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CLASSIFIED RECORDS

MAMMALS

Q3 & Q4 - July to December 2019

Hedgehog: SFW noted dead Hedgehogs at Odstone, Snarestone, Glenfield and Barlestone and a live one in his Groby garden at 5.30 pm on 19 July. PJD had regular visits from Hedgehogs to her feeding station in her garden in Quorn during July, August and September and recorded on most nights on the camera trap until 9 December. On 15 December one fell asleep in the feeding box and despite being given torn paper bedding was gone by the next morning and none were seen since then.

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Mole: Molehills were noted by HI & SFW, on their travels at Peckleton, Scalford, Groby, Glenfield, Beacon Hill, Freeby, Waltham, Empingham, Garthorpe, Barwell, Cottesmore, Noseley, Bagworth, Barrowden and Oakham.

Bat: ATO had bats around his Shelthorpe house – probably, he thinks, judging by their size, a species of pipistrelle.

Brown Hare: PJD had a good view of a Hare near Craven's Rough in Ulverscroft and SFW & HI had sightings at Higham on the Hill, Barrowden, Clawson and Harby parish, Bottesford, Bradgate Park, Empingham, Pickworth, Buckminster, Stretton (in Rutland), Waltham, Eye Kettleby Lakes and Market Bosworth.

Rabbit: droppings were seen at Desford and live Rabbits at Higham, Buckminster and Twycross Zoo.

Grey Squirrel: were seen in Swithland Wood and Breedon on the Hill and 'Cyril the Squirrel' and friends regularly visit ATO's peanut feeder at Shelthorpe – peanuts vanishing rapidly and being buried in the flower beds and lawn!

Wood Mouse: ATO had a dead Wood Mouse left on his path – probably by his cat and PJD had a live one on her trail camera visiting the Hedgehog feeding station. **Red Fox:** The Belvoir Hunt killed three foxes near Holwell. PJD's camera trap picked up a fox visiting her garden in Quorn.

Badger: dung pits were noted at Brooke and Freeby and setts at Greetham and Peckleton.

Muntjac: were noted at Groby Rifle range and on the edge of an arable field at Hallaton.

Roe Deer: dead animals were found by SFW beside roads in Glenfield and Broughton and Dalby and a live one was crossing the road in Pickworth.

Fallow Deer: an adult male was seen in Clipsham.

Helen Ikin

BIRDS

Q3 & Q4 - July to December 2019

The maximum number of **Canada Geese** on Charnwood was 64 at Cropston Reservoir on 24 September but Albert Village Lake held 149 on 17 November. **Greylag Geese** outnumbered the former with 254 at Cropston Reservoir with the Canadas in September.

Virtually all the **Mute Swan** records came from Swithland Reservoir where the maximum number was 92 on 27 July.

There were two **Shelduck** at Wanlip Meadows on 4 September and a **Ruddy Shelduck** was at Swithland Reservoir on the 30th.

There was a Mandarin Duck at Isley Walton in November and up to a dozen between Cropston and Swithland Reservoirs in late summer. Probably the same two Garganey were at Cossington Meadows during August and September and there was one at Thornton Reservoir on 19 September. Shoveler were noted at Groby Pool, Watermead Park and Swithland Reservoir where there were 16 on 23 September. Gadwall were seen at four sites with Swithland Reservoir holding 119 on 27 December. The same site had 96 Wigeon on the same day. Mallard, as usual were well distributed with 67 at Swithland Reservoir, 74 in Bradgate Park and 164 at Albert Village Lake being the highest counts. The first Teal of the autumn was at Swithland Reservoir on 1 August and this site provided the highest count, 56 on 23 September. A female **Red-crested Pochard** was at Watermead Park in August and September and there were three at Groby Pool on 5 November. There were only a few **Pochard** reported with 15 at Swithland Reservoir on 27 December the highest number seen. **Tufted Duck** were noted at seven sites with 65 at Swithland Reservoir on 7 August the highest count. A now rare **Ruddy Duck** was at Albert Village Lake on 17 November.



Pochard © Jim Graham

A **Common Scoter** was present at Swithland Reservoir on 31 July. There was a **Goldeneye** at Groby Pool on 5 November and one at Thornton Reservoir on 29 December. There were 13 at Swithland reservoir two days earlier.

Two **Red-legged Partridge** were seen at Cropston Reservoir and one at Barkestone Wood. There were two **Grey Partridge** at Scalford, Melton on 7 July. Very few **Pheasants** were noted.

Little Grebe were found at all the expected sites with a maximum of 11 at Albert Village Lake on 17 November. **Great Crested Grebe** were at all the larger water bodies with 32 at Cropston Reservoir on 15 September.

The most **Grey Heron** seen together was seven at Swithland Reservoir on 7 August. There were two **Great White Egret** at Watermead Park on 5 September and one at Groby Pool on 25 October. **Little Egret** were widespread, especially around the Charnwood reservoirs, usually in small numbers but there were 11 at Cropston Reservoir on 26 July. Fourteen **Cormorants** were reported from

Swithland Reservoir on 30 Sept and nine were at Watermead Park on 4 December.

As usual most of the many Sparrowhawk sightings were from gardens and there were two in a Cropston garden on 30 September. A rare record for the county, a Goshawk flew over Ibstock on 12 October. On the same day a Red Kite flew over Hugglescote and others were seen regularly around Charnwood. Buzzard could be seen almost anywhere with many records of small groups, seven were together over Woodhouse Eves on 14 July. Kestrel were not as regularly reported as Sparrowhawk but were well spread across the area. A family party of four Hobby was feeding on dragonflies over Swithland Reservoir on 30 September and another was in the vicinity at the same time. Others were seen at Newtown Linford, Desford, Groby Pool and Bradgate Park. A pair of Peregrine reared young on Leicester Cathedral and others, probably the same group were noted at Cropston, Swithland Reservoir and Groby.

Water Rail were recorded every month at Kelham Bridge and regularly at Groby Pool with one at Albert Village Lake in November.

Moorhen were at all the expected waters but with only a maximum of 13, at Swithland Reservoir and Watermead Park. Coot far outnumbered the previous species with 40 at Watermead Park and 141 at Swithland Reservoir both in December.



Snipe © Jim Graham

The only **Lapwing** noted during the period was a group of 83 at Watermead Park on 4 December. There were 21 **Golden Plover** over Bradgate Park and 26 at Cossington both in December. Two **Woodcock** were at Holwell

Mouth on 23 December. **Snipe** were at Groby Pool and Kelham Bridge with a maximum of seven. Cropston, Swithland and Thornton Reservoirs had **Common Sandpiper** but no more than three. Apart from four at Birstall Meadows, all **Green Sandpiper** were at Kelham Bridge. The only **Greenshank** were two at Birstall Meadows on 4 September.

Black-headed Gull were widespread with a maximum of 145 at Groby Pool on 27 November. No more than two Common Gull were seen anywhere. There was a Great-black Backed Gull at Albert Village Lake on 27 November. A few Herring Gull were at Cropston Reservoir later in the year. Most Lesser Blackbacked Gull were at Cropston Reservoir with 69 on 25 August.

There were 13 **Common Tern** at Swithland Reservoir on 19 July and lesser numbers were at Cropston Reservoir and Groby Pool. An **Arctic Tern** was at Cropston Reservoir on 9 September.

Stock Dove were noted in small numbers in five different areas, and the maximum number of **Wood Pigeons** was 500 in Bradgate Park on 6 October. Only a few **Collared Dove** were noted anywhere.

Barn Owl were noted at Kelham Bridge, Bradgate Park and Hinckley whilst **Tawny Owl** were only seen in Bradgate Park. Surprisingly, there were more **Little Owl** than Tawnies, mainly in Bradgate Park, but also at Hinckley and Melton. Two **Short-eared Owl** were seen flying over Glebelands Park Leicester on 16 December.

The most **Swift** seen together was 30 at Watermead Park on 5 September which was also the last report of the autumn. **Kingfisher** were noted in six different areas but never more than one bird.

Great Spotted Woodpecker were widespread with many seen at garden feeders including three at Cropston on 30 August. There was an equal number of Green Woodpecker and were equally widespread. Three were together in the previous garden at Cropston on 31 August. No Lesser Spotted were recorded, this now being a species is less frequently seen in the county.

Single Ring-necked Parakeet were seen at

Ibstock and in a garden at Holwell.

Five Jay were foraging for acorns in Bradgate Park on 3 October and others were noted all around Charnwood. Magpie were not reported much but ten were together at Albert Village Lake on 6 October. Groups of Jackdaw were regularly noted with 120 in Bradgate Park on 26 September the highest count. The only record of Rook was at Ulverscroft where there were three on 2 October. Carrion Crow, as usual, were widespread in small numbers. Raven were the most reported corvid with records throughout the area. Four were together at Quorn and Swithland Reservoir.

Most of the **Coal Tit** records were of garden birds but a total of 35 were caught and ringed at Charnwood Lodge in the last three months of the year. As usual Kelham Bridge provided the most **Willow Tit** records but one visited a garden at Holwell twice in December. The majority of other Tit records were from NJ's ringing notes at Charnwood Lodge at the end of the year. The totals were as follows; Five **Marsh Tit**, 42 **Blue Tit** and 62 **Great Tit**. The largest group of **Long-tailed Tit** were at Groby Pool where there were 20 in November, and at Mountsorrel Meadows where there were 15 in October.

Single **Skylark** were seen at Cotes and Cropston both in July.

One hundred **Sand Martin** were over Swithland Reservoir in July and 20 holes were being used in the artificial wall at Kelham Bridge. Three hundred **Swallow** were feeding over Cropston Reservoir in August and the last report was from Kelham Bridge on 21 September. There were at least 12 **House Martin** nests in a Quorn street and young birds were feeding over the gardens in August. The last sighting was from Quorn on 28 September.

There were only three **Willow Warbler** records; well spaced and only one bird per record. **Chiffchaff** on the other hand, were numerous and widespread, there were six wintering birds at Quorn and Barrow sewage works on 3 December. A **Siberian Chiffchaff** was seen at lbstock on 3 November.

Reed Warbler were only noted at Groby Pool and the Grantham Canal but surprisingly no Sedge Warbler were mentioned. A Cetti's

Warbler was seen and heard in early November at Groby Pool. Blackcaps were well reported in autumn and one in late December. Two Garden Warbler were seen at Newtown Linford on 29 August. A few Whitethroat were noted with five at Cropston on 30 July.



Whitethroat © Jim Graham

A lone **Firecrest** was with a Tit flock at Ibstock Sewage Works on 3 November and a total of 18 **Goldcrest** were ringed at Charnwood Lodge in late autumn, but only four **Wren** were ringed in the same period. Eight Wren were counted at Watermead Park on 4 December.

Numerous **Nuthatch** were noted, generally at Swithland Reservoir, Bradgate Park and Groby Pool, although six were counted in Swithland Woods on 16 October. **Treecreeper** were only seen in Bradgate Park and Charnwood Lodge where a total of four were ringed.

The largest number of **Starling** was 60 in a Holwell garden in September.

Ten **Blackbird** at Watermead Park in December was the biggest count but smaller numbers were very evident around the area. Very few **Fieldfare** were noted with a maximum count of 27 at Albert Village Lake in November. **Redwing** were much more noticeable, mainly at Charnwood Lodge where 180 were ringed during the period. **Song** and **Mistle Thrushes** were recorded in equal numbers but disappointingly only a total of seven birds each.

Robin were everywhere with maximum counts of 14 in Swithland Woods and ten around Cropston Reservoir. A **Black Redstart** was at Ibstock Brickyard on 19 November whilst two male **Redstart** were regularly seen in

Bradgate Park between late July and mid-August.

Two **Whinchat** were at Brascote Pits on 26 August and two **Stonechat** were in Bradgate Park later in the year. Single **Wheatear** were at Brascote Pits and Buckminster, Melton, both in August.

Small numbers of **Spotted Flycatcher** were seen at four sites, Bradgate Park, Newtown Linford, Groby Pool and Thornton Reservoir.

The majority of **House Sparrow** records came from a Holwell garden where there were regularly high numbers with a maximum of 50 in October. Few **Dunnock** were noted and three were ringed at Charnwood Lodge.



Dunnock © Jim Graham

The only Yellow Wagtail of the summer was at Cropston on 25 August. Grey Wagtail were seen in ten different locations including gardens, and there were six at Cropston Reservoir on 9 September. There were virtually no Pied Wagtail mentioned. Twenty Meadow Pipits were found in Bradgate Park on 21 November and a single Tree Pipit was at Kelham Bridge on 22 August.

Although widespread, there were very few Chaffinch reported with the largest group being just five in a Holwell garden. A Hawfinch flew over Ibstock on 28 October. The most Bullfinch seen together was six at Groby Pool on 27 November. Greenfinch were mainly garden birds with no more than four noted. Small numbers of Linnet were only seen at Cropston and Bradgate Park where the only Lesser Redpoll were also noted, one in late October and November. The only finch species in any numbers were Goldfinch, some on garden

feeders, but the majority in Bradgate Park where there were 65 on 15 August. The same site had 20 **Siskin** on 8 December.

The most **Yellowhammer** together were six at Newtown Linford on 29 August and the only **Reed Bunting** were seen at Brascote Pits and Cropston Reservoir, with one and two birds respectively.

Baz Forgham

REPTILES AND AMPHIBIANS

Q3 & Q4 - July to December 2019

These notes cover sightings for the last two quarters of 2019, which are few in number.

Common Lizard Zootaca vivipara: we have only two sightings of this reptile – both of them courtesy of HI & SFW. The first was a single specimen seen on 3 July in Swithland Wood, near the Great Pit enclosure, recorded by SFW. The second one was again a single specimen at North Luffenham Airfield on 17 July. This one was running across the airfield runway!

Grass Snake Natrix natrix: once again we have only two sightings – the first from PJD who found one in a friend's compost bin at Ulverscroft on 9 August. The second one was squashed on the road at Waltham, noted by SFW.

Common Frog Rana temporaria: rather unusually, particularly for this time of year, we have several sightings of this amphibian. Firstly a single adult in a pond at South Luffenham on 17 July seen by SFW & HI who also recorded another single specimen at Market Bosworth Park on 7 September. ATO found an adult, 5 cm or a bit less in body length, which had joined a larger specimen in some saucepans full of water in the back garden in Shelthorpe. The saucepans were well shaded and retained the water well after rain. The two frogs remained in the saucepans until the end of September or early October, at which time they disappeared, presumably to go into hibernation. Finally, while digging in the north-facing front garden on 15 December, ATO found a single frog approx. 3 cm in length. It was transferred to the south facing back garden which is appreciably warmer.

Some of the records from our gardens may appear to be commonplace and therefore perhaps not important. However these sightings and their dates are important, because, taken over a period of time, they build up a picture of changes which are taking place in our landscape, both rural and urban, and the effect these changes are having on our fauna. In particular there is obviously increasing concern over the effects which climate change is having on our wildlife, including those creatures which we find in our gardens and may, at present, regard as common.

Tony Onions

DRAGONFLIES and DAMSELFLIES

Dragonflies and Damselflies in 2018

As in 2017, records for dragonflies and damselflies were very low both in volume and quantity. There follows a brief report on species found during the year.

Emerald Damselfly *Lestes sponsa*: There were no records received despite being recorded in at least 35 10km squares in VC55 since 2000.

Banded Demoiselle Calopteryx splendens: the first of the year was a male noted on the River Lin in Bradgate Park on 19 May. Subsequently, it was recorded at 26 further sites mostly of one or two. There were three double-figure counts: 30 on the River Soar near Zouch on 26 May, 20 on the River Sence at Sheepy Magna on 11 July and ten at Newtown Burgoland Marshes on the 1st. The last of the year was a one on the Grand Union Canal at Loughborough on 23 August.



Banded Demoiselle © Jim Graham

White-legged Damselfly *Platycnemis pennipes*: as in 2017, no records were received for this species despite recent increases due to improved water quality.

Azure Damselfly Coenagrion puella: the first of the year came in on the same day and location as in 2017; PHG's Quorn garden on 18 May. Small numbers were found at only six further locations with the highest count being just four in HS's Quorn garden on 24 May. The final record came from this location on 22 July.

Variable Damselfly Coenagrion pulchellum: it looks as though no one surveyed the Grantham Canal this year as no reports were received.

Common Blue Damselfly *Enallagma cyathigerum*: noted at 17 widespread sites between 15 May and 3 September. Numbers were low with records being of one or two. The only breeding seen was a pair at Luffenham Heath Golf Couse on 24 May.

Red-eyed Damselfly *Erythromma najas*: there were just five records from four sites all involving the River Soar. The first was of two at Normanton-on-Soar on 26 May. There were several near the Otter Inn, Kegworth on 6 June, a male at Barrow-upon-Soar on 12 July, several close by on the 22nd and finally a few near Dishley Pool on 10 August.

Small Red-eyed Damselfly *Erythromma viridulum*: no records were received for this species, possibly being overlooked.

Blue-tailed Damselfly *Ischnura elegans*: the only count of any significance was 20 adults on the River Soar near Zouch on 26 May. Records of one or two came from a further ten location with the last for the year being one at Bradgate Park on 3 September.

Large Red Damselfly *Pyrrhosoma nymphula*: found in just eight locations, including four gardens in Quorn, between 6 May and 7 July. Most records were of one or two but five, including two mating pairs, were in HS's Quorn garden on 18 May.

Southern Hawker *Aeshna cyanea*: the first of the year, a full month later than in 2017, was in PHG's Quorn garden on 20 July. The best count was of three in HS's Quorn garden on 27 September and the final record was from the same location with a mating pair on 10 October.

Brown Hawker *Aeshna grandis*: records came from 15 widespread and varied sites between 10 June and 29 September. Most were of one or two with four frequently seen in PHG's Quorn garden during July the best count.

Migrant Hawker Aeshna mixta: records came from just six sites between 15 July and 7 October. Most were of up to three with "several" being noted in Swithland Reservoir Waterworks gardens in early September.

Emperor Dragonfly Anax imperator: records came from just three sites, two involving the River Soar, at Quorn and Barrow-upon-Soar and on the Grand Union Canal near Barrow-upon-Soar. At Quorn, a female was noted to be laying eggs under the leaves of Yellow Water-lily (PHG).

Hairy Dragonfly *Brachytron pratense*: as with Variable Damselfly, usually found along the Grantham Canal, no records were received confirming that none of our recorders visited the area during the season.

Broad-bodied Chaser *Libellula depressa*: one or two were located at four sites between 20 May and 13 June but five were noted near North Farm on the Shenton Estate on 23 May.

Four-spotted Chaser Libellula quadrimaculata: there were just two records, both of singles, on a pond at Luffenham Heath Golf Course on 24 May and on Springfield Lake at Quorn on 11 June.

Black-tailed Skimmer *Orthetrum cancellatum*: surprisingly no records were received.

Ruddy Darter *Sympetrum sanguineum*: reported from four sites; the first was one on the River Welland near Bringhurst on 15 July. The highest count was just three at Cropston Reservoir on 5 August.



Ruddy Darter© Jim Graham

Common Darter Sympetrum striolatum: records were received from 12 widespread sites. The first was a male on the River Welland near Bringhurst on 15 July. All records were of one or two except for five at Charnwood Lodge on 29 September. The final records were on 19 October.

Dragonflies and Damselflies in 2019

Emerald Damselfly *Lestes sponsa*: as in 2018, there were no records received despite being widespread in VC55.

Banded Demoiselle Calopteryx splendens: the first of the year was one noted near Horn Mill, Rutland on 23 May. Records came from a total of six locations, well below the 27 in 2018. No count was in excess of three as opposed to a maximum of 30 in 2018. The final sighting was at Buddon Brook Meadow on 20 August.

White-legged Damselfly *Platycnemis pennipes*: as in 2017 and 2018, no records were received for this species.

Azure Damselfly Coenagrion puella: the first of the year came from the same location as in 2017 and 2018; PHG's Quorn garden on 17 May – a day earlier. Small numbers were found at only five further locations with the highest count being just four in HS's Quorn garden on 15 July, this was also the final record of the year.

Variable Damselfly Coenagrion pulchellum: the only record received was of six near the Stathern Bridge on the Grantham Canal on 5 June during the Club's field outing.

Common Blue Damselfly *Enallagma cyathigerum*: noted from seven locations well below the 17 in 2018. Numbers were low with records being of one or two from 21 May through to 30 June.

Red-eyed Damselfly *Erythromma najas*: there were just two records, singles, near Redmile on 4 June and on the Quorn Brook on 13 July.

Blue-tailed Damselfly *Ischnura elegans*: strangely, no records were received.

Large Red Damselfly *Pyrrhosoma nymphula*: found in just five locations between 14 May and 13 July. All were of singles except for "several" in Croxton Park on 28 May.

Southern Hawker *Aeshna cyanea*: all records came from HS's Quorn garden. The first of the year was on 15 July. All sightings were of singles except for a pair mating on 27 August.

Brown Hawker Aeshna grandis: records came from just four locations, compared to 15 in 2018, between 17 July and 26 August. Three were noted at both Buddon Brook Meadows on 8 August and Charnwood Lodge on the 24th.

Migrant Hawker *Aeshna mixta*: singles were found at just three sites between 8 August and 6 October.

Emperor Dragonfly *Anax imperator*: no records were received.

Broad-bodied Chaser *Libellula depressa*: noted at only two sites between 21 May and 20 June.

Four-spotted Chaser *Libellula quadrimaculata*: no records were received.

Black-tailed Skimmer *Orthetrum cancellatum*: no records were received.

Ruddy Darter *Sympetrum sanguineum*: no records were received.

Common Darter Sympetrum striolatum: reported from five sites between 15 July and 6 October. Most were of singles with 16 at Charnwood Lodge on 24 August and six, including two pairs, at Bradgate Park on 6 October.

Jim Graham

BUTTERFLIES

Q3 - July to September 2019

Hesperidae

Large Skipper Ochlodes venata: there were two single sightings in different locations on 19 July at Church View gardens, Quorn and Bede Island on 6 August (HB).

Small Skipper *Thymelicus sylvestris:* observed between the 9 July and the 9 August in six locations. Ten were noted at Evington Golf Course on 3 July (HB), 18 were seen at Sense Valley Forest Park on 9 July (DBF) and 36 were recorded at Buddon Brook Meadows on 17 July (HS).

Essex Skipper Thymelicus lineola: it is difficult to distinguish this species from the similar Small Skipper unless you are lucky enough to observe it closely from the right angle. The main difference is the underside of the tips of the antennae – the Essex Skipper has black tips. Essex Skipper was noted in six locations between 26 July and 12 August including three seen by HI & SFW in Glenfield Parish on 26 July.

Pieridae

Brimstone Gonepteryx rhamni: 27 were observed between 29 July and 25 August, mostly one at a time. Three were seen at Buckminster parish by HI & GH on the 8 August. These were usually unspecified or males. A female was noted on 16 July at Quorn (PHG) and at Broad Hill, Mountsorrel on 25 August (HS).

Large White *Pieris brassicae*: 34 were observed, quite widely, mainly in ones or twos between 5 July and 19 September.

Small White Pieris rapae: this butterfly was quite common between 1 July and 30 September; a total of 142 were counted. Several people just described them as frequent throughout the period rather than giving numbers. I saw six on Broad Hill on 25 August and two counts of five in my Quorn garden and again at Broad Hill on 3 August and 5 September (HS).

Green-veined White Pieris napi: was recorded, mainly as singletons, between 1 July and 30 September. A total of 27 were counted in 17 different locations but several people noted they were present in small numbers throughout the quarter. PHG noted several laying eggs on watercress on the brook side at Quorn Memorial garden on 13 July.

Lycaenidae

Small Copper Lycaena phlaeas: a total of 44, mainly singletons, were seen in 11 different locations by members between 12 July and 30 September. Three were seen by HI & SFW on 21 September on Mountsorrel. I recorded four at Charnwood Lodge on 24 August, three at Charnwood Lodge on 7 August and three at Buddon Brook Meadows on 20 August. JH saw one near a colony of Sheep's Sorrel, a larval food plant, in St Bartholomew's Churchyard in Quorn.

Common Blue *Polyommatus icarus*: between 9 July and 17 September, a total of 78 were seen at 22 different locations. HB saw 14 at Ellis Meadow on 7 August. Nine (five male and four female) were noted at Buddon Brook Meadows on 28 August (HS). Nine (four male and five female) were also seen at Buddon South Mound on 25 August and seven (six male and a female) were seen at Broad Hill on the same date (HS).

Brown Argus Aricia agestis: a total of 25 were seen in eight different places between 8 August and 17 September. Eleven were recorded at Buddon Brook Meadows on 8 August (HS). It was a good year for both this butterfly and the Common Blue in our area.

Holly Blue *Celastrina argiolus*: 19, mainly singletons, were seen in ten different locations between 23 July and 1 August.



Holly Blue © Jim Graham

Purple Hairstreak *Quercusia quercus:* there was only one sighting, on the 16 July at Wood Lane, Quorn on the Rothley Common side of the road (HS).

Nymphalidae

Many of the *Vanessids* were recorded as nectaring on buddleia. HB reported that after several blank years in 2019 his "Butterfly Bush" lived up to its name.

Red Admiral Vanessa atalanta: a total of 229 were noted throughout the quarter in many different locations. Eleven were seen at Broad Hill, Mountsorrel on 25 August (HS), nine at Garthorpe on 1 September (HI & SFW) seven at Spinney Hill Park on 3 September (HB). I recorded nine in the garden at Quorn on 2 September and eight each time in the garden on 28 and 30 August and 3 September (HS).

Painted Lady, Vanessa cardui: a news item heard by ATO on 3 August mentioned that warm weather and a southerly wind had brought a large number of Painted Ladies to the UK. There were 173 sightings of this butterfly ranging from 1 July to 21 September in widespread locations. Seventeen were noted at Broad Hill on 3 August and ten at the same location on 25 August (HS). Seven were seen in Buddon Brook Meadows on 20 August (HS). Five were noted at Gartree Road on 3 August (HB) and were also seen at Hugglescote on 24 August (DBF). Four were seen at Gates Garden Centre, Cold Overton on 29 July (HI & SFW).

Small Tortoiseshell Aglais urticae: 150 were counted between 2 July and the 26 September in many locations. DBF saw 13 on 24 August at Hugglescote. Six were seen by HI & SFW in Garthorpe Parish on 1 September. Five were seen in my Quorn garden on both 23 and 25 August.

Peacock Aglais io: 197 were recorded between 14 July and 5 September including 30 at Broad Hill on 3 August, 17 in my Quorn garden on 2 and 3 August, 15 on 1 August, and 12 on 4 August (HS). PHG recorded eight or more on 2 August in Quorn and ATO saw six in Loughborough on 1 August. HI & SFW recorded six at Burton Lazars on 12 August.

Comma Polygonia c-album: 82 were noted between 10 July and 30 September. These were mainly sighted in ones and twos but HI & SFW saw four at Twycross on 17 September.

Purple Emperor Apatura iris: there were no sightings of this butterfly reported by members. However, according to information from Butterfly Conservation, individuals were seen at Charnwood Lodge, Beacon Hill and Bardon Hill in the third week of July. Hopefully one of our members will be lucky enough to see one in 2021.

Silver-washed Fritillary *Argynnis paphia:* only one person was fortunate enough to see this butterfly, at Thorpe Acre Green in Loughborough on 30 August (ACR).

Satyridae

Speckled Wood Pararge aegeria: 72 were seen between 2 July and 26 September. DBF saw eight at Sence Valley Forest Park on 5 August.

Seven were noted at Buddon Brook Meadows on 8 August, six were recorded at Buddon Brook Meadows on 24 August and another six at Charnwood Lodge on 26 August (HS).

Marbled White Melanargia galathea: like the Silver-washed Fritillary and Purple Emperor, this butterfly is gradually extending its range northwards and is expected to be seen more often in our area. It was recorded three times by HI & SFW. Three were seen at Tickencote on 1 July, two were seen at North Luffenham Airfield on 17 July and one in Bradgate Park on July 18 - this is an unusual site as it is usually found on calcareous soil.

Gatekeeper *Pyronia tithonus:* this was common in many locations between 11 July and 1 September with 311 noted by members. DBF recorded 62 at Sence Valley Forest Park on 5 August. About 36 were seen on Evington Golf Course on 3 August (HB) whilst 32 were noted at Charnwood Lodge in August and 22 at Buddon Brook Meadows on 8 August (HS). ATO mentions seeing this butterfly on ragwort. In my garden they are also often to be seen nectaring on marjoram.

Meadow Brown Maniola jurtina: this was common between 1 July and 25 August with 94 being counted by members. At Buddon Brook Meadows 24 were recorded on 17 July (HS). The butterfly was often described as frequent or people said they had seen several rather than giving an actual number.

Small Heath *Coenonympha pamphilus*: this was recorded between 2 July and 7 August. HI & SFW had singletons in four locations and I saw seven at Charnwood Lodge on 7 August.



Small Heath © Steve Woodward

Ringlet Aphantopus hyperantus: 392 were recorded by members from 1 July until 7 August. HB described them as very common on Evington Golf Course on 3 July. DBF saw 266 at Sence Valley Forest Park on 9 July. Fifteen were noted by SFW & HI at Burton and Dalby parish on 15 July, and 29 were recorded at Buddon Brook Meadows in Quorn on 17 July (HS).

Q4 - October to December 2019

A few butterflies were recorded at the beginning of October and just one in November.

A Painted Lady Vanessa cardui and a Small White Pieris rapae, were seen in Quorn on 6 October (HS). JG reported seeing a Painted Lady flying in a bedroom in Holwell on 28 October. HI & SFW saw a single Red Admiral Vanessa atalanta, on 8 October at Wing, on 9 October at Whitwick and at Groby on 10 October. Two Red Admirals were also seen at Quorn on 9 October and a Comma Polygonia c-album was seen at Quorn on 12 October 12 having found its way indoors (HS). HI & SFW noted a female Brimstone Gonepteryx rhamni, at Great Bowden on November 26.

Thank you to everybody who sent in Butterfly records for these two quarters.

Helen Shacklock

MOTHS

We would like to apologise to Graham and Anona for inadvertently omitting the first quarter moths report from the previous edition of Heritage.

Q1 - January to March 2019

Just one other person sent in records for this quarter, between us we covered four sites for 554 individual moths of 31 species all attracted to MV light. The actual total of individuals will be much higher, but no numbers were included with the Whitwick records, so I have just done a minimum count of one for each species recorded. I am well aware that counting individual moths at a trap can be a little daunting sometimes, but the numbers of certain species can be as interesting as the species themselves, particularly throughout the winter months. Also the additional records are from a garden directly

butting up to Holly Hayes Wood in Whitwick, this used to be a well-known site historically but very little recording has been undertaken in modern years, already this site is producing some interesting records, it will only get better. Permission was also granted to run moth traps in Sheet Hedges Wood, this is another site that has had a decent reputation in previous years, not just for Lepidoptera, but again little recording has been done recently; we are looking forward to regular visits here. The wood itself is quite a size approx. 90 acres of mixed woodland with a central meadow. There are a few public access trails, but the parking close to the site is limited and probably best from the Groby Pool car park approx. ten minutes walk. Although it is designated as a SSSI, most of the categories from Natural England state it is "unfavourable to recovering". Even so, this area is well worth the effort to get there and I have no doubt there will be some very interesting species to be found, and again not just Lepidoptera.

Okay, so on to the species accounts starting with the micro moths. A solitary bright purple and speckled with silvery white Eriocrania sangii was in Grange Wood in mid-March. A single Ypsolopha ustella was in Lount Nature Reserve early in January. Mid- to late March had Diurnea fagella out in numbers with single night totals of 58 in Grange Wood and 33 Sheet Hedges Wood. The only Plume moths recorded were both from Whitwick, Beautiful **Plume** Amblaptillia acanthadactyla and Common Plume Emmelina monodactyla. Tortricodes alternella were on the wing and widespread from early January and a single stunning Acleris kochiella was recorded at Whitwick. Mid-March in Grange Wood produced 21 Yellow Horned Achlya flavicornis plus a singleton at Whitwick. It was almost the end of March before the first and only recorded Water Carpet Lampropteryx suffumata was seen at Sheet Hedges Wood. Brindled Pug Eupithecia abbreviata did the same but was instantly found at all sites, several nights well into double figures. The first Early Thorn Selenia dentaria was at Whitwick.

All the following species were widespread and recorded from at least three of the four sites, some were at all four. I will just list all the rest of the species that were recorded but add

a comment where thought interesting: March Moth Alsophila aesularia, Pale Brindled beauty Phigalia pilosaria, Oak Beauty Biston strataria, Spring Usher Agriopis leucophaearia, Dotted Border Agriopis marginaria, Engrailed Ectropis bistortata, Early Grey Xylocampa areola. Regarding Chestnut Conistra vaccinii, we operated four light traps at Charnwood Lodge on 7 January but all ten of this species were found at rest on tree trunks, and the only record of Grey Shoulder-knot Lithophane ornitopus came from Whitwick. Satelite Eupsilia transversa, Clouded Drab Orthosia incerta, Common Quaker Orthosia cerasi were all widespread. The highest number of the last species was 56 in Grange Wood in mid-March, and the highest numbers Small Quaker Orthosia cruda were 75 and 73 at Sheet Hedges Wood and Grange Wood respectively. Although just the one, it was nice to see Lead-coloured Drab Orthosia populeti in Grange Wood in mid-March. No surprise that Hebrew Character Orthosia gothica and Twin-spotted Quaker Anorthoa munda were everywhere. To finish up, singles of Red Chestnut Cerastis rubricosa and Oak Nycteoline Nycteola revyana were at Sheet Hedges Wood and Whitwick respectively.

Graham and Anona Finch

Q3 - July to September 2019

The total number of individuals recorded were approximately 7011, and the total number of species reached 359 and these were amassed by nine recorders. This included 12 sites where a moth trap had been operated, but also, as September is usually classed as the real start of the leaf mining season, we have a considerable number of records from the early feeding signs of 37 species of micro moths. In fact, an impressive count of 175 species of micros were recorded this quarter. This shows how much the interest in the "small fry" has increased, no doubt in a large part due to the ground breaking Field Guide to the Micro Moths of Great Britain and Ireland by Sterling, Parsons and Lewington (2012). This has become the "micro mothers" bible and covers 1033 of the 1627 species on the British list and although there are about another 600 species it does not cover, the majority of the species we are likely to get in our area are dealt with. Just a quick note on dealing with the data, once I have all the data for a quarter, I get them into an Excel spreadsheet with all the relevant details in the relevant columns, I can then filter on column headings, species names, locations and quantity, etc. So, providing each recorder has included the quantity in numbers I can easily and quickly do a sort and see which species has been recorded in the highest numbers. Of course, this does not work if the quantity states "many", "several", "lots" or a "few" this is a shame, as it's not too onerous to have a relatively accurate guess/estimate on numbers involved. All this extra detail not only makes every single record that much more interesting but also meaningful. This is really useful as I can now see the species which has been recorded the most often and how many individuals for each species, plus all the species that are still getting recorded in single figures. I guess what I am getting at is, I would love everyone to try and provide a number count with their records.

Okay, on with the summary. Orange Swift Triodia sylvina was recorded at Altar Stones, Billa Barra and Cliffe Hill Quarry, whereas Mapwinged Swift Korscheltellus fusconebulosa was only reported from Charnwood Lodge, similarly a single **Ghost Moth** *Hepialus humuli* only from a Whitwick garden. To write a reasonable comprehensive account of the micros would take up the whole report, so I'll try and cherry pick a few of the more notable species. The mines of *Heliozella resplendella* found on Alder at Albert Village Lake, *H. hammoniella* on Birch at the same site and also at Cloud Wood. The pale "fried egg" shaped mines of Tischeria ekebladella were widespread on Oak, Bucculatrix ulmella mines also on Oak in Cottesmore Wood and the delicate leaf folds of Euspilapteryx auroguttella were on St. John'swort in Cloud Wood. Exton Estates had Phyllonorycter esperella mines on Hornbeam, Albert Village Lake had *Phyllonorycter* klemannella mines on Alder and the familiar mines of Horse Chestnut Leaf-miner Cameraria ohridella were found in large numbers all over VC55. The silvery, meandering surface mines of the adventive Phyllocnistis citrella were found on Kumquat fruits at Welland Vale Garden Centre. This species seems to be quite regularly found on citrus fruits in supermarkets and garden centres recently. The only records for Ypsolopha scabrella came from light traps at a Loughborough garden and Ypsolopha sequella from a Whitwick garden, both as singletons. Diamond-back Moth Plutella xylostella although only in low numbers was widely reported and Apple Leaf Miner Lyonetia clerkella was also widespread with mines found on Apple, Birch and Cherry. The distinctive spiral mines of Laburnum Leaf Miner Leucoptera laburnella was found at the usual site on Melbourne Road, opposite Kelham Bridge. A single *Caryocolum fraternella* was taken at The Drift, there are very few records of this Stitchwort feeder for VC55. The case bearing Coleophora potentillae was found Meadowsweet at Tunnelly Wood, again, only a couple of previous records for this, also a single Coleophora deauratella was attracted to light at The Drift, identity was confirmed by dissection.

A nice selection of Plume moths were recorded: Many-plumed Moth Alucita hexadactyla, Yarrow Plume Gillmeria pallidactyla, Beautiful Plume Amblaptilla acanthadactyla, Brown Plume Stenoptilia pterodactyla, White Plume Pterophorus pentadactyla and Common Plume Emmelina monodactyla, all were in single figures and most were from gardens. The most widespread and numerous was Light Brown Apple Moth Epiphyas postvitana. I know I've mentioned this before, but Green Oak Tortrix Tortrix viridana has been recorded at ridiculously low numbers for some time now, we have three sightings this quarter of a catch of four and two catches of singletons. It's good news for the Oaks, but will we ever see this back in daytime observations and nightly catches of 100's? Quite a few reports of Bee Moth Aphomia sociella mainly from gardens and the only records of Gold Triangle Hypsopygia costalis were from a Whitwick garden and Hypsopygia glaucinalis from a Loughborough garden all as singletons. Singles of Rusty-dot Pearl Udea ferrugalis from Whitwick and Rush Veneer Nomophila noctuella from Cliffe Hill Quarry were the only reports of these migrants. Recorded on most nights was Large Yellow Underwing Noctua pronuba recorded on 47 nights, but the moth with highest totals for a single night's catch was

Dark Arches *Apamea monoglypha* - 175 individuals.

I'll begin the summary with Oak Lutestring Ochropacha duplaris which was only recorded at Charnwood Lodge and Whitwick with a single Pale Eggar Trichiura crataegi from Staunton Harold. Poplar Hawk-moth Laothoe populi was reported widespread just singles of Privet Hawkmoth Sphinx ligustri and Pine Hawk-moth Sphinx pinastri from The Drift near Croxton Kerrial. Reported in singletons Hummingbirdbird Hawk-moth Macroglossum stellatarum although fairly widespread, was only reported from various sites on the Charnwood Forest and all (seven) records of Elephant Hawk-moth Deilephila elpenor came from two gardens at Whitwick and Loughborough. Out of 26 records of 87 individuals of Riband Wave Idaea aversata only 11 were of the non-banded form, meaning the majority were of the banded form. Waring and Townsend states that the banded form is "more frequent in southern Britain than the north". So, we are either in the "cross-over" zone from south to north or maybe the banded form really is moving further north? Adrian Russell is keeping a tally on this and he may be able to shed some light on this in the near future.



Northern Spinach © Jim Graham

As Bilberry is the food plant for **Northern Spinach** *Eulithis populata* no surprise all our records are from this area, the closely related and similar looking **Barred Straw** *Grandaritis pyraliata* with Cleavers and Bedstraws as the food plants and is much more widespread, but this quarter was only recorded from Croxton

Kerrial. A total of seven species of "Pug" moths were recorded the most interesting being Slender Pug Eupithecia tenuiata, a singleton was attracted to light in a Loughborough garden towards the end of its flight period in July. We seem to be getting a few more reports of August Thorn Ennomos quercinaria these last couple of years, which could well be partly due to our improving ability to separate it from similar looking species. The two confusing species are Dusky Thorn Ennomos fuscantaria and September Thorn Ennomos erosaria, the main give-away is the white "knee-socks" forming a distinct colour break from the tibia and femur. The only records for Barred Yellow Cidaria fulvata were two from Loughborough with two Iron Prominent Notodonta dromedarius, and singles of **Pebble Prominent Notodonta ziczac** and Swallow Prominent Phoesia tremula from Whitwick. Lesser Swallow Prominent Phoesia gnoma was well reported in reasonable numbers, but just a solitary Pale Prominent Pterostoma palpina from Charnwood Lodge.

Always a nice moth to see is White Satin Leucoma salicis with two adults at light from Whitwick but there was a reduction in sightings of Black Arches Lymantria monarcha found at just Charnwood Lodge and Quorn. Almost all the reports for Cinnabar Tyria jacobaeae were of larvae, a single Muslin Footman Nudaria mundane was found at Charnwood Lodge and a solitary Round-winged Muslin Thumatha senex was attracted to light in a Quorn garden. Buff Footman Eilema depressa, Dingy Footman Eilema griseola, Common Footman Eilema lurideola and Scarce Footman Eilema complana were all widely reported, but Orange Footman Eilema sororcula came only from Whitwick and Charnwood Lodge. Although all in low numbers with three individuals being the highest number of any one sighting, Silver Y Autographa gamma was very widely reported. The first Dusky Sallow Eremobia ochroleuca appeared bang on time in late July at Croxton Kerrial and Rosy Rustic Hydraecia micacea around the same time at Whitwick. A single record of the local Twinspotted Wainscot Lenisa geminipuncta was a very nice find from a Quorn garden in early August. All the regular Sallow moths started to show from mid-August and continued through to the end of September. Angled-striped Sallow Enargia paleacea was well reported this

quarter. This used to be something of a north west of the county speciality, but is now found in smaller numbers much further afield. The lovely Brindled Green Dryobotodes eremita was found at Staunton Harold and Whitwick, and a very nice record of Grey Chi Antitype chi and Black Rustic Aporophyla nigra on three nights in September, both species from Whitwick. Heart and Dart Agrotis exclamationis was out and about in good numbers, most nights reported well into double figures. The only Turnip Moth Agrotis segetum and Purple Clay Diarsia brunnea records came from the two gardens at Loughborough and Whitwick. Also at Whitwick and coming to the end of its flight period, was just a single Ingrailed Clay Diarsia mendica. Lots of records for Broad-bordered Yellow Underwing Noctua fimbriata and Lesser Yellow Underwing Noctua comes both species were very widely reported. July and August at Whitwick returned the only records of Green Arches Anaplectoides prasina, Dotted Clay Xestia baja and Square-spotted Clay Xestia stigmatica. It will be noticed that the bulk of the records come from the regularly operated light traps in the two Loughborough and Whitwick gardens, with only a few forays out into the wider countryside. The beauty of being involved in a regular constant site effort often delivers the rewards of several choice species, the outcome of which has been proved by the above results.

Q4 - October to December 2019

A lean last quarter for the year with less than 200 adults being recorded, plus 95 leaf mine records which brought us to a total of 72 species from five recorders. Still well in the leaf mining season and it shows how important it is to record the early feeding stages as 42 species of micro moths were found, many of which would be extremely difficult, if not impossible, to determine other than by dissection. If it wasn't for the majority of these species being far easier to identify from their mines and cases, we would probably never know they are around. Starting off with the micros, several additional species of leaf miners were added to the year list: Ectoedemia subbimaculella off Oak, E. atricollis off Hawthorn and E. occultella off Birch. The last two species are particularly similar and if taken as adults would be extremely difficult to tell apart. Another three species that are relatively easy to record off Oak are Heliozela sericella, Tischeria ekebladella and Bucculatrix ulmella. Once you have your eye in for these species it's surprising how often you actually find them, but if you were relying on sightings of adults, you could be forgiven for thinking they are very rare. Parornix species are notoriously difficult to identify, therefore it is recommended they are bred from the host plant or dissected for confirmation. The Blackthorn feeding species Parornix finitimella and Parornix scoticella present another problem as their mines are identical and are best not used to separate the species. However, if the mines are tenanted a quick look with a hand lens at the caterpillars will provide a determination. P. finitimella are greyish with black rings on the legs, whereas P. scoticella is more or less pale green with concolorous legs; P. finitimella was found on Blackthorn along the margins of Thornton Reservoir, the latter was not recorded this quarter.

Recognising the host plant species is the key to finding these tiny moths so finding Norway Maple in Coleorton Wood we immediately looked for a fairly large blotch mine on the underside of the leaves for Phyllonorycter *joannisi* and there they were. Up until fairly recently, Tachystola acroxantha was infrequently seen but these last few years it has become a garden species and a singleton was attracted to light in a Whitwick garden. The Coleophora family are another notoriously problematical group, the larvae of these have portable cases and many are host-specific so finding the host is half the battle. The distinctive pale windows and cases on the leaves of Rose at Thornton and Coleorton added them to the



Mottled Umber © Graham Finch



Merveille-du-Jour © Graham Finch

day's list. Out of the 42 species of micro moths only four were identified from the adult stage learning the early feeding stages is so important in the fascinating world of micro lepidoptera. Out of the 25 species of macro moths recorded only one species made it into double figures, Red-Green Carpet Chloroclysta siterata with a total of ten individuals. Sightings of Winter Moth Operophtera brumata were late in appearance not showing until well into November, the same applied to Feathered Thorn Colotois pennaria and Mottled Umber Erannis defoliaria. A marked difference from last quarter, just two reports of Silver Y Autographa gamma, with singles of each from both Ibstock and Whitwick. The striking caterpillar of Sycamore Acronicta aceris was found near the Monastery in Charley parish early in October. Despite the amount of trapping last quarter, Chestnut Conistra vaccinii and Dark Chestnut Conistra ligula were only recorded from Charnwood Lodge and Whitwick. One our most "wanted" moths Merveille-du-Jour Griposa aprilina was recorded several times and Black Rustic Aprorophyla nigra was on the wing all through October, both species were attracted to light at Whitwick. Lastly a single Oak Nycteoline Nycteola revayana was recorded from Charnwood Lodge mid-November.

Many thanks to members for sending in their records.

Anona and Graham Finch

BEETLES

We would like to apologise to Graham for inadvertently omitting the first quarter beetles report from the previous edition of Heritage.

Q1 – January to March 2019

The weather at the beginning of the year was quite mixed, but mainly fairly mild. We had some really warm days, fairly dry and windy and cooling down towards the end of the quarter. Even so, four recorders managed to find and record 450 individuals of 75 species - very nearly double compared to the 2018 corresponding quarter. The totals for the main groups were: Carabids 28, Staphs 20 and Ladybirds an impressive nine species. The only water beetle recorded was **Nebrioporus depressus** found at Charnwood Lodge in mid-March. Sieving reed litter at Saddington Reservoir and grass tussocks at Loughborough Big Meadows produced the only Leistus fulvibarbis. Although a total of seven Nebria brevicollis were found under various stones at Charnwood Lodge, this was the only record of this usually abundant species. Most of the Bembidion species found in the previous quarter were in evidence plus a few additional species Bembidion aeneum and B. properans from a grass tussock at Seaton Meadow. Saddington Reservoir produced B. properans plus B. dentellum, B. tetracolum and B. fumigatum all from sieved grass tussocks, B. fumigatum was found at Ratchett Hill and B. gilvipes at Lyddington Meadow. The usual Pterostichus species were found although most were in very low numbers, with Pterostichus madidus at Castle Donington, P. niger from the Outwoods, P. vernalis from a field near South Wood and Ratchett Hill. The most widespread was *P. strenuus* being found throughout at most locations visited. Loughborough Big Meadows in early February held singles of Agonum thoreyi, A. emarginatum and Trichocellus placidus. Other widespread species were Acupalpus dubius, Badister bullatus, Demetrias atricapillus and Paradromius linearis, but Philorhizus melanarius was only found at Stretton Wood.

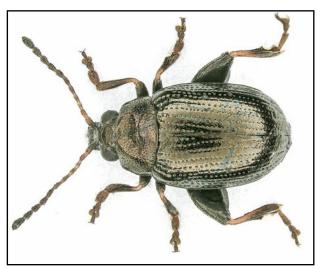
Starting the Staphs off with **Anthobium atrocephalum**, from a decayed Birch Polypore at the Outwoods, and the tiny **Sepedophilus nigripennis** from a grass tussock near South

Wood. A single **Bolitochara obliqua** was found in a drying-out dead Chicken of the Woods fungus on a roadside near Market Bosworth. Instantly recognised to genus by their large bulging eyes are the Stenus species, with just over 70 species in Britain and with almost 50 species recorded in VC55 you can be sure you will find members of this genus sooner or later. Sieving grass tussocks at Castle Donington provided four Stenus clavicornis, the same method for singles of S. juno and S. similis at Loughborough Big Meadows, plus nine at Seaton Meadow and another single at Lyddington Meadow and S. flavipes was found by sieving grass cuttings at Brown's Hill Quarry. More recognisable as Staphs, singles of Lathrobium elongatum at Loughborough Big Meadows, Philonthus carbonarius at Misterton Marsh, *P. cognatus* at Ratchett Hill and South Wood and P. nigrita from Bardon Hill. Very similar looking to the previous genus, a solitary Quedius cruentus was found at the Outwoods. Long, slim and very different in looks were singles of Othius punctulatus from the Outwoods, Atrechus affinis at Bardon Hill and Xantholinus linearis from Brown's Hill Quarry. The only dung beetles recorded were those from cow dung at Gumley late in February. They were singles of Aphodius fimetarius, A. prodromus and seven A. sphacelatus. Still sieving grass tussocks, two hibernating click beetles, both Agriotes lineatus were found in a field near South Wood. The presence of Meligethes aeneus was first noted early in March and numbers escalated from then on reaching uncountable numbers by the end of the month. Wherever there is Gorse the ever-present *Micrambe ulicis* can usually be found. Naturally the main sites for this species are on the Charnwood Forest, so it was nice to add records well away from this area; Brown's Hill Quarry and Gumley, almost at opposite ends of the county. Although being a tiny beetle it soon becomes a familiar species found when beating Gorse. The ladybird mimic Endomychus coccineus was found under bark of dead wood lying on the ground at Shenton Estates in early January.

Starting the ladybirds off with a single *Rhyzobius litura* from Brown's Hill Quarry early in March, and *R. rufa* four from Misterton Marsh in late February and two from Bardon Hill in late

March. The only 22-spot Ladybird Psyllobora vigintiduopunctata came from the Harborough district, from Misterton Marsh and Saddington Reservoir, and amazingly there is just a single record of a solitary Harlequin Ladybird Harmonia axyridis from the Outwoods. Several 2-spot Ladybird Adalia bipunctata were found in Gumley and were the only records of this species. The most frequently recorded species easily 7-spot Ladybird Coccinella septempunctata with sightings from early February through to the end of March noted from all corners of the county. Late February provided the only Water Ladybird Anisosticta novemdecimpunctata when two were swept from reeds at Saddington Reservoir. Beating Ivy and sweeping low vegetation at Brown's Hill Quarry added the only 22-spot Ladybird Tytthaspis sedecimpunctata. Likewise, Seaton Meadow held the only 24-spot Ladybird Subbcoccinella vigintiquattuorpunctata in early January. The Chicken of the Woods fungus at Charnwood Lodge in mid-March held six Eledona agricola. This is quite a small, but distinctive beetle at under 3mm belonging to the Tenebrionidae (darkling beetles) and lives in tree fungi. Although often found under bark or dislodged from dead branches, just a single Salpingus planirostris was found at Charnwood lodge in early February.

Just two species of the *Chrysomelidae* were reported this quarter with singles of *Oulema melanopus* from Stretton Wood and *Chaetocnema concinna* from Ratchett Hill and Saddington Reservoir. A total of four species of Weevils were recorded starting with **Gorse Weevil** *Exapion ulicis*, most records are from



Chaetocnema concinna © Graham Finch

the Charnwood Forest but this should be found everywhere that Gorse grows. Records for this quarter come from Bardon Hill, Gumley and Brown's Hill Quarry. The last site produced 20 individuals of the only record for Protapion trifolii, a small blackish weevil with two-tone yellow and black to dark legs. This is one of the many Apionidae species that are found on Clovers; this species is particularly fond of Red Clover, where the larvae develop in the flower heads. Sieving reed litter at the edge of Saddington Reservoir produced a single Notaris acridulus, overall blackish with small patches of paler hairs on the elytra. Almost always found in wetland habitats where its preferred food plants are sweet-reed grasses, Glyceria spp. and as usual the most widespread and abundant species noted was Sitona lineatus recorded from many sites and all by either sieving grass tussocks or reed litter.

Many thanks for those who sent in their records.

Graham Finch

Q3 - July to September 2019

A slight increase of individuals from the previous quarter with 2106 (2043 in Q2) but a slight drop in the number of species 187 (232 in Q2) from six recorders. The total of species for the main group numbers were: water beetles 25, Carabids 47, Staphs 24, Ladybirds 12, Chrysomelids 17 and weevils 28. I don't think we need to start getting too worried about this yet, but just a single species of Longhorn beetle was recorded! The most frequently recorded species was Pterostichus madidus with 15 records followed by Rhagonycha fulva with 13. Out of the 187 species recorded this quarter, only seven made it into double figures; it's amazing just how many of the remaining species were found as singletons.

On with the summary, *Gyrinus substriatus* was again the only member of this genus to be recorded. Flotillas of Whirligigs *Gyrinus* can be seen with ease on many still water bodies, netting them is another matter, unless you have reflexes akin to Bruce Lee. Most of the water beetles seen last quarter were recorded with a few additions including *Hydroporus angustatus*, from a well-overgrown pond beside the cricket

pitch at Bradgate Park and Hydroporus discretus and two *Dytiscus marginalis* from a fairly new pond in Swithland Wood. The start of a series of pitfall traps on Shenton Estates produced 20 out of the 25 species of *Carabids* recorded. The most notable Carabid has been Amara consularis. which came to MV light at The Drift. There have only been three previous records for this, the first two records only give a grid ref as SK41 High Sharpley in 1963, and SK41 Charnwood Lodge in 1965; the third is interesting though, as this is from The Drift at Croxton Kerrial in 1992, and is only about a mile from this latest record. Also seven of the Leiodid beetle Nargus velox were from pitfalls at the same site. There are always plenty of Staphylinidae species around, but it was really nice to see several species that definitely do not look like typical Staphs. Two such species were Rybaxis longicornis from Loughborough Big Meadows and Mountsorrel Marsh and *Brachygluta fossulata* from The Drift at Croxton Kerrial, both found by vacuum sampling. Otherwise, a good assortment of staphs was recorded including eight species of Stenus. The only Lesser Stag Beetle Dorcus parallelipipedus were of two individuals under bark at The Drift. A nice find on the Exton Estates in Rutland was a single Aphodius foetidus among dozens of Aphodius contaminatus in sheep dung. This species should be quite widespread in VC55, but there are just two previous records, Anstey Lane 1848-1895 F Bates, and Leicester Frith 1894-1898 JH Woolley, making this the third record in just over 100 years. A solitary and stunning Platycis minutus one of the "net-winged" beetles was attracted to MV light at Staunton Harold. Scarce in VC55 with just six previous records and five out of the now seven records have been recorded in August.

Records of the Soldier beetles were quite low with only four species found, and only *Rhagonycha fulva* in any numbers. We only have five records for *Axinotarsus marginalis* to date, three records from Bradgate Park, one from Cropston and the latest from Shenton Estates. As already mentioned, 12 species of Ladybirds were found with Harlequin Ladybird *Harmonia axyridis* being recorded only twice, which is very unusual as this is often one of the most recorded beetle species, not just Ladybirds. Although stated to be "widespread"

Orchesia undulata seems to be infrequent within VC55; we have just 15 records, this latest from Bradgate Park. A single adult of Prionychus ater was attracted to light at the Drift, Croxton Kerrial, with just seven previous records for this species; a large black Tenebrionid beetle that seems to be increasing, especially to light traps. The only Longhorn beetle found was Stenurella melanura swept during the day at Seaton Meadow, it is strange how no other Longhorns were reported during this quarter.

Amongst the pick of the bunch from the Chrysomelidae are the two sightings of Bloodynosed Beetle Timarcha tenebricosa at Stretton and Thistleton, a species that we seem to be getting fewer records of in recent times. Another species that has spread quite rapidly throughout VC55 is Rosemary Beetle Chrysolina americana was found in Quorn. I am obviously not trying as I have yet to see this species. Sue Timms found numerous adults and larvae of Agelastica alni (new to VC55) on Alders at Albert Village Lake on 21 September. I visited this site the following day to find it in abundance, mainly on the Alders growing fairly close to the water's edge. This is a species that has been spreading over the last few years; it's medium sized and a dark blue/black, so easily seen on the green leaves of Alder. It's thought to have been transported around the country, particularly on Alders being planted at amenity sites. It will be interesting to watch if and how this species spreads throughout VC55, it's quite an obvious species and can be found quite late in the year. Vacuum sampling along The Drift produced Cryptocephalus labiatus at Croxton Kerrial and Cryptocephalus moraei at Saltby. The former is the scarcest out of the two with eight previous records and the latter, ten records, however both are very nice-looking beetles and it's always a good day finding any Cryptocephalus species. Finishing off with the Weevils, a quick sweep of the net over a small patch of Mallow on Seaton Meadow produced several adults of *Malvapion malvae*, a nice easy species to target when you have located the food/host plant. Several visits to different areas of The Drift have turned up numerous quality beetles, especially using the suction sampler, including two individuals of *Protapion filirostre*. The only other record for this is when Derek Lott found it at Ketton Quarry in 1986, this last record from Saltby is only the second record. Vacuum sampling at Seaton Meadow produced the only records of several notable species including Graptus triguttatus, Tanymecus palliatus and Rhinocyllus conicus. Another species to target is Meadow Cranesbill Weevil Zacladus geranii, again easily found on its main host Meadow Cranesbill, reported from several sites this quarter. Staying true to its preference for the wetter areas, a single Datonychus melanostictus was found at Kelham Bridge. Particularly associated with Ribwort Plantain, Mecinus pascuorum was also found to be widespread; this is another easy species to target. Several long-leaved Willows at Rutland Water were literally infested with mines of *Isochnus sequensi*, several tenanted mines were taken and bred through to adults; this species is proving to be widespread throughout the counties. Finally, two species that occur in the dead twigs of Ash Hylesinus toranio with four previous records, a singleton was found at Ibstock and Ash Bark Beetle Hylesinus varius with 22 previous records, two adults found along Shenton Cutting.

Q4 - October to December 2019

A total of approximately 1418 individuals of 157 species, just over half of what was recorded for last quarter so, not too bad for the start of the winter period. Group totals were: water beetles 19, Carabids 52, Staphs 45, Ladybirds 14, Chrysomelidae 12 and weevils 15, and again just a single species of Longhorn beetle recorded. Bembidion lunulatum was the most recorded species with 14 records, Devil's Coach-horse Ocypus olens had 13 records, Rhamphus oxyacanthae had 12 records and Pterostichus strenuus with 11 records; these were the only species to break into double-figure sightings.



Devil's Coach-horse © Graham Finch

On with the summary, water beetles did not do so well this quarter, except for a couple of exceptional species. *Berosus affinis* a singleton netted from a woodland pond at Rutland Water took the VC55 total up to just three, the first being in Leicestershire 1848-1895 F Bates, Magna Park 2017 GL Finch and this latest. Also, from the same pond on the same day *Berosus signaticollis* again just two previous records at Saddington Reservoir, 1990 Derek Lott, Shenton Estates 2016 and this 2019 record. Best out of a long list of *Carabids* were *Agonum muelleri* and *Agonum viduum* not rare but both only occasionally found.

The Staphs provided another long list of species the pick of these was Astenus lyonessius just a single adult was found by sieving grass cuttings at Rutland Water, but no obvious highlights amongst the rest. A visit to the "bone yard" in Bradgate Park to check on the Necrobius violaceus colony, well over 25 individuals were found, so I think they are safe for now. I received a tube containing five "grain weevils" from a farm near Desford early in October. Closer inspection established they were Saw-toothed Grain Beetle Oryzaephilus surinamensis and as the name suggests they are a pest of stored grain. These were taken from a large building holding wheat. They are quite distinctive being pale brown, flattish with sharp tooth-like projections running along the sides of the pronotum. There are just four previous records with the last being in 1983, so we have had to wait over 30 years for our next sighting.

The ladybirds didn't do too badly with 14 species reported. Coccidula rufa was found in most grass sievings, including 20 in a single tussock along Slash Lane, near Barrow upon Soar, single sightings of one Pine Ladybird Exochomus quadripustulatus in Congerstone Ladybird Orange Halyzia sedecemguttata in a garden at Cropston. Sieving flood debris along Slash Lane and Loughborough Big Meadows produced several hundred of 22-spot Ladybird Psyllobora vigintiduopunctata plus a further eight near Sawley Marina. A Ladybird solitary 18-spot Myrrha octodecimguttata was found at Charnwood Lodge, but this tends not to get recorded that often, I wonder if it gets confused with Creamspot Ladybird Calvia quattuordecimguttata

which wasn't recorded this quarter? Only two reports of Harlequin Ladybird Harmonia axyridis both as singletons at Twycross Zoo wetland site, this area is definitely worth several visits through the year, and Newbold Verdon. Well down too were reports of 7-spot Ladybirds Cocciella septempunctata with just five sightings. Water Ladybird Anisosticta novemdecimpunctata were only found by sieving flood debris on the Charnwood Forest, 16-spot Ladybird Tytthaspis sedecimpunctata were fairly widespread and again 24-spot Ladybird Subcoccinella vigintiquattuorpunctata were only found on the Charnwood Forest.

The Tenebrionidae or Darkling Beetles are mainly nocturnal or crepuscular beetles and are quite variable in form. Many are associated with dead wood habitats including fungi on dead wood, and some are commensal in human habitations such as stored products and birds' nests. Several specimens of Rust-red Flour Beetle Tribolium castanium were found again in a grain store on a farm near Thurlaston. On to the Chrysomelidae, with two species we had records for that can cause considerable damage mainly to Legumes and relatives were Bruchus loti regularly found on Meadow Vetchling and Bird's-foot Trefoil, one sieved from a grass tussock at Seaton Meadow and Bean Beetle Bruchus rufimanus especially fond of Broad Beans, where a singleton was sieved from flood debris at Shenton Estates.

There are several similar looking blue leaf beetles that are sometimes not straightforward to identify; Lema cyanella is one of them. Mainly feeding on various thistles in dampish areas, a singleton was swept off thistle in Seaton Meadow. A solitary Rosemary Beetle Chrysolina americana was found in a garden in Cropston and a closely related Chrysolina polita was found clinging on to partly submerged logs at Watermead North. At Holwell Quarry, four Phaedon tumidulus were sieved from grass cuttings. The Flea Beetle (nothing to do with fleas, they are just small beetles that are good jumpers!) Psylliodes chrysocephala was found to be widespread throughout the whole of the quarter.

I'll finish off now with the weevils, although there have not many species reported. A single **Perapion violaceum** was sieved from a grass red species Apion haematodes was knocked out from a decaying hay bale on Shenton Estates. Notaris acridulus was found at two sites, four individuals from Loughborough Big Meadows and a staggering over 100 from Slash Lane, plus still not a particularly common species, a lone Tanymecus palliatus all by sieving flood debris. Sieving a large pile of grass cuttings near Sandpiper Hide at Rutland Water produced the spikey Sitona hispidulus and several Sitona lineatus and a beautiful metallic green Hypera nigrirostris. Cionus tuberculosus was found on Figwort at Foxton Locks and Rhinoncus pericarpus from flood debris at Sawley Marina. Records for the last two species of weevils are of their mines and not adults; I honestly believe these are more important than sightings of adults, as they represent confirmed breeding locations. The two species are Rhamphus oxyacanthae food/host plant Hawthorn and Rhamphus pullicarius food/host plant various Sallows. Until quite recently both species had few records, but once the leaf mines are learnt, they are very easy to find, in fact with R. oxyacanthae, the challenge is to find a Hawthorn without any mines.

tussock at Seaton Meadow and one of the small

Many thanks to everyone for their records.

Graham Finch

PLANT GALLS

Introduction

My report this year will cover the records provided from 2019 to Loughborough

Naturalists' Club by our Members Steve Woodward and Helen Ikin, occasionally in association with Geoffrey Hall and Mary Penton. These will be compared to the records provided for 2017 and 2018. I am not sure how much to make of any comparison over the three years as 2019 has been the final year of the 2020 BSBI Flora Atlas recording and that has quite likely taken precedence over plant gall recording; the total numbers of records being fewer than previous years. However, some tables have been drawn up from the data. As before, the records cover a wide spread of VC55 Leicestershire and Rutland.

In addition, for this report, I have included records for 2018 and 2019 from Charnwood Lodge. Several of our new Members belong to the Charnwood Lodge Volunteer Recording Group and in 2018 and 2019 Chris Leach, with lan Farmer, has attended the reserve to train some of the volunteers in the recording of plant galls. Although Chris is not a member of the Loughborough Nats, several of his "trainees" are. The records were recorded collectively but under Chris's name. Therefore for this year I have not amalgamated them with the above mentioned records. I include tables to show the variety of plant galls found on just that one reserve. The Charnwood Lodge records differ from the county-wide records in that they simply show presence, not abundance, as no record was kept of numbers of each type of gall found.

As usual, I will present the information by hosts, following the style of the Journal of the British Plant Gall Society.

TABLE 1		2017	2018	2019
Cynipid Wasp Gall Causer	Common Name	# records	# records	# records
Andricus aries	Ram's Horn Gall	0	1	1
Andricus foecundatrix	Artichoke Gall	5	0	1
Andricus grossulariae	On Turkey Oak	0	2	0
Andricus kollari	Marble Gall	12	17	12
Andricus lignicolus	Cola-nut Gall	1	1	0
Andricus quercuscalicis	Knopper Gall	12	17	4
Biorhiza pallida	Oak apple Gall	11	1	2
Neuroterus anthracinus	Oyster Gall	2	0	0
Neuroterus numismalis	Silk-button Gall	5	1	0
Neuroterus quercusbaccarum	Common Spangle Gall	9	1	0
	Total	57	41	20

Galls on Oak

Galls on Oak - County-wide Records - See TABLE 1 on page 20

As in the previous two years, all the galls found county-wide on oak in 2019 were formed by Cynipid Wasp species. The **Marble Gall** was most common as before, followed by **Knopper Gall**. The last two years show a marked absence of Oak Apple Gall in the sites visited and similarly for Common Spangle Gall. There were no new types of oak gall found.

Galls on Oak - Charnwood Lodge

TABLE 2		2018	2019
	Host Species	Number	of Species
Psyllid	Quercus robur	1	1
Scale Insect	Quercus robur		1
Midge	Quercus robur	2	1
Gall Wasp	Quercus robur	22	21
Gall Wasp	Quercus petraea	2	2
Gall Wasp	Quercus cerris	2	2

As will be seen, the majority of galls were formed by Gall wasps, however other causers have also been found at Charnwood Lodge. All the Cynipid Wasp gall causer species found county-wide were also found at Charnwood Lodge. Extra to the county-wide records for 2018 and 2019 were the following species on oak.

TABLE 3	Gall Causer Species	Year	Year
		2018	2019
Gall Wasp	Andricus acallidoma	Υ	
	A. curvator	Υ	Υ
	A. gemmeus	Υ	Υ
	A. glandulae	Υ	Υ
	A. infectorius	Υ	
	A. inflator agamic and sexual	Υ	YY
	A. paradoxus	Υ	
	A. quercuscorticis	Υ	Υ
	A. quercusradicis	Υ	Υ
	A. solitarus		Υ
	A. sieboldi	Υ	Υ
	Biorhiza pallida	Υ	Υ
	Neuroterus albipes	Υ	Υ
Scale insect	Asterodiaspis	Υ	Υ
Midge	Macrodiloplosis pustularis	Υ	
	M. roboris	Υ	
Psyllid	Trioza remota	Υ	Υ

Andricus infectorius is of special interest. It was found on **Quercus robur** and could not initially be identified using the British Plant Gall literature. It was eventually identified, and confirmed, as the asexual generation of **A. infectorius**. This is only the fourth record of this gall for Britain, previous records have been from Cornwall and Devon. It was not found again at Charnwood Lodge in 2019 but three galls were found at Ulverscroft Nature Reserve.

The asexual generation is a 10–20 mm spherical gall, found from late May through to October when it matures. Found on the terminal bud of a branch, it is initially green and becomes dark brown as it matures, falling to the ground in the winter. The gall is found on three types of oak including *Quercus robur*. Oak gall wasps often have two generations per cycle, with one sexual and one asexual, each creating different galls. The sexual generation of this gall is currently unknown, but probably is on Turkey oak (*Quercus cerris*). A very small, ovoid gall on the catkins of Turkey Oak may be the sexual generation.



Andricus infectorius © Steve Woodward

The Charnwood Lodge volunteers spent some time searching the few Turkey Oak trees on the Lodge for the possible alternative generation. None was found. This species has been found in some western and central European countries but has not so far been found in Belgium, Germany, Spain and Switzerland.

A full description of Andricus infectorius finds is published by Chris Leach in the Leicestershire Entomological Society Newsletter 62.

Galls on Roses

Galls on Roses - County-wide Records

All the galls on Roses were again caused by a Cynipid wasp.

TABLE 4	Gall Causer Species	Common Name	Year	Year	Year
			2017	2018	2019
Gall Wasp	Diplolepis rosae	Robin's Pincushion Bedeguar Gall	11	21	12

Galls on Roses - Charnwood Lodge

At Charnwood Lodge two extra types of galls were found.

TABLE 5	Gall Causer Species	Common Name	Year	Year
			2018	2019
Midge	Dasineura rosae	None	Υ	
Gall Wasp	Diplolepsis eglanteriae	Smooth Pea Gall	Υ	Υ
Gall Wasp	Diplolepis rosae	Robin's Pincushion Bedeguar Gall	Υ	Υ

The larvae of the midge *Dasineura rosae* causes galls on the leaves of various rose *Rosa* species. The leaflet is folded upwards along the main vein, thickened and pod-like. This fold contains many larvae.

The Gall Wasp *Diplolepsis eglanteriae* forms galls on the leaves of the Dog-rose (*Rosa canina*). Each gall is a hollow, fleshy nursery chamber for a larva, a small white grub, which feeds on the chamber wall. The galls appear to detach from the leaves before leaf fall and will lie in the leaf litter until the grub pupates and emerges as the small adult wasp, only about 4 mm long.

Galls on other Trees and Shrubs

Galls on other Trees and Shrubs – County-wide Records

TABLE 6 A	Gall causer species	Common Name	Host species	Gall location
Fungus	Taphrina alni	Alder Tongue Gall	Alder	cones
Fungus	Taphrina pruni	Pocket Plum Gall	Prunus	fruit
Mite	Aceria campestricola	Pustule Gall	Elm	upper leaf surfaces
Mite	Aceria erinea	Walnut Leaf Gall	Walnut	leaves
Mite	Aceria fraxinivora	Cauliflower Gall	Ash	fruiting keys
Mite	Aceria myriadeum	Red pustule Gall	Field Maple	leaves
Mite	Aceria nalepai	A Pouch Gall	Alder	leaves, between the midrib and primary veins
Mite	Eriophyes laevis	none	Alder	leaves
Mite	Eriophyes similis	none	Blackthorn	leaves, especially margins
Mite	Phytoptus avellanae	Big Bud Gall	Hazel	buds
Mite	Vasates quadripedes	none	Silver Maple	leaf veins or blades
Psyllid	Spanioneura buxi	Box Gall	Вох	shoot tips
Aphid	Cryptomyzus ribis	Red Currant Aphid Gall	Red Currant	leaves
Woolly aphid	Pemphigus spyrothecae	none	Poplar	leaf petiole
Midge	Dasineura crataegi	Hawthorn Button-top Gall	Hawthorn	shoot tips
	Total number of species		Total number of tree/shrub species	
	15		15	

TABLE 6 B	Gall causer species	Common Name	Year 2017	Year 2018	Year 2019
Fungus	Taphrina alni	Alder Tongue Gall	0	1	2
Fungus	Taphrina pruni	Pocket Plum Gall	0	0	1
Mite	Aceria campestricola	Pustule Gall	1	0	0
Mite	Aceria erinea	Walnut Leaf Gall	3	6	1
Mite	Aceria fraxinivora	Cauliflower Gall	3	4	3
Mite	Aceria myriadeum	Red pustule Gall	1	0	0
Mite	Aceria nalepai	A Pouch Gall	2	0	0
Mite	Eriophyes laevis	none	1	0	0
Mite	Eriophyes similis	none	2	0	0
Mite	Phytoptus avellanae	Big Bud Gall	0	1	1
Mite	Vasates quadripedes	none	1	3	4
Psyllid	Spanioneura buxi	Box Gall	0	1	2
Aphid	Cryptomyzus ribis	Red Currant Aphid Gall	0	1	0
Woolly aphid	Pemphigus spyrothecae	none	1	1	0
Midge	Dasineura crataegi	Hawthorn Button-top Gall	1	1	2
	Total number of species		Total number of galls	Total number of galls	Total number of galls
	15		16	19	16



Taphrina pruni © Steve Woodward

The galls found in 2019 are caused by a range of gall causers, as in previous years. New this year is the Pocket Plum Gall *Taphrina pruni* found on *Prunus* sp. This is caused by a fungal plant pathogen. The fungus produces chemicals which distort the fruit so that it swells on one side, becoming generally deformed and flattened. The stone does not develop. These galls can be found on *Prunus spinosa* Blackthorn and *Prunus domestica* Domestic Plum and are thought to be fairly widespread across Britain and in Leicestershire and Rutland but may vary in abundance from year to year. This would be an easy one for us to look for and identify.

Galls on other Trees and Shrubs – Charnwood Lodge

Different to galls found county-wide were:

TABLE 7 pt1			Year	Year
			2018	2019
	Gall causer species	Host species	Presence	Presence
Bacterium	Agrobacterium tumifaciens	Blackberry	Υ	
Fungus	Taphrina betulina	Silver Birch	Υ	Υ
	Puccinia graminis	Mahonia	Υ	
	Kuehneola uredinis	Blackberry	Υ	Υ
	Phragmidium violaceum		Υ	Υ
	Gymnosporangium clavariiforme	Hawthorn	Υ	
	Melampsora caprearum	Grey Willow	Υ	Υ
Mite	Aceria cephalonea	Sycamore	Υ	Υ
	Aceria pseudoplatani		Υ	Υ
	Aculus hippocastani	Horse-chestnut	Υ	Υ
	Aceria nalepai	Common Alder	Υ	Υ
	Eriophyes laevis		Υ	Υ
	Acalitus calycophthirus	Silver Birch	Υ	Υ
	Acalitus rudis		Υ	Υ
	Eriophyes leionotus		Υ	Υ
	Eriophyes pyri	Rowan	Υ	
	Acalitus stenaspis	Beech	Υ	
	Aceria nervisequa		Υ	Υ
	Eriophyes crategi	Hawthorn	Υ	
	Phyllocoptes goniothorax		Υ	Υ

TABLE 7 pt2			Year	Year
			2018	2019
	Gall causer species	Host species	Presence	Presence
Psyllid	Psyllopsis fraxini	Ash	Υ	Υ
Aphid	Spanioneura buxi	Вох		Υ
Midge	Massalongia ruber	Silver Birch	Υ	Υ
	Semudobia betulae		Y	Y
	Semudobia skuhravae		Y	Y
	Semudobia tarda		Y	Y
	Psyllopsis fraxinea	Ash	Y	Y
	Dasineura plicatrix	Blackberry	Y	Y
	Iteomyia capreae	Grey Willow	Y	Y
	Iteomyia major		Y	Y
	Hartigiola annulipes	Beech	Y	Y
	Taxomyia taxi	Yew	Y	Y
Sawfly	Pontania pedunculi	Grey Willow	Y	Y
	Phyllocolpa		Y	Y
	Pontania proxima	Crack-willow	Y	Y
	Total	Total	Total	Total
	35	15	34	29

Over the two years, galls were on 15 species of tree or shrub. None of these was caused by gall wasps. Some tree species had galls caused by more than one type of gall causer, for example Silver Birch had galls caused by fungus, mite and midge. Mite causers were most common with 13 species found, followed by midge with ten species.

No record of a bacterium caused gall was received in 2017. *Agrobacterium tumifaciens* on blackberry was recorded in 2018. This is a soil bacterium that has the ability to infect plant cells and transfer a defined sequence of their DNA to the plant cell by infection and is a causative agent of crown gall disease. It enters the plant through wounds in roots or stems and stimulates the plant tissues to grow in a disorganised way, producing swollen galls which may be present all year. Crown gall symptoms include round, wart-like growths – 50 mm or larger in diameter - that appear at or just above the soil line, or on lower branches and stems. Plants with several galls may be unable to move water and nutrients up the trunk and become weakened, stunted and unproductive. Young plants can be killed by developing gall tissue. Crown gall is a common plant disease, found throughout the world and occurs on woody shrubs and herbaceous plants including grapes, raspberries, blackberries and roses.

The fungus *Gymnosporangium clavariiforme* is interesting in that it is a species which must alternatively infect Juniper and Hawthorn. In Juniper, the primary host, the fungus of this species does not form a gall, but releases spores directly from the bark which travel on the wind to the secondary host, in this case Hawthorn, where it produces yellowish depressions on the leaves. It also infects the fruit, which grows whitish tubes like a Medusa head, and is sometimes referred to as Crown of Thorns. These are the spore tubes. The spores must then infect Juniper to complete the life cycle. I am not certain if the Charnwood Lodge record was on the leaves or the fruit. Other species of *Gymnosporangium* behave similarly infecting junipers and fruit trees alternatively. The fungus does not cause serious damage to junipers, but apple and pear trees can suffer serious loss of fruit production due to the effects of the fungus. Due to the economic impacts of the rusts in some areas where orchards are of commercial importance, some regions have attempted to ban the planting of and/or eradicate the coniferous hosts.

Galls on Herbaceous Plants

Galls on Herbaceous Plants – County-wide Records

TABLE 8 A	Gall Causer Species	Common Name	Host Plant Species	Gall location
Fungus	Puccinia malvacearum	Hollyhock rust	<i>Malva</i> Mallow	leaves and petioles
Fungus	Puccinia urticata	Rust Fungus	Urtica dioica Common Nettle	stems and leaves
Fungus	Claviceps purpurea var. purpurea	Ergot	Arrhenatherum False Oat-grass	inflorescence of grasses
Mite	Cecidophyes nudus	None	Geum urbanum Wood Avens	leaves
Mite	Cecidophyes rouhollahi	None	Galium aparine Cleavers	leaves
Psyllid	Trioza centranthi	Valerian psyllid	Centranthus ruber Red Valerian	leaves
Aphid	Hayhurstia atriplicis	none	Atriplex prostrata Spear-leaved Orache	leaves and bracteoles
Midge	Jaapiella veronicae	none	Veronica chamaedrys Germander Speedwell	leaves
Midge	Rondaniola bursaria	Lighthouse Galls	Glechoma hederacea Ground- ivy	terminal buds
Midge	Dasineura urticae	none	Urtica dioica Common Nettle	leaves
Fly	Urophora cardui	Picture-wing Fly Gall	Cirsium arvense Creeping Thistle	stems and leaves
Cynipid Wasp	Phanacis hypochoeridis	none	Hypochaeris radicata Cat's-ear	stem or petiole
	Number of gall species	13	Number of host species	13

TABLE 8 B	Gall Causer Species	Common Name	2017	2018	2019
Fungus	Puccinia malvacearum	Hollyhock rust	0	0	1
Fungus	Puccinia urticata	Rust Fungus	0	0	1
Fungus	Claviceps purpurea var. purpurea	Ergot	0	0	1
Mite	Cecidophyes nudus	none	2	2	2
Mite	Cecidophyes rouhollahi	none	18	14	5
Psyllid	Trioza centranthi	Valerian psyllid	0	0	4
Aphid	Hayhurstia atriplicis	no common name	0	1	0
Midge	Jaapiella veronicae	none	11	8	7
Midge	Rondaniola bursaria	Lighthouse Galls	0	0	2
Midge	Dasineura urticae	none	3	0	0
Fly	Urophora cardui	Picture-wing Fly Gall	3	5	0
Cynipid Wasp	Phanacis hypochoeridis	none	1	2	0
	Total Number of galls		39	32	25

New this year are galls caused by fungi on three hosts, a *psyllid* on **Red Valerian** and a midge on **Ground-ivy**.

Puccinia malvacearum is a rust fungus that galls the leaves and petioles of members of the Malvaceae family including Hollyhock Alcea rosea. Numerous yellow spots occur on the upper surfaces of the leaves, whilst on the underside of the leaves and on the petioles it causes hard, rounded swellings, occasionally yellowish but most often reddish brown and later powder grey. Many of our members are keen gardeners and perhaps grow Hollyhocks. This is something we could look out for in our gardens.

Puccinia urticata is a rust fungus which develops on the stems and leaves of Common (Stinging) Nettle or Small (Annual) Nettle. It often starts as small orange blisters or swellings. Close examination may reveal the pinhead-like fruiting bodies of the fungus. The spores may spread to other nettles or to various sedges where the *telial* stage of the lifecycle continues without causing a gall to form.

Ergot or Claviceps purpurea is a fungus which causes the production of a violet-black spindleshaped structure longitudinally furrowed, up to 1 cm long and formed in the inflorescences of grasses. The fungal body is described as an ergot kernel. In autumn, the mature fungal body falls to the ground, over-wintering in this state until late spring when, after a period of chilling, tiny pale pinkish or purplish drumstick-shaped fruit bodies develop from it producing thread-like asco-spores. These infect other grasses belonging to several genera including some of our most important food crops such as wheat and rye. It is thought to be common in Britain but not well recorded, and fairly common in Leicestershire and Rutland. Ergot has an interesting history. During the Middle Ages, ergotism, a severe reaction to ergotcontaminated food (such as rye bread), was common and was known as St. Anthony's Fire. The fungus causes convulsions and gangrene and has been thought to be behind some accusations of witchcraft. However, ergot has also been used medicinally, for example in child-birth, care needed to get the dose right! And is the basis for some other compounds e.g. LSD. Modern methods of farming mean that

ergot contamination can be removed from cereal crops and deep ploughing (ergot cannot germinate deep underground) and rotation farming also helps reduce ergot contamination. Ergot poisoning still occasionally happens in some poorer countries.



Trioza centranthi © Steve Woodward

The psyllid *Trioza centranthi* forms galls on Red Valerian Centranthus ruber. The adults are normally about 2.5 to 3 mm long and are difficult to identify. They overwinter on evergreens. However the nymphs form distinctive leaf-roll galls which are easily identified. The leaf at the tip of the shoot is broader than normal and the edges of the leaf are swollen and turned upwards. The flowers can also be affected and are a tangled leafy mass called a phyllanthy. The nymphs also feed on Cornsalad Valerianella. T. centranthi was historically rare and scattered in Britain. It was found mainly on the English South Coast and particularly on the Somerset North Coast. It seems to be increasing in recent years. I noticed in the summer of 2019 that all the hundreds of Red Valerian plants that grow on the Ham Stone



Trioza centranthi © Steve Woodward

Garden Walls of my home village, Montacute, in south Somerset were infested with this gall, a phenomenon that I had not been aware of before. In fact, some of the villagers were quite happy as it seems to be reducing the sturdiness of the Red Valerian which is normally quite damaging to their walls.

The final new find in 2019 was the midge *Rondaniola bursaria* which causes Lighthouse Galls on the terminal buds and leaves of *Glechoma hederacea* Ground-ivy. The gall takes the form of a hairy cylinder up to 4 mm tall, often several on the



Rondaniola bursaria © Steve Woodward

upper surface of a leaf. The galls are initially green, later light red or brown. Each gall contains a single larva. Galls fall off the leaf in late summer leaving a neat, circular hole. The gall is recorded more frequently than the midge. The galls are widespread in the southern half of Britain but status in Leicestershire and Rutland is not known.

Galls on Herbaceous Plants - Charnwood Lodge

TABLE 9			Year	Year
			2018	2019
	Gall Causer Species	Host Species	Presence	Presence
Fungus	Puccinia circaeae	Enchanter's-nightshade	Υ	Υ
Fungus	Puccinia glechomatis	Ground-ivy	Υ	Υ
Mite	Cecidophyes rouhollahi	Goosegrass	Υ	
Psyllid	Livia juncorum	Jointed Rush	Υ	
Midge	Rondaniola bursaria	Ground-ivy	Υ	Υ
Midge	Dasineura kiefferiana	Rosebay Willowherb	Υ	Υ
Midge	Dasineura pteridis	Bracken	Y	Υ
Midge	Dasineura urticae	Nettle	Υ	Υ
Midge	Jaapiellla veronicae	Germander Speedwell	Y	Υ
Fly	Urophera cardui	Creeping Thistle	Υ	
Fly	Chirosia betuleti	Broad Buckler-fern	Y	Υ
Fly	Chirosia grossicauda	Bracken	Y	Υ

These will be the first records we have had on ferns. Bracken has found to be galled by two organisms. The midge *Dasineura pteridis* and the fly *Chirosia grossicauda*. Broad Buckler-fern has been galled also by a fly, *Chirosia betuleti*.

The larvae of the midge *Dasineura pteridis* cause blackish cigar shaped galls to form on the leaf edges of bracken called **Little Black Pudding Galls**. These are frequently seen in the autumn, whereas the adults are more difficult to find in the spring.

The larvae of the fly **Chirosia grossicauda** causes galls to form on Bracken fronds, usually in the autumn. The tip of the pinnule (involving a few



Chirosa betuleti © Steve Woodward

pinnules) rolls downwards and may discolour; inside a white maggot mines along the main vein.

Chirosia betuleti is a small grey fly resembling a small house fly. Its larvae cause galls to form on ferns, and in particular on Male-fern, Ladyfern and Buckler-ferns. Eggs are laid in the tip of the fronds, and the resulting larvae tunnel into the main stalk causing it to twist and the pinnae to become bunched and distorted like a mop head. Some of the pinnae may turn brown and die. The gall can be found from early summer until late in the autumn.

Conclusion

There is an enormous range of plant galls to be found in VC55, Leicestershire and Rutland. More records from our Members, both on our regular walks and from individual outings would be very welcome. Some are difficult to identify but many others are unmistakable, especially if the host plant is identified. Help with ID is available for many of the species on the Naturespot website, along with colour photos. Naturespot is also useful to obtain illustrations of the galls recorded in this report. It would not be possible in a Heritage Report to illustrate and describe all the species found. There would also be the chance of finding something new to Leicestershire and Rutland, even to Britain. We seem to be in a period of distribution changes for British natural history.

Hazel Graves

OTHER INSECTS

All these were found by HI & SFW. We were not really focused on insects this year (see the Flowering Plants & Ferns report) so these are mostly casual records.

Orthoptera

An Oak Bush-cricket Meconema thalassinium was found at Stretton Road, Clipsham on 2 July. Roesel's Bush-cricket Metrioptera roeselii is much easier to find than the previous species, being large and very noisy (when the bat detector is switched on). They were detected in Newtown Linford, Desford, Burton Lazars, Buckminster, Croxton Kerrial, Prestwold, Quorn and Tickencote.

Only one **Slender Ground-hopper** *Tetrix subulata* showed itself during the year, at The Brand on the Open Day, 19 May.

Hemiptera

We have five shield-bug species reported: Pied Tritomegas bicolor at Sewstern on 24 May; Green Palomena prasina at five widespread sites; Sloe Dolycoris baccarum at Quorn on 29 June, Measham on 4 May and Stathern on 6 June; one Forest Bug Pentatoma rufipes in a Groby garden on 24 August and six widespread records of Dock Bug Coreus marginatus.

Diptera

The very smart soldier-fly known as the **Banded General Stratiomys potamida** was seen at Barlestone May Meadows on 27 June. Its broad yellow and black abdomen and elongated antennae give the startling impression of a vespid wasp. The larvae feed in the mud around ponds and can survive dry spells.



Stratiomys potamida © Steve Woodward

The Dark-edged Bee-fly Bombilius major was seen at 12 sites in March and April. We have only three hover-fly species recorded: Episyrphus balteatus, Myathropa florea and Sphaerophoria scripta. We will detail only one record, not because it is rare but because the site is remote and (we imagine) rarely visited by naturalists: E. balteatus, Lindley Park Drive, Higham on the Hill, 6 July. Visitors have to park on a lay-by on the A5, cross then walk beside a very busy trunk road, then pick up a dead-end footpath with little of interest. Such are the joys of tetrad square-bashing (see the Flowering Plants & Ferns report)!

Hymenoptera

Andrena is a genus of solitary bees that mine into the ground to make a nest. We found these species: A. chrysosceles at Swinford church on 28 April; A. cineraria at ten sites; A. clarkella at Sheepy Magna on 29 March; A. fulva at six sites;



Andrena cineraria © Steve Woodward

A. haemorrhoa at Eaton on 22 April; A. nigroaenea at Tur Langton on 11 May.

A solitary bee that specialises in collecting the protein-rich pollen of Campanula flowers is called Chelostoma campanularum. It is one of Britain's smallest bees, with a forewing length of 4 mm. The black female has white pollen collecting hairs under her abdomen. They were found at Cottesmore church on 2 July, Tixover on 8 July and at the Griffin, Swithland on 3 July. The bee with the silliest English name is the Hairy-footed Flower Bee Anthophora plumipes. Only the male has hairy feet (tarsi), and only on the middle legs. The female looks like a black bumble-bee. We found this bee at 18 widespread sites, between 21 February (at Quorn) and 24 May. We will not detail the bumblebee records this time, but in summary we had seven species, all common ones.

We did not look hard for wasps this season and only two solitary wasp species were encountered. *Cerceris arenaria* was at North Luffenham Airfield on 17 July and Bradgate Park (many) on 18 July. The other species was *Cerceris rybyensis* also at Bradgate on the same day. These yellow and black wasps nest in the ground (often footpaths) and can be seen carrying back their prey to feed their larvae.

Lasius flavus is the yellow ant that builds earthen ant-hills in grassland. Ant-hills were found at Seagrave, Bottesford, Peckleton, Redmile, Hose, Clawson & Harby parish, Kirby Muxloe, Kimcote and Pickworth. No doubt they were in most other places too, but ants are under-recorded!

Steve Woodward

FLOWERING PLANTS and FERNS

I was pleased to see the report from Colin Green (submitted by Jackie) that a large and unusual plant called **Greater Tussock-sedge** *Carex paniculata* is doing well at Holwell Mouth. On 23 December he counted 42 tussocks. This plant is frequent on canal banks, but elsewhere in Leicestershire it is scattered rather sparsely in wet woods and along spring-lines, especially on calcareous soils, such as here on the escarpment. The population at Holwell Mouth was last reported by Michael Jeeves in 1990.

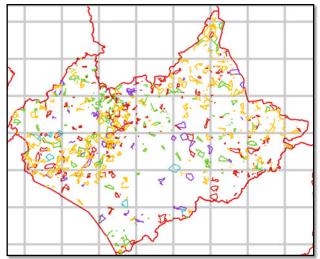
Groundsel Senecio vulgaris is an abundant weed but it has an uncommon variety hibernicus that sharp-eyed Peter Gamble found in Quorn on 22 August. Peter described it as the rayed form, meaning that that the flower heads seem to have long "petals" (more accurately, they are ligules, being five fused petals).

At the end of December 2019, fieldwork finished for the national wild flower mapping project *Atlas 2020*. On 28 December, Helen Ikin, Geoffrey Hall (County Recorder) and myself were exploring Ryhall, Rutland, trying to get the species total up to scratch (while avoiding the worst of the mud).



Bogged down in Ryhall, Rutland. Helen Ikin is glad that Atlas 2020 fieldwork has finished. © Steve Woodward

Since 2015, I have been plotting my botanical fieldwork routes on a map (using QGIS: https://qgis.org/en/site/about/index.html). In this version the line colours represent years. I have travelled widely through Leicestershire and Rutland (Vice-county 55), but avoided some areas (Leicester, south-east of Leicester and the Hinckley area) because other recorders have been busy there. The Groby area and



Map: Flora recording walks by Steve Woodward and Helen Ikin for Atlas 2020. Turquoise: 2015; Violet: 2016, Green: 2017; Red: 2018; Yellow: 2019. Excludes churchyard surveys.

Charnwood Forest, being my "home patch" have received a lot of attention. The purpose of the map was to monitor progress and highlight under-worked areas, and this is evident by looking at the yellow lines — final year excursions. I was trying to improve poor coverage in west Leicestershire, north-east Leicestershire and Rutland, where there are few local botanists. More details on the progress of this project have been published in recent editions of *Leicestershire & Rutland Recorder*.

I am pleased to confirm that after the Ryhall excursion, the whole of Leicestershire and Rutland achieved satisfactory coverage for the atlas (based on statistics for each 10 km square, shown in grey). Loughborough is now well-recorded but Charnwood Forest remains a little patchy.

I will select a few of the 4,036 records that Helen and myself made during the last two quarters of 2019. We usually recorded only additions to tetrad lists, or updates to pre-2000 records, rather than everything we saw.

Bracken *Pteridium aquilinum* would not normally merit a mention, but we found it at Ranksborough Hill, near Langham where (judging from old records) few botanists had ventured. It was a new record for tetrad SK81F, demonstrating the value of square-bashing for plotting *plant* distribution rather than *botanist* distribution.

As I mentioned in the previous *Heritage*, planted trees are fair game, as long as the record

is annotated "P" (for planted). **Monterey Pine** *Pinus radiata* is an introduced conifer from California. The needles are in bundles of three, rather than two as in most pines. We found examples at Thurcaston and Burbage. A large specimen can be seen at Swithland Wood Camp.

Navelwort Umbilicus rupestris is a wellknown resident of Swithland (in the churchyard and the slate quarries) but it does occur infrequently elsewhere. We found a population along Kinchley Lane on 30 September and some plants on Church Lane, Grimston on the 25th. Being near gardens, both may not be entirely natural in origin, but they seem to be selfsustaining. In the same family (Crassulaceae), Stonecrops of six kinds were found: Butterfly Hylotelephium spectabile, Autumn 'Herbstfreude', Caucasian Phedimus spurius, Reflexed Petrosedum rupestre, Biting Sedum acre, and White Stonecrop S. album. They mostly seem to leak out of gardens along pavements and wall-tops. Reflexed and White are the most frequent in churchyards. I have learned the leaf shape of Biting Stonecrop, so no longer do I have to chew a leaf and wait to see if it bites back!

Wild Liquorice Astragalus glycyphyllos is absent from the Loughborough area but it is widespread in eastern Rutland, including the species-rich verges of the A1 and minor roads near Empingham. As a member of the Pea family (Fabaceae) the fruits are pods, which in this species are prominent.

We read in the newspapers about Hemp *Cannabis sativa* being discovered by the Police in people's lofts, but it does occasionally turn up outdoors, usually in urban areas. Our find of a few odd plants in Burton and Dalby parish was beside a ditch, out in the countryside.

Common (or Stinging) Nettle Urtica dioica is literally everywhere (i.e. in every tetrad) but Small Nettle Urtica urens is less frequent. It is indeed usually a smaller plant but the lower leaves are long-stalked and their teeth look relatively bigger and sharper. We usually encounter it where nutrients are abundant, in farmyards or near allotments. We found Small Nettle in Oakham Cemetery, Blaby, Barrowden Sewage Works, Rothley (Kinchley Lane) and Osbaston. Also, in the same family (Urticaceae)

is a plant called **Pellitory-of-the-wall** *Parietaria judaica*, which nearly always grows around the base of a wall. It appeared at Shepshed, Oakthorpe and Donisthorpe parish and Barwell. I believe this species is more frequent than it used to be.

Willowherbs are all too numerous, especially in villages, and I have to admit that I lack the commitment to check every one diligently! I will not list all the localities, but the species we have found during this period are as follows: Great Epilobium hirsutum, Hoary E. parviflorum, Broad-leaved E. montanum, Square-stalked E. tetragonum, Short-fruited E. obscurum, American E. ciliatum and Rosebay Chamaenerion angustifolium. I often took specimens home so that I could examine seeds and hairs under the microscope with the multiaccess key in Stace (2010). A new "picture key" has recently been published (Leaney, 2020) which should make field identification quicker. It is still essential to look carefully at stem hairs with a hand lens, and to be aware that willowherbs are promiscuous when it comes to hybridisation!

Weeds of cultivation have taken a hammering from modern herbicides, some such as **Field Penny-cress** *Thlaspi arvense* are now difficult to find. The English name of this crucifer refers to its large disc-shaped fruits. We found it at Empingham, Thurcaston and an industrial estate at Market Overton.



Sand Spurrey Spergularia rubra. © Steve Woodward

On the drive to Charnwood Lodge and on some paths in Bradgate Park grows a plant called **Sand Spurrey** *Spergularia rubra*. It has pink flowers and prostrate habit and seems to benefit from trampling. Away from Charnwood, however, Sand Spurrey is thinly scattered and

we found it on a farm drive at Lindley Park, near the A5, a part of the county with no previous record of it. This may be a case of nobody having looked – this is a remote and dreary place with difficult access (see the Other Insects report).



Fruits of Hound's-tongue Cynoglossum officinale at Highfield Road, Groby. © Steve Woodward

Hound's-tongue Cynoglossum officinale is not uncommon in some parts of the country, especially coastal areas and in quarries, but the Flora of Leicestershire (Primavesi & Evans 1988) map shows only three dots (including Bradgate Park and Loughborough). It was a big surprise to find Hound's-tongue as a front garden weed in my own housing estate in Groby. The plants were weeded out (and have not re-appeared in 2020) but I was able to check the diagnostic fruits.

Frying Pan Pond on Beacon Hill, having public access, receives visitor contributions to its flora from time-to-time. On 5 August we noticed three plants of **Bogbean** *Menyanthes trifoliata*, with its distinctive floating trifoliate leaves. It formerly occurred in Leicestershire as a native plant in marshes and bogs, but all present populations seem to be introductions.

East Midlands Airport is a parking nightmare so botanising nearby means walking from Castle Donington or a yomp from Diseworth. We were pleased to see that an unusual species, found a few years previous, was still present on the A453 verge: the curiously-named **Ploughman's-spikenard** *Inula conyzae*. It is a yellow composite with an upright, hairy stem and numerous bracts around the flower head that have a purplish tinge, and leaves like those of Foxglove. I mentioned the Bee Orchids near the airport in the previous *Heritage*. I bet that few readers realise that the airport has a nature trail! It is well-hidden and, because of parking,



Parking restrictions prevent virtually everyone from using this nature trail – other than airport employees. Judging from the density of brambles, few of them do. © Steve Woodward

practically inaccessible. It is a path around the perimeter, with planted trees and shrubs, a notice-board boasting about its wonderful wildlife, but seems to be neglected and overgrown. Along the southern part we added only **Male Fern** *Dryopteris filix-mas* to our tetrad list SK42H.



Ploughman's-spikenard *Inula conyzae* © *Steve Woodward*

Continuing with composites (Daisy family or Asteraceae), the brick works at Merry Lees on 28 September was infested with Narrow-leaved Ragwort Senecio inaequidiens, whose descriptive name tells us how to recognise it. We found it nowhere else in 2019.

I used to associate **Pyramidal Orchid Anacamptis pyramidalis** with sunny holidays to coastal nature reserves — yet this is one of a handful of orchids that is spreading in Leicestershire! On 11 July I found a single spike on the verge of the A50 where it by-passes Groby. Then on 26 July I discovered a population (30+) beside the A46, between Glenfield and Anstey. At the same site grew another surprise, **Strawberry Clover Trifolium fragiferum**.



Pyramidal Orchid Anacamptis pyramidalis at Gynsill Lane, Glenfield. © Steve Woodward



Strawberry Clover *Trifolium fragiferum* at Gynsill Lane, Glenfield. © Steve Woodward

It is exciting finds like these that make trudging the main road verges worthwhile (maybe).

Steve Woodward

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OTHER RECORDS

Records have also been received for: Ants, *Cynipid* wasps, Solitary and Social Wasps, Social and Solitary Bees, Flies, Galls, Bugs, Grasshoppers, Snails, Mites and Woodlice.

WEATHER



Weather vane at Stapleton © Steve Woodward

The weather in July really gave us everything from searing heat to flash floods in just a few days. Afternoon temperatures averaged 22.3°C which is 0.5°C higher than normal with the nights being particularly warm at 14°C which was 1.5°C above normal. Our mean temperature of 18.2 °C was 1°C warmer than normal. The real talking point however was the heat in the third week with temperatures climbing above 27°C for four consecutive days with them reaching 35.2°C at my station and 36.4°C at Campbell Scientific in Shepshed on July 25th. These figures represent the highest temperatures ever recorded in our region and not too far away in Cambridge the national record temperature of 38.7°C was reached making it the hottest day since accurate records began in 1900.

Hot on the heels of the heat, came the rain. Up until the 22nd the weather had been predominately dry but after the temperature reached 28°C on the 24th, a ferocious storm arrived in the early hours. This produced a spectacular lightning display with ear splitting thunder between 2 and 3 am. 10 mm fell during this storm at Mountsorrel with other locations receiving much more. After the really hot day on the 25th cooler air arrived on the Friday but the hot air remained over the North Sea. The cooler airmass began to undercut the hot one which caused the weather front to become very active and it became almost stationary over us between Saturday morning and Sunday evening. In Loughborough 57 mm of rain fell in this 36 hour period and in Mountsorrel I recorded 53 mm. These totals represent our usual monthly July rainfall! Flash flooding became a severe problem with many major roads on Sunday morning, becoming difficult to negotiate let alone the minor ones. Several houses and flats in Mountsorrel were flooded after a blocked culvert on Loughborough Road near Waitrose caused hundreds of gallons of water to flow into people's homes. It took fire fighters many hours to pump out all the properties and many will take weeks to dry out. The usual roads in the Soar Valley flood plain were affected after the river burst its banks.

After a dry day on the Monday another deluge arrived on the Tuesday after a small but deep area of low pressure crossed overhead. This produced another 12 hour deluge and in Mountsorrel another 30 mm of rain once again causing flooding problems. The large guide and scout camp at Heather was forced to close early after a weekly total of rain of 87 mm recorded in Mountsorrel (or more than 3.5 inches) in just four days. Our final rainfall total for July was 106 mm and this coupled with June's total of 138 mm makes a summer rainfall total of 244 mm so far which exceeds our total of 234 mm for both these months set in 2012. Sunshine for the month was below average at 166 hours or 12% below normal.

Well, what a contrasting summer we have had so far. Compared to last year it has been much wetter and with far fewer hotter days than 2018 but let us see what August brings us!

August like the other summer months had very variable and contrasting conditions as weather types frequently changed. Afternoon temperatures averaged 22°C in Mountsorrel with night temperatures averaging 13.6°C. The average of 17.8°C meant this August was 0.8°C warmer than normal and the warmest since 2016. There were only five days when temperatures exceeded 80°F however, which is the threshold I call hot! The warmest day recorded 30.2°C on the 25th. Rainfall was also higher than normal with 80 mm falling at Mountsorrel which was 26% above usual but more than half of this total fell on just two days with 21.4 mm falling on the 14th and 20 mm of rain falling on the 9th. The month contained 17 dry days so there is more than one way to look at statistics! It was sunny with 200 hours of bright sunshine recorded 20% which was above normal and the sunniest since 1995 locally.

The summer as a whole was very wet with 324 mm falling at my station which was just short of my record of 345 mm set in 2012. The

rainfall however fell heavily on just a few days with 200 mm of this total falling on just nine days in the summer while 49 days stayed completely dry so there was quite a lot of dry weather over the three month period and the wet periods were very concentrated. The summer had far fewer hot days than 2018 with the temperature exceeding 80°F on just nine days in 2019 compared to 21 days in 2018. We did however break our all-time temperature record of 35°C with 35.2°C being logged at Mountsorrel with Campbell Scientific at Shepshed recording 36°C. This searing heat was caused as air from the Sahara desert was brought northwards into western Europe with temperature records in several countries being broken with our own new record of 38.7°C being set in Cambridge on 25th July. The average temperature of the summer was 16.9°C just 0.4°C above normal. The sunshine total of 514 hours was 12% lower than the usual figure thanks to a very dull June. So this summer had everything weather wise and it certainly was always a topic of conversation as conditions changed on a regular basis.

Sometimes the month's weather statistics do not always give a true reflection of the weather in that month and September 2019 fits into this category. Firstly, September was the wettest I have recorded in Mountsorrel in 20 years of records with 118 mm falling on the village which was twice the usual amount. Virtually all this rain however fell in the last nine days of the month. 101 mm (or 4 inches) fell in this period to be exact and caused considerable flooding to not just the main river systems but too many local brooks and streams as the sudden downpours turned usually slow moving tributaries into raging torrents in just a few hours. Sileby, Cossington and parts of Loughborough were worst affected by the latter with the River Soar also in full flood. Many homes were inundated by water especially the flash floods and much disruption was caused. All of this was in stark contrast to the first 21 days which were an extension of summer. 140 hours of sunshine was recorded in the first 21 days of the month with just 12 hours logged in the final nine days. Five days had more than 11 hours and at 155 hours it was the sunniest September since 2003.

The first three weeks were dominated by high pressure with the last nine days having a succession of Atlantic lows crossing the country with a few ex tropical storms to boot! Temperatures in the end were close to normal with the dry sunny and warm start counter balancing the wet cooler ending. Afternoon temperatures were logged at 18.4°C with evenings averaging 10.8°C. The overall mean of 14.6°C was 0.2°C above normal. Winds peaked at 35 mph during the final days of the month.

So September brought us great contrasts and for the third time in four months a very heavy and intensive spell of rain. So into October we now go and at the moment it looks to be staying unsettled and wet!

October 2019 was the wettest October in my 20 years of weather records in Mountsorrel. A staggering 144 mm of rain fell (nearly six inches). There were 23 rain days in the month with particular heavy deluges on the 1st - 32mm, 14th - 22mm and the 26th - 23mm.

The jet stream settled over the centre of the country and a seemingly never ending of low pressure areas provided what seemed an almost constant deluge.

The last week of September had also seen 100 mm fall so in just a five week period nearly 250 mm had fallen or very nearly five months average rainfall in just five weeks! The effect of the flooding was severe. The Soar usually floods four or five times a year but in October it flooded five times in as many weeks. The usual roads affected were impassable for many days as the rain poured down with almost no break with only the last four days giving us a temporary lull. Not surprisingly temperatures were lower in this period with afternoon maximums averaging just 13°C, 1°C below normal with the overall max just 15.7°C.

Many Octobers recently have seen temperatures rise to 25°C but areas of high pressure and warm, balmy days were completely absent this month. Night time temperatures averaged 7°C which was normal as all the cloud and rain prevented temperatures dropping too low with our lowest temperature on the 27th being 0.7°C, so a frost was avoided in October, now a quite common occurrence. Not surprisingly sunshine totals

were well down for the month with just 78 hours logged at Mountsorrel instead of the usual 105 hours with just one day, the second, giving us double figure totals at 10.2 hours but many days were mostly dull with seven completely sunless days. So we have experienced one of the wettest periods I have ever recorded and as we have entered November still the rain keeps falling. Let's hope for a change soon!



Weather vane at Thistleton © Steve Woodward

November continued in the same theme of September and October namely incredibly dull and wet. A staggering 127 mm of rain fell during the month and on 26 days which is both the highest rainfall November total I have had and the highest number of wet days in 25 years. Areas of low pressure trundled in one after the other and sometimes the weather fronts lingered for hours at a time. The very wettest day was the 14th when 20 mm fell but the 11th and 28th saw 12 mm fall too. The Soar Valley saw flooding on a large number of days just as it had in September and October with transport difficulties and road closures commonplace. Not surprisingly it was a very dull month with just 33 hours of sunshine recorded in Mountsorrel which averaged just over one hour a day and was only 50% of the usual figure. There were very few sunny dry days, just two in total and one of these, the 29th, produced seven hours of sunshine. Temperatures were also quite low most of the time as we stayed on the cold and wet side of the jet. Afternoon maximums were logged at 8°C about 1.2°C below normal on average, with night time temperatures being recorded at 4°C, a fraction below normal. The warmest day was recorded on the 1st at 14°C with the coldest day of 1.6°C being logged on the 29th. All the cloud and damp prevented a lot of frost but we managed air frost on five nights with my lowest temperature being recorded at -3°C. Winds were not too strong and this helped to keep the rain bands in place for sometimes long periods. Thick fog was rare but visibility was down to 100 m on the 30th.

The main story of the autumn was also the rainfall. The three months September 1st to November 30th produced a huge rainfall total of 388 mm or more than double the usual total. This is nearly 15 inches of rain and represented six months of normal rainfall falling in just three months. We are on course to reach 1000 mm for the year 2019 something I have never reached before in 25 years. Nottingham, Watnall recorded 375 mm for this period making it the wettest autumn there since records began in January 1960 nearly 60 years ago!

As usual as winter records begin there are a large number of reports about what the weather will bring. The truth is that accurate forecasts can only be made five to seven days ahead and beyond this any forecast is pure guesswork. In the immediate future we look like getting some more rain with the odd cold and fresh day but no serious snowfall is likely in the next ten days.

Once again December proved to be a very wet month. 86 mm of rain fell at Mountsorrel which is nearly 40% above normal. The rainfall total for the year at Mountsorrel rose to 992 mm a staggering 50% above our normal total of 650 mm here in the Soar Valley. No doubt many upland locations such as the Charnwood Forest received well over 1000 mm. The year 2019 was the wettest year I have recorded since my records began 20 years ago. Most of this rain fell between June and December when 800 mm of the 992 mm fell. The cause was slow moving areas of low pressure with rain fronts which ground to a halt over us on at least six occasions giving us up to 50 mm in 24 hours at times. Between September 22nd and December 22nd there were 72 days with rain and just 18 dry ones! The rain did stop finally falling after Christmas. The resultant rain has caused flooding on numerous occasions with some of our flood prone spots being underwater for up to six weeks during the autumn. The rains have badly affected farmers too with many crops unable to be planted due to the saturated conditions. On the plus side December was milder than normal. Afternoon temperatures were logged at 8.3°C (+1.1°C) with night time temperatures recorded at 3.3°C (+1.4°C). The

warmest day was on December 19th when 12°C was recorded and the coldest night was on the 2nd with a low of -2.7°C The mainly mild, damp conditions meant frost was rare with just three air frosts recorded here and there was no snowfall recorded at all. This makes five out of the last seven Decembers totally snow free at this Soar Valley location. The sunshine total of 55 hours was about average for this location. The average temperature for the year was 10.2°C at this location, a fraction above normal but there were some big extremes. February saw temperatures rise to 18°C on the 26th and in London they reached 21.2°C when the average is 8°C making this the warmest winter day ever recorded. Indeed 21.2°C is the average July maximum so for this to happen in February is remarkable!

In July we broke the national temperature record with a high of 38.7°C in Cambridge. Here we broke our record too with temperatures up to 35.2°C on Thursday 25th July. December then reached some very high temperatures in Scotland with 18.7°C recorded making this the warmest December day ever recorded. So three temperature records were broken in a year but as the planet continues to warm up, then we must expect this to happen on a regular basis. The planet continues to warm every year and all the earth's warmest recorded years have been in the last 20 years, with 2016 being the warmest on records that go back to 1850.

A warmer world gives us more extremes with both heatwaves and flooding becoming more commonplace so perhaps the extremes we have experienced this year will become more common place in the future.

Phil Morrish

ACKNOWLEDGEMENTS

Heritage has been compiled from records submitted by the following members and friends: Howard Bradshaw, Ben Croxtall, Rhys Dandy, Pam Darby, Anona Finch, Graham Finch, Bas Forgham, Peter Gamble (PHG), Jackie Green (JG), Jim Graham, Sue Graham, David Gray, Helen Ikin (HI), Nigel Judson, Tony Onions, A C Rose, Helen Shacklock (HS) and Steve Woodward (SFW).

We are grateful to them all.

Records for the next quarter should be sent to:

Helen Ikin, 237 Forest Road, Woodhouse, Loughborough, Leics. LE12 8TZ.

email: helen.canids@btinternet.com

Late records may not be included in the quarterly reports.

Please put moth records on a **separate** sheet from butterflies – they go to different writers – thank you.

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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.

The original records are archived. All of the older paper records have been deposited at the Record Office for Leicestershire, Leicester and Rutland, Long Street, Wigston Magna, Leics. LE18 2AH, accession number DE9392. Most pre-2011 paper records are also available on a disc (see Heritage 205). Recent paper records will reside with Helen Ikin, until a batch is ready to go to the Record Office.