively few records because it is very similar to Poecilus cupreus. Over-winters in the soil, can fly but hardly ever does, and can live for up to 4 years.

10 Two-spotted Carpet Beetle

Attagenus pellio

More common in the southern half of the country, this carpet beetle is described as a pest that damages textiles and grains. You are more likely to encounter them indoors. They can overwinter for a year or two.

11 Varied Carpet Beetle

Anthrenus verbasci

A common species (there were a dozen of them within a square metre) considered a pest as they eat fabric, carpets and various other natural materials. Sort of like a very small goat!

12 Vine Weevil

Otiorhynchus sulcatus

No idea why this one has not been recorded before. The enemy of gardeners everywhere, the larvae of these impressive looking beetles live in the soil and eat plant roots.

13 Glass Snail

Vitrina pellucida

Other common names for these snails include, winter semi slug. Their transparent shells are very thin. This species is a favourite snack for hedgehogs.

14 *Bibio hortulanus*

A species of marchfly where the male and female are dimorphic - meaning they do not look the same. Most often found in East Anglia, this appears to be the 3rd Shropshire record.

15 Platycheirus ambiguus

NBN only holds 145 records for this species in the UK, though a handful of those records are close to Shrewsbury. Quite likely an under-recorded species due to it being quite similar to other species. Our specimen has been accepted as considered correct. Its unofficial name seems to be Blackthorn Sedgesitter.

16 Common cryptops

Cryptops hortensis

A common species of centipede with 21 pairs of legs but no eyes, using their antennae to feel their way around. Centipedes have a pair of legs for each body segment where millipedes have two pairs. Millipedes are much slower.

17 Western Yellow Centipede

Haplophilus subterraneus

Quite a long species with 70 or 80 pairs of legs. You'll probably find one of these if you dig the soil in your garden. Completely harmless to us, centipedes inject their prey with poison where millipedes mainly eat plants.

18 Cobweb Spider

Pholcus phalangioides

Commonly referred to as 'daddy long legs', they are indoor spiders though in places where the temperature is fairly cool and constant.

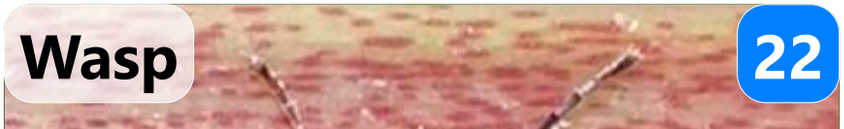
19 Common Fox-Spider

Alopecosa pulverulenta

This spider was hot-footing it across the lawn to escape the lawn mower. A type of wolf spider, they are active hunters rather than web builders.

20 Tachinus rufipes

Quite a common species of Rove beetle that enjoys damp places and preys on aphids.



21 *Euura*

Sawflies belong to the insect order, Hymenoptera, along with bees and wasps. Sawflies do not sting. The genus Euura has more than 120 species.

22 Ichneumon stramentor

A relatively large and colourful Ichneumon wasp. Less than one hundred British records showing on NBN, but under recorded. Ichneumon wasps parasite insects like moths and beetles. This means their young live on or in (yuk!) other species.

23 *Gelis*

Gelis are a genus of ichneumona wasps. A wingless ant mimic, they are described as hyperparasitoid, meaning they actually parasite other parasitoid wasps.

24 *Proctotrupidae*

A small parasitoid wasp, smaller than an ant. They use the larvae of beetles to host their offspring. According to Buglife there are 326 species in the UK.

25 Potato Flea Beetle

Psylliodes affinis

Primarily interested in spuds, this little beetle will make do with tomatoes or peppers. With a bit of luck he doesn't find his way into the greenhouse!

26 Aceria myriadeum

These red galls are caused by a very tiny mite.

27 Curculio venosus

A reasonably large weevil, usually found in deciduous and mixed woodland, often on oak trees. This one was spotted in the Hope Valley.

28 Epuraea melanocephala

Another small brown beetle from the family Nitidulidae, a type of sap beetle.

29 Yellowhorn Fern-sawfly

Strongylogaster xanthocera

There are 38 historic records on NBN, never previously in Shropshire. This species of sawfly was actually found in two locations; once in the Hope Valley and once near Pulverbatch. The female has the black and yellow stripes, the male is orange.

30 Ophion

Ophion is a genus of ichneumonid wasps. They are endoparasites, meaning they start out life living inside another insect.

31 Belted Rose Spinner

Pamphilius inanitus

There are only 29 records for this species of Sawfly on NBN, this is the first record for Shropshire. All four insects in this section were found within minutes and within yards of each other.

32 Wayward Sawfly

Tenthredo temula

Not sure what makes this sawfly wayward, but it is a very striking insect with a distinct U shaped pattern on its back.

33 Large Garden Bumblebee

Bombus ruderatus

The Ruderal or Large Garden Bumblebee is mostly a resident of the south east, east of England and midlands, with fewer records the closer you get to Wales. There is one previous record for Shropshire on NBN.

34 Cantharis livida

If you want to see these soldier beetles, take a walk along the track near Pulverbatch Castle. There were four different species present.

35 Fine Streaked Bugkin

Miris striatus

Not uncommon, especially in Shropshire, the photograph shows we found a nymph (young) version of this distinctive plant bug.

36 Platyura marginata

A species of large fungus gnat that seems to mostly live along the Welsh border and parts of Gloucestershire and Wiltshire.

37 Bibio leucopterus

The male fly has milky white wings whereas the female has dark wings. Like many flies, they are under recorded.

38 Geomyza tripunctata

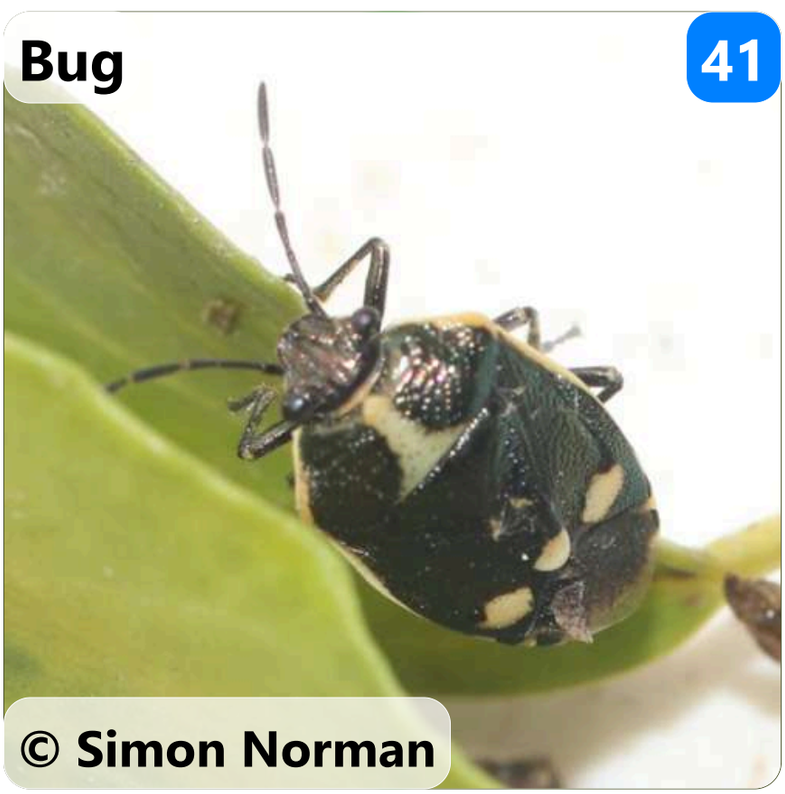
This fly is part of a family that all look very similar, but fortunately the wing pattern on this one makes it easy to identify.

39 Issus coleoptratus

A planthopper species with incredible camouflage. The only known living creature to have mechanical gears, which they use while young nymphs to jump accurately. Worth reading more about!

40 Deraeocoris (Deraeocoris) flavilinea

This species only arrived in the UK in 1996 but has quickly spread. Usually associated with Hawthorn, this nymph was on a Damson tree.



41 Cabbage Bug

Eurydema (Eurydema) oleracea

A form of shield bug. This species can be found in a variety of colours.

42 Hawthorn Leaf Beetle

Lochmaea crataegi

A member of the leaf beetle family, generally present for a relatively short time peaking while the hawthorn is in blossom.

43 Sialis

An Alderfly species, spending the first few years of its life living in streams or ponds as a nymph, and perhaps as little as a few days or even hours as an adult.

44 Phytomyza chaerophylli

A leaf mining fly thought to be quite common and widespread, but with relatively few UK records.

45 Peach-leaved Bellflower

Campanula persicifolia

A herbaceous perennial

46 Druce's Crane's-bill

Geranium endressii x versicolor = G. x oxonianum

A garden plant escape that is known to naturalise as a cross species.

47 Agapanthia villosoviridescens

A species of longhorn beetle whose larvae grow inside the stalks of plants like thistles and nettles.

48 18-spot Ladybird

Myrrha octodecimguttata

one of the less common ladybirds, this brown and cream spotted beetle is often found around conifers like Scots Pine, overwintering beneath their bark.

49 Chromatomyia aprilina

The larvae of this fly feeds on honeysuckle leaves, often leaving a distinct star shaped pattern.

50 Phytomyza minuscula

A leaf mining species of fly.

51 Closterium kuetzingii

This is a microalgae, possibly planktonic as it was floating in the water column of the pond at Nills Quarry. Although this is a Shropshire first for the national database, it is only because nobody is looking for or recording them.

52 Acrotomus succinctus

From the Tryphoninae subfamily of parasitic wasps, this one has 18 UK records, and would be a first for Shropshire.

53 Common Red-legged Robberfly

Dioctria rufipes

A predatory species of fly with red front legs, that preys on small flies and wasps. First time it has been recorded in the Rea Valley

54 Greater Lettuce

Lactuca virosa

Greater Lettuce, a form of wild lettuce is a reasonably tall plant. More common in the East of the country and the East Midlands. Another nice find for our area.

55 Mullein

Cucullia verbasci

For such a ridiculously conspicuous catepillar, the Mullein moth itself is a master of camouflage. Fairly common and widespread in the UK.

56 Variegated Golden Tortrix

Archips xylosteana

A resonably common moth. The excellent UK Moths website describes this species as a garden resident that takes flight just before dusk and can be seen during July and August.

57 Little Snipefly

Chrysopilus asiliformiss

A pale coloured fly around 1cm in length. The individual above is a female; the male having a very distinctive thin tapering body - which also turned up a week later in another part of the Rea Valley!

58 Diplazon pectoratorius

A parasitoid wasp belonging to the Ichneumonidae family. A possible first for Shropshire.

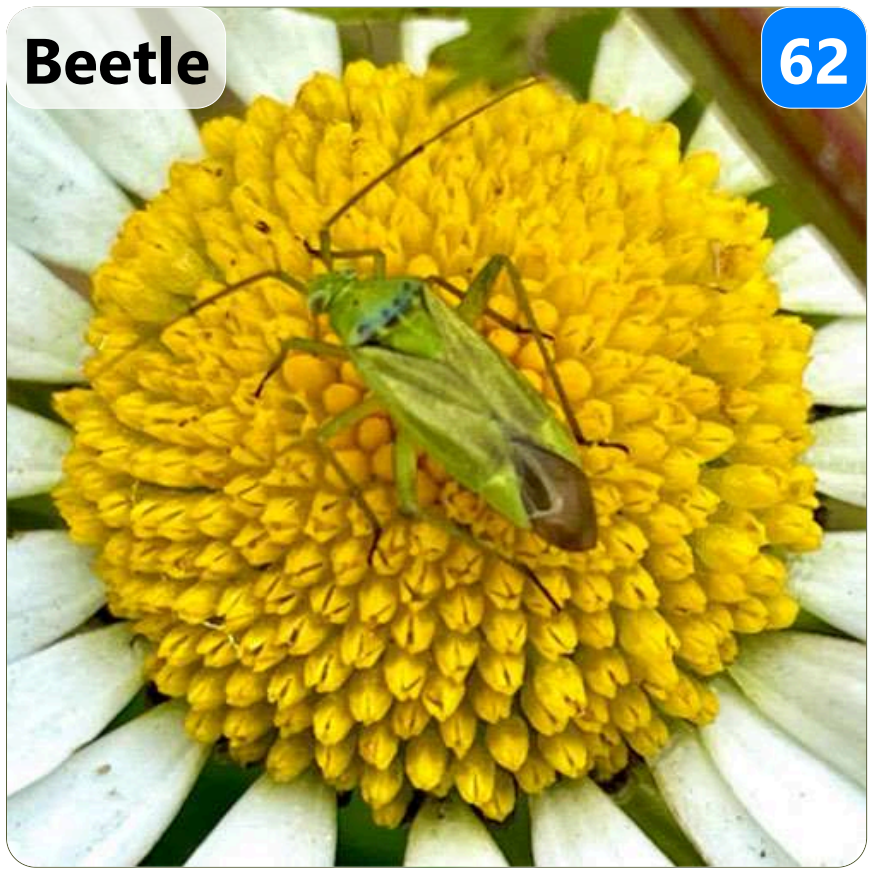
59 Minettia fasciata

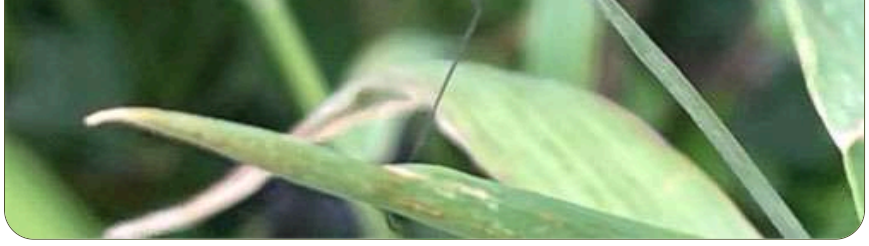
A small pale coloured fly from the family Lauxaniidae.

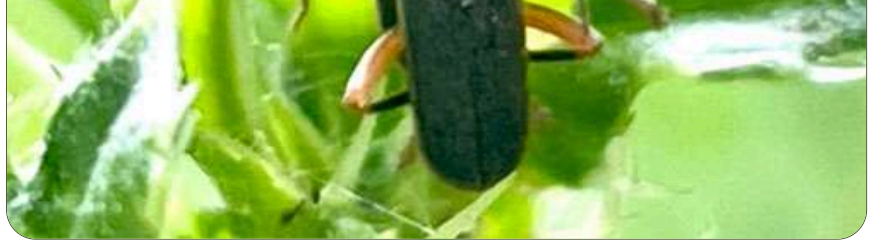
60 Giant Hogweed

Heracleum mantegazzianum

Giant Hogweed is an umbellifer, related to the carrot family. Growing up to 10ft tall. Imagine the carrots they would produce! A common plant but no records in our area before.







61 Brown Knapweed

Centaurea jacea

Centaurea jacea, Brown Knapweed is a plant that keeps botanists arguing as there are numerous hybrids. There are currently 107 UK records, none showing for Shropshire.

62 Potato Capsid

Closterotomus norwegicus

A widespread and distinctive green bug that becomes more brown with age. Feeds on a variety of flowers as well as root vegetables.

63 Tiger Cranefly

Nephrotoma flavescens

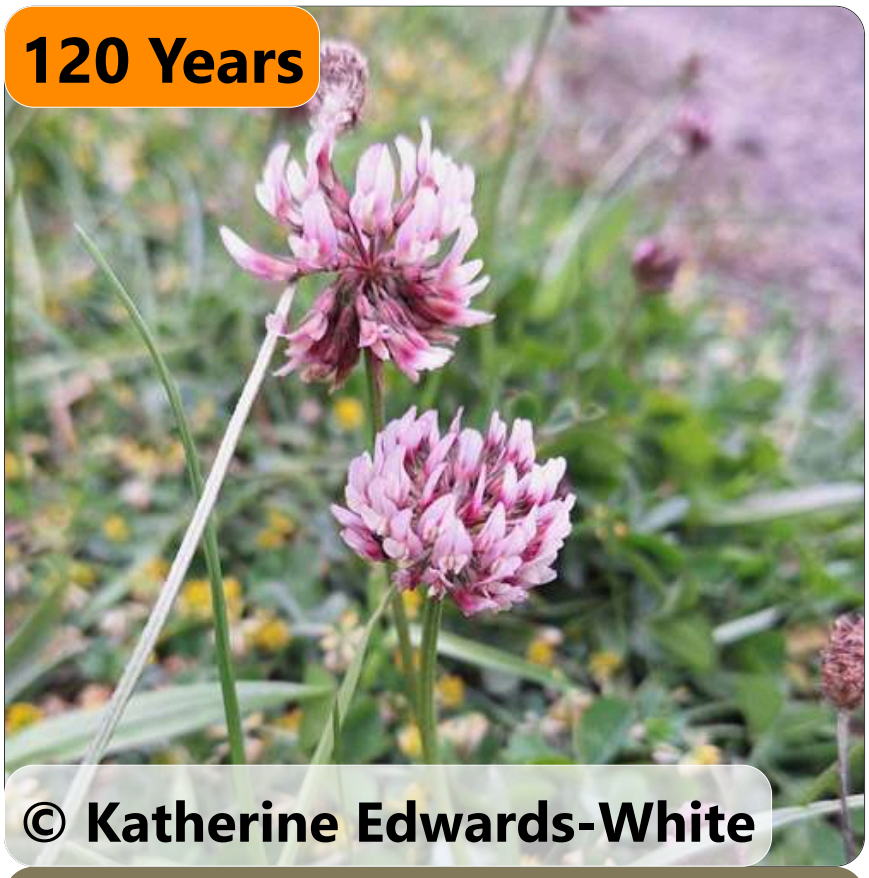
Possibly showing as new because craneflies are quite difficult to tell apart. We think this one is Tiger Cranefly due to the broken black line down its back, and the shape of the black mark on the back of its head.

64 Cantharis lateralis

Another variety of soldier beetle. This one very common in the Central Midlands and South East, becoming less common in our area and through Wales. Their favourite hangout is umbellifers like Hogweed.

Rediscoveries

We also find species that *have* been recorded before in our area, but not for a good few years. To find a previous record of the species below, we have to go back more than 20 years.



Alsike Clover

Trifolium hybridum

Small Yellow Underwing

Panemeria tenebrata

Eyed Hawk-moth

Smerinthus ocellata

Pale Eggar

Trichiura crataegi

Broad-barred White

Yellow Corydalis

Pseudofumaria lutea

Hecatera bicolorata

Tenthredo mesomela

Fern-grass

Catapodium rigidum

Apple Fruit Rhynchites

Tatianaerhynchites aequatus

Green Nettle Weevil

Phyllobius pomaceus

Two-toothed Door Snail

Clausilia (Clausilia) bidentata

Hebrew Character

Orthosia gothica

Grypocoris (Lophyromiris) stysi

Panaeolus papilionaceus

Cantharis

Blunt-tailed Snake

nigricans

Millipede

Cylindroiulus punctatus

26 Years

Common Leaf Weevil

Phyllobius pyri

26 Years

Anaspis maculata

25 Years

25 Years

Common Heath

Ematurga atomaria

Sulphur Tubic

Esperia sulphurella

Small-flowered Crane's-bill

Geranium pusillum

Horse-radish

Armoracia rusticana

A Focus on Wasps

When most people think of wasps they picture *Vespula vulgaris* Common Wasp, the striped yellow and black insect that enjoys a BBQ.

This wasp belongs to the family *Vespidae*, one of eleven families that make up our UK wasp population. The Natural History Museum suggests there are more than 7,000 species of wasp in the UK. Here in the Rea Valley, the six new additions above (*Ichneumon stramentor*, *Acrotomus succinctus*, *Gelis sp.*, *Ophion sp.*, *Proctotrupidae sp.* and *Diplazon pectoratorius*) take our historic total to 51 species - so there are still a lot to be found.

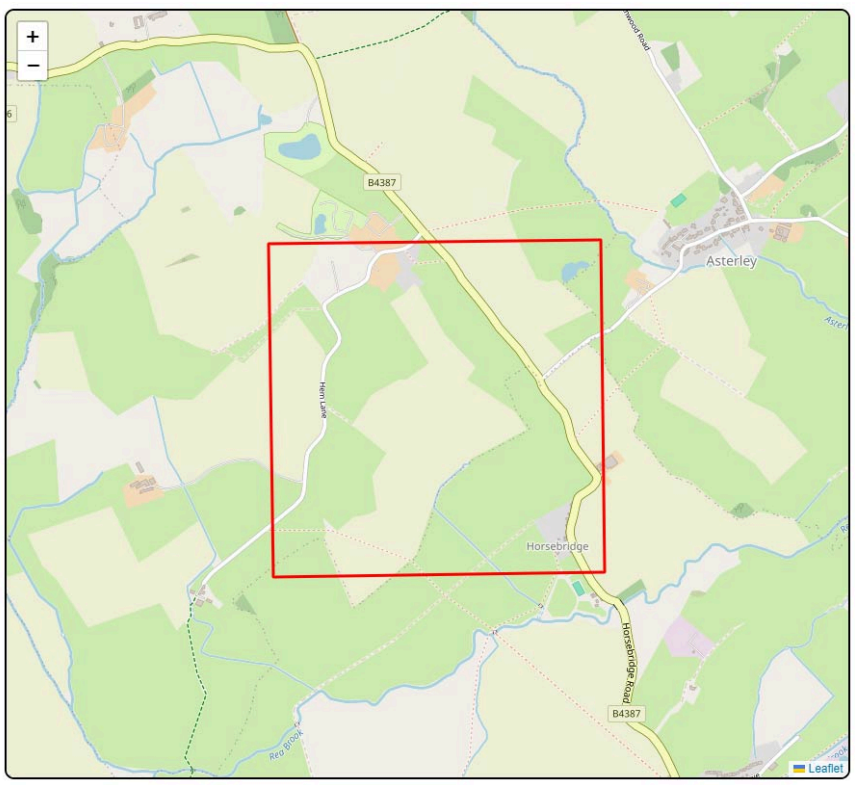
As with bees, only a few wasp species are social creatures (living in colonies with a queen and workers). The majority are solitary, each with their own specialised way of surviving.

You do not have to travel far from home to find wasps. Spend an hour or two sitting still in your garden, or somewhere that has plenty of flowering plants, and you will soon tune in to these insects we share our lives with, yet barely notice - many of them are a lot smaller than you would think.

The easiest way to tell wasps from flies are their long antennae. Be careful though, this trait is common to *hymenopteran*, meaning some wasps look like bees and some bees look like wasps. Did we mention stoneflies and sawflies also look a lot like wasps? If your creature has a broad connection between the abdomen and the thorax, it is not a wasp. Wasps have a very thin connection between these two parts of their body. A good photograph is very useful when trying to identify these insects, but they will take flight as soon as you swing a camera in their direction. Practice creeping up like a ninja if you want to take a photograph, you will be amazed how close you can get if you move very slowly!

Need Inspiration?

Survey square SJ3606 sits on the boundary between the parishes of Pontesbury and Westbury, on the Horsebridge road. Footpaths from Minsterley and Asterley can take you into this square.



According to DEFRA's Magic Map application, a good proportion of the square is grassland, under Countryside Stewardship - protecting and enhancing the natural environment to improve the diversity of wildlife.

We have three records so far this year, two of which were for species new to our area. In the past it has been a good spot for butterflies and moths, with species such as *Stigmella lemniscella* Red Elm Pigmy, *Parornix anglicella* Hawthorn Slender and *Phyllonorycter oxyacanthae* Common Thorn Midget. A single plant record in 2008 (*Pimpinella saxifraga* Burnet-saxifrage) is the sum total of our historical botanical knowledge for this square kilometer on the edge of Minsterley! Over the years, 1,065 wildlife records have made their way to the NBN database for this square, relating to 42 different species. The most common species recorded in this square is *Sciurus carolinensis* Eastern Grey Squirrel.

There is one species recorded in this square that has not been found anywhere else in our survey area: *Phyllonorycter schreberella* Small Elm Midget a type of moth.

Who contributed

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Why and How to take part

Wildlife data from iRecord is downloaded and analysed by lots of different interest groups, and helps with research and planning. It may not seem like your Red Admiral record, or your photo of an Alder leaf beetle is going to make any difference, but it all adds up to tell a local and national story. Every record we add, throws more light on the creatures that live in the Rea Valley.

If you like the idea of finding something new but think it sounds difficult, 26 of the new finds above were located in the same back garden. Imagine what is waiting for us in the other 99.9997% of the Rea Valley - we are barely scratching the surface!

All records are very welcome. If you see a Common Frog when walking your dog, or a Northern Pike while riding your bike, pop it on iRecord and you will be helping us map and protect the wildlife in our little corner of the world.

To get involved in our 2024 iRecord Activity, visit: **https://irecord.org.uk** and search for Rea Valley in the Activities section. Hopefully we can inspire you to help us understand more about what lives in the Rea Valley. Your records might feed into our iRecord Activity if you already use iNaturalist, iRecord Ladybirds, UKBMS or take part in various other national recording schemes.

Ask to join our facebook or WhatsApp groups to hear more about what we are finding and to get help if you need anything identifying.