Reticulation of the Quarterly Bulletin of the Detriction of the Loughborough Naturalists' Club

No. 248

1 October - 31 December 2022

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CLASSIFIED RECORDS

MAMMALS

Molehills were found at Rearsby, Watermead CP Birstall and Wymondham.

A Common Shrew was found by HG at Morley Quarry, Shepshed on 12 November.

All **Brown Hare** sightings were by SFW & HI from seven sites. Most were singles but two were near Wyfordby and Tickencote where they were trying to escape a spraying tractor. Records of **Rabbit** came from just two locations, Queniborough and Horn.

Records of **Grey Squirrel** came from nine locations. Most were of five or fewer with 23 counted at Bradgate Park in December and 21 at Swithland Wood in November.

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Grey Squirrel © Jim Graham

Both records of **Brown Rat** were of individuals "squashed on the road" found by SFW & HI at Newbold Heath and Empingham.

A **Red Fox** was seen most nights, except when very wet, on PJD's garden trailcam throughout the quarter, another was at Rothley on 4 October and a dead one near Nanpantan Hall on 2 December.

The only **Badger** record was of one dead by the side of the road found by DJP, at Bull in the Hollow, Shelthorpe on 11 October.

HI & SFW had "good views" of two **Stoat** near Fort Henry Lakes, Rutland on 12 November.

Muntjac was recorded at four sites. One was "crossing the road slowly, not worried about the traffic" near Roecliffe Manor and another was on the roadside on Groby Lane, Newtown Linford.

Jim Graham

BATS

We would like to thank Peter Proudlove for the work he has done in submitting a very comprehensive and informative report on the Bat Records for the whole of 2022.

Rather than delay this edition of *Heritage* further, we have made the decision to hold this extensive report over to the next edition of the bulletin.

BIRDS

The only double-figure counts of **Mute Swan** were at Watermead Park with 34 on 20 December and 89 at Swithland Reservoir two days later. A **Whooper Swan** flew high over Kelham Bridge on 15 October.

Cropston Reservoir held all of the **Greylag Geese** with 45 on 20 November. The same site had the highest count of **Canada Geese** with 59 on 9 October, whilst Watermead Park had 30 on 20 December. There were three **Egyptian Geese** at Cropston Reservoir on 2 October and on the same day there was also a **Ruddy Shelduck** present.



Egyptian Geese © Jim Graham

Wigeon were only found at Watermead Park and Cropston Reservoir with 98 at the former on 20 December and 36 at the latter on 26 November. There were 100 **Gadwall** at Watermead Park on 20 December but only a maximum count of six at Cropston Reservoir around the same time. **Teal** were only noted at four sites with Watermead Park having the majority with 51 on 20 December but Cropston Reservoir had 44 just a month earlier. On the same dates there were 110 **Mallard** at Watermead and 109 at Cropston Reservoir. Few other Mallards were mentioned. A drake **Pintail** was at Cossington Meadows on 2 October. Watermead Park held 96 **Shoveler** on 20 December.

Two **Red-crested Pochard** were seen at Bradgate Park and Groby Pool in early November and there were three at Watermead Park on 20 December. There was as single **Pochard** at Thornton Reservoir on 11 October, two at Groby Pool on 9 November and 18 at Watermead Park on 20 December. A female **Ring-necked Duck** was at Swithland Reservoir on 21 and 22 November. There were few **Tufted Duck** reports but there were 134 at Watermead Park on 20 December but just 16 two days earlier at Cropston Reservoir.

There were 11 **Goldeneye** at Swithland Reservoir on 21 November and a single at Cropston Reservoir on 18 December. Watermead Park had five **Goosander** on 20 December and there was one at Cropston Reservoir on both 2 October and 18 December.

Five **Red-legged Partridge** were seen at Dishley Pool on 8 November. There were 16 **Pheasant** around Cropston Reservoir on 9 October and one regularly visited a garden at Holwell.

Two **Gannets** flew over Kelham Bridge on 15 October. Watermead Park had 46 **Cormorants** on 20 December and Cropston Reservoir held 25 on 9 October. Single **Little Egret** were noted at four sites, Bradgate Park, Cropston Reservoir, Watermead Park and Quorn. A **Great White Egret** was at Cossington Meadows on 2 October and another at Swithland Reservoir on 22 December.

Ten Little Grebe were counted at Thornton Reservoir on 3 October and other smaller counts were at Bradgate Park, Watermead Park, Fort Henry Pools and Groby Pool. Up to 26 Great Crested Grebe were regular at Cropston Reservoir and there were odd ones at Watermead Park and Groby Pool.

Up to 20 **Red Kites** were reported to be around the Dishley Pool area on 8 November. Others in far fewer numbers were noted over Bradgate Park, Groby and Holwell. A **Marsh Harrier** was reported at Watermead Park on 22 November. A **Sparrowhawk** was a regular visitor to a Holwell garden and others, all singles, were noted at Cossington, Groby and Bradgate Park. **Buzzard** were well reported from all around the area usually in ones or twos but four at Kelham Bridge was the maximum on 13 October. This quarter the number of **Kestrel** records was almost identical to Buzzard. They were noted at around a dozen sites usually single birds and never more than two. Two **Peregrines** were over Groby Pool on 1 October, one was on the church at Market Harborough on 3 October and one over Dishley Pool on 8 November.



Kestrels © Jim Graham

Single **Water Rail** were seen at five different sites but there were three at Watermead Park together with 17 **Moorhen** on 20 December. The next highest number of Moorhen reported was six at Cropston Reservoir on 2 October. **Coot** were much scarcer with almost all records from Watermead Park and a maximum of 214 on 20 December.

There were a few double-figure counts of Lapwing at Cropston Reservoir, Watermead Park, and Bradgate Park but 100 were noted at Cossington Meadows on 12 November. The same site had a Pectoral Sandpiper on 20 and 25 October and a Dunlin on 2 October. Single Jack Snipe were at Thornton Reservoir, Sence Valley FP and Cossington Meadows, all in October. Common Snipe were more often seen in suitable wet areas with 15 at Cossington Meadows on 2 October and 21 at Kelham Bridge on 29 October. A Woodcock was accidentally flushed at Cropston Reservoir on 18 December. A Common Sandpiper was at Cossington Meadows on 2 October and a Green Sandpiper was there on 12 November. All other Green Sandpipers were seen at Kelham Bridge where the maximum was five on 1 November.

The majority of the gull records came from

Cropston Reservoir. The maximum count of **Black-headed Gull** was 311 on 18 December although there were 200 at Groby Pool on 27 December. There were 25 **Common Gull** there on 18 December, 157 **Lesser Black-backed Gull** on 9 October and 79 **Herring Gull** on the same day. On 20 November there was a **Caspian Gull** and another was at Watermead Park on 17 December. Thornton Reservoir had three **Great Black-backed Gulls** on 12 November.

The only **Stock Dove** reported were from Bradgate Park, Hugglescote, Cropston Reservoir and a Holwell garden where there were six on 23 November. **Woodpigeon** were widespread with a maximum count of 200 at Ulverscroft on 31 October. There were few **Collared Dove** records all small numbers and all in gardens.

A lone **Barn Owl** was hunting at Cossington Meadows and another was in Bradgate Park, both in October. A **Tawny Owl** was at Charnwood Lodge on 30 November and others were seen or heard at Holwell, Beacon Hill and Ulverscroft.

Single **Kingfisher** were seen at Cossington Meadows and Dishley Pool but three were observed at Watermead Park on 20 December.

Of the numerous **Green Woodpecker** reports most were from Bradgate Park, noted throughout the quarter with five on 1 October and four on Christmas Day. Other single birds were found at Thornton and Cropston Reservoirs, Quorn, Charnwood Lodge and Watermead Park. There were slightly fewer **Great Spotted Woodpecker** noted but they were more widespread. One was ringed at Nanpantan and one or two were regular visitors to gardens at Holwell and Hugglescote.

Magpie were well distributed with eight seen at Watermead Park on 2 November. All Jay records were from the Charnwood area with three in Swithland Wood on 4 October and four at Beacon Hill on 4 November. All Jackdaw records were in double or three figures with most observations coming from the Bradgate/Cropston area where there was a minimum of 200 on 2 November. On 9 November two Rook were seen in Bradgate Park. Surprisingly, this was the only Rook report of the quarter. Like the previous Jackdaw report, most Carrion Crow were noted in the

Bradgate/Cropston area with a maximum count of 76 on 9 October. There were plenty of **Raven** records, mainly from Charnwood but with no more than three birds.



Goldcrest © Jim Graham

Most of the **Goldcrest** seen were around the Bradgate Park area with 12 there in October and 14 on 14 December. As usual, **Blue Tit** were everywhere including permanent garden features. The most reported was 34 at Nanpantan on 9 December. It was a similar story with **Great Tit**, at Nanpantan there were 25 on 18 November. **Coal Tit** had similar distributions but in much smaller numbers, six in Bradgate Park on 17 December being the highest count. A single **Marsh Tit** at Charnwood Lodge on two occasions in December were the only records.

Skylark were only noted at four sites with 25 in Bradgate Park on 22 October, but by far the biggest number was at Ashby Folville with 100 on 21 December.

October **Swallow** were seen at Thornton Reservoir and Bradgate Park and the last of the season were four over Cropston Reservoir on the 9th. On 1 October there were 20 **House Martin** at Thornton Reservoir and six at Groby Pool three days later.

Cetti's Warbler in twos or threes were heard at Watermead Park, Groby Pool and Cossington Meadows in all three months of the quarter. There were seven sightings of double-figure groups of **Long-tailed Tit** with 19 counted at Watermead Park and 20 at Beacon Hill both in November.

What were presumably summer **Chiffchaff** were heard at Thornton and Cropston

Reservoirs, Bradgate Park and Beacon Hill, but an obvious winter bird was at Kelham Bridge on 29 December. Single **Blackcap** were in my Hugglescote garden in early October and at Charnwood Lodge in mid-December.

Nuthatches were seen or heard at ten sites, all in Charnwood, four were located at Beacon Hill, Nanpantan and Swithland Wood. Treecreeper were found in similar locations, but with fewer numbers although there were five at Charnwood Lodge in November and a similar number in Bradgate Park in late December. Wren were found throughout the area but the majority were in Bradgate Park where there were numerous double-figure counts with a maximum of 21 on 30 November.

Surprisingly, the most **Starling** noted from the very few records was around 50 in Bradgate Park on 22 November.

A **Ring Ouzel** was at Ives Head on 2 October. **Blackbird** were, as usual, widespread with a maximum count of 21 in Swithland Wood on 22 November. The first **Fieldfare** were a group of ten in Bradgate Park on 22 October. Of the few records received, the biggest flocks were 200 at Beacon Hill on 5 December and 100 at Woodhouse on 21 November. Only five records of **Song Thrush** were received involving a total of just seven birds! There were far more



Redwing © Jim Graham

Redwing sightings than Fieldfare but in smaller numbers. The most seen together was 50 at Beacon Hill and the Outwoods, and 54 in Bradgate Park, although there was 81 in JG's garden at Cropston, all in December. **Mistle Thrush** with a maximum of three were only found at Cropston Reservoir, Groby Pool, Swithland Wood and Bradgate Park. **Robin** were numerous with lots of records, 18 were counted in Swithland Woods and ten in the Outwoods, both late in the year. **Stonechat** seemed to be permanent in Bradgate Park throughout the quarter with 12 noted on 30 November. Others were found at Lea Wood, Thrussington Mill, Dishley Pool and Cossington Meadows.

Dunnock were pretty ubiquitous with most records from gardens but never more than five birds. The three **House Sparrow** reports had a high count of just nine birds in a Quorn garden.

Two **Grey Wagtail** were noted at Cropston Reservoir on 2 October and single birds were also seen at Groby Pool, Watermead Park and a Quorn garden. The highest number of **Pied Wagtail** reported was only four, none of which were in the usual urban locations. Recently the majority of **Meadow Pipit** have been found in Bradgate Park and this quarter all were from that area. Most numbers were in the teens, with a maximum of 24 on 30 November. A **Rock Pipit** flew over Sence Valley on 15 October.

It was a poor quarter for **Chaffinch** with the most seen together being ten in Swithland Wood on 22 November. Garden visitors were almost all of the Greenfinch sightings, with a maximum of just three birds. However there were 22 in Groby village on 11 November. There were far more Goldfinch records with more birds counted, the biggest of which was 44 in a Holwell garden on 13 October. There were a few single number counts of Siskin but the only double-figure count was at Groby Pool with 25 on 9 November. Cropston Reservoir provided most of the Linnet sightings with 150 in early October and 63 in mid-November. Lesser Redpoll were noted at Beacon Hill where there were 20 on 30 December and Groby village with 25 on 21 December. At Bradgate Park there were two Crossbill on 12 November and a single on the 30th. Not many Bullfinch were reported, all in ones or twos apart from seven at Beacon Hill on 13 December.

All **Yellowhammer** reported were in Bradgate Park with a maximum of six, as was the only **Reed Bunting** record, a single on 1 October.

Bas Forgham

DRAGONFLIES and DAMSELFLIES

Southern Hawker *Aeshna cyanea*: the only record was of one in HS's Quorn garden on 13 October.

Migrant Hawker *Aeshna mixta*: two males were found at Cropston Reservoir on 2 October.

Common Darter *Sympetrum striolatum*: recorded from five locations. Two were in JG's Cropston garden, and a pair was ovipositing in the Gaddesby Brook, Gaddesby on 4 November.

Jim Graham

BUTTERFLIES

Most of the butterflies seen in this quarter were singletons and all records relate to October. There were no records for November or December.

Comma *Polygonia c-album*: SFW & HI recorded singles at Freeby on the 1st and Markfield on the 13th.

Speckled Wood *Pararge aegeria*: seen by JG at Bradgate Park on the 1st and another at Cropston Reservoir the following day.

Peacock, *Aglais io*: a single was seen at Bradgate Park on the 22nd (JG)

Small Tortoiseshell *Aglais urticae*: one was seen at Wymondham on the 18th (SFW & HI).

Red Admiral *Vanessa atalanta*: a total of ten were noted in five different locations between the 14th and 25th. Two were seen by PD at Quorn on the 18th.

Small White *Pieris rapae*: one was noted at Cropston Reservoir (JG).

Large White *Pieris brassicae*: was in my Quorn garden on the 6th (HS).

Brimstone *Gonepteryx rhamni*: JG noted one at Bradgate Park on the 22nd and one was also seen by HS at Quorn on the 26th.

Holly Blue *Celastrina argiolus*: was recorded at Twycross on the 23rd by SFW & HI.

Thank you to those who sent in their records.

Helen Shacklock

FUNGI

Report for Q3 and Q4

With few records received in Q3, I have combined the 56 records of 45 species from the two quarters. Note: not all records that have been received are written up.

Well, perhaps it was the weather but with only five fungi reports in Q3 the star record was literally the proliferation of **Collared Earthstar** *Geastrum triplex*, in JGr's Holwell garden.



Collared Earthstar © Jackie Green

The most frequently reported fungus was the colourful **Fly Agaric** *Amanita muscaria*. Found from HS's garden in Quorn, across Charnwood Lodge, Swithland Wood and Bradgate Park throughout the quarter.

The less recorded **Amanita excelsa** – something referred to as the **Grey Spotted Amanita** was found by DR in Charnwood Lodge.

The next most common report was that of **Tar-spot Fungus** *Rhytisma acerinum*. Records came from across the county – basically anywhere people saw Sycamore trees. This is a plant pathogen that commonly affects maples

in late summer and autumn, causing the tar spot. Tar spot does not usually have an adverse effect on the trees' long-term health.

Russulaceae - Milkcaps, Brittlegills

Not to be confused with the following group, **Primrose Brittlegill Russula sardonia** was found in Stocking Wood, Swithland (GF), and the often more widely reported **Ochre Brittlegill Russula ochroleuca** *a*t Charnwood Lodge (MM).

Psathyrellaceae – Brittlestems and Inkcaps

Common Inkcap *Coprinopsis atramentaria* was found at Watermead Country Park (JG), but perhaps the more eye-catching **Magpie Inkcap** *Coprinopsis picacea* was at Swithland Wood (GF).



Magpie Inkcap © Graham Fisher

Strophariaceae - Tufts, Scalycaps

Ever present at Charnwood Lodge is **Petticoat Mottlegill** *Panaeolus papilionaceus* due to its favoured environment growing in dung or on grassland enriched with manure (particularly that of horses or cattle). In contrast, **Golden Scalycap** *Pholiota aurivella* lives on deciduous wood – often Ash - seen at Charnwood Lodge.

Tricholomataceae – Knights, Funnels & Bonnets

The Deceiver Laccaria laccata was found at Morley Quarry, Shepshed by HG, who also recorded Clouded Funnel Clitocybe nebularis at Swithland Wood.



Mycena supina © Margaret McLoughlin Pyronemataceae – Cups, Peels and Ears

My final report is of **Mycena supina** seen two metres up a tree at Charnwood Lodge by MM. Still rarely recorded in Northern Europe, this tiny fungus is associated with deciduous trees and grows in moss thereon. Without my go-to expert, a well-recognised national mycologist John N Hedger, who provided the identification, this would not have been recorded. The description is based on three Norwegian collections and the whole variation of this species is probably not completely understood.

Margaret McLoughlin

Reference

Dr. R. A. Maas Geesteranus 1992: 43, Emmett et al. 2008: 382

LEAF MINER FLIES

Report for 2022

Agromyzidae

This will be the second report in this series on the Agromyzid leaf miner flies, whose larvae feed within leaves and make distinctive mines. All the records, except three of **Phytomyza ilicis** on Holly (SFW & HI), are mine (HG). All my records have been submitted to NatureSpot and verified by Barry Warrington, National Agromyzidae Recording Scheme.

Fewer species were recorded than in 2021. It is possible to speculate on the reasons for this:

- I was away from VC55 for six weeks of the summer and autumn.
- The summer of 2022 was very hot and dry, and the leaves of many trees withered and died from drought before autumn arrived.
 Some flowering plants e.g. Cow Parsley died back too. Fly larvae could have died or failed to thrive in these conditions.
- Some plants e.g. Ploughman's Spikenard have quite limited distributions and not being in the right place at the right time to see them was another factor.

There were eight species from 2021 recorded again in 2022 and eight species from 2021 not re-recorded in 2022. There were three new species recorded in 2022.

Of interest were new fly mines found in 2022.

Amauromyza labiatarum: found by HG at Holly Hayes Wood on 7 July. Mines of this fly were found on Hedge Woundwort. The mines have narrow galleries leading to a largish blotch.



Amauromyza labiatarum © Hazel Graves



Aulagromyza heringii © Hazel Graves

Aulagromyza heringii : found by HG at Jubilee Wood Road Verge on 20 November. Surprisingly, this was my first find of this mine, despite frequently examining Ash leaves for plant galls. However, few records of this appear on NatureSpot.

Phytomyza lappae: discovered by HG at both Ulverscroft on 14 August & Aylestone Meadows North on the 18th. The mine is a long, white, upper surface gallery which follows the veins and can appear angular because of this.



Phytomyza lappae © Hazel Graves

The mines made by **Agromyza anthracina** are also interesting. Although little can be made of an increase from 1 to 5 records in one year, nettle is a very common plant and although the mine was looked for in 2021, it was only found once, whereas it seemed more widespread this year. It will be interesting to follow this to see if it is becoming more widespread.

The mines made on Holly by **Phytomyza ilicis** are also interesting from a methodology point of view. We obtained 11 records in 2022. My recollection is that I never found a Holly Bush without this mine, often when not in a position to make a record, and the mines were on a big percentage of the leaves. The question is when

Scientific Name of Fly	No. of Records 2021	No. of Records 2022	Common name of Host
Agromyza anthracina	1	5	Nettle
Agromyza flaviceps	1	1	Нор
Amauromyza labiatarum		1	Hedge Woundwort
Amauromyza verbasci	1		Mullein
Aulagromyza heringii		1	Ash
Cerodontha iridis	3		Stinking Iris
Chromatomyia aprilina	3	5	Honeysuckle
Chromatomyia lonicerae	1		Honeysuckle
Chromatomyia primulae	2	1	Primrose
Liriomyza amoena	1		Elder
Phytoliriomyza melampyga	1		Indian Balsam
Phytomyza agromyzina	1	3	Dogwood
Phytomyza chaerophylli	2		Cow Parsley
Phytomyza conyzae	1		Ploughman's Spikenard
Phytomyza glechomae	1		Ground-ivy
Phytomyza ilicis	5	11	Holly
Phytomyza lappae		2	Burdock
Phytomyza pastinacae/spondylii agg.	1	2	Hogweed
Phytomyza ranunculi	1	2	Buttercup
19 species over 2 years	16 species	11 species	

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to stop recording something so common. Should records be made for every observation, or only for the more rarely seen species? This could be done more scientifically so rates of change could be observed, but that would mean doing more structured surveying, as the botanists do, monad by monad, or as the ornithologists do, on regularly repeated transects. It is important to collect data of common species; the House Sparrow decline was not noticed immediately because it was thought not necessary to record sparrows.

Hazel Graves

HOVERFLIES

Syrphidae Report for 2022

The first report in this series, a new field for me, was for the recording season 2021. I reported on the hoverflies that I had found and been able to identify. These were confirmed by the hoverfly experts who work with NatureSpot. All records used in the report for 2022 have also been verified on NatureSpot. This second report also includes records from MB, JG, MM and DR, one record each. These records have been easy to access, already verified, through the Loughborough Naturalists' Club's liaison with NatureSpot.

I only use data which has a photo to support the record and has been confirmed on NatureSpot or by another expert recorder. There are problems with this. As I and other recorders become more familiar with hoverflies, we will be able to identify "easy" ones when not in a position to photograph. At what point would any of us become expert enough for others to accept records at face value?

My first year of recording was mainly trying to find as many different species of hoverflies as possible, as a learning curve. This year I have tried to record familiar ones but also new ones.

Therefore, these results show what we were able to record in 2022. They reflect the easier to ID ones and the ones prepared to sit still to be photographed. No information regarding abundance or distribution can be inferred from this data. I am hoping that more Members will record hoverflies – the ones being seen regularly as well as new and interesting ones. It is important as we go forward that records of common species are collected. Hoverflies are one of the easiest fly groups to record as many frequently feed as adults on flowerheads and can stay still for quite a while – gardens are good places to find them.

Hoverflies are assigned to one of at least 12 tribes largely dependent on their larval feeding habits. There are certain characteristics common to the flies of each tribe, so if "picture matching" is the form of ID used, it is also essential to check that the features noticed also appear in that tribe.

In 2021, the records fell into four tribes, in 2022 records fell into six tribes, Bacchini and Cheilosiini being new.

Bacchini – larvae feed on aphids either on leaf litter and ground layer or on nettle & bramble.

Syrphini – larvae live on tree aphids.

Cheilosiini – genera different, *Cheilosia* feed on plant leaves, stems, and roots, *Ferdinandea* on sap runs, *Rhingia* on fresh cattle dung.

Eristalini – larvae are rat-tailed maggots, living in many places with wet decaying vegetation such as in ponds, ditches, manure heaps.

Volucellini – larvae live in nests of social bees and wasps.

Xylotini – larvae live in decaying timber (although *Syritta pipiens* lives in compost, manure and silage).

Most of the 2022 records have been made in or near Loughborough or Charnwood Forest, the exception being **Xylota segnis** at Prior's Coppice. Most of the 2022 records were of singles, with a few up to four. The exception being **Cheilosia** *illustrata* where there were at least ten individuals on Hogweed in the Ulverscroft Valley.

The following table shows that 20 were species found in 2021 and 20 were found in 2022. Ten of the 2021 species were re-found in 2022 and ten of the 2021 species not re-recorded in 2022. Ten new species were found in 2022 making a total 30 species found over the two years.

Tribe	Species	Common Name	No. Of	No. Of
			Records 2021	Records 2022
Bacchini	Melanostoma scalare	Chequered Hoverfly		1
Bacchini	Platycheirus albimanus	White-footed Hoverfly		1
Syrphini	Eupeodes luniger			1
Syrphini	Leucozona lucorum			1
Syrphini	Epistrophe eligans		1	1
Syrphini	Episyrphus balteatus	Marmalade Hoverfly	1	4
Syrphini	Meliscaeva cinctella		1	1
Syrphini	Chrysotoxum bicinctum		1	
Syrphini	Leucozona laternaria		1	
Syrphini	Leucozona glaucia		1	
Syrphini	Xanthogramma pedissequum s.l.		1	
Syrphini	Sphaerophoria scripta		1	
Syrphini	Syrphus ribesi		1	
Cheilosiini	Cheilosia illustrata			1
Cheilosiini	Ferdinandea cuprea			1
Cheilosiini	Rhingia rostrata			1
Erastalini	Eristalis intricarius			1
Erastalini	Eristalis nemorum			1
Erastalini	Eristalis pertinax	Tapered Drone Fly	5	6
Erastalini	Eristalis tenax	Common Drone Fly	1	1
Erastalini	Helophilus pendulus	The Footballer	2	2
Erastalini	Myathropa florea		1	
Erastalini	Eristalis arbustorum		1	
Volucellini	Volucella bombylans	A bumblebee mimic		1
Volucellini	Volucella inanis	Lesser Hornet Hoverfly	2	1
Volucellini	Volucella pellucens	Pellucid Fly	2	2
Volucellini	Volucella zonaria	Hornet Hoverfly	1	
Xylotini	Syritta pipiens	Thick-legged Hoverfly	1	1
Xylotini	Xylota segnis		1	2
Xylotini	Xylota sylvarum		1	
6 tribes	30 species over 2 years		20 species	20 species

Certain anecdotal information springs to mind. Some months of the summer of 2022 were extremely hot and dry. Flowers ceased flowering very early in the season and on the occasions when it was expected that many hoverflies on plants such as hogweed, would be seen, the plants had dried up and few hoverflies were found. It is to be hoped that some egg laying had already taken place, and knock-on effects will not be seen in 2023.

Anecdotally, it was also noticeable that the numbers of Lesser Hornet Hoverfly Volucella inanis and Hornet Hoverfly Volucella zonaria were greatly reduced. These are very striking flies and easy to identify. Both species were found until recently mostly in the south-east. Their range has been expanding northwards in recent years and comments have been made on the increase of their presence in VC55. It was surprising that no record of Hornet Hoverfly was made in 2022.

These were the new finds for 2022. The text illustrates that some hoverflies are reasonably easy to ID whereas others are much more difficult.

Chequered Hoverfly *Melanostoma scalare* found by HG at Rocky Plantation on 10 April .

Males have long, thin bodies and lozengeshaped yellow spots.



Chequered Hoverfly© Hazel Graves



White-footed Hoverfly © Hazel Graves

White-footed Hoverfly *Platycheirus albimanus* found by HG at Nanpantan on 1 April.

A small hoverfly with grey-silver (f) or bronze (m) spots. Males in the *Platycheirus* genus have ornamented front legs with broad flattened tarsi. *P. albimanus* males are identified by the distinctive clump of white, tangled hairs near the base of the front femora.



Eupeodes luniger © Hazel Graves

Eupeodes luniger found by HG at Loughborough on 17 April.

The species can be variable in terms of both size and colour with a wing length usually between 6.5mm and 10mm. It has broad yellow lunate markings on tergites 3 and 4 which don't reach the outer edge.



Leucozona lucorum © Hazel Graves

Leucozona lucorum found at Markfield by HG on 7 May.

This is easier to recognise that either of the last two. The striking white band and black wing patches are distinctive. The orange/yellow *scutellum* separates it from the similar *Volucella pellucens*.



Cheilosia illustrata © Hazel Graves

Cheilosia illustrata found at Markfield by HG on 9 June.

Another bumblebee mimic, easy to identify and usually sitting with its wings closed tightly over its back. Very often seen on hogweed flower heads. There were at least ten on the day I saw this.



Ferdinandea cuprea © Hazel Graves

*Ferdinandea cuprea f*ound at Charnwood Lodge by MM on 27 May.

Identification depends on often brassy looking abdomen, grey stripes on its thorax and the two wing 'clouds'. Often seen sunning itself on tree trunks. Larvae often feed on sap runs on oak and ash.



Rhingia rostrata © Hazel Graves

Rhingia rostrata was found at Markfield by HG on 23 July.

This species is less common than *R. campestris* but easy to separate by, amongst other features the bluish thorax and a bright orange abdomen. Its range is expanding from southern England into the midlands.

Eristalis intricarius found at Charnwood Lodge by DR on 10 May.

Unusually for an *Eristalis* species, this is a large, furry bumblebee mimic. Males and females are different, the larger female with a white tail, the smaller males with a reddishbrown tail. Wing venation may be needed to distinguish from similar flies.



Eristalis intricarius © David Robinson



Eristalis nemorum © Hazel Graves

Eristalis nemorum found at Stanton under Bardon by HG on 24 July.

Another one difficult to ID and was helped out by Roger Morris. The features needed for ID, such as the face and the wing details, were not evident on this photo. It needed an expert to ID from this angle.

Volucella bombylans found at Ketton Quarry by JG on 4 June.

Another bumblebee mimic. Females lay eggs in the nests of bumblebees and wasps where



Volucella bombylans © Jim Graham

the larvae feed on debris and occasionally the bee larvae.

The most surprising find was of a **Marmalade Hoverfly** *Episyrphus balteatus* nectaring on ornamental *Hypericum* at Abbey Park, Leicester during a Club visit on 7 December 2022.

Conclusion

So far in this series there are 30 records from Loughborough Naturalists for hoverflies. Brian Whetton has recorded 121 species since 1998. Plenty more for us to find.

It would be good if records could also be made of hoverfly larvae. Many feed on aphids, and can be found whilst examining aphids including in the garden.

Information can be found on Facebook UK Hoverflies Larval Group. You will need to join the group to view.

https://www.facebook.com/groups/15802983 22233838/

Hazel Graves

References

Ball, S. & Morris, R. 2013 *Britain's Hoverflies, an introduction to the hoverflies of Britain*. WILDGuides, Princeton University Press.



Report for 2022

The gall records which this report has drawn upon are from SFW in the company of HI, GH, the BSBI or Rutland Natural History Society and from me, HG, sometimes in the company of Leicester Lit & Phil Natural History Section.

In *Heritage* reports in previous years, the species have been arranged according to their host plants i.e., galls on oaks, galls on roses, etc. For this report, however, they will be discussed in terms of the six major groups of the causing organisms.

1. UNKNOWN CAUSER

Mossy Willow Gall: Watermead South 10 May.

No scientific name is ascribed as the causer is not yet known. Mites can be found but probably are not the causer - simply the inquiline or lodger. The gall, a distorted catkin, is thought to have been caused by a virus or phytoplasma. Phytoplasmas were discovered in 1967 by Japanese scientists who termed them mycoplasma-like organisms. Both mycoplasma and phytoplasma are genera of bacteria in the class Mollicutes which lack a cell wall around the cell membrane. No one yet has managed to culture them in any of the standard ways, so they are challenging to study. They are thought to be transferred from plant to plant by sap-sucking insects.



Mossy Willow Gall © Hazel Graves

2. FUNGI



Campion Anther Smut © Hazel Graves

Species	Common Name	Site
Melampsora populnea	Dog's Mercury Rust	Nanpantan and Great Merrible Wood
Microbotryum violaceum or Microbotryum lychnidis-dioicae	Campion Anther Smut	on Red Campion at 2 sites in Charnwood Forest.
Puccinia betonicae	Betony Rust	Lea Meadows
Puccinia malvacearum	Mallow Rust	Charnwood Forest
Puccinia sessilis	Arum Rust	Charnwood Forest
Puccinia smyrnii	Alexanders Rust	abundant at Burbage Woods where Alexanders has spread in recent years.
Triphragmium ulmariae	Meadowsweet Rust	Charnwood Forest and Prior's Coppice



Betony Rust© Hazel Graves

3. HEMIPTERA: APHIDS, PSYLLIDS & TRIOZIDS

Aphids

Red Currant Aphid *Cryptomyzus ribis*: Found in the walled garden at Launde Abbey. This aphid needs woundwort species as an alternate host. If you want to grow Red Currants then weed your garden of woundworts!

Poplar Spiral Gall Aphid Pemphigus *spyrothecae*: Found near Old Dalby and at its usual location, very abundant, on the poplars near Dishley Pool, Loughborough. This is a social insect species and interesting in that it behaves in an apparently altruistic manner. The colony inside each gall contains "defenders" who are willing to sacrifice themselves to prevent attack when the gall is open to allow winged aphids to leave and during the repair process.

Rosy Leaf-curling Aphid Dysaphis devecta agg.: Examples of this were found on two Apple trees in the hedges at Nanpantan Cemetery. The aphids cause the apple leaves to roll and turn red. It seems to be unusual in the County with



Rosy Leaf-curlingAphid agg. © Hazel Graves

only one previous record on NatureSpot (the County's records at Leicestershire & Rutland Environmental Records Centre (LRERC) have not been checked). It is recorded as an aggregate because there are three similar species: *D. devecta*, *D. anthrisci* and *D. chaerophylli*, all of which produce similar galls. *D. devecta* aphids stay on apple all year whereas *D. anthrisci* and *D. chaerophylli* use Cow Parsley and leaf bases of other *Chaerophyllum* species. I cannot currently discover how they can be told apart.

Woolly Apple Aphid Eriosoma lanigerum: This was a most spectacular find on an apple tree at Watermead. Members of Leicester Lit & Phil Natural History Section puzzled over ID. The trunk of the whole tree had large areas covered in thick, white, flocculent wax. One of the group was able, using a microscope attachment to his iPhone, to see what were probably aphids. Later investigation under a microscope confirmed this. Although apple is the secondary host of this species, it can cause devastation if an infection spreads in an apple orchard. In the USA, where it has spread from Britain, the alternate host is American Elm Ulmus americana but I have not discovered yet the alternate host here. Once



Woolly Apple Aphid © Hazel Graves

seen, easily recognised again, as I did in the autumn on the coast path in Carmarthen.

Psyllids

Ash Psyllid Gall Psyllopsis fraxini agg.: This aggregate is made up of: *P. fraxini, P. discrepans, P. distinguenda* which cannot be separated unless the psyllids are examined. Nymphs feed on the leaves whose edges become swollen and roll downwards and become marked with purple. The nymphs produce wax as protection. An easy one to spot and found eight times.



Ash Psyllid Gall © Hazel Graves

Buckthorn Psyllid Gall Trichochermes walkeri: This psyllid causes leaf margin curl. Not very often seen as Purging Buckthorn *Rhamnus cathartica* is not commonly seen, although there must be more than we normally notice as it is the food plant of Brimstone butterfly caterpillars.



Buckthorn Psyllid Gall © Hazel Graves



Spanioneura buxi or Psylla buxi © Hazel Graves

Spanioneura buxi or **Psylla buxi**: this psyllid causes galls to form on the shoot tips of Box where the leaves bunch, become thickened and concave giving a cabbage-like appearance. If examined in the summer nymphs covered in wax can be seen. These galls have been found at two sites in Loughborough, and at Lyddington and Long Clawson.

Trizoids

This group was originally thought to be Psyllidae but recent research has split Psyllids into several new groups.

Triozid Red Valerian Gall *Trioza centranthi*: seven records .

Triozid Oak Gall Trioza remota: this was new to me this year. I think previously oak leaves have had so many cynipid wasp galls on them that this one has been overlooked. When first asked about it, I just assumed it that the very small bumps were damage from fallen silk button or spangle galls. However closer examination showed a flat, orange-yellow nymph in a depression on the leaf underside with a bump above. The nymphs and depression/bump are only 1-2 mm, so easy to miss. Adults overwinter on conifers.



Triozid Oak Gall © Hazel Graves

4. DIPTERA (FLIES)

Cecidomyiidae: gall midges or gall gnats

Species	Common Name	Records
Dasineura crataegi	Hawthorn Button- top Midge Gall	2
Dasineura kiefferiana	Rosebay Willowherb Midge Gall	2
Dasineura pteridis	Little Black Pudding Bracken Midge Gall	1
Dasineura ulmaria	Meadowsweet Midge Gall	1
lteomyia capreae	Sallow Midge Gall	
Contarinia tiliarum	Lime Midge Gall	1



Rosebay Willowherb Midge Gall © Hazel Graves



Lime Midge Gall © Hazel Graves

Tephritidae, one of the families of fruit flies.

Thistle Gall Fly *Urophera cardui*: ten records on stems of Creeping Thistle *Cirsium arvense*.

Sphenella marginata: In the summer, it was reported that the galls caused by this fly had been found in the county, apparently new. In fact, there are previous records. The fly larvae feed inside the flowerheads of Ragwort and cause them to swell. Larvae or pupae can be found if the gall is opened. Interested



Sphenella marginata © Hazel Graves

cecidologists found themselves studying many Ragwort flowerheads to see if they could find it. The gall was easy to find once people started to look.

Anthomyiidae: some of which are called Rootmaggot Flies.

Mop-head Gall *Chirosia betuleti*: This appears as a knot in ferns, especially on Male-fern, Lady-fern and Buckler-ferns.

5. HYMENOPTERA (CYNIPID WASPS & SAWFLIES)

Seven species of Cynipid wasp caused galls on Pedunculate Oaks. These were the usual frequently recorded wasp galls.

Species	Common name	Records
Andricus	Ram's-horn	1
aries	Gall Wasp	
Andricus	Artichoke	6
foecundatrix	Gall Wasp	
Andricus	Oak Marble	7
kollari	Gall Wasp	
Andricus lignicola	Cola-nut Gall	1
Andricus	Knopper Oak	11
quercuscalicis	Gall Wasp	
Cynips	Cherry	4
quercusfolii	Gall Wasp	
Neuroterus	Spangle	7
quercusbaccarum	Gall Wasp	

What was striking and very noticeable in the field was the complete absence of *Neuroterus numismalis* Silk Button Galls, which are frequent in most years, and very abundant in 2021. Also noticeable is the difference between the load of

Neuroterus quercusbaccarum Spangle Gall Wasp this year when there were very few on the leaves that were recorded compared to 2021 when these galls totally covered the backs of an overwhelming number of oak leaves in widespread areas. I am not sure why this cycle of boom and bust is found in these galls, but it has been observed before. It could be due to weather conditions, trees responding to infestations in previous years or to build-up of parasites in boom years.

Parasites of *Neuroterus quercusbaccarum* Spangle Galls

At the end of the season, I noticed larvae old Spangle Galls Neuroterus under quercusbaccarum. According to Redfern & Shirley they could be the larvae of the midge Parallelodiplosis galliperda. However, after posting on FaceBook BPGS, I was informed that Xenodiplosis laeviusculi is also a possible species, but less common. I was able to find information about the two species, their larvae being told apart by structure of their terminal segments. Looking at the photos I obtained, and comparing the image with those on the Dutch Bladmineerders web site, both Chris Leach and I decided there was a 90% certainty that they were Xenodiplosis laeviusculi, however this is insufficient to make an confirmed record. Other members of BPGS think that P. galliperda and X. laeviusculi may be one species, and more research is needed.



Unidentified parasite © Hazel Graves

Two species of Cynipid wasps caused galls on roses, one species on a herbaceous plant, and one sawfly gall causer was recorded, as follows in this table:

Species	Common Name
Diplolepis rosae	Robin's Pincushion or Bedeguar Gall Wasp
Diplolepsis eglanteriae agg.	Smooth Pea Gall Wasp
Aylax papaveris	Wasp poppy seed-head gall.
Euura proxima	Willow Redgall Sawfly

6. ERIOPHYIDAE (GALL MITES)

All Eriophyidae live as plant parasites, mostly gall-causing. They are small arachnids, a class of joint-legged invertebrates including spiders, many of which have four pairs of legs. Gall mites, however, have just one pair. They are mostly tiny, less than 1 mm in length with simple, unsegmented bodies. Their primary method of population spread is by wind. Because they are microscopic, they are poorly researched. Members of the British Plant Gall Society are currently working on them and so far have published a provisional key for mites on Acer. The forthcoming new edition of British Plant Galls is likely to have some changes. Some changes we are already aware of, which makes ID and confirmation difficult, as it depends on which edition is used.

For example, the "Nail" galls on limes were thought to be various species but are now thought to be just one. This makes recording easier as the species of lime no longer needs to be determined. *Aceria cephalonea* and *Aceria macrorhyncha* are now also thought to be the same species on Sycamore – the height of the gall depending on age and other factors, rather than mite species.Galls from the following mite species were found in 2022 on trees and herbaceous plants.

Conclusion

The world of Plant Galls is fascinating and diverse, being caused by a wide range of causer organisms. Apart from fungal and plant galls, many gall records are of invertebrates. It can be easier to find and identify the non-flying, static life-stage of an invertebrate which provides proof of breeding, which a record of a flying insect cannot do. Research is showing changes in our understanding of how some species are distinguished. These organisms are near the bottoms of our increasingly fragile food chains. Galls from the following mite species were found in 2022 on trees and herbaceous plants:

Mite species	Host tree	Records
Phyllocoptes populi	Aspen	1
Acalitus brevitarsus	Alder	2
Aceria nalepai	Alder	6
Eriophyes laevis	Alder	3
Aceria fraxinivora	Ash	2
Acalitus stenaspis	Beech	1
Aceria nervisequa	Beech	1
Aceria campestricola	some Elms	1
Aceria aceriscampestris	Field Maple	2
Aceria macrochela	Field Maple.	5
Aceria macrocheluserinea / A. eriobia	Field Maple	1
Phyllocoptes goniothorax	Hawthorn	2
Eriophyes leiosoma	Lime	1
Eriophyes tiliae / E. lateannulatus	Lime	3
Eriophyes similis	Prunus	10
Eriophyes pyri	Rowan	4
Aculus laevis	Sallows	1
Vasates quadripedes	Silver Maple	4
Stenacis euonymi / S. convolvens	Spindle	1
Aceria cephalonea	Sycamore	2
Aceria macrorhyncha	Sycamore	1
Aceria pseudoplatani	Sycamore	1
Aceria erinea	Walnut	2
Cecidophyes nudus	Wood Avens	2
Cecidophyes rouhollahi	Goosegrass	3

Hazel Graves

References:

Redfern, M. & Shirley, P. 2011 (2nd edition). British Plant Galls FSC. British Plant Gall Society (BPGS) FaceBook British Plant Gall Society https://www.britishplantgallsociety.org/ Plant Parasites of Europe – leafminers, galls and fungi https://bladmineerders.nl/

FLOWERING PLANTS and FERNS

Three members have sent in a total of 1640 records of 449 taxa. The majority are from myself and HI (referred to as "we") and these have been accepted by the VC Recorder and uploaded to the BSBI database.

During the Rutland County Show in 2022, an "Ask the Gardening Experts" session was in progress as we made our way through the marquee. A member of the audience described to the panel a troublesome weed which was clearly Field Horsetail Equisetum arvense (mentioned in the previous Heritage). Predictably, the "expert" mis-named it as Mare's-tail, which is a plant in a totally different group that happens to have a similar English name. They are vaguely similar (to those with poor eyesight) but horsetails are related to ferns whereas mare's-tails are actually flowering plants. The plant I found in Browns Wood (Bagworth parish) on 13 October was certainly a horsetail, but not the common Field Horsetail. It was Water Horsetail Equisetum fluviatile, whose stems are thin-walled with a large hollow, so that they can be squashed like a drinking straw. As its name implies, it prefers very wet places and is more usually found at lake margins. Of the true ferns, Male-fern Dryopteris filix-mas was the most frequently recorded, with records at Husbands Bosworth parish, Thrussington, Cold Overton, Twycross and Long Clawson. It is common in ditches, under hedges and on damp walls in villages. Do not be misled by the words *Male* and *Lady* in fern names, they have nothing to do with the gender of the plants. Indeed, sexual organs do not form on ferns as such but only on the gametophyte stage of their life-cycle – a separate and inconspicuous plant known as the prothallus.



Scots Pine © Steve Woodward

Scots Pine Pinus sylvestris was formerly a native species in English forests, thousands of years ago (Proctor, 2013), but more recently, native populations have been confined to the Caledonian Pinewoods, where they are carefully conserved. Selected strains of Scots Pine (with straight trunks) have been commonly planted in England as forestry trees and ornaments in estates and large gardens, so our records from VC55 are invariably introduced, or the offspring of introduced trees. For example, those that we found at Edmondthorpe Hall (Wymondham), Trout Hatchery (Horn, Rutland) and Queensway Old Dalby. The upper trunks have a coppery tinge and the leaves are short and glaucous. Another commonly planted pine, with dark grey trunks and longer, deep green leaves, is Pinus nigra, with two subspecies: Corsican Pine and Austrian Pine. From a distance, they are not always easy to separate, so we recorded Pinus nigra at Cold Overton, Twycross, Gaddesby parish, Pug's Park Spinney (Horn parish, Rutland), Long Clawson and Ashby Folville.



Yellow Corydalis © Steve Woodward

Fumitories have strange, elongated flowers – perhaps someone can explain to me how they are pollinated. Both of our finds are alien species: **Yellow Corydalis** *Pseudofumaria lutea* has yellow flowers, but in the winter its leaves can be recognised – usually on walls in villages, such as Ashby Folville. **Common Fumitory** *Fumaria officinalis* has smaller, pink flowers that need to be measured to distinguish them from their look-alikes (see Link 1). It is a weed of disturbed places, often demolition/building sites. It is believed to be an important food source for Turtle Doves. Common Fumitory (alas no Turtle Doves) turned up at Long Clawson and Nether Broughton.



Common Fumitory © Steve Woodward



Virginia-creeper C Steve Woodward

Virginia-creeper Parthenocissus quinquefolia is a popular climber in gardens, but I did not expect to see it, evidently established in a rural hedge, near Kirby Mallory on 15 October. I suspect that someone may have dumped garden rubbish here. Meadow Vetchling Lathyrus pratensis is a common, yellow-flowered pea on grassy roadside verges, but by the fourth quarter it has long gone over. Its leaves, however, turn black before withering away and I was able to recognise them at Twycross and Wymondham.

Of the plants listed in the new *Rare Plant Register* (see *Heritage* **247** page 1), only one was found during the fourth quarter: **Tormentil** *Potentilla erecta ssp. erecta*. A search of the verge of Melton Road (B676) in Burton on the Wolds parish on 16 October revealed just one or two plants by the kerb. This is not a typical roadside verge plant, but the vegetation here is a vestige of the wide strip of old grassland that formerly bordered this road. It appears to be an old drove road, along which cattle would be



Tormentil © Steve Woodward

driven to market, grazing on the way. Drove roads were used regularly for centuries until railways made drove roads and their wide grassy verges redundant. Nearby Paudy Lane is another example. A few fragments are kept open as grassland, including the Twenty Acre Piece SSSI at Six Hills (which still retains some uncommon plants), but most of these verges have become scrubbed over with Blackthorn and Hawthorn and have lost most of their botanical interest.

Lady's-mantles are grassland plants, with many species confined to northern Britain (Stroh et al. 2019). They have clusters of small, yellowgreen flowers and roundish leaves with many round lobes having toothed margins. We have rather few in VC55 and it is a lucky botanist who finds a native species. An introduced species, however, readily escapes into the wild: **Garden Lady's-mantle** *Alchemilla mollis*. We found it in St. John the Baptist's churchyard, Cold Overton on 22 October. Below the calyx of an *Alchemilla* flower is an epicalyx, which in this species has longer segments than the calyx.

Sweet Violet Viola odorata var. odorata was in flower at Long Clawson and Uppingham – in November! One shoot of Giant Bellflower Campanula latifolia was found in Spring Wood, Cadeby parish, on 2 December. Although long



Giant Bellflower © Steve Woodward

dead, the lantern-like remains of the fruits were distinctive. This and other woodland species had not been reported from the tetrad for decades, so it appears that no botanist had peered into Spring Wood recently. Giant Bellflower is thinly scattered in the county, with only a couple of recent records in West Leicestershire. The best place to look is the Breedon on the Hill area.



Common Fleabane © Steve Woodward

Common Fleabane Pulicaria dysenterica is absent from most VC55 tetrads and is certainly no longer common. A few plants were found near the M1 at Ratby on 11 October. The daisyshaped head is bright yellow, like the sun in a child's painting. Guernsey Fleabane Erigeron sumatrensis looks very different, with narrow flower heads lacking much colour, but both are in the daisy family Asteraceae. Guernsey Fleabane has look-alikes (all previously in the genus Conyza) and they need careful examination with a hand lens to sort them out, ideally using the guidance in BSBI News (Leaney, 2017). This species has spread dramatically in the last few years, into urban habitats, but so has Canadian Fleabane E. canadensis.

On the Club visit to Swithland Wood on 5 October, some "oak" leaves had sprouted in opposite pairs along a creeping hairy stem, close



Honeysuckle with odd leaves © Steve Woodward

to the ground. After some head-scratching I decided they were an odd form of **Honeysuckle** *Lonicera periclymenum* leaves. It is not uncommon for the leaves to show some lobing, but I had never seen any like these before.

Sanicle Sanicula europaea was found on the Club outing to Swithland Wood on 5 October (where it has been known for a long time). This umbellifer is almost confined to old woods, but does occasionally turn up elsewhere. Fool'swater-cress Helosciadium nodiflorum is socalled because the leaves could be mistaken for true Water-cress, yet this plant is an umbellifer and nothing to do with cress. The English name implies it would be a mistake to put it in your salad! It is very common in wet ditches and its abbreviated Latin name, pronounced "Hello Noddy", was called six times during the quarter.



Broad-leaved Helleborine © Steve Woodward

Many orchids have brightly-coloured spikes of flowers in early summer, but **Broad-leaved Helleborine** *Epipactis helleborine* is an exception. Its dull, greenish-purple flowers appearing rather late in the season, usually in the shade of woodland. One plant was found by HG in Swithland Wood on 12 November.



Timothy © Steve Woodward

Most grasses have decayed to the point of invisibility by winter, but one that can still be recognised is **Timothy** *Phleum pratense*. We found him at twelve widespread sites. This is the very common grass with a dense, elongated head of flowers resembling a sausage, rounded at each end and with a rough feel. The head of another grass, Meadow Foxtail *Alopecurus pratensis* is smaller, tapered at the top, has a silky feel, and is unlikely to be found in winter. A hand lens feature that confirms Timothy is the "devil's horns" on the individual spikelets. Even when its sausages have disintegrated, a few satanic spikelets often hang on to the stem, allowing safe identification.



Checking for devil's horns © Steve Woodward

Steve Woodward

References

Leaney, B. 2017. Common problems with identification in *Conyza*: Norfolk experience. *BSBI News* **135**: 7-17.

Proctor, M. 2013. *Vegetation of Britain and Ireland*. Collins New Naturalist.

Stroh, P., Walker, K., Smith, S., Jefferson, R., Pinches, C. & Blackstock, T. 2019. *Grassland plants of the British and Irish lowlands*. BSBI.

Link 1: https://naturebftb.co.uk/wpcontent/uploads/2021/04/Fumitories-and-Ramping-fumitories-crib.pdf

WEATHER

October 2022 was the warmest locally in 21 years with an average temperature of 13.1°C in Mountsorrel and 12.8°C in Hinckley. Afternoon temperatures averaged 16.8°C which was 2.1°C above normal and night time temperatures were logged at 9.1°C, which is 1.5°C above normal. The overall mean of 13°C was 1.8°C above normal. This warmth is becoming common now in October. Steve Jackson at his Coventry weather station at Bablake School has access to weather records going back nearly 150 years. He says that since the millennium October's temperature has increased by a huge 1.3°C in just 22 years compared to the figures in the 1990s. Since the year 2000 October temperatures now average 11.4°C whereas in the 1990s they stood at just 10.2°C . The record temperature warmth was set in Oct 2001 when temperatures averaged 13.7°C but since then five more Octobers have made the warmest top eight ever recorded with only 1921 being the only warm year out of the modern age. September and October are the months that have warmed most in this period although every month has shown some increase.



Cat and Mouse © Steve Woodward

October was also very wet. At Mountsorrel I recorded 92 mm which was 30% above normal with Dave Mutton in Cosby recording 89 mm. Meanwhile at Dean Whittaker's station in Hinckley he recorded 120 mm or double his usual total. This is the fourth year running Dean has exceeded 100 mm of rain in month in October and this goes to show how recently how warm and wet it has become. Air masses warmer than ever before are blowing in from the south-west in October. As well as warmth they are carrying much more moisture than normal, which has led to all the rain. Despite the rain, however, the sun did manage to shine brightly on some days with Dave's total in Cosby reaching 144 hours or 30% above normal with the sunniest day recorded on the 8th when 9.5 hours was logged. Winds mainly blew in from a south-west point in October reaching a max of 39 mph on the 6th.

After a dry first few days which were also quite warm, the weather became wetter with rain falling on 22 days in the month with more than 1 mm falling on 14 of these days. The maximum fall in Hinckley was 33.4 mm on the 23rd and 22 mm in Mountsorrel on the 23rd. Air from a tropical source frequently reached our shores with very mild temperatures being the result. Our warmest day was on the 29th when 19.4°C was recorded: more than 6°C above normal. Most October days had an average temperature of 17°C, nearly 2°C above normal. Low pressure dominated but it mainly anchored itself in the Atlantic which then maintained the warm winds which blew around it. There were no cold spells at all indeed our lowest maximum temperature was 14°C, which was the highest figure in recorded history in this month. There were no air frosts recorded with our minimum temperature of 3.3°C being on the 11th.

So another warm and wet October this year and as we enter November there seems no change in the immediate pattern.

November was an extremely mild month with winds blowing from a very mild south-west direction for the majority of the time. The air source was frequently subtropical and this was blown towards us as area of High pressure sat over Europe and Low pressure over the Mid-Atlantic. This funnelled the airmass from a very mild direction most of the time. Afternoon temperatures averaged 11.3°C (+1.1°C from normal)at both my station at Mountsorrel and Dean Whittaker's in Hinckley. Our warmest day was on the 11th when we reached 16.2°C but even our coldest day at 5.5°C on the 29th was not far from the average. Night time temperatures averaged 6.3°C (+1.9°C above normal). There was no air frost recorded at all in the month the first time since 2009. Only 11 Novembers have been frost free in the last 130 years locally! The overall mean temp of 8.8°C was 1.5°C above usual making this the warmest October since 2015.

With the warmth came large amounts of rain! Areas of Low pressure and moist mild air are able to carry large amounts of moisture and these frequently produced copious amounts of rain. I recorded 135.2 mm in Mountsorrel which is double my usual November total and my highest ever November rainfall total in my 21 years of records while Dean recorded 134.4 mm in Hinckley again double his usual total. It was a bit drier with Dave Mutton in Cosby with Dave recording 94 mm there. Our wettest day in Hinckley was on the 21st when Dean recorded 22 mm of rain but in Mountsorrel the 17th was wetter with 23 mm falling on this date. Rain fell on 22 days in Mountsorrel. Flooding became a problem as the rainfall deficit for the year was brought to an end after a very wet October and November which saw 230 mm fall in Mountsorrel and this bought the water table up and as more rain fell much flooding occurred in the Soar Valley. Many thanks to the local flood wardens and particularly Robert Butler in Sileby who does a great job reporting on the local flood conditions in the Soar Valley villages and he provides several updates a day in these flood condition days.



Flooded canal, Mountsorrel © Steve Woodward

Not surprisingly sunshine was limited with just 63 hours registered in Cosby which was 20% less than usual due to the thick cloud and rain for most of the month. The sunniest day was the 25th with 7.4 hours of sun recorded. The first 11 months of this year have been the warmest recorded since local records began in 1892. The autumn as a whole has also been very mild too. Here are some facts from the Bablake School Weather station in Coventry. It has been the warmest autumn there since 2011. The latest decade, from 2011-20, shows that autumn temperatures are now 1.5°C warmer than they were 100 years ago locally and it is the autumn season that has warmed the most in this time. The autumn is now 23% wetter but also 12% sunnier than it was 100 years ago so the rise in global temperatures is having a big affect locally too.

As I write this, the weather has under gone a big change as cold arctic winds have arrived and we are now in a chill with some snow showers likely, and severe frosts as we head into mid-December. The weather is always ready to serve up a surprise for us.

December was the coldest month since 2010 and in 2022 the only month that logged below average temperatures. Afternoon temperatures averaged 6.4°C at both my station in Mountsorrel and at Dean Whittaker's Hinckley weather station. Night time temperatures were logged at 1.2°C giving us an overall mean of 3.8°C which is 1.1°C below normal. This made it the coldest December since 2010. The month consisted of two halves. The first half was very cold with a large mass of polar arctic air arriving. Day temperatures were close to freezing in this period with the maximum at Hinckley just 0.3°C on the 13th, our coldest day of the month, and almost an ice day where temperatures stay below freezing all the time. We had 12 consecutive frosts with the coldest temperature being recorded at Mountsorrel on the 15th when a bone chilling -8°C was recorded; our coldest night since Christmas day 2010. Snowfall was very limited however, with just a few days with a few flakes. The very cold Arctic air was very dry also so did not contain any precipitation. The intense cold spell lifted on the 18th and then on the 19th winds blew in from the opposite direction directly from the tropics. Temperatures shot up and on the 19th and we recorded a max of 13.8°C at Mountsorrel, our warmest day of the month nearly 21°C warmer than it had been just three days before! The rest of the month saw winds blow from the west and south-west and these brought much milder temperatures and lots of rainfall and the mild last fortnight went a long way to offset the exceptionally cold first 14 days but the temperature mean was still 1°C below normal. A lot of rain fell after the 18th with Mountsorrel's total reaching 58 mm or 9% below normal, while Dean in Hinckley logged 65 mm a fraction below normal for the month. The wettest day was the 13th in Hinckley when 13.6 mm were recorded and in Mountsorrel the 23rd when I logged 11.2 mm. Winds were frequently strong after the 18th and my maximum gust was 40mph on the 28th. The very cold and sunny days in the first of the month ensured that 67 hours of sunshine were recorded locally 10% above normal. Although bucking the trend this December, Steve Jackson at his station at Bablake School in Coventry, has that average December worked out temperatures have gone up from 4.1°C between 2001 and 2010 to a massive jump to 5.9°C between 2011 and 2020 a massive increase of 1.8°C and this trend is noticeable in most other months of the year.

So December, despite being a little below average, turned out to be the only month in 2022 with monthly figures below normal. Indeed both locally and nationally 2022 was the warmest year since records began in 1659! Put another way, the last time we had a year this warm was in the Middle Ages! The average mean temperature was 11.5°C a full 1°C above normal. Total rainfall for the year was 657 mm in Mountsorrel just 5% below normal. January was a dry and mild month. While February stayed very mild it was very wet with 88 mm of rain nearly twice the normal amount. The winter 21/22 ended with no substantial snowfall at all. Spring arrived and mild and dry summed it up again. Then came the summer. All three months were warmer, sunnier and drier than normal with an incredible heatwave recorded in July when temperatures reached a staggering 39°C or 102°F. This was the first time 100°F has been reached locally in 350 years of records. The temp of 39°C in Leicestershire broke the previous record held in Market Bosworth of 34.5°C, so a 4.5°C smash of the record was historic! The autumn continued to be mild but was much wetter with October recording 100 mm in Hinckley and November 135 mm in Mountsorrel. So, although the rainfall totals nearly returned to average, it was the staggering temperatures that made the headlines in almost every month this year. Fourteen of the Earth's warmest years in the 350 years of records we have, have all occurred since the millennium which is a pretty startling statistic and the MET OFFICE has already stated that 2023 will follow a similar pattern. The Earth is warming up at a speed we have never seen before and although the climate has been substantially both warmer and colder over the last 100,000 years the changes we have seen in this short timescale over the last 30 years are unprecedented.

Thanks once again to Dean Whittaker, Dave Mutton and Steve Jackson for use of their data.

Phil Morrish

ACKNOWLEDGEMENTS

Heritage has been compiled from records submitted by the following Members & friends:

B Croxtall, R D Dandy, P J Darby, G Fisher, D B Forgham, J Graham (JG), S C Graham, H Graves (HG), D Gray, C Green, J Green (JGr), H Ikin (HI), N S Judson (NSJ), M McLoughlin (MM), K Moore, F Proudlove, P Proudlove, D Robinson, H Shacklock (HS), J P E Sollitt, S F Woodward (SFW). We are very grateful to them all.

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Records for the next quarter should preferably be entered via <u>NatureSpot</u> as soon as possible. Please ensure that you select "Loughboro' Nats" Project and set the padlock. Alternatively email a simple spreadsheet or text document to Margaret McLoughlin at:

loughboroughnaturalists.records@gmail.com

Records submitted for *Heritage* have been checked as far as possible by the writers of the various sections. They have not all been formally validated by County Recorders (as this is not practical on a quarterly basis). Full details of the records are submitted to Leicestershire & Rutland Environmental Records Centre LRERC, County Hall, Glenfield, Leics. LE3 8RA, either as spreadsheets or as scans of paper records. Once validated, selected records will be added to the LRERC database and made accessible to the public.