



The Leeds Naturalist 2019

By the time you read this we will have reached 2020, the year during which Leeds Naturalists' Club and Scientific Association celebrates its 150th Anniversary. Peter Larnar has described many aspects of the history of the Club in a recent edition of *The Naturalist* (December 2014, Vol.139: 210-216). In this he explains how a Mr James Brodie, speaking to the Leeds Young Men's Christian Association in February 1870, described a natural history club in Dundee and this then led to the formation of the Leeds Naturalists' Field Club, which met for the first time in April 1870... and the rest, as they say, is history. To celebrate this noteworthy event we are planning, jointly with Leeds Parks & Countryside Service, a Bioblitz in the Meanwood Valley in May. Hopefully this will attract some new young blood to join the Club, something that is sorely needed!

To give you a flavour of what was going on in the early years of the Club we have included a brief extract from the Club's 1890 Transactions below.

Comments on this edition and contributions for future newsletters should be emailed to leedsnats@gmail.com or posted to 86 Bachelor Lane, Leeds LS18 5NF.

Andy Millard

Excursion to Arthington and Rawdon (from: *Transactions of the Leeds Naturalists' Club and Scientific Association 1890*)

"Upwards of 40 members took advantage of the beautiful afternoon of Saturday June 29th 1889, and joined in an excursion of the Club to Arthington, Rawdon and Harewood. Some members of the party drove by conveyance from Leeds, the remainder following by the 2.40pm train and met at Arthington the other division. Here the party divided, one portion proceeded to Harewood and investigated the high ground adjacent to the castle and park. The other proceeded to the bank of the river and thence followed its winding course towards Harewood.

The members of the party then visited, by invitation, Mr W Johnson Cheetham at his residence, Rawdon Hill, which is situated about midway between Arthington and Harewood and stands at a considerable elevation. At this delightful place the members were most heartily and hospitably received. The evening was remarkable clear, and the visitors greatly enjoyed the magnificent prospect, with Wharfedale looming far away as background, and with Lower Wharfedale showing to great advantage in the evening sunlight as foreground, and the lovely valley of the Washburn in the middle distance."

Weather Report for 2019

After the long hot (mostly dry) summer of 2018, this year was something of a contrast. January was cold with several days failing to break the "freezing" line with a low temperature of -6°C but on the whole it was dry. We had a little or no snow – less than 1/4in rainfall all month. A snow flurry on the morning of

February 1st brought joy to some and gloom to others but the rest of February brought milder conditions, again with little rain: none at all from 13th to 18th and again 22nd - 28th, which continued into March.

Overall March was wetter with heavy rain on the 6th and again on the 17th but still fortunately (depending on your age and point of view) no snow and little or no frost. Despite its reputation, April had long dry spells - hardly any rain from 6th to 24th with one day at ¼ in and one day with 1/3in although the temperatures were hovering around the freezing point on the 12th. May again had dry spells especially from the 14th to the 25th but with a few heavy rainfalls (7th and 12th) before "Summer" started in June with several days of heavy rain (11th to 14th and 26th) but then a comparative dry spell, although no heat wave! July was mixed, short dry spells from 15th to 17th but heavy rain on 13th, 20th and 24th, a trend which continued in August with heavy rain on the 9th, 11th and 15th preceding drier spells towards the end of the month – but still no heat wave.

September was mostly dry – no rain at all 14th and 15th and then 18th to 23rd but then two days of heavy rain on the 28th and 30th – repeated in October with the 2nd and 4th having heavy rain and the 6th even more which was repeated on the 18th. November brought heavy rain to parts of the East Midlands and the Doncaster area with accompanying extensive flood warnings. However, Leeds had just one day of very heavy rain on the 8th of November but steady rain most days. This was generally less than in other parts of the country though the temperatures dipped (6th, 10th, 13th, 19th 20th and 21st).

All in all a miserable year after the hot 2018 but not so bad as some.

Peter Birdsall

Butterflies in 2019

The big news this year has been the arrival in Leeds of two new species of butterfly, the Essex Skipper and the Dark Green Fritillary - both noted at Rodley Nature Reserve.

The Essex Skipper was the last butterfly to be recognised as a British species (in 1888) because it is so very similar to the Small Skipper that nobody had noticed it really was different, although it had been recognised on the continent many years earlier. The best distinguishing feature is the colour of the underside of the antennae – orange on the Small Skipper and sooty black on the Essex – but these features are not always easy to see. It has been extending its range for many years in the south of the country and it has been recorded in other parts of Yorkshire, so its arrival here had been expected.



Essex Skipper showing characteristic sooty black underside of antennae. Photo: Iain H Leach

The Dark Green Fritillary has been present in parts of Yorkshire for many years, and over the past 20 or so there have been a few reports of it in Leeds, but none of them completely convincing. However, both these recent sightings have been confirmed by photographs.



Painted Lady. Photo: P.Larner

Another feature of the year was the abundance of Painted Ladies which have been present in good numbers during August and continuing into September, often flying on dull, cool days when other species were not. From my personal experience I was glad to see more Peacock butterflies this year (e.g. 7 in the garden on 5th August) after several years when

numbers were in decline. It's surprising that they have been able to do so well when there were so few last year. The decline of Small Tortoiseshell seems to have continued, and in our garden the only summer records were one on 8th and one on 27th August. Perhaps things have been better elsewhere.

During periods of hot weather in August, Holly Blues were passing to and fro in the garden, but we were unable to decide whether there were lots passing through or just one making repeat visits. Nice to see them – or it - anyway.

Peter Larner

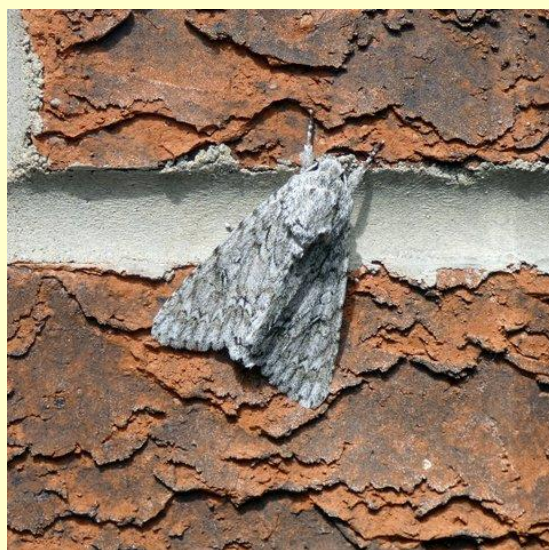
Moth Trapping in a Tinshill garden

2019 was not a very good year for moth-trapping in our garden with too many nights lost to rain, and some moths not appearing when expected, possibly because of low temperatures.



Haworth's Minor (*Celaena haworthii*). Photo: P.Larner

However two new species for the garden were found which was definitely a plus: Haworth's Minor (14mm), normal habitat, boggy acid moors - so its arrival in our garden on 28 August was something of a surprise.



The Sycamore (*Acronicta aceris*). Photo: P.Larner

The Sycamore (20mm), which arrived on 8 July, is white with distinctive cross lines and has been

expanding its range North and West from Lincolnshire for some years. This might be a first for Leeds

Field Trip: Hetchell Wood – 19th May

Six members and one guest enjoyed an exploration of this diverse area in generally good weather. Some of the flora characteristic of the Magnesian Limestone here were noted, including Rock Rose (*Helianthemum*) and Dyer's Greenweed (*Genista tinctoria*), which, as its name suggests, has been used as a dye-plant. Remains of the plant were found in the York Viking excavations suggesting its use went back to at least the Anglo-Scandinavian era of the 9-11th Centuries.



Polygala vulgaris. Photo A.Millard

Good specimens of flowering Common Twayblade (*Listera ovata*) and Common Milkwort (*Polygala vulgaris*) were observed. It being spring, warblers like Chiffchaff and Blackcap were in good voice. Lepidopteran species included Orange Tip and Peacock butterflies, together with the moths Green Longhorn (*Adela reaumurella*) and a larva of the leaf miner *Stigmella aurella* in a bramble leaf.



Bibio leucopterus. Photo by C.Rew

The Bibionid fly *Bibio leucopterus* was found, along with the hoverfly *Portevinia maculata*, the larvae of

which feed on Wild Garlic (*Allium ursinum*). The more spectacular insects included the Red-headed Cardinal beetle (*Pyrochroa serraticornis*), the Green Tiger Beetle (*Cicindella campestris*), the latter being found in the sandy hillocks of Pompopali, and a queen Hornet (*Vespa crabro*), briefly netted from the south-facing area of Magnesian Limestone grassland but, unfortunately, it escaped before being photographed!



Pyrochroa serraticornis (left) & *Cicindella campestris* (right). Photos: C.Rew

Other Hymenoptera included the Red-tailed Bumblebee *Bombus lapidarius*, the Orange-tailed Mining Bee *Andrena haemorrhoa* and the Ashy Mining Bee *Andrena cineraria*.



Andrena cineraria (left) & nest (right). Photo A.Millard

Gavin Boyd & Andy Millard

Field Trip: Ledsham Banks Nature Reserve – 30th June

Five members and two guests visited this Yorkshire Wildlife Trust reserve. A total of 78 flowering plant species were recorded, although this is almost certainly an underestimate.



Pyramidal *Anacamptis pyramidalis* (left) and Fragrant *Gymnadenia conopsea* (right) orchids. Photo by G. Heffernan

Several Orchids were seen in flower – Pyramidal (*Anacamptis pyramidalis*), Common Spotted

(*Dactylorhiza fuchsii*), Fragrant (*Gymnadenia conopsea*) & Bee (*Ophrys apifera*). Other notable plants seen were: the rare Pasque Flower (*Pulsatilla vulgaris*), well-protected from grazing, not in flower but with full seed-heads on display, suggesting the possibility of self-seeding. Two notable grasses were making a good show of tall flowering stems: Tor-grass (*Brachypodium rupestre*) and Upright Brome (*Bromopsis erecta*). However, these can tend to dominate if not cut, grazed sufficiently or parasitized; two hemiparasitic flowering plants were present in good numbers to assist with this: Yellow Rattle (*Rhinanthus minor*) and Red Bartsia (*Odontites vernus* ssp *vernus*). White Bryony (*Bryonia dioica*) was evident and in flower near the entrance and Dyer's Greenweed (*Genista tinctoria*) was flowering well. Other notable calcareous species in flower were: Common Milkwort (*Polygala vulgaris*), Yellow-wort (*Blackstonia perfoliata*) and Wild Thyme (*Thymus polytrichus*). In addition, one fungus, the vivid white Snowy Inkcap (*Coprinopsis nivea*), a Summer-fruiting species, was recorded, along with one Lichen, *Xanthoria parietina*, on the gate at the entrance.



Bee Orchid. Photo C.Rew

The most notable insect record was undoubtedly the considerable number of Marbled White (*Melanargia galathea*) butterflies seen on the reserve. It was estimated that between a dozen and as many as thirty were on the wing at any one time enjoying the warmth and sunshine. This species became extinct on the Magnesian Limestone belt grassland by the 1880s but now has scattered populations on this kind of habitat in Yorkshire.

Other Lepidoptera included the butterflies Meadow Brown (*Maniola jurtina*), Small Skipper (*Thymelicus sylvestris*), Ringlet (*Aphantopus hyperantus*), Red Admiral (*Vanessa atalanta*), Peacock (*Aglais io*) in the form of black speckled caterpillars on Stinging Nettle and, of course for this year, Painted Lady (*Vanessa*

cardui)! Amongst the moths recorded were 6-Spot Burnet (*Zygaena filipendulae*) on Scabious, Yellow Shell (*Camptogramma bilineata*) and rather worn Chimney Sweeper moths.



Marbled White. Photo by C.Rew

Just two species of bees were noted, the Red-Tailed Bumblebee *Bombus lapidarius* but also the very small and delightfully named Shiny-margined Mini-miner bee *Andrena semilaevis*. The Conopid fly *Sicus ferrugineus*, a widespread and common parasite of various bumblebee species, was also recorded.

*Sicus ferrugineus*. Photo: C.Rew.

The commonly found Spotted Longhorn Beetle (*Rutpela maculata*) was seen on Hogweed but the beetle of most visual interest was the shiny green *Oedemera nobilis*, the male of which has hind femora not dissimilar from the thighs of a sumo wrestler! At Ledsham Banks it is definitely at the northern-most edge of its main geographical range.

A spider of the family Salticidae, which includes the Common Zebra Spider (*Salticus scenicus*) frequently seen running (and jumping) around on sunny walls and fences, was identified as the genus *Heliophanus*, probably *flavipes*.

Graham Heffernan & Gavin Boyd

Field Trip: Ledston Luck – 16th July

Two species of orchid were seen: Common Spotted (*Dactylorhiza fuchsia*) in good numbers in the lower

area near the open water, probably with hybrids present in the population as colour, size & labellum markings were very variable, and Pyramidal (*Anacamptis pyramidalis*) on the higher, drier area. A good showing of Common Centaury (*Centaurea erythraea*) growing with Yellow-wort (*Blackstonia perfoliata*) was noted. The hoary Ragwort (*Senecio erucifolius*) was present around the lake area, and at its margins we saw Water Mint (*Mentha aquatica*) along with impressively large stands of *Schoenoplectus tabernaemontani*, the Common Spike-rush (*Eleocharis palustris*), Jointed Rush (*Juncus articulatus*), and some Alsike Clover (*Trifolium hybridum*), an alien species but possessing delicately-coloured pinkish flower-heads. An infrequently encountered species of the white-flowered Batrachium Section of the Buttercups, Thread-leaved Water-crowfoot (*Ranunculus trichophyllus*) was present in the water and submerged nearby among the *Schoenoplectus* stems were skeins of the Stonewort *Chara vulgaris*, a green alga but usually recorded along-side flowering plants because of its very large size among fresh-water algal groups. New Zealand Pigmyweed (*Crassula helmsii*) was also noted in restricted clumps though not in the large quantities it can achieve. The hemi-parasitic Red Bartsia (*Odontites vernus* ssp *vernus*), Prickly Ox-tongue (*Picris echioides*) and Common Fleabane (*Pulicaria dysenterica*) were all seen in drier areas above the lake.

Gatekeeper, Small Skipper, Meadow Brown and Ringlet Butterflies were seen, along with the large Dragonfly *Aeshna grandis* and the smaller vivid blue Common Blue Damselfly (*Enallagma cyathigerum*). A Soldier beetle was also recorded and Buzzards were heard and then seen overhead.

Graham Heffernan

Field Trip: Ben Rhydding Gravel Pits – 18th August

Four members assembled on a relatively sunny Sunday morning for a walk around this Local Nature Reserve managed by Wharfedale Naturalists' Society. For a fairly small reserve this has a good variety of habitats, including woodland, scrub, tall herbaceous vegetation, open grassland and patches of bare ground. In addition, its location alongside the River Wharfe provides fine riverside habitat. Notable plants in flower included Clustered Bellflower, Ragged Robin and Imperforate St. Johns Wort (for a full species list contact Andy Millard/Shirley Carson).



Ragged Robin. Photo: A.Millard

Butterfly species observed included Small White, Meadow Brown, Peacock, Speckled Wood and, in

view of the invasion this year, the inevitable Painted Lady. Odonata included Brown Hawker, Common Blue Damselfly and Blue-tailed Damselfly, the last of these unfortunately being consumed by a spider!



Teasels. Photo: A.Millard.

A noteworthy observation was a field full of Teasels (*Dipsacus fullonum*).



The fungus *Amanita rubescens* (The Blusher) was observed in an area of woodland (Photo: A.Millard)

Andy Millard

Knopper Galls



Knopper galls (photo: P.Larner) and, inset, responsible gall wasp *Andricus quercuscalicis*. (photo: Craig Mabbett; accessible at <https://www.naturespot.org.uk/species/knopper-oak-gall-wasp>)

At West Park on 25 August I noticed that there seems to be a really good crop of acorns this year. On one tree some acorns were carrying Knopper Galls which are produced when the gall wasp *Andricus quercuscalicis* lays its egg on an acorn. This is the parthenogenic (asexual) generation of the tiny wasp which emerges in the spring. This generation alternates with a sexual generation which produces galls on Turkey Oak catkins.

Peter Larner

Bee Hotel vandalised!

In February 2014 I purchased a small bee hotel and set it up on a south-east facing wall of the house, outside the cellar, in a relatively sheltered position overlooking the garden. Within three months it had attracted its first occupant, a Red Mason Bee (*Osmia bicornis*). The following year, 2015, the cluster of cells sealed with leaf fragments suggested it was particularly attractive to the Patchwork Leaf-cutter bee *Megachile centuncularis*, which is a regular in the garden.



Bee hotel showing first *Osmia bicornis* nest in 2014 (left) and probable *Megachile centuncularis* nests in 2015 (right), both circled in yellow. Photo: A. Millard

Since then mason bees have predominated and, although the Orange-vented Mason Bee (*Osmia leaiana*) is commonly in the garden it seems to prefer my second bee hotel attached to the shed and it's the Red Mason Bee that mainly occupies the cellar bee hotel. Numbers of these have increased year on year and have provided some good views, particularly of the sealing of the outermost cell.



Osmia bicornis nest showing nearly complete final seal with moist mud (left) and female working on the same seal. Photo: A. Millard

A large number of tubes were occupied in 2018 and even more in 2019, although unfortunately I never got round to photographing the latter but was thinking that the hotel would need an extension/annex for next year!



Bee hotel in summer 2018 with significant number of tubes occupied (left) and in November 2019 after even more tubes occupied during the summer but now damaged (right).

I don't check the hotel on a regular basis and it was just by chance that I looked at it in mid-November of this year and noticed that, to my dismay, all the tube outer seals had been destroyed. However, closer

examination with a torch suggested that some of the inner partitions had remained more or less intact. I can only assume that something like a hungry Blue or Great Tit had discovered that there were goodies behind the unappetising-looking outer seals of mud.

When taking the bee hotel indoors temporarily to examine the tubes more closely I tipped it over some paper with the tube openings facing down to see if anything interesting would fall out. I was a bit taken aback when I examined the debris under the microscope and was confronted by a sea of movement! These were mites of some sort and I promptly put the debris in the freezer for a few days to 'immobilise' them!



Pollen mite *Chaetodactylus* sp. Photo: A. Millard

They are almost certainly pollen mites, possibly of the species *Chaetodactylus osmiae*, which is specifically associated with mason bees of the genus *Osmia*. As the name suggests, they feed on pollen and thereby can reduce the food store for the bee larva. It has been suggested they might damage the bee directly by piercing the egg.

Andy Millard

Leeds Naturalists' Club 150th Anniversary Springwatch

In partnership with:

Leeds City Council Parks & Countryside Service

A Bioblitz based in **Meanwood Park** with events starting the evening of Friday 22 May and continuing throughout Saturday 23 May.

We would welcome the involvement of Leeds Naturalists' Club members e.g. with identification expertise, willingness to lead guided walks etc.

For more details email: leedsnats@gmail.com