



Edinburgh Natural History Society
JOURNAL 2022

A record of activities throughout the year





Edinburgh Natural History Society

Council October 2022-23

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<i>Vice President</i>	Vacancy
<i>Secretary</i>	Joan McNaughton
<i>Treasurer</i>	David Adamson

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Christina Graham, Sheila Hindshaw, Roger Holme, Heather Kinnin,
Frances Lindsay, Dorothy Lyle and Ellie Mayhew

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<i>Indoor Meetings Organisers</i>	Gillian Steele
<i>Website & Social Media</i>	Sarah Adamson and Wilma Harper
<i>Links with other Groups</i>	Sarah Adamson and Wilma Harper
<i>Journal</i>	Dorothy Lyle and David Oates

The aim of the Journal is to give a snapshot of the Edinburgh Natural History Society in 2022.

RESOURCES

Enquiries regarding requests for loans of equipment such as microscopes should be made via the website.

Thanks to members who made contributions and helped produce Journal 2023,
especially to Jean Long for her meticulous proof-reading.

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Cover photograph (LY):
Redshanks *Tringa totanus*

Back cover photograph (JMcN):
Puss Moth *Cerura vinula*

Illustrations: Eric Perry

PHOTOGRAPHS

Thanks to the following who kindly supplied photographs:
Wilma Harper (WH), Dorothy Lyle (DL), Joanie McNaughton (JMcN),
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Editorial

For the past few years, the journal has featured a President's Piece with an overview of the status of the Nats and thoughts on where the society might be heading. In the absence of a president, I have inherited the task and thus this editorial.

2022 saw slow progress towards a return to normality, albeit a new and slightly different normality, after the ravages and restrictions of Covid. Outings resumed and our first indoor meeting for two and a half years was held in the autumn. Though many were delighted to be back there was still a reluctance by some to go out and to mix and attending numbers were in the main still well below the "BC" (before Covid) numbers.

We have all become so used to armchair entertainment over the past two years, with interest amusement and education all being provided at the touch of a button or the swipe of a screen. Many of us have been able to please ourselves as to our timetable and our activities and I fear have all become more insular and selfish as a consequence. There seems little desire in the main to take on anything other than essential responsibilities. Thus we in the Nats, in common with many other organisations, are finding it hard to recruit new members and even harder to persuade the members we have to commit to becoming office bearers or outing leaders and take a more active part in the running of the society.

A constant thread running through Sarah's Newsletters in 2022 was the plea to members to please help with both the running of the Society and the organising of activities. It is no wonder! Sarah and David between them run much of the business of the Nats and without their dedicated and constant organisation I'm sure the Nats would cease to exist. I hear of societies being forced to merge with other likeminded groups because of this lack of commitment. So, I will add my plea to Sarah's and ask you all to consider what you could do to help. It is not necessary to be an expert. Having an expert along on an outing is wonderful but one doesn't need to be one to lead an outing. Nor does one need to be an expert to sit on the Council. A challenge is good for us all so, why not give it a try?

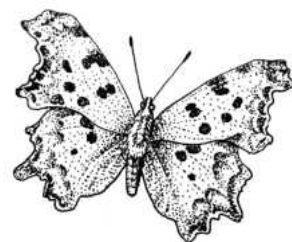
Expert help is available these days in many forms and each of us can carry the equivalent of several reference books and a good camera courtesy of the mobile phone in our pocket. Making the most of all these online experts can be a little difficult and daunting for the less IT savvy but help is very often at hand in the shape of another member. It is hoped to hold workshops during the year to help improve skills in this area.

Merging with a likeminded group may not be to our liking but joint outings and links to groups with similar goals can be mutually beneficial. The Society continues to forge links with many others with interests, both specialist and general, in the natural world.

So let's hope that in 2023 we can all move forward to fresh fields and pastures new or perhaps correctly and more aptly to fresh woods and pastures new!

Dorothy Lyle

Polygonia c-album



OBITUARY Eunice Smith

Anyone who was an active member of the Society from the 1980s onwards is likely to remember Eunice, who died on 21 December 2022 aged 83. She and her husband Denis regularly attended both outdoor and indoor meetings often providing transport for those who would otherwise be unable to attend. Eunice's particular interest was in fungi and she was a member of the local Fungus Group, as well as being a teacher, tree warden, Artlink volunteer, and Braille transcriber. She was involved with the Friends of Davidson's Mains Park and attempted to tackle the Park's problem of invasive Himalayan Balsam. Brought up in Dumfriesshire and with a life-long interest in the poetry of Burns, Eunice moved to Edinburgh in the late 1950s, and joined ENHS in 1983, later serving on the Council. Her sense of humour and fun, and her willingness to challenge identifications, have been much missed since her failing health prevented her from attending meetings a few years ago.

David Adamson

Footnote: When I first moved to Edinburgh one of my sisters came to visit with her two small children. Thirty years later I remember this occasion because Eunice made it memorable. On finding some inkcaps, *Coprinus comatus*, the lesson began and showed how she could communicate at any level and to any age on her subject, fungi. Memorably, she demonstrated the method for making 'ink' - boil deliquescent inkcaps with salt and water, then cool and strain. The process made a terrible stink, however the resultant ink was tested and stored in a jar. The ink remained in Edinburgh and several years later was rediscovered - a fine ink for painting and writing.

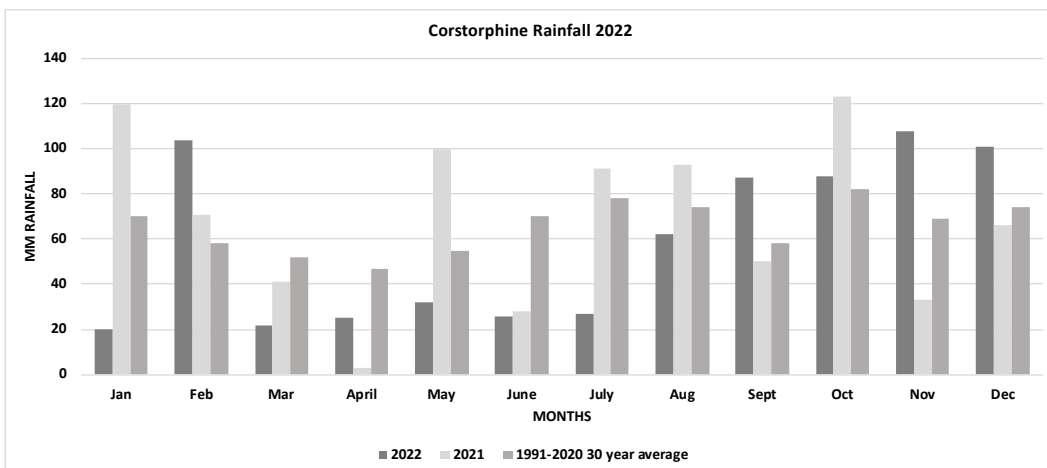
Sarah Adamson

Rainfall in Corstorphine 2022

Over 50 years of rainfall readings at Hillview Road, Corstorphine. *Frances Dunn*

2022 was a very mixed year in rainfall figures with six very dry months, mainly in the summer, and even August below average. February, November and December were well above average with some very heavy downpours.

	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2022	20	104	22	25	32	26	27	62	87	88	108	101	702
2021	120	71	41	3	100	28	91	93	50	123	33	66	819
1991-2020 30 year average	70	58	52	47	55	70	78	74	58	82	69	74	787



MAKING FRIENDS, LINKS AND A CONVERSION

During the pandemic a virtual world opened up via video conferencing. Those names we knew were suddenly on screens and had faces. The first fumbling talks were exciting, offering the chance to find new ways to broaden skills. Before long a worldwide network was enabling us to delve into new groups and communicate with experts. Activities which had previously required travel could be achieved in an online group.

Three memorable events:

1. The Royal Entomological Society Outreach Group presented this session www.youtube.com/watch?v=oOD4u6QVHm8&t=2238s. An enlightening video, where Professor Adam Hart, Big Wasp Survey, related how he overcame the problem of training volunteers to undertake research at a distance.

2. At RBGE, phenology projects stopped in March 2020, only restarting in April 2022. During this time Dr Michelle Bastian, senior lecturer in Environmental Humanities, Edinburgh College of Art, planned to investigate how volunteers perceive time in relation to their phenology projects. I was invited to share global talk sessions with a breadth of ideas, where Traditional Ecological Knowledge (TEK) within indigenous populations was a recurring theme. This knowledge is used to explain the natural world and how it informs daily life.

3. Early in 2022 Dr Max Coleman RBGE made contact because I was a recorder and familiar with iRecord. A BioBlitz was organised at Little Sparta to record wildlife and undertake public engagement. Recording was via iNaturalist and some specialists were sampling for the Darwin Tree of Life Project. Most were new to iNaturalist but by the end of the weekend the value of iNaturalist had been proven. A 'moment' changed opinions when an experienced moth recorder said, "If it disagrees with me let me know". The very next specimen was identified by the artificial intelligence, AI, as a different species. Out came the big moth book and handlens – 'a curved spine on the front leg lower tibia' - AI correct! Samples from the identified specimens collected were taken for DNA analysis. As the summer progressed, using iNaturalist created links with 'experts', some also working on the Darwin Tree of Life Project across the world. Exploring iNaturalist by recording, challenges the user and the system – a continual process of development.

The outcome – my belief in the value of the broadest sweep of recording, creating more records and convincing people that it doesn't need to be difficult is affirmed. We carry smart phones which will do most of the work to create a record – identification, place, time and person. By using our senses better we will be paying more attention to time and space.

Sarah Adamson

SIAMESE TWINS

Dandelions (*Taraxicum agg*) are common along the pavement, so one is aware of them without really looking at them. I must have passed a nearby plant several times before noticing there was something odd about it – two of its flowers were conjoined like Siamese twins. Presumably it is no great disadvantage if you're a flower to have such a close companion.

Jackie Muscott

EARLY SPRING FLOWERS

It's fun early in the year to record the first flowers that come out. But I wonder how many people look at trees, particularly conifers, many of which flower early in the year. Hazel (*Corylus avellina*) is the earliest tree, along with Filbert (*Corylus maxima*) then Grey Alder *Alnus incana* and our native Alder *Alnus glutinosa*, all of which have more or less conspicuous catkins. Conifers, despite their size, have relatively small, even tiny 'flowers'. This year I recorded flowers on Yew (*Taxus baccata*), Lawsons Cypress (*Chamaecyparis x lawsonii*), Wellingtonia (*Sequoiadendron giganteum*) and White Cedar (*Thuja occidentalis*) before the first weekend in March. Doubtless Leyland Cypress X (*Cupressocyparis leylandii*) was flowering too. Apart from the Yew all these trees have small male and female flowers on the tips of the shoots looking like an extension thereof.

Note: - Most of the conifers can be found in Astley Ainslie, while there are two dwarf White Cedars in Grange Cemetery (labelled). There are two Filberts on Blackford Hill near the Observatory, which I had assumed were Hazels until I saw the fruits last autumn.

Jackie Muscott

WHITE (GREY) SQUIRRELS

I live in the Barnton Park estate, behind the wall on the Queensferry Road. When the houses were built, the section of the wall they abut, and the woods, became the joint responsibility of the householders. As the committee member responsible for the woods in the Barnton Policy Parks Association, I take more than a casual interest in what's happening in them.

When I went looking for possible photographs for the journal this year, one which stood out was a white Squirrel (*Sciurus carolinensis*) in my garden. White squirrels are an uncommon but still regular sight in the area, cropping up from time to time on local social media. The white squirrels seem to be confined to the west plot in the woods, which runs from Barnton Park Drive to the lane opposite Drum Brae. The other place in Edinburgh I've seen white squirrels is the old railway path parallel to Gorgie Road. I think they have also been seen in Saughton Park. I assume that these are two separate populations.

There is even a website about white squirrels in the UK - <https://whitesquirrels.co.uk/squirrel-facts>

"There are two types of genetic aberrations that cause the white coats. The first is:

1. Albinism - a congenital condition caused by an absence of melanin, which gives colour to the skin and hair, making the squirrel easily identifiable by the red eyes
2. Leucism - a condition which causes grey squirrels to have a partial loss of pigmentation affecting the skin and hair, but not the eyes, so while the squirrel's fur may be white (or have patches of white), the eyes will remain dark."



Grey Squirrel *Sciurus carolinensis*

Looking at the photograph of the one in my garden, I think it has red eyes suggesting albinism. In other older photographs I've taken in the woods, the eyes look dark. So perhaps both conditions are present in the population.

We have plenty grey squirrels, too many in my view. Having put a dome on the bird feeder pole to stop them climbing up, they now leap the 3m from the trellis onto the feeders. There are reports of them entering the roof spaces in houses and many of the branches which fall in storms show squirrel damage. They also limit the choice of species that will grow successfully in the woods.

I've seen black (grey) squirrels in Ontario and apparently Woburn is home to a population of black squirrels, also found in Bedfordshire, Hertfordshire and Cambridgeshire. To complete the picture, there were reports of a white Red Squirrel (*Sciurus vulgaris*) near Dunkeld in May 2020 during lockdown. On 18 February 2023 Carolyn Hargest posted a photograph on Twitter of a white squirrel in the copse opposite Oxfangs Library. In response to my comment about the Barnton and Gorgie ones, she remembered one in Craiglockhart in 2013 and a couple in Paties Field a year or two after. Reports of all squirrel sightings can be logged on <https://scottishsquirrels.org.uk/squirrel-sightings/> where the resulting distribution maps of the greys and reds can be found.

Wilma Harper

BIRDS ON THE GARDEN FEEDERS

I keep some low-powered binoculars by my bedroom window which has a view of the bird feeder and when I go into the room, I take a look to see what's happening. Tits (*Paridae*) are the most frequent visitors plus a Robin (*Erithacus rubecula*) and various finches (*Fringillidae*). One day in late April I had a real treat - I noticed the Blue Tits (*Cyanistes caeruleus*) toing and froing and then saw a bigger bird approaching. It turned out to be a Goldfinch (*Carduelis carduelis*), and he sat there munching for more than ten minutes (the Blue Tits continued to come to the other side of the feeder so they must have been used to him/her). Presently however another larger bird replaced them, a handsome male Bullfinch (*Pyrrhula pyrrhula*), and when the two finches left, the resident Chaffinch (*Fringilla coelebs*) arrived. Sadly, I have seen no Greenfinches (*Carduelis chloris*) this year. They have visited for many years so I fear the deadly virus has caught up with them.

Other less welcome visitors to the feeder have included Starlings (*Sturnus vulgaris*), which can at least perch there and Jackdaws (*Corvus monedula*) which cannot – they have to fly up flutter and grab which keeps all the other birds away apart from the Wood Pigeon (*Columba palumbus*) stalking below. The Jackdaws are resident here and breed early, so may have young and be desperate for food. Recently I watched one fly up more than a dozen times which must consume a lot of energy. A Magpie (*Pica pica*) has even attempted to copy them but is too ungainly.

Jackie Muscott

ANOTHER LINK

For those unable to get out and about it is good to know that you can still do a bit of field work by logging on to your computer. I recently watched an excellent presentation given to the Belfast Naturalists Field Club by James Crymble of RSPB. The presentation explored the effects of pests on the seabird population on Rathlin Island and the 5year programme to eradicate the rats and ferrets and monitor the seabirds - well worth watching so see the link below. Similar work has been done on the Shiant Isles east of Harris. As part of the monitoring, time lapse cameras have been set up in two locations relaying views of the sites 24/7. Soon the cliffs and birds will be able to be seen by logging on to the Zooniverse website and you will be able to help by counting birds, chicks and eggs. Hopefully this will be up and running in time for this year's nesting season.

There are many more projects to get involved in on the Zooniverse site. You could be counting Penguins in the Antarctic or looking for Frogs in Australia if that takes your fancy but the Rathlin project is a very worthy cause and a little bit nearer to home.

To view the presentation https://youtu.be/38v_PvGNqw8

To explore Zooniverse <https://www.zooniverse.org>

Dorothy Lyle

MISTLETOE IN EDINBURGH EH9A

Jean Long had spoken to me about some local Mistletoe (*Viscum album*) on several occasions a few years ago, telling me it was growing on two different trees near where we both live. Sadly, I didn't heed her on those occasions, not knowing it was rare in Scotland. Doh!

However, when Jean mentioned the local Mistletoe again recently (Jan 2022), I decided to go looking. She had said there were two trees in St Albans Road but, after walking the length and breadth of the road, I could only find one, a healthy enough looking plant although it had no berries on it. Its host tree, a Rowan (*Sorbus aucuparia*), with berries(!), was almost opposite Mary Clarkson's house so I decided to pay Mary a wee visit.

We had a good chat about the Mistletoe, and Mary told me one of the host trees sadly had been cut down. She went on to ask me if I'd seen the Mistletoe growing on a small Apple (*Malus sp*) tree in Relugas Road, very near where I stay. I've walked past it often enough and never noticed. Off I went looking again, and there it was where Mary had said, with berries too! It was still looking healthy on my next visit, on 22 February. However, when I went back on 23 March the Mistletoe and Apple had both been hard pruned.

I visited both host trees again in November. The St Albans Road plant growing on the Rowan was looking healthy, but the plant growing on the Apple tree in Relugas Road was not visible. I could not see it as the tree was still in full leaf, even in November. I hoped it was there, just buried out of sight.

So, on my last visit to the Apple tree host, on a snowy Saturday afternoon in December, I was able to see the Mistletoe still reasonably healthy, with new green leaves appearing from the pruning cuts made in February/March, and it had two ripe plump berries. I just hope they leave it well alone between now and spring and into summer to allow these new leaves to grow and new branches to form. It may take some time to get back to the healthy plant it was in February. I will be keeping an eye on it from now on.

Joanie McNaughton



Mistletoe *Viscum album*



Phaeolepiota aura

HOVERFLIES AND RECORDING

Marmalade flies (*Episyrphus balteatus*) are colourful, common and widespread. Most of us are likely to recognise them as hoverflies by their overall appearance and because they hover and visit flowers. However not all hovering flies are hoverflies and not all hoverflies hover. In Britain the order *Diptera* (true flies) consists of over 100 families of which the *Syrphidae* (hoverflies) is but one. Within the British *Syrphidae* are around 280 species, distinguished from other fly families by a number of features, one being a fold in their wings that resembles a vein. This false vein is called the “vena spuria”. However, there are other, more noticeable features common to most hoverflies: they lack the elongated bodies and legs of, say, craneflies; they often mimic bees or wasps; and they may be slightly furry but never have the bristly appearance of less attractive flies.

The hoverfly life cycle follows that of other flies: egg, larva, pupa and adult. Some of the larvae are predatory on aphids; others are rarely seen as they develop within plants, in wasp and ant nests, in dung, on tree sap, in rotting wood, in stagnant water, or in the soil. The pupae are often well hidden, so hoverflies can be totally overlooked until they reach the adult stage. In some cases, only the adult is usually seen in Britain because the species arrives as a migrant, e.g. *Scaeva pyrastris*. While the pupal stage can last for weeks or months, the adult stage is normally measured in days.

Identifying hoverflies can be tricky, and not just because they are adept at flying away with zig-zag movements the moment that you spot them. A species can have more than one colour form, an example being the bee-mimic *Volucella bombylans* which has two main types, one mimicking white tailed bumblebees and the other matching the colour pattern of red-tailed bumblebees. Some individuals in a species are much darker than others to the extent that a familiar pattern is hidden. The field guide, Britain’s Hoverflies [by Stuart Ball and Roger Morris in the WILDGuide series], states that dark forms are prevalent in those individuals which have developed in cooler months, the dark pigment absorbing more solar radiation. Finally, like some bumblebees, males and females can have different colour patterns, as in the species *Eristalis intricaria*.

Some species feed on flower pollen and nectar and can be found in an urban garden. More difficult to find are hoverflies that are “monolectic”, i.e., feed on only one plant. Although not strictly monolectic, adults of *Cheilosia grossa* are unlikely to be found far from Willow (*Salix sp*) flowers. I have only seen one individual, a male on 17/04/21 at RBS Gogarburn, near a row of such trees. Other species have definite habitat preferences such as moorland. I have found *Sericomyia lappona* in the hills above Pitlochry but nowhere else. Some species seem widespread but infrequent. *Didea fasciata* visited my garden on a day of intense heat in the summer of 2022. I have also seen it at Ladybank in Fife and in Selm Muir Wood in West Lothian. Britain’s Hoverflies describes it as a woodland hoverfly with a southern bias in distribution.

Although some species seem common and widespread, other species of hoverfly appear to have suffered drastic declines since the mid-twentieth century and possibly even before then. Evidence of declines and changes in distribution has been collected by the Hoverfly Recording Scheme for many years. For example, *Leucozona glaucia* is fairly common on hogweed in woodland in late summer and we saw this species on ENHS excursions to Woodhall Dean and to Leadburn in July 2022. However, the distribution map on the Hoverfly Recording Scheme (HRS) website shows very few records from South-east England since 2010 where it had previously been common. This species may have moved northwards due to climate change. The HRS is affiliated to the Biological Records Centre, and those submitting records are helped by the UK Hoverflies Facebook page. This page has over 6,000 members and a number of experts who can confirm or correct attempts at identification from the photos submitted by the recorders.

I would encourage anyone with an interest in insects to record hoverflies - a good camera, a field guide and a bit of patience and curiosity are all that you need. There is a real thrill in identifying species that you haven’t come across before. Some of my best finds have been within a few hundred yards of my house, e.g., my only *Heringia* was at Pinkhill in west Edinburgh. If you do decide to start recording, Spring of 2023 would be an ideal time to begin as many species are short-lived and are only around

when Hawthorn (*Crataegus monogyna*) and Willow are in flower. Your records would add to the evidence of change. I started to record hoverflies shortly after midsummer in 2020 (an interest brought about by Lockdown) and have kept one HRS Recording Spreadsheet for each year. In 2021 I managed about 2,300 records and in 2022 just over 1,750. Thanks mainly to some hardy *Syrphus* individuals that spent much of January 2023 on railings outside Saughton Park. I have 16 records so far in 2023. I hope that this short article encourages you to look at hoverflies with a bit more curiosity. It will be worth it.

David Adamson

LEADBURN COMMUNITY WOODLAND AND SABRE WASPS

I have visited Leadburn Community Woodland (“Leadburn”), Peeblesshire (VC78) a number of times over the last ten years and have enjoyed watching it grow. So, firstly, a bit about its history and how it has developed.

In the 1960s, when the Forestry Commission (“FC”) owned the land at Leadburn, it comprised two blocks, mainly Lodgepole Pine (*Pinus contorta*) and Sitka Spruce (*Picea sitchensis*) and experimental plots used by FC’s Northern Research Station. In 2007, SCIO charity Friends of Leadburn Community Woodland (“FLCW”) acquired the first block of 44 hectares which FC had cleared-felled in 2001. The Charity then purchased the second experimental block, when it was put up for sale in 2019.

Groundworks for the restoration of the second area of raised bog were completed early in 2021, which included the installation of wooden dams, blocking ditches and compacting the surface. The Charity’s objective is: “To manage community land and associated assets for the benefit of the Community and the public in general as an important part of the protection and sustainable development of Scotland's natural environment, where 'sustainable development' means development which meets the needs of the present without compromising the ability of future generations to meet their own needs.”.

There are two main paths utilising disused railway lines, and an expanding network of paths criss-crossing these main paths. The paths link many wildlife habitats. Some 8,000 trees were planted, some of them now up to 15m tall, including a mixture of native Scots Pine (*Pinus sylvestris*), Birch (*Betula sp.*), Rowan (*Sorbus aucuparia*), Aspen (*Populus tremula*) and Oak (*Quercus sp.*). Four permanent ponds were established where Odonata thrive. Species I have seen include Common (*Sympetrum striolatum*) and Black (*Sympetrum danae*) Darter and Four-spotted Chaser (*Libellula quadrimaculata*) Dragonflies, and Azure (*Coenagrion puella*), Emerald (*Lestes sponsa*), Common Blue (*Polyommatus icarus*), Blue-tailed (*Ischnura elegans*) and Large Red (*Pyrrhosoma nymphula*) Damselflies.

17 hectares of raised bog was restored in 2009 and a further 3.8 hectares of raised bog restored in 2021 which is up to 6m deep. Part of the recently acquired raised bog area is species rich with typical bog vegetation such as *Sphagnum* moss, Round-leaved Sundew (*Drosera rotundifolia*) and Bog Asphodel (*Narthecium ossifragum*). This is a known site for a priority butterfly species, Large Heath (*Coenonympha tullia*) and Small Pearl-bordered Fritillary (*Boloria selene*), both on the Scottish Biodiversity List and have UK BAP Status. Elephant Hawk-moth (*Deilephila elpenor*) and Red-necked Footman (*Atolmis rubricollis*) are two of the many moth species which occur here. I have recorded a number of hoverfly species, two in particular are *Sericomyia silentis*, a bog specialist, and *Xylota segnis*, are now devoid of any vegetation or wildlife, and their vast store of carbon is being released when the peat is extracted and sold for garden compost. There are two ruined buildings on one of the railway paths which were built in the early 1940s as part of a network of Royal Naval Armament Depots. One of these buildings is used as a Barn Owl (*Tyto alba*) roost in winter. There are nesting Common Whitethroat (*Sylvia communis*) and several other summer migrant warblers including Grasshopper Warbler (*Locustella naevia*). Common Redpoll (*Acanthis flammea*) are a constant sight and sound when walking over the heathland in the summer, and I saw several singing male Tree Pipit (*Anthus trivialis*). Buzzard (*Buteo buteo*) and Great-spotted Woodpecker (*Dendrocopos major*) also

nest in the woodland areas. But the highlight and most exciting event for me took place this summer – finding Sabre Wasp (*Rhyssa persuasoria*) on each of four visits throughout July.

I had never heard of Sabre Wasps before, let alone seen one. I was looking at this pile of logs, wondering if it might be a suitable lunch stop spot for an upcoming ENHS field trip that I was to lead, when I saw movement - a long thin black and white insect with orange-red legs. I googled on my iPhone exactly that description, and Mr Google produced Sabre Wasp straight away, the largest Ichneumon wasp in Europe. I saw more movement and there was another, and finally a third slightly apart from the first two. With a bit more googling I realised the first two were female and the third a male, seemingly watching over. Certainly, he took no part in any of what followed, presumably he had done his bit! The two females, I realised later, were vying for the best grubs buried in the dead wood.

Sabre Wasps are easy to identify with the striking pattern of small white spots along the entire length of the thin, black body and their long orange-red legs and large size (10–40 mm). The female of the



species is the more spectacular, her whole body measuring approx 40-50mm with an ovipositor more than double that length. If you look closely, you may even see the Sabre Wasp has transverse ridges on the top of the thorax, at the front, which they use to brace themselves as they emerge from the wooden burrow in which they have pupated. They are commonly seen around log piles and particularly in pine forests where their host species, Wood Wasps (*Siricidae*) and Longhorn Beetles (*Cerambycidae*), have buried their larvae in the dead wood.

In the three sites where I found them, they were using Lodgepole Pine.

The female taps on the wood with her antennae to detect movement and scent emanating from the buried larvae's wooden tunnels. She then uses her long egg-laying 'tail' to drill a probe hole. She may drill a few probe holes before deciding on a suitable position, and then drills as deep as she can. But how do these Sabre Wasps manage to drill through dead wood? Scientists have learned that the probe's outer skin or cuticle contains Zinc and/or Manganese metals. These metals make the drill strong and prevents it from wearing down during the drilling process. The probe consists of two parallel segments, with the strengthened drill held aloft while the finer ovipositor penetrates the drilled tunnel to reach the host grub.

After 30-60 minutes, if successful, she will breach the tunnel wall, sting and paralyse the larva and lay an egg on its body. The Sabre Wasp grub begins to eat the host alive, starting with the muscle tissue first, and the vital organs last. This keeps the host alive for as long as possible and therefore ensures the food supply is fresh. After this macabre process, the Sabre Wasp grub pupates. Once the adult emerges it feeds on nectar or honeydew. The flight period is July/August.

On my last visit, my ENHS field trip, the Sabre Wasp had become the target species. So, you can guess my relief, after not finding it on the original pile of logs where I had thought to have lunch, at finding it on at another log pile, where we did actually have lunch, all the while watching four females, possibly five, prospecting with their antennae for wood wasp grubs, finding and then drilling holes and ovipositing. What a thrill!

Joanie McNaughton

Excursion Reports



ABERLADY IN FEBRUARY 12th February 2022

Leader: Stan da Prato

On a breezy February morning 14 Nats met in the Aberlady Bay LNR car park. The aim was to find out how much there is to see at a time of year when many things are not in flower/on the wing. While waiting for some who came by bus, we started birdwatching from the car park, getting good views through several telescopes of Teal (*Anas crecca*), Wigeon (*Anas penelope*) and Mallard (*Anas platyrhynchos*). Unlike the quacking Mallard the other two ducks were giving their trademark whistling calls. Also calling were Curlew (*Numenius arquata*). This species is red listed due to severe population declines in the British Isles. However, the birds we see on our east coasts in winter breed in Finland where the population is still holding up. No longer a novelty due to warming climate, a Little Egret (*Egretta garzetta*) fished in the Peffer Burn. Out of the wind in Sea Buckthorn (*Hippophae rhamnoides*) thickets we heard the soft piping calls of Bullfinches (*Pyrrhula pyrrhula*) and the cackling of Fieldfares (*Turdus pilaris*). A Badger (*Meles meles*) had been foraging for worms along the path. The bryo-expert IDed the mosses growing on Buckthorn and Elder (*Sambucus nigra*) branches. By the containers which serve as the volunteer hub we talked about reserve management and everyone was impressed by the amount of litter the volunteers had collected from the beaches. A pair of Stonechats (*Saxicola rubicola*) sat up on thorn bushes as I explained the former turf nursery, now managed as an important wildflower habitat. We passed the electric fence which contains the sheep which each winter now graze the coarser grasses to encourage greater floral diversity in the grassland.

At the sandspit we had planned to set up 'scopes to study waders at High Tide. There had been plenty on my recce on Friday but any today were out of 'scope range to my great embarrassment. The X craft-midget submarines used to train for the attack on the German battleship Tirpitz in Norway in WW2 were underwater. However, the group happily turned to seashell ID. Avoiding the windswept and Sanderling (*Calidris alba*) free beach we walked through the grassy area that used to be intertidal, looked at the remains of the tern watchers' shelter then managed to locate the WW2 pillbox which now holds hibernating Peacock butterflies (*Aglais io*). The anti-tank blocks with mini gardens on top attracted interest and provided shelter for folk to eat sandwiches out of the wind. The only Pink Feet (*Anser brachyrhynchus*) of the day flew over, struggling into the gale. The bryo expert took some samples to properly ID the various mosses on the humps; at least five species on some. In all 21 mosses were identified for the day. Back into the wind at Gullane Point; plenty sea foam but nothing sinister to worry about. There were more lichens on the rocks but few birds apart from Eider (*Somateria mollissima*) so we looked at what is left of Jehovah Gray's iron mine.

We had another seashell session then went back on the main track which gave good views of the reserve and participants could see how far they had walked. Grey areas by the path were due to one of the "reindeer moss" type lichens *Cladonia portentosa*. All seemed to enjoy the day despite the wind.

Stan da Prato



WHAT'S THAT TREE? 25th February 2022

Leader: Sarah Adamson

After a couple of weeks of weather warnings, and a postponement, the day turned out to be sunny, if a bit wet underfoot. 'What's that tree?' is a common cry along with 'I don't know trees when there are no leaves'. The morning wasn't about being a tree expert but looking for clues as to what tree it might be and what lives with that tree species. Quite often there are a few leaves or seed cases that might give a clue – Oak (*Quercus sp*) and Beech (*Fagus sylvatica*) hold on to their leaves. Others may have a few stragglers left or there may be some on the ground. Other clues can help, such as knowing the galls, like the marbles, apples and artichokes of oak. Then there is the promise of things to come. Winter twigs showing buds alone take some time to get to know but combine that with flowers and catkins you get more information. An abundant tree was Alder (*Alnus sp*) growing freely through the damp places.

Alders give a lot of information. Last year's cones hanging on stalks are a favourite feeding place for small birds like siskins (*Carduelis spinus*), catkins which open over a long period and the leaf buds described as a mauve boxing glove are all good clues. Another catkin bearer, Hazel (*Corylus avellana*), with its tiny red female flowers was just starting to open its leaf buds. Elder (*Sambucus nigra*) and Hawthorn (*Crataegus monogyna*), also early starters, were beginning to show some leaves. The ever-popular sticky buds made the identification of Horse Chestnut (*Aesculus hippocastanum*) easy - there were many across the site. A variety of Willows (*Salix sp*) with their buds held tightly against the twig were not yet revealing their catkins, the familiar pussy willow.

The woodland floors were bright green with carpets of mosses and emergent Few-flowered Leek leaves (*Allium paradoxum*). Bird's-nest fungi (*Crucibulum laeve*), blackened and past their best, could be seen in the woodchip paths. Caroline saw deer tracks on the paths and suggested where they may rest under browsed canopies of Yew (*Taxus baccata*). There are many Roe Deer (*Capreolus capreolus*) in the area. Opened hazelnut shells and conifer cone cores showed the work of Grey Squirrels (*Sciurus carolinensis*) and other small mammals. The improved visibility of leafless branches allowed good views of woodland birds and a nest resembling one made by Long-tailed Tits (*Aegithalos caudatus*).

As we left David was able to point out two visitors from New Zealand, a moss and a liverwort, to Seamus Neesham, the site landscape manager at RBS Gogarburn.

Sarah Adamson



BRYOPHYTES FOR IMPROVERS – Craiglockhart & Colinton Dells 26th February 2022
Leader: David Adamson

Seven of us met at the Water of Leith Centre, a slightly different group to those who attended the Mosses for Beginners outing in November. The aim of the excursion was to visit a small number of locations in the Dells which had not been fully covered by the Lothians Bryophyte Group the previous week, and to give participants the confidence to identify at least one or two mosses in the field.

Our first stop was at a moss-covered log by the path below Bogs Bridge. The rotting wood on part of the log was covered by mosses usually found on moorland, so the stage of decay must have replicated nutrient-deficient upland conditions. In all we found 17 bryophyte species on this one log.

Our next log, in that part of Craiglockhart Dell known as “Invasive Corner” due to the number of alien plants, was dominated by only two species: the invasive alien liverwort *Lophocolea semiteres*, and the moss *Dicranum scoparium*. It is here that volunteers from the Water of Leith Conservation Trust monitor quadrats from which Giant Hogweed (*Heracleum mantegazzianum*) has been eradicated. Their monitoring includes recording the bryophyte species in each quadrat, a challenging task. More obvious than the mosses were a pink-flowered *Pulmonaria*, Snowdrops (*Galanthus sp*) and some Crocuses (*Ornithogalum sp*).

After a bit of a scrambled short-cut, we arrived at the lade above Kate's Mill. Among the mossy mosaic on the stonework one tiny moss stood out due to its apple green colour: *Bryoerythrophyllum recurvirostrum*. However, the bryophytes immediately below the weir were more difficult to access and identify due to the high level of the river following recent rain and snow.

After lunch we kept to the west side of the Water of Leith, stopping to look at Stinking Hellebore (*Helleborus foetidus*), Earthstars (*Geastrum triplex*) and other oddities in the wood beside Redhall Walled Garden. Our last destination was the low weir above Slateford Road which has some unusual moss species including *Didymodon sinuosus* and *Orthotrichum rivulare*.

Sarah found four Ladybird species, we saw Dipper (*Cinclus cinclus*) and heard Nuthatch (*Sitta europaea*). We also met a birdwatcher who had seen a Sparrowhawk (*Accipiter nisus*) so the outing was more than just looking at very short plants with very long names.

Bryophytes can be difficult to get to know, but I hope that those who attended this outing may be encouraged to take their interest a bit further.

David Adamson



BRAID BURN 16th March 2022

Leader: Sheila Hindshaw

Eleven of us met on a damp morning for a linear walk following the Braid Burn through Blackford Glen and the Hermitage of Braid. Blackford Glen is a glacial trough with the deposited glacial till providing productive agricultural land. Right at the start of the walk we spotted a group of 6 Roe Deer (*Capreolus capreolus*) being led by 2 bucks, grazing on the growing crops. It is always good to spot the first signs of spring. Coltsfoot (*Tussilago farfara*), Celandine (*Ranunculus ficaria*) and Giant Butterbur (*Petasites japonicus*) were out on the river bank. One of the first Chiffchaffs (*Phylloscopus collybita*) of the year was both heard and seen, whilst a pair of Buzzards (*Buteo buteo*) flew along the valley.

Lewinskya affinis



The Hermitage of Braid and Blackford Hill is a Local Nature Reserve (LNR) and Local Geodiversity site. It also contains a geological SSSI at Agassiz Rock, which we visited. Within the LNR 12 hectares of the mature woodland are on the Inventory of Ancient and Semi-Natural Woodland. As we entered the LNR we spotted a patch of Sweet Violet (*Viola odorata*), its flowers providing nectar for butterflies in early spring. In appearance it is almost identical to the Common Dog Violet (*Viola riviniana*) but is scented. Legend says that a person can only smell Sweet Violets once, as they steal your sense of smell. This is untrue, but it stems from the fact that sweet violets contain beta-ionone, a chemical which temporarily shuts off smell receptors.

Nearby the spikes of Butterbur (*Petasites hybridus*) were poking through the ground, their purple florets looking quite distinctive from the white florets and acid green cauliflower leaves of the non-native Giant Butterbur (*Petasites japonicus*) seen earlier. A carpet of fallen nuts under a Hazel tree (*Corylus avellana*) showed evidence of nibbling by mice. White Dead Nettle (*Lamium album*) was in flower and the leaves of other flowering plants such as Comfrey (*Symphytum officinale*) were evident. The bare branches of the Blackthorn (*Prunus spinosa*) were festooned with bright green balls of the moss (*Lewinskya affinis*) giving them the appearance of almost being in leaf! Areas of Wall Pennywort (*Umbilicus rupestris*) were found growing on the damp, rocky lower slopes. Bullfinch (*Pyrrhula pyrrhula*) and Goldfinch (*Carduelis carduelis*) were spotted in the Blackthorn (*Prunus spinosa*) and Gorse (*Ulex europaeus*). Flowers of Elm (*Ulmus sp*) and Willow (*Salix sp*) catkins were seen but the Hazel (*Corylus avellana*) catkins had finished with new leaves now showing.

Blackford Hill is formed of andesite, a volcanic lava from volcanic activity 410 million years ago. The rock shatters easily and is useful as road stone. There have been a series of quarries into the side of the hill operational from 1826 -1953. Within the LNR these have been allowed to regenerate naturally. The thin soils and bare rock provide a suitable habitat for a range of flora. We spotted two different Stonecrops (*Sedum sp*), Black Spleenwort (*Asplenium adiantum-nigrum*), Broad Buckler Fern (*Dyopteris dilatata*) and Wood Sage (*Teucrium scorodonia*).

The Braid Hills to the south of Blackford Hill are composed of trachyte, another volcanic lava. This hard rock extends across the valley. The Hermitage of Braid gorge was formed when a huge volume of very abrasive glacial meltwater forced its way through this barrier. The steep rocky sides of the gorge now form a suitable habitat for a range of ferns, mosses and liverworts.

The Hermitage of Braid is heavily used by the public and much of the special flora and fauna previously recorded there may no longer be present. Few-flowered Leek (*Allium paradoxum*) dominates

much of the ground cover, however it was encouraging to see patches of Golden Saxifrage (*Chrysosplenium oppositifolium*) lining the path to the icehouse.

A visit to the wildlife garden below the Dovecot revealed flowering plants of Primrose (*Primula vulgaris*), Lungwort (*Pulmonaria officinalis*), Periwinkle (*Vinca minor*) and Marsh Marigold (*Caltha palustris*), with Hart's-tongue Fern (*Asplenium scolopendrium*) growing at the base of the wall.

Sheila Hindshaw



STOW BY TRAIN with Lothians Bryophyte Group 9th April 2022

Leaders: Sarah and David Adamson

Most of the group travelled on a busy Borders Train and were met by others who had travelled locally. The group of 14 set off up the hill behind the village and 6 peeled off to Torsonce Wood to look at mosses and liverworts. The rest of us set off uphill through a woodland of windblown trees resulting in having to navigate under, over and around them. Andrew Francis helped us to tune into the woodland birds, in particular Siskins (*Spinus spinus*) and Redpoll (*Carduelis cabareo*). The flowering of plants appeared to be behind those in Edinburgh except for Lesser Celandine (*Ficaria verna*). We walked a short section on the road and then on to open moorland where numerous Skylarks (*Alauda arvensis*) entertained us and a Red Kite (*Milvus milvus*) took a leisurely flypast over the hill. We had seen Red Kite on each of our previous two visits this year.

Eating lunch, whilst sitting in the mainly Beech (*Fagus sylvatica*) woodland and overlooking the Torsonce Estate, a Great Spotted Woodpecker (*Dendrocopus major*) and noisy Nuthatch (*Sitta europaeus*) called overhead. Unknown to us the moss group were lunching no distance from us. After a brief meet-up our route took us through another area of windthrow where a Noble Fir (*Abies procera*) had fallen and we could enjoy the rare sight of the top of the tree. The Noble Fir has distinctive 'candles' - the core of the cones after the scales have fallen away.

Back in the village our eyes were drawn to the pavements and walls where there was Whitlow Grass (*Erophila verna*), Thale Cress (*Arabidopsis thaliana*) and Ivy-leaved Toadflax (*Cymbalaria muralis*).

After several visits to this area, it is obvious that this now sparsely populated area has been modelled by man over many centuries. Much of today was about looking at the landscape visible in most directions, including five or more windfarms. The distribution of houses and water channels suggests that there may have been many mills in the area which was confirmed on an old map (1780) of the area. The Pringles, owners of Torsonce, had extensive land, and at some stage the course of the Gala Water had been altered.

Sarah Adamson



ALONG THE ESK IN SPRING TO SEE THE TOOTHWORT 16th April 2022

Leader: Sue Jury

It was a lovely Spring Easter morning. 14 of us met at the Whitecraig entrance to make our way along the River Esk towards the Weir. We were planning also to visit Inveresk Lodge Garden. The first thing we saw was a wonderfully camouflaged Puss Moth (*Cerura vinula*). What a beautiful handsome and large moth he was. He was just a short distance from his woodland territory.

We progressed into the riverside walkway and under the series of roads and bridges that cross the early part of the walkway. We looked at the male and female flowers of Dog's Mercury (*Mercurialis perennis*), a dioecious plant, meaning having 2 sexes on different plants. Dog's Mercury is also an ancient wood indicator AWI. We compared the true Wild Garlic (*Allium ursinum*) with the invasive Few Flowered Garlic (*Allium paradoxum*). A third garlic was also found along the verges further on

along the walkway, Keeled or Witches Garlic (*Allium carinatum*). The site of Yellow Star of Bethlehem (*Gagea lutea*) was shown to everyone. I had seen and photographed it in mid-March and I shared images with anyone who would like to visit next year! Other spring flowers in the area were observed: Windflower or Wood Anemone (*Anemone nemorosa*), Leopardsbane leaves (*Doronicum pardalianches*), Fringe Cups (*Tellima grandiflora*) and Sweet Cicely (*Myrrhis odorata*) was plentiful with its aniseed-scented leaves. One of the earliest flowering umbellifers *Anthriscus sylvestris* and *Chaerophyllum temulum* leaves were compared. Dames' Violet (*Hesperis matronalis*) leaves were observed - no flowers yet.

Also seen were *Symphytum x uplandicum*, a clump forming species and *Symphytum tuberosum*, a creeping species of Comfrey with its neat leaves - Red Campion (*Silene dioica*), Tansy (*Tanacetum vulgare*) whose leaves can be used to make Easter cakes and Mugwort (*Artemisia vulgaris*) with its contrasting grey silver leaves being lighter on the underside. Garlic Mustard (*Alliaria petiolata*) another garlic-smelling plant was found in abundance. Ground Ivy (*Glechoma hederacea*) one of the early flowering plants was seen frequently along the path. Only the leaves of *Arum maculatum* were seen, known for its toxic bright red autumn berries and Coltsfoot (*Tussilago farfara*) whose leaves come after the flowers. Also Butterbur (*Petasites hybridus*) whose small leaves will later become enormous and rhubarb-like; these were used to wrap butter during warm weather, hence the name. A few dinosaur era like plants of Field Horsetail (*Equisetum arvense*) were seen and Wood Stitchwort (*Stellaria nemorum*) a new plant for me! Thank you, David.

Invasive species of Himalayan Balsam (*Impatiens glandulifera*) a species of the Busy Lizzie family and a plant with far-flying seeds was found mainly along the riverside. Giant Hogweed (*Heracleum mantegazzianum*), toxic to the skin causing severe blistering is rampant in this area, coming from all along the railway line. Japanese Knotweed (*Fallopia japonica*), a member of the buckwheat family was found further along the walkway. This causes structural damage to properties, weakening foundations and growing through walls and drains. It is spread not by seeds but through the roots. The last invasive species was Western Skunk Cabbage (*Lysichiton americanus*) a member of the Arum family. It is a striking plant. This was in the Lodge garden. It has a skunk odour which attracts insects. It can choke rivers and is now banned from being sold. It has been here several years and is well controlled.

Lathraea squamaria was the first Toothwort to be found. Toothworts are plants that have tooth-like projections coming out of the ground. They are parasitic plants of the Broomrape *Orobanchaceae* family, living and feeding on the roots of other plants, mainly Willows (*Salix sp*), Poplars (*Populus sp*), Alder (*Alnus sp*) and Aspens (*Populus sp*). This toothwort was close to *Populus x canescans*, which is what it likes. We noted the wonderful barks of the tree specimens in this spot. *Lathraea squamaria* is a strange flesh-pink colour. I have seen it this year higher up the Esk near Bonnyrigg, where it grows under Sycamore (*Acer pseudoplatanus*) in abundance. Toothworts have no chlorophyll as they do not need it for photosynthesis. Further along is the Purple Toothwort (*Lathryraea clandestina*) with hooked tooth-like projections. This seems to be growing on the willows by the river's edge.



Purple Toothwort *Lathryraea clandestina*

Two woodland grasses *Brachypodium sylvaticum* and *Bromopsis ramosa* were found. Also other grasses *Deschampsia cespitosa*, *Alopecurus pratensis*, *Phalaris arundinacea*, and *Glyceria sp*. The Wood-rush (*Luzula sylvatica*) was found in abundance in the wooded areas. Wood-rush looks like a grass but on closer inspection you will see white hairs on the leaf edges. Some old tops were observed such as the hairy St John's-wort (*Hypericum hirsutum*).

On our way to the Inveresk Garden Lodge we passed a rather stunted Larch (*Larix decidua*) with young bright pink cones. We looked at some annual weeds in the pavement cracks on the way to the garden comparing *Erophila verna* with *Arabidopsis thaliana*.

Once in the garden there is a wonderful Common Walnut (*Juglans regia*) to be seen with its striking deeply fissured silver-grey bark.

We made our way down to the pond where we ate lunch, followed by an exploration of the pond area. There is a very interesting plant Water Soldier (*Stratiotes alnoides*) there. This is a native plant normally found in the fens. It stays under the water and just surfaces to flower with 3 white petalled blooms. It shelters aquatic insects like Dragonflies (*Anisoptera sp*) and is used in conservation. It is also a highly desirable ornamental plant. It has very brittle leaves which are sword-shaped and with a jagged edge. We found 2 kinds of rush *Juncus inflexus* and the common Soft Rush (*Juncus effusus*) and compared the 2 species. There was a large patch of Greater Pond Sedge, (*Carex ripara*) identified by its sharply-pointed glumes. It seems to be more common in England. We saw two sorts of Bulrush and then Common Club-rush (*Schoenoplectus lacustris*). There was new planting of Katsura (*Circidiphyllum japonicum*) and Dawn Redwood (*Sequoia sempervivens*). We found a fungus - Turkey tail (*Trametes versicolor*) - confirmed on ispot by my Mum!

We also saw a Field Vole (*Microtus agrestis*). From my video I could identify that he was grey/brown, short tailed, with short ears which were hairy on the inside! Roe deer (*Capreolus capreolus*) are commonly seen here but not today. They were seen on my recce.

Birds seen were Greenfinch (*Chloris chloris*), Bullfinch (*Pyrrhula pyrrhula*), a flock of Pink-footed Geese (*Anser brachyrhynchus*) overhead in the Lodge Garden, Grey Wagtail (*Motacilla cinerea*), Blue Tit (*Cyanistes caeruleus*), Nuthatch (*Sitta europaea*), Robin (*Erithacus rubecula*), Blackcap (*Sylvia atricapilla*), Longtailed Tit (*Aegithalos caudatus*), Carrion Crow (*Corvus corone*), Chiffchaff (*Phylloscopus collybita*), Great Tit (*Parus major*), Dunnock (*Prunella modularis*) and Buzzard (*Buteo buteo*). I also saw Goosander (*Mergus merganser*) and a Treecreeper (*Certhia familiaris*) on my recce.

Other finds from David and Sarah.

Insects: *Cheilosia pagana* (hoverfly) mainly on Dandelion (*Taraxacum sp*) and Lesser Celandine (*Ficaria verna*). Birch Shieldbugs (*Elasmotethus interstinctus*) (x2) resting on leaves.

Andrena scotica (Chocolate Mining Bee) on pavement at Inveresk. Pill woodlouse (*Armadillidium vulgare*) on old wall Inveresk Garden. 2 x *Bombylius major* (Bee-flies) near start of walk.

Bombus hortorum queen (Garden Bumblebee) feeding on Purple Toothwort.

It is always good to see Adonis' Ladybird (*Hippodamia variegata*). There were some shiny beetles mating There are three commonish species. I can rule out *Chrysolina americana* (Rosemary Beetle). The other two are *C polita* and *C fastuosa* - it looks more like *C polita* but I have never had a *Chrysolina* verified — we await a verifier.

Mosses: *Leptodictyum riparium* and *Tortula truncata* around the pond at Inveresk Garden.

Snails: *Clausilia bidentata*, *Cepaea hortensis* and *C nemoralis*, the slug - *Lehmanna marginata*.

Barbara Sumner has been informed of all the species not on the DDb (Distribution Database).

Sue Jury

Cream-spot Ladybirds *Calyvia 14-guttata*



MORNINGSIDE CEMETERY 23rd April 2022

Leader: Per Smiseth

It was a chilly day of Cemetery Wildlife Watch. Per Smiseth set-up this activity on iRecord in October 2021 alongside a Facebook group. A few of us had already taken part in this activity and today was the chance to recruit more Cemetery Wildlife Watchers. Over the first winter much of the focus had been on beetles, especially ladybirds, and true bugs.

Gradually, more groups have been included, such as mosses, liverworts, birds

and some flowering plants. As the season has become more spring-like there is more to be recorded and more people needed to do the recording.

Per's personal highlight was a couple of Sulphur Tubic micromoths (*Esperia sulphurella*) - a first for 2022. For me it was to find the ladybird eggs with orange spots – so they are not fictional after all. I believe that these are Cream-spot Ladybirds (*Calvia 14-guttata*) eggs which can be confirmed by rearing them.

There is a disproportionate number of 'Watchers' interested in invertebrates, and this is rightly so since there are so many invertebrates and they are usually undervalued.

It was good to see what is good about the Edinburgh Natural History Society - heaps of curiosity and sharing!

Sarah Adamson



EDINBURGH'S CITY NATURE CHALLENGE 30th April 2022

Leaders: Sarah Adamson & Nick Warren (Scottish Wildlife Trust, Lothians group)

As part of the City Nature Challenge 2022, on Saturday 30th April, Edinburgh Natural History Society and the Scottish Wildlife Trust Lothians group ran a series of events to celebrate the city's nature in its variety of habitats from the hills to the coast.

We started the morning at Red Moss of Balerno, where participants met up in the car park at 7a.m. to enjoy and explore the raised bog, the mesotrophic loch and fen found there - all rare habitats of this city. Throughout the walk, we encouraged participants, most of whom were nature enthusiasts but not naturalists, to make use of all their senses to observe nature.

We slowly meandered to the Threipmuir bridge and then on to the Robin Aitken Bird Hide on the south side of Bavelaw Marsh before walking around the Red Moss of Balerno Reserve guided by the reserve's convenor Tim Duffy. On this sunny morning, we were welcomed by the Redpolls (*Acanthis flammea*) calling around the car park before hearing the much sought after Cuckoo (*Cuculus canorus*).



Sarah Adamson talks intertidal zonation at Wardie bay. Photo: Nick Warren

Sarah and I met up again between 2p.m. and 4p.m. at Johnston Terrace, the SWT's smallest reserve in the heart of the city, this time assisted by Kate Walters. After a brief talk about the reserve, the participants were given the opportunity to explore the reserve at their own pace. Given its small, garden-like size, the reserve encourages people to look at the detail of nature.

We ended our day at Wardie Bay for low tide. There, as we walked from the high to low tide lines, Sarah guided us through the interesting examples of seaweed intertidal zonation.

By the end of the day, close to 100 people had taken part in the events. We were not systematically recording species but still encountered 44 species of birds and 41 different species of flowers. The three brave souls who made it across the city from dawn to dusk were pretty tired but had been reminded of the great diversity of life present within Edinburgh - something that should be enjoyed again and again.

Nick Warren & Sarah Adamson



A dry, warm day greeted the group of 11 who met at the Polkemmet Country Park Visitor Centre. The walk today would take us around the lovely woodland and riverside walks of the park which is 168 acres in size and located near Whitburn. The park is owned and run by West Lothian Council and it is located on the former private estate of the Baillie family who lived on the site for over 300 years. The Visitor Centre is housed in the old stable complex and our first sightings of the day were of Common Starlings (*Sturnus vulgaris*) and Western Jackdaws (*Corvus monedula*) nesting under the guttering in the courtyard.

From the Visitor Centre we made our way on a riverside path towards the large pond. On our way we marvelled at a number of splendid trees including Lawson's Cypress (*Chamaecyparis lawsonia*), Noble Fir (*Abies procera*), Western Red-cedar (*Thuja plicata*), Western Hemlock-spruce (*Tsuga heterophylla*) and Cedar- of -Lebanon (*Cedrus libani*). Along the riverbank were lovely displays of White Butterbur (*Petasites albus*), Yellow Archangel (*Lamium galeobdolon*) and Wood Sorrel (*Oxalis acetosella*). A very vocal Eurasian Nuthatch (*Sitta europaea*) was also spotted briefly by some of the group.

The pond was very productive for a number of water-based plant species including Mare's-tail (*Hippuris vulgaris*), Water Mint (*Mentha aquatica*), Greater Spearwort (*Ranunculus lingua*) Ivy-leaved Duckweed (*Lemna trisulca*), Broad-leaved Pondweed (*Potamogeton natans*) and Yellow Iris (*Iris pseudacorus*) to name just a few. One of the highlights of the day near the pond was the ghostly cast skin (called an exuvia) of a damselfly that had newly emerged. A good number of Large Red Damselflies (*Pyrrhosoma nymphula*) were seen hawking over the water.

Our walk continued past the Mausoleum (built in 1915 by Lady Baillie of Polkemmet) and surrounding the historic structure was a large number of mature Douglas Fir (*Pseudotsuga menziesii*). Next up was lunch, in the courtyard of the Visitor Centre sitting at picnic tables.

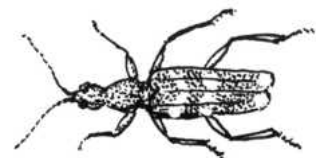
After lunch we headed south to walk in woodland initially before taking another riverside walk back to the car park. The woodland was very productive for insects – 5 species of Ladybird were seen: Kidney-spot (*Chilocorus renipustulatus*), Cream-spot (*Calvia quattuordecimguttata*), Orange Ladybird (*Halyzia sedecimguttata*), Ten-spot (*Adalia decempunctata*) and Larch Ladybird (*Aphidecta obliterate*). We also spotted a spectacular Giant Cranefly (*Tipula maxima*) which has a leg span of 100mm and is the largest of the British craneflies. Striped Millipede (*Ommatoiulus sabulosus*) with its two striking longitudinal bands was seen on the trunk of a tree and a Two-banded Longhorn Beetle (*Rhagium bifasciatum*) also showed well.

The floor of the woodland was carpeted with numerous wildflowers and with the sun shining through the canopy it was a delightful stretch of the walk. Notable species included Common Vetch (*Vicia sativa*), Common Wintergreen (*Pyrola minor*), Wood-sedge (*Carex sylvatica*), Bottle Sedge (*Carex rostrata*), Wood anemone (*Anemone nemorosa*), Tuberous Comfrey (*Symphytum tuberosum*) and Zig-zag Clover (*Trifolium medium*). Branched Bur-reed (*Sparganium erectum*) was growing in a small pool beside the track. Butterflies were in short supply (surprisingly given the sunny weather) but we did spot Orange Tip (*Anthocharis cardamines*) and Green-veined White (*Pieris napi*).

Time had flown and as we headed back to the car park everyone present seemed delighted with the range and variety of species seen during the day in such a rich and diverse country park. A return visit, perhaps at a different time of year, is definitely recommended.

Lynn Youngs

Rhagium bifasciatum





RIVER ALMOND EXPLORATION 21st May 2022

Leader: Wilma Harper

Despite being planned at short notice this river exploration attracted ten members who assembled in the small car park beside the Old Cramond Brig. Wilma had found a particularly shiny metallic beetle, *Chrysolina fastuosa*, on a recent run by the Almond, and that had inspired this outing.

We had gone no distance along the path on the north side of the river when Wilma drew our attention to an old hornbeam tree (*Carpinus betulus*). This is not native in Scotland, but it seeds quite readily and is used in hedgerows and even as a roadside tree in suburban areas. Shortly afterwards we stopped again, this time for Sarah to point out *Mikiola fagi* galls on beech leaves. The old trees towering above us were mainly Beech, but Anneliese noticed a Lime tree (*Tilia sp*) which had twiggy growth that seemed to cover most of the tree instead of being confined to the base of its trunk. Just before the Grotto Bridge there was a Sycamore (*Acer pseudoplatanus*) of enormous girth that may have been the oldest tree of all.



Mikiola fagi. Gall on Beech

I was pleased to find my first *Portevinia maculata* hoverfly of 2022, a male which was sitting on a leaf of Ramsons (*Allium ursinum*) at the south side of the bridge. Unfortunately, it didn't stay long enough for Vladimir to see it, so he had to make do with my photograph. Some of us clambered down from the path to look at the spectacular linn where the Almond surges through a narrow gap between rocks. After walking along field margins, we re-joined the riverside path where David, a better botanist than I, photographed a large, red-flowered dead nettle *Lamium maculatum*. This is uncommon but is well established by this stretch of the river. We also found many *Chrysolina fastuosa*, mainly on White Dead Nettle (*Lamium album*).

We stopped for lunch below the railway embankment that separates the Lennie fields from the airport. When not drowned out by the roar of airliners we were able to hear the songs of Skylarks (*Alauda arvensis*) and of several warblers, including Whitethroat (*Sylvia communis*), Sedge Warbler (*Acrocephalus schoenobaenus*), Blackcap (*Sylvia atricapilla*), Chiffchaff (*Phylloscopus collybita*) and Willow Warbler (*Phylloscopus trochilus*). Swifts (*Apus apus*) and Sand Martins (*Riparia riparia*) flew above the Almond, and insects were enjoying the flowers of the many wild plants. Also in flower were Broad Beans (*Vicia faba*), but the pollinating insects seemed to prefer the Buttercups (*Ranunculus sp*) and Dandelions (*Taraxacum sp*) at the edge of the field. Vladimir identified a grass that was filling the spaces between the Broad Bean plants as *Vulpia myuros*. Wilma explained that an area of Willows (*Salix sp*) situated between the fields and river was an old ox-bow lake, still wet enough to provide cover for Reed Buntings (*Emberiza schoeniclus*) and a Swan (*Cygnus olor*).

After re-crossing the Grotto Bridge, where Jane photographed a Scorpion Fly (*Panorpa communis*), we entered a street of empty military houses, each separated from the road by a patch of cut grass. The houses had curtains, but no cars, and were patrolled by one security man whom we met as we made our way through the deserted village towards the A90 underpass. From there it was a short distance back to the starting point. Thanks to Wilma for organising and leading us on a route that rarely touched the same place twice.

David Adamson



LICHENS AT SEAFIELD CEMETERY 28th May 2022

Leader: Rebecca Yahr

A small but select group of lichen hunters turned out on a beautiful day at Seafield Cemetery, and we were lucky to have Brian Coppins along to compile a list and help with the teaching on the day. It was an interesting experience, as the overall impression of the place was that there wouldn't be much in the way of lichens around. The trees and headstones appeared mostly bare, and the graveyard very well

looked-after, suggesting that there might not be much room for the wilder side of things in the mix. However, out came the handlenses, and there was plenty to see.

A couple of marble and granite headstones near the east entrance kept the group busy for the best part of 4 hours; in usual fashion, the group managed to cover about 15 metres in the first couple of hours. We first dealt with the bright orange and yellow leafy lichens in the genus *Xanthoria*, turning crimson with a strong base (10% KOH) applied as a small 'spot test' – a tiny drop of the reagent applied to a bit of lichen and checked for a colour change. We saw not only the ubiquitous *X. parietina*, but also its close relatives *X. aureola* (narrower 'corn flake' lobes) and *X. calcicola*, with knobbly finger-shaped projections in the centre (isidia). Sticking to more lichens with similar chemistry – orange/yellow turning crimson with a spot of KOH – we saw a handful of species of the crust-forming genus *Caloplaca*, some with elongate lobes on the edges of the thallus (*C. saxicola* with crystal-dusted convex tips) and some with no thallus at all (eg. *C. holocarpa*). We saw the differences in rocks producing differences in lichen communities, just beside each other on neighbouring headstones, the marble stones with the orange *Caloplaca* and *Xanthoria* species, and the granite mostly without.

We braved even smaller lichens on granite headstones with Brian's help, looking at the tiny thalli with even tinier black spore-bearing fruits in the genera *Amandinea* and *Catillaria* on slightly nutrient-enriched granite headstone tops, and we saw a typical acid rock community, at home anywhere from a granite headstone to the tops of dry stone dykes across the country – with the tiny black and brown mosaics of *Buellia aethalea*, and the pale yellow-greens of *Lecanora intricata* and *L. polytropa*, along with ashy *Porpidia tuberculosa*. Here we also got a few glimpses of the relatively large and shiny-lobed leafy lichens in the large mostly leafy family of Parmeliaceae, *Parmelia saxatilis* and *Melanelixia* species.

Only then did we move another 30 metres away and into the shade of the big lime and sycamore trees. Here, we found a typical community of nutrient-loving epiphytes was present on the sycamore trees, even 'dripping' down onto the monuments below. Here, the lichens were vying for our attention with some lovely bugs in all stages of development, but I managed to stay mostly on target! This lichen community is characterized by the small, matt grey rosettes of the mostly leafy, but mostly smaller Physciaceae. This group includes *Physcia adscendens* and *P. tenella*, differing in their vegetative reproductive structures, and the green-when-wet-group of *Phaeophyscia orbicularis*, the even tinier *P. nigricans*, and the larger, crystal-dusted *Physconia grisea*, with simple rhizines below. We had already spent some time with these on the headstones, with Vlad generously and repeatedly performing the so-called 'spit-test', a non-covid-friendly version of the spot test, but just using spit. The logic is that since most chemicals we use in spot tests are based on water, to see if the change with a spot test is just from wetness, rather than a true chemical colour change, we can test using spit, also mostly water. In the Physciaceae, those spit tests help you see the differences between those genera that remain grey when wet (*Physcia*) vs those that don't (*Physconia* and *Phaeophyscia*). Ahem. Moving on. It was good to see them again and revisit the species we'd seen on the headstones again on the trees and in a new part of the cemetery, though the lovely bluish *Physcia caesia* we'd seen with the *Xanthoria* and *Caloplaca* species earlier in the day on the marble headstones did not make an appearance here under the canopy of the trees.

There was only a short time to examine the boundary wall, but a handful of lichens were there including a couple of species from the *Lecanora dispersa* group, those without much in the way of thallus, but apparently spending all their energy on spore production. We didn't spot any terrestrial species, and there were few fallen twigs of any size at all, so some things from the canopy will surely have been missed. One surprise that Brian found on larch twigs was the first confirmed record in the Lothians for the tiny, yellow leafy lichen *Candelaria concolor* – looking like a little *Xanthoria* species, but not turning crimson with KOH. It isn't a rarity, but it is much commoner further south.

Over the course of the day, Brian's keen eye and experience allowed a remarkable list of over 70 species (73 plus two lichen parasites – and that's not counting all of Dorothy's insects!). Not bad considering that when he took up his post at RBGE in the 1970s, there were almost no lichens at all in Edinburgh, save a few species tolerant of lead (petrol) and acid (acid rain).

We've come a long way, baby. Now, let's all see if we can get a handle on the nitrogen situation and try to keep *Xanthoria* and *Physcia* species from taking over the place!

Rebecca Yahr

Lichens - Seafield Cemetery NT2875 Brian Coppins and Rebecca Yahr

<i>Acarospora fuscata</i>	<i>Hyperphyscia adglutinata</i>	<i>Physcia adscendens</i>
<i>Amandinea punctate</i>		<i>Physcia caesia</i>
<i>Arthoniapunctiformis</i>	<i>Lecania erysibe s. str.</i>	<i>Physcia stellaris</i>
<i>Arthopyrenia punctiformis</i>	<i>Lecania inundata</i>	<i>Physcia tenella</i>
<i>Aspicilia contorta subsp. Contorta</i>	<i>Lecanora albescens</i>	<i>Physconia grisea</i>
	<i>Lecanora antiqua</i>	<i>Placynthiella icmalea</i>
<i>Buellia aethalea</i>	<i>Lecanora campestris s. Campestris</i>	<i>Porina chlorotica f. chlorotica</i>
	<i>Lecanora compallens</i>	<i>Porpidia tuberculosa</i>
<i>Caloplaca albolutescens</i>	<i>Lecanora dispersa</i>	
<i>Caloplaca arcis</i>	<i>Lecanora expallens</i>	<i>Ramalina farinacea</i>
<i>Caloplaca decipiens</i>	<i>Lecanora hagenii</i>	<i>Rinodina oleae</i>
<i>Caloplaca dichroa</i>	<i>Lecanora hybocarpa</i>	
<i>Caloplaca flavocitrina</i>	<i>Lecanora intricate</i>	<i>Verrucaria hochstetteri</i>
<i>Caloplaca holocarpa s. str.</i>	<i>Lecanora muralis</i>	<i>Verrucaria nigrescens f. nigrescens</i>
<i>Caloplaca limonia</i>	<i>Lecanora polytropa</i>	<i>Verrucaria nigrescens f. tectorum</i>
<i>Caloplaca oasis</i>	<i>Lecanora semipallida</i>	<i>Verrucaria viridula</i>
<i>Caloplaca obscurella</i>	<i>Lecanora soralifera</i>	
<i>Caloplaca saxicola</i>	<i>Lecanora symmicta</i>	<i>Xanthoria calcicola</i>
<i>Candelaria concolor</i>	<i>Lecidella carpathica</i>	<i>Xanthoria candelaria s. str.</i>
<i>Candelariella aurella f. aurella</i>	<i>Lecidella elaeochroma f. elaeochroma</i>	<i>Xanthoria parietina</i>
<i>Candelariella reflexa</i>	<i>Lecidella scabra.</i>	<i>Xanthoria polycarpa</i>
<i>Candelariella vitellina f. vitellina</i>	<i>Lecidella stigmatea</i>	
<i>Catillaria atomarioides</i>	<i>Lepraria incana s. str.</i>	<i>Athelia arachnoidea</i>
<i>Catillaria chalybeia var. chalybeia</i>		
	<i>Melanelixia subaurifera</i>	<i>Taeniolella phaeophysciae</i>
<i>Dimerella pineti</i>	<i>Melanohalea elegantula</i>	
<i>Diplotomma alboatrum</i>		
<i>Diplotomma parasiticum</i>	<i>Opegrapha varia</i>	
<i>Evernia prunastri</i>	<i>Parmelia sulcata</i>	
	<i>Phaeophyscia nigricans</i>	
<i>Fuscidea lightfootii.</i>	<i>Phaeophyscia orbicularis</i>	



GORE GLEN 4th June 2022
Leader: Rob Wallace

Today's walk was led by probably the best amateur coleopterist this side of the Cheviots, which was fortunate since we found a great many beetles on this outing. From the leisure centre in Gorebridge Main Street, our group of eight slowly, sometimes very slowly, descended to the Gore Water by crossing a playing field, the A7 road and the Borders Railway. There were insects from the very start. Rob used a sweep net to find some of them, but others were found by the less strenuous technique of standing still and staring.



Rhinoceros Beetle *Sinodendron cylindricum*

The insects were often a bit too lively to photograph in the warmth of the June sunshine, so Rob used glass tubes to trap some of the contents of his sweep net before they flew away. The tubes, usually containing a beetle, would be passed round so that we could look at the insect before it was released. Using the standing and staring method, Sarah found an Eyed Ladybird (*Anatis ocellata*), one of six ladybird species seen today, and also found a Bronze Shieldbug (*Troilus luridus*) on birch. The Blue Shieldbug (*Zicrona caerulea*), which Stuart found on Alder (*Alnus sp.*), resembled a Chrysolina beetle in its metallic gleam. One of the best finds was made by Joanie near the end of the walk: a male Rhinoceros Beetle (*Sinodendron cylindricum*) sporting a "horn" on its head.

We stopped for lunch in the cool shade of the trees by the Gore Water. However, the insect world doesn't observe a lunch break. There was a click beetle resembling a soldier beetle, a rove beetle, scorpion flies and some elusive hoverflies in a patch of dappled sunlight. Shortly afterwards Rob spotted the largest beetle of the day on a handrail - the long-horn *Rhagium bifasciatum*.

Although the main interest was in the insects, we did notice other aspects of natural history. The deep purple spikes of Northern Marsh Orchids (*Dactylorhiza purpurella*) stood out in the short vegetation near a playing area, their common spotted cousins *D. fuchsii* being not yet in flower. In the wooded glen were some botanical indicators of slightly base rich conditions such as *Echium vulgare*, *Galium odoratum* and *Hypericum hirsutum*. Most birds were difficult to see due to the foliage, but we heard Blackcap (*Sylvia atricapilla*), Chiffchaff (*Phylloscopus collybita*) and Willow Warbler (*Phylloscopus trochilus*).

By late afternoon I think most of us were finding it difficult to take in more information because we had already seen so much. However, I did summon the energy to spend more than ten minutes pursuing a hyper-active hoverfly which turned out to be the red-tailed variety of a bee-mimic *Volucella bombylans*. The train journey back to Waverley was a good opportunity to go over some of the day's highlights. Thanks to Rob for a very good day.

David Adamson



LOCHSHAW MOSS SSSI 11th June 2022
Leader: Colin Edwards

Colin Edwards unlocked a gate to allow us to park by a farm track close to Lochshaw Moss SSSI in West Fife. Colin is Butterfly Scotland's representative in Fife and is Environment Manager of Forest and Land Scotland. Before we set off Colin opened a moth trap which contained around 40 moths of 20 different species (see appendix below), a good haul considering the windy conditions.

A ten-minute walk brought our group of seven to the Moss. Although its main importance is as a lowland raised bog the surface was hidden by a forest of low-growing Birch Trees (*Betula pendula*).

Sheep obviously don't graze on birch heavily enough to prevent tree growth and as the trees take up water, resulting in the desiccation of the raised bog and loss of the peat, an effective means needs to be found to control this.

Although the surface of the Moss was dry, the species of plants suggested it was normally much wetter. There were plentiful hummocks of the Cotton-grass (*Eriophorum vaginatum*), and the hollows were filled with various spongy Sphagnum mosses, the latter providing a home to Sundew (*Drosera rotundifolia*) and at least one species of liverwort. Cranberry (*Vaccinium oxycoccus*) seemed to be everywhere, despite an apparent absence of insects to pollinate its flowers. Most of the insects in flight were day-flying moths, but Colin was very pleased to find a Large Heath Butterfly (*Coenonympha tullia*) which usually appears later in the month. Nearby were some Frogs (*Rana temporaria*) and a Lizard (*Zootoca vivipara*). Rob used his sweep-net to good effect and collected *Rhagonycha* and *Lochmaea* beetles. Apart from the Cranberry there were few plants to provide nectar for insects and the only bees seen in the reserve were workers of *Bombus pratorum* and either *B terrestris* or *B lucorum*.

Between the west end of the reserve and a mature birchwood Sarah found a Green Hairstreak Butterfly (*Callophrys rubi*), somewhat late for this Spring species. Stopping to look at the hairstreak allowed us to notice other insects such as a scorpion fly *Panorpa communis* and a green lacewing of the *Chrysopidae* family. We also found a single damselfly, and nymphs of a shield-bug. From the vegetation at the edge of the birchwood Rob swept a 14-spot Ladybird (*Propylea quatuordecimpunctata*) and a very small hoverfly that has still to be checked, and in the wood itself were a Light Emerald Moth (*Campaea margaritaria*) and Birch Shieldbugs (*Elasmostethus interstinctu*).

On raspberry flowers near the car park, and sheltered from the wind, we found some bees, among which was a male Forest Cuckoo Bumblebee (*Bombus sylvestis*) with a very yellow tail. After thanking Colin for showing us round Lochshaw Moss we drove the short distance to Peppermill Bothy in Blairhall.

David Adamson

Appendix: Colin Edwards' actinic heath trap moths were Map-winged Swift (*Pharmacis fusconebulosa*), Silver ground carpet (*Xanthorhoe montanata*), Purple Bar (*Cosmorhoe ocellata*), Phoenix (*Eulithis prunata*), Spruce Carpet (*Thera britannica*), Foxglove Pug (*Eupithecia pulchellata*), Brown Silver-line (*Petrophora chlorosata*), Scalloped Hazel (*Odontopera bidentata*), Willow Beauty (*Peribatodes rhomboidaria*), White Ermine (*Spilosoma lubricipeda*), Flame Shoulder (*Ochropleura plecta*), The Flame (*Axylia putris*), Knot Grass (*Acrionicta rumicis*), Clouded-bordered Brindle (*Apamea crenata*), Middle-barred minor (*Oligia fasciuncula*) Green Arches (*Anaplectoides prasine*), Purple Clay (*Diarsia brunnea*) and 2 day flying moths Common Heath (*Ematurga atomaria*) and Latticed Heath (*Chiasmia clathrata*).



White Ermine Moth *Spilosoma lubricipeda*



HOLYROOD PARK 18th June 2022
Leader: Stan da Prato

Holyrood Park is apparently one of the top ten Edinburgh visitor attractions listed by Tripadvisor, and its main paths are well trodden by dog-walkers, runners and those out to conquer Arthur's Seat because it is there. Our group of eleven had no hill to climb, and our hopes, rather than objectives, were to find some of the botanical specialities of the park. In this we were partly successful, but months of dry, windy, weather had retarded plant growth and may be the reason that we didn't find every species on our target list. We set off from Holyrood Palace car park to the top of the Haggis Knowe, overlooking St Margaret's Loch, where we found several patches of Maiden Pink (*Dianthus deltoides*) surviving on a crag exposed to the west wind. Our next objective was to find Adder's Tongue Fern (*Ophioglossum vulgatum*) in Hunter's Bog. Many of these small ferns were sheltering between clumps of Tall Fescue (*Festuca arundinacea*), but only a few seemed to have produced fertile fronds. Stan told us that the park had been used by Scottish kings for hunting and that Mary Queen of Scots had dammed Hunter's Bog

for a water pageant. Later, Prince Albert took an interest in its landscaping and is responsible for the current road layout and drainage. On our outing a former pond was completely dry, and there was no water to prevent us walking through tall vegetation to look at Reedmace (*Typha latifolia*).

Whitethroats (*Sylvia communis*) were seen and frequently heard. Those with binoculars had a good view of a Stonechat (*Saxicola rubicola*) perched on the top of a Sycamore (*Acer pseudoplatanus*). Kestrels (*Falco tinnunculus*) hovered above Salisbury Crags and towards Arthur's Seat. We found raptor pellets full of the hair of small mammals. Unfortunately, we did not see or hear Skylarks (*Alauda arvensis*) or Meadow Pipits (*Anthus pratensis*), probably because of disturbance by people and dogs despite the park rangers' many notices. No Fulmars (*Fulmarus glacialis*) were seen on the cliffs above the Radical Road. Inland colonies of this seabird have declined in recent years. There were hoverflies, including the striking black and yellow *Chrysotoxum bicinctum*. We had seen a couple of Small Heath Butterflies (*Coenonympha pamphilus*) and, before leaving the Hunter's Bog, we paused to look at Seven-spot Ladybirds (*Coccinella septempunctata*) in the three stages of larva, pupa and adult.

We followed the road above Samson's Ribs towards Dunsapie Loch. There was plenty of new botanical interest including colourful Viper's Bugloss (*Echium vulgare*), and Bloody and Dove's Foot Cranesbills (*Geranium sanguineum* and *G. molle*). We could not find Forked Spleenwort (*Asplenium septentrionale*) at its usual locality. By way of compensation some of us were lucky enough to see a Grayling Butterfly (*Hipparchia semele*), and a butterfly enthusiast kindly pointed out a Common Blue (*Polyommatus icarus*). She had also seen a Northern Brown Argus (*Aricia Artaxerxes*) but it eluded us. Lunch was taken by Dunsapie Loch, watched by hopeful but ultimately disappointed Canada Geese (*Branta canadensis*), Mallards (*Anas platyrhynchos*) and a Lesser Black-backed Gull (*Larus fuscus*). Some of the party elected to return via the low road with the chance of another park speciality, Sticky Catchfly (*Silene viscaria*), the county flower of Edinburgh & Midlothian and the plant in the Nats' logo.

Our circular route gave us a series of views of much of Edinburgh and the Lothians. Stan pointed out the top of the Bass Rock, visible over 25 miles away, and white with Gannets (*Morus bassanus*) and their droppings in the sunshine. Sadly, avian flu is currently killing hundreds of these birds. Thankfully not every species is declining, and on the last stretch of the walk we found some Speckled Wood Butterflies (*Pararge aegeria*), a species that has extended its range and become very common in Edinburgh in recent years. Thanks to Stan for leading the outing and to everyone in the group for their good company.

David Adamson



GIFFORD COMMUNITY WOOD AND POND AREA 25th June 2022
Leader: Dorothy Lyle

Five of us met in the centre of Gifford on a lovely summer day and made our way back to my brother's house nearby. I had set a moth trap in the garden overnight and our first task was to open the trap while enjoying a welcome morning cuppa. The trap was a little disappointing with quite a small catch but there was an impressive Poplar Hawkmoth (*Laothoe populi*), the attractive Peppered Moth (*Biston betularia*), Green Carpet (*Colostygia pectinataria*) and White Ermine (*Spilosoma luteum*) moths to please everyone.

We then set off to explore the community wood and the adjacent pond area. On the way to the pond, we found several webs of Bird-cherry Ermine (*Yponomeuta evonymella*) caterpillars. The pond area is a rich habitat with a large bit of marshy ground where the vegetation has been allowed to encroach on a portion of the original pond. We all poked about and came up with quite a few interesting finds. Unfortunately, the large Puss Moth (*Cerura vinula*) caterpillar I had spotted the previous day was nowhere to be seen, but we did find a much smaller one. In the pond, we also noticed Frog (*Rana temporaria*) tadpoles with legs. There was a Dabchick (*Tachybaptus ruficollis*) on the pond, Swallows (*Hirundo rustica*) swooping over the adjacent fields and Greenfinch (*Carduelis chloris*) and Redpoll (*Acanthus flammea*) close by. There were Large Red (*Pyrrhosoma nymphula*) and Blue-tailed (*Ischnura elegans*) damselflies, Clouded Border (*Lomaspilis marginata*), Silver Y (*Autographa gamma*)

and Brown China-mark (*Elophila nymphaeata*) moths and of course numerous other insects which were too quick or too unfamiliar to be identified.

Then back to the wood where we lunched in a clearing in which stood one of the many interesting sculptures that have been introduced by the landowner. The “STOP worrying” sign nearby amused us all. We then explored the community woodland where again there were many interesting finds. We saw several Birch Roller Weevils (*Deporaus betulae*), numerous *Argyresthia brockeella* micromoths, Speckled Wood (*Pararge aegeria*) and Red Admiral (*Vanessa atalanta*) butterflies and even a Red Admiral caterpillar rolled into a nettle leaf. There was also an Orange Tip (*Anthocharis cardamines*) caterpillar on some Garlic Mustard (*Alliaria petiolate*). Rob found a few beetles, notably *Nebria brevicollis*, Dead-nettle Beetle (*Chrysolina fastuosa*) and Blue Willow Beetle (*Phratora vulgatissima*), and a Bracken Bug (*Monalocoris filicis*). We also found the usual variety of ladybirds and shieldbugs.



A pleasant summer wander with lots to see was rounded off with a cup of tea at my brother’s house before the journey home.

Dorothy Lyle



SAUGHTON PARK 3rd July 2022
Leaders: Sarah & David Adamson

The Friends of Saughton Park (“FOSP”) have a nature group which holds themed walks during the summer, and this outing’s theme was insects. The areas visited were within and outside the walled garden. ENHS was represented by Ailsa and Janet, while Wendy and the leaders were members of both organisations, and the other seven were all FOSP members. We were lucky to have one youngster, Archie, who maintained his enthusiasm throughout the meeting and showed us the insects, which he caught in his bug box. These included five Rosemary Beetles (*Chrysolina americana*) at one time, which may be some kind of record.

The garden around the sundial was probably the least interesting of the areas visited, at least in terms of insects. There were plenty of honeybees and a few *Bombus terrestris* workers, especially on the *Nepeta six-hills giant*, but we found a lot more types of insects on the flowers in the main herbaceous border that runs north-south through the walled garden. These included plenty of 7-spot Ladybirds (*Coccinella septempunctata*) as larvae, pupae and adults, a hoverfly *Merodon equestris* masquerading as a bumblebee, and some solitary bees *Colletes daviesanus* which like to land on flat-topped Asteraceae flowers. The physic garden was also productive, the notable insects including Wool Carder Bees (*Anthidium manicatum*) and Leafcutter Bees *Megachile sp.* In the area of the bandstand we found caterpillars of the Cinnabar Moth (*Tyria jacobaea*), the species name referring to their foodplant.

Finally, we ventured from the walled garden to the nearby wild orchard where there were some new insects to discover. These included *Rhagonycha fulva* beetles on umbellifers, a solitary bee *Andrena denticulata* and, on Spear Thistle (*Cirsium vulgare*) a male Southern Cuckoo Bumblebee (*Bombus vestalis*) that Archie managed to capture.

As it was now nearing lunchtime, the meeting ended before everyone’s attention drifted towards food. In all we had seen at least seven bumblebee and four solitary bee species, bugs, beetles, some small moths and at least one sawfly. Sarah and I then walked to the Water of Leith Centre, on the way seeing a leaf-cutter bee trying its best to live up to its name by carrying a large slice of a leaf.

David Adamson



LONGNIDDRY TO ABERLADY 16th July 2022

Leaders: Lynn Youngs and Jean Long

18 members met at Longniddry Bents (No 3) car park on a cool, clear, overcast morning but with a forecast of the day becoming increasingly hot and sunny.

The day started with a “Botanical Blitz”! The leaders had earmarked two large patches covered with wildflowers adjacent to the meeting point and on the recce had listed 50 plant species growing in these areas. For those who wished to participate handouts were passed out for members to find as many species as possible within an allocated time of approximately 45 minutes. What a fantastic response! Just about everyone (a few people opted to look for insects instead) threw themselves into looking for the plants on the list and helped each other with sightings. It was a terrific start to the day and feedback was very positive with many members reporting that this had made them feel involved and they enjoyed the challenge of trying to find all of the plants on the list. There are too many plants to include in this report but the notable species included Musk Thistle (*Carduus nutans*), the beautiful Burnet Rose (*Rosa spinosissima*), Field Penny-cress (*Thlaspi arvense*) and wonderful displays of Bloody Cranesbill (*Geranium sanguineum*).

Moving on we came to an area nearby that looked like gravel wasteland but two less common plants of East Lothian were growing in profusion – Thyme-leaved Sandwort (*Arenaria serpyllifolia*) and Small Nettle (*Urtica urens*). As we walked further along the coast, we were delighted to see wonderful specimens of the lovely Clustered Bellflower (*Companula glomerata*) and a small display of Wild Garlic (*Allium vineale*).

By now the sun was becoming stronger and, as forecast, the day was warming up. This stretch of the East Lothian coastline is incredibly rich and diverse and it became quite a challenge to keep the group moving as there was so much to see. The group focusing on insects reported numerous species including *Acrosathe annulata* (a coastal species of Stiletto fly), *Udea lutealis* (Pale Straw Pearl), *Dithryea guttatoris* (Mottled Yellow Fly) and *Zygaena filipendulae* (Six-spot Burnett Moth) to name a few. *Tyria jacobaeae* (Cinnabar moth) caterpillars were seen on Common Ragwort (*Senecio jacobaeae*) and Butterflies seen included Ringlet (*Aphantopus hyperantus*), Small Skipper (*Thymelicus sylvestris*), Common Blue (*Polyommatus icarus*), Red Admiral (*Vanessa atalanta*), Small Tortoiseshell (*Aglais urticae*) and Meadow Brown (*Maniola jurtina*). Joanie was keeping a close eye on the bird species that were around and she reported sightings of European Goldfinch (*Carduelis carduelis*), Common Linnet (*Linaria cannabina*) and Sandwich Terns (*Sterna sandvicensis*).

One notable tree spotted on the route towards Aberlady was a fine specimen of Turkey Oak (*Quercus cerris*) which actually had acorns. The acorns are quite distinct – orange at the base, graduating to a green-brown tip, and with a 'hairy' acorn 'cup', which looks like a hat made of moss. This species was introduced to the UK as an ornamental tree in the 1700s and is non-native.

Slightly further along the coast we spotted Prickly Saltwort (*Salsola kali*) which was in flower and a huge display of Sea Sandwort (*Honckenya peploides*) which was in seed - both great sightings. By now the day was very hot and sunny and after lunch we continued along the coast to visit two water courses. These were both very productive for less common wildflowers – species seen included Blue Water Speedwell (*Veronica anagallis-aquatica*), False Fox Sedge (*Carex otrubae*), Yellow Oatgrass (*Trisetum flavescens*) and Hemlock Water Dropwort (*Oenanthe crocata*). Watercress was also seen and Sue Jury carefully checked the seed pods to discover that there were two rows of seeds which confirmed that the species was *Nasturtium officinale*.

The last part of the walk took us into a woodland area following the John Muir Trail to Aberlady. We all marvelled at the seedpods of Rough Chervil (*Chaerophyllum temulum*) and a Figwort that was spotted was identified as Yellow Figwort (*Scrophularia vernalis*) but sadly no longer in flower. The floor of the woodland was covered in lovely tufts of Hairy Brome (*Bromopsis ramosa*).

Finally, we arrived in Aberlady where a few people caught the bus back to the car park, some hardy souls opted to walk back and a number of members rounded off the day by visiting the terrific exhibition at the Scottish Ornithologists' Club HQ at Waterston House in Aberlady on "Birds, Botany and John Clare". This exhibition featured artists work with extracts from John Clare's nature poems written in the 19th century and it was well worth seeing. A fitting end to a very enjoyable day.

Lynn Youngs



WOODHALL DEAN 23rd July 2022

Leader: Lesley Fairweather

A group of 11 met at the Ford car park at the entrance to the SWT Reserve, Woodhall Dean. It was a warm and pleasant day as it had been during most of July.

Buzzards (*Buteo buteo*) could be heard throughout the walk but particularly loudly at the start where the young were begging for food from their parents. Also at the Ford, were Yellowhammers (*Empiriza citronella*) competing noisily with Chiffchaffs (*Phylloscopus collybita*). The Redstarts (*Phoenicurus phoenicurus*) had completed the upbringing of their young and had moved on, the usual result after a hard-working spring period.

The ancient Oaks (*Quercus sp*) and Ash (*Fraxinus excelsior*) at the start of the reserve had been measured a few years earlier and were aged at 200 years. Three Oaks, growing out of the sandstone conglomerate were particularly admired. Indicators of ancient woodland such as Dog's Mercury (*Mercurialis perennis*) was seen in profusion especially under the avenue of tall Hawthorn Trees (*Crataegus monogyna*). Later, another indicator of ancient woodland was found, Enchanter's Nightshade (*Circaea lutetiana*) almost hidden by the profusion of bracken. Pauline King, who left early, spotted a Slow-worm (*Anguis fragilis*) in the open area before the shade of the trees. However there were no Adders (*Vipera berus*) seen that day.

A circular path allows access into the centre of the Reserve, made easier by a substantial bridge crossing the Weatherly and Woodhall Burns. The Bryophyte community flourishes in this damp environment. The packhorse bridge, once used for the transport of charcoal and tannins, makes an attractive feature and growing on the top of it was a large clump of the rare Wood Vetch (*Vicia sylvatica*). Walking round the field, Sarah Adamson pointed out large clusters of Harvestmen spiders on many of the fence posts – never underestimate a wooden post for wild-life inhabitants. The boundary trees, once pollarded, were in good shape unlike the coppiced Oaks hit by Storm Arwen where several had been brought down. Luckily the ancient and successful Badger (*Meles meles*) sett was unscathed. Further on David Adamson identified Wood Fescue (*Festuca altissima*) a very tall grass. The rare lichen, *Gyalecta ulmi*, at Tinker's leap was not seen, even with the help of Vladimir's high powered illuminated lens!

Lunch at Bob and Betty's bench was welcomed with shade or sun available to suit all requirements. The most abundant butterfly was Speckled Wood (*Pararge aegeria*) which has increased in numbers over recent years. On the outskirts of the reserve where a pond was dug some years ago, several Common Blue Damselies (*Enallagma cyathigerum*) were enjoying the sunshine.



Speckled Wood *Pararge aegeria*

Lesley Fairweather

Footnote. The reserve and its car park were remarkably species-rich, particularly in insects. The following are some of the more notable species found: Flies *Empis tessellata*, *Sicus ferrugineus*, *Bibio pomonae*, *Panzeria sp*, *Graphomya maculata*; Bugs *Troilus luridus*, *Tingis cardui*; Beetles *Anoplotrupes stercorosus*; Wasps *Symmorphus bifasciatus*, *Ectemnius cavifrons*. The unusual grass *Apera spica-venti* was found in the car park.
David Adamson



LEADBURN COMMUNITY WOODLAND 30th July 2022

Leader: Joanie McNaughton

Thirteen Nats gathered on this sunny day in the lay-by that served as a car park. It was so nice to see Nev and Sue Crowther who some had not seen for quite a few years.

The Forestry Commission (“FC”) owned the land and planted mainly Lodgepole Pine (*Pinus contorta*) and Sitka Spruce (*Picea sitchensis*) in the 1960s. There were also experimental plots used by FC’s Northern Research Station. In 2007, SCIO charity Friends of Leadburn Community Woodland (“FLCW”) acquired the already clear-felled (2001) first block of 44 hectares. In 2019 it purchased the second, experimental, block and groundworks for raised bog restoration were completed in 2021, including installation of wooden dams, blocking ditches and compacting the surface.

There are three disused railway lines and an expanding network of grassy paths criss-crossing these main paths which link many wildlife habitats. FLCW planted 8,000 trees including native Scots Pine (*Pinus sylvestris*), Birch (*Betula sp*), Rowan (*Sorbus*), Aspen (*Populus tremula*) and Oak (*Quercus sp*) and four permanent ponds were established where Odonata thrive. Raised bog, woodland, meadow and heathland are all here.

We took a narrow woodland path, part of the Peebles Way. On Rosebay Willowherb (*Chamaenerion angustifolium*) we saw an Elephant Hawk-moth (*Deilephila elpenor*) early instar caterpillar with its diagnostic twin eyes. Nearby an ‘Ear’ moth was spotted. Ear moths (*Amphipoea species*) are very alike requiring genital determination to ID them to species. On Creeping Thistle (*Cirsium arvense*) Dorothy found Thistle Tortoise Beetle (*Cassida rubiginosa*) larva which has a protection system against predators of carrying an umbrella of frass on twin tail-spikes. We reached a pile of logs where I had seen something new to me on a previous visit, a long thin black and white insect with orange-red legs. I googled exactly that description and produced Sabre Wasp (*Rhyssa persuasoria*). I saw three of them, two females and a male and this became a target species. You can imagine my disappointment not to see one here on the excursion, but more later! Just beyond this, on the edge of the woodland before reaching the raised bog we found Common Earthball (*Scleroderma citrinum*).



Beyond the trees we came to a section of species-rich raised bog, known to support two priority butterfly species, Large Heath (*Coenonympha tullia*) and Small Pearl-bordered Fritillary (*Boloria selene*) both on the Scottish Biodiversity and UK BAP Status lists. Sadly, we saw neither. But Large Heath larvae’s food plant, Cross-leaved Heath (*Erica tetralix*) was still in flower, as was Bog Asphodel (*Narthecium ossifragum*). *Sphagnum* mosses were surviving the drought, and Round-leaved Sundew (*Drosera rotundifolia*) too, the latter with flower buds. Here too we watched a female Emerald Damselfly (*Leste sponsa*). The

path took us across the newly acquired section with early recolonisation of bog species in evidence. Two hoverflies seen were *Sericomyia silentis*, a bog specialist, and *Xylota segnis* prospecting for egg-laying sites amongst the roots of windblown conifers bordering the raised bog.

We reached another disused track, which provided a suitable lunch spot beside a pile of logs. A few of us sat on around it. Suddenly Dorothy yelled out, “Look, there’s something. Is that one?”, meaning Sabre Wasp. Well, you can imagine my glee. I had given up on them, having passed several suitable sites. We saw four, possibly five, females prospecting on the logs for buried grubs. Intent on their searching, we got close to them with much whirring of camera shutters, lunch forgotten! For more on these extraordinary insects please read my separate article in the Journal.

Continuing after lunch we passed one young Oak Tree (*Quercus sp*) with Oak Apple, a gall of the *Biorhiza pallida* gall wasp. Several Alder (*Alnus glutinosa*) had bright red chemically-induced distortions, Alder Tongue (*Taphrina alni*), on the female catkins. There were also skeletal leaves munched by Alder Leaf Beetle (*Agelastica alni*) larvae. None of these cause permanent damage to the trees. A plant I had not come across before, Bifid Hemp-nettle (*Galeopsis bifida*), grew by the path.

We reached the Dolphinton Way and two ruined buildings built in the early 1940s as part of a network of Royal Naval Armament Depots. One, the Laboratory Building, is used as a Barn Owl (*Tyto alba*) roost in winter. Beside the path were Small Skipper (*Thymelicus sylvestris*), an easy-to-photograph Narrow-bordered 5-spot Burnet Moth (*Zygaena lonicerae*) and a very fresh 6-spot Burnet Moth (*Zygaena filipendulae*). As is often the case in mid-summer there was a lack of birds, the normally constant sound of Lesser Redpoll (*Acanthis cabaret*) overhead was deafening in its absence. We reached Craighall Pond where I hoped to see more Odonata. Unfortunately, it was rather windy to get good views but we did see Common (*Sympetrum striolatum*) and Black (*Sympetrum danae*) Darters. I saw a few Damselflies, but none close enough to ID for certain.

Heading back to the lay-by we stopped to watch Leafcutter Bees (*Megachile sp*) carrying bits of leaf into holes in a wooden seat. We wondered how many people sat there ignorant of what was beneath them! Observations from David Adamson were hoverflies *Cheilosia illustrata*, 5-6 *Platycheirus granditarsus*, *Chrysogaster cemiteriorum* and his first *Orthonevra nobilis*, also the sawfly *Tenthredo olivacea* and two Brown Hare (*Lepus europaeus*) in the clear-felled area.

Joanie McNaughton



PRESTONGRANGE 13th August 2022
Leader: David Oates

Prestongrange in mid-August has become an annual fixture, mainly to admire the butterflies that cluster on the Buddleia bushes among the decaying relics of mining. Drought has changed so much this summer - plants withered, insects vanished, and the Buddleia flowered earlier than usual. Thankfully there were still some butterflies to be seen. However, these were only the most colourful and conspicuous of the invertebrates that drew us, and a couple of Edinburgh entomologists, to this site on another warm day of unbroken sunshine.

The wall outside the visitor centre appeared barren but, after scanning it for a while, we noticed small dark objects that moved; these were the jumping spider *Sitticus pubescens*, found again on another old wall at lunchtime. Next stop was at the west end of the long brick kiln where White Mellilot (*Mellilotus albus*) was abundant. Sarah found a Hairy Shieldbug (*Dolycoris baccarum*) on thistle, David spotted mining bees entering holes made in power station ash, Rob swept from bushes a Hawthorn Shieldbug (*Acanthosoma haemorrhoidale*) and Vlad explored an overgrown area beyond the fence.

The Birch Trees (*Betula sp*) on the way to the Cornish Beam Engine produced their usual species: Birch Catkin Bug (*Kleidocerys resedae*), Parent Bug (*Elasmucha grisea*) and Birch Shieldbug (*Elasmotethus interstinctu*). At the top of a flight of steps we were joined by a family from Devon for a gallery view of butterflies on Buddleia in a fenced-off area. Most were Peacocks (*Aglais io*) but we also saw Commas (*Polygonia c-album*) and a Red Admiral (*Vanessa atalanta*). Tufts of Fern Grass (*Catapodium rigidum*) were growing all along the gallery wall. We could hear the distinctive call of a Nuthatch (*Sitta europaea*) which others photographed when it posed on top of old mining equipment. Meanwhile Dorothy's careful scrutiny of the vegetation turned up, among other species, a leafhopper *Typhlocyba bifasciata*, an Orange Ladybird (*Halysia sedecimguttata*) larva and a parasitized Alder Moth (*Acrionicta alni*) caterpillar.

After lunch we completed a circuit of the reclaimed coastal grassland on the other side of the main road. On Broom we found Gorse Shieldbug (*Piezodorus lituratus*) and Pine Ladybirds (*Exochomus quadrimaculatus*) and saw an *Ancistrocerus* wasp on Yarrow (*Achillea millefolium*), solitary bees

Colletes succinctus flying above a patch of Heather (*Erica sp*) and a single Wall Brown (*Lasiommata megera*) butterfly. The purple flowers of Lucerne (*Medicago sativa*) demonstrated its ability to cope with the dry conditions. On the shore Rob found fossils of both the roots and trunk of ancient clubmosses or horsetails, and there were various *Hieracium* species, including one with blotched leaves, covering the eroded slope above the tideline.

I think that only Vlad and I saw a Seal (*Phoca vitulina*) that poked its head above the water just before the end of the meeting. Thanks to David for sharing his expertise in insects and to all who participated in a very relaxed and enjoyable outing.

David Adamson



MURRAYFIELD FLOOD RELIEF on the WATER OF LEITH 27th August 2022

Leaders: Sarah & David Adamson

Today was about observing and being guided by the people taking part. Dorothy kicked off with nymphs of the Hawthorn Shieldbug (*Acanthosoma haemorrhoidale*) in their late summer feeding spots on Rowan (*Sorbus aucuparia*) berries. Two other rose family members nearby were Hawthorn (*Crataegus sp*) and a Wild Rose (*Rosa sp*) which allowed us to compare them. This set the tone for the rest of the outing along the section below the main cycle/walkway where representatives of the Pea (*Fabaceae*), Mint (*Labiatae*) and Daisy (*Asteraceae*) families thrive. The diversity of composite flowers such as Daisies (*Bellis perennis*) and Thistles (*Cirsium sp*) was noted. Some were surprised how the familiar larger pea flowers were densely packed in a Clover (*Trifolium*) head. Later some recalled that the Broom (*Cytisus scoparius*) and Gorse (*Ulex europaeus*) which develop seed pods had had pea flowers earlier in the year.

A team from the Water of Leith Conservation Trust have treated and monitored the response in an effort to eliminate the invasive Giant Hogweed (*Heracleum mantegazzianum*). Some ENHS members participate by surveying areas in order to see the recovery of areas treated. Over the last couple of years there has been a focus on the mosses and liverworts, *Bryophytes*, the early colonisers of bare earth. Bare earth arises from the killing of the Giant Hogweed plant which grows from a large basal rosette.

We arrived at Saughton Park greeted by music at the skate park, an event around the Simpson's Memory Box Appeal Tree and Friends of Saughton Park in the courtyard. After lunch in the Italian Garden our wander took us through the Physic Garden where there were members of the above plant groups, especially more Mints. We often pass these plants when out and about where they can indicate relicts of earlier human habitation. The Caley's demonstration gardens included 'The Resources Garden' which was offering its resources to many flying insects and was a great way to see what types of late summer flowers are visited by insects.

On to the bridge, via the Reverse Archimedes Screw, where a leaning position was adopted to wait for the Otters (*Lutra lutra*). Alas, no otters, but multiple fly-bys of the Kingfisher (*Aceldo atthis*). A local otter-watcher was eager to enlighten us with the recent behaviour of the park otter family. All in all, we were left in a relaxed mood. The day had been sunny without the rain of the last week or so. The iNaturalist website was 'down' for the duration and some of us, who would have recorded on the spot, took only a few photos.

Sarah Adamson

Footnote 30th December 2022 *Sarah Adamson*

Winter rain caused flooding of the area visited in August. On this occasion the flooding covered the footpaths and the flood gates protected the local houses from flooding. The flood relief area contained most of the water and several days later that water had receded leaving the typical winter appearance. In the next year or so it will be possible to see if plants and seeds have been deposited along with the debris that dropped out of the water. What often needs a longer time to be assessed is the fate of the birds and mammals living waterside. This area is part of our local 'patch' and rarely fails to please as it transforms from concrete scar to rich river habitats.



WILSONTOWN 10th September 2022

Leaders: Sarah & David Adamson

For several years we have wanted to show Wilsontown to the ENHS. Today, in still conditions, with a mixture of sunshine and clouds, it was perfect to see how Wilsontown, an early iron ore mining area, sat in the larger landscape. The far distance revealed mountains and closer there was standing forestry as well as clear-felled forestry which we walked through. Taking advantage of interpretation boards at viewpoints you could look down on the area of 'bell' pits where iron ore was extracted by man-power and carried to the surface. The ground was often coal waste and many features were created with this waste. Brick building remnants, chunks of concrete and the re-use of railway tracks were also evident. The one standing roofless building was the 'pub' at the end of the residential street; now you could imagine the rectilinear outlines in the rosebay willowherb. The modern small settlement is called Rootpark. Ravens (*Corvus corax*) croning overhead accompanied us for most of the day.

The natural history was general in that we were able to review some of the non-vascular plants, like ferns, mosses and liverworts. Of vascular plants some non-flowering examples included Stag's-horn Clubmoss (*Lycopodium clavatum*) and Adder's Tongue Fern (*Ophioglossum vulgatum*) through to naturalising flowering plants and the planted forestry. Plants hosted a variety of late summer insects and flocks of small birds. They also showed signs of the changing season. Our newest member, Ellie, was interested in plant galls and we found a nettle gall *Dasineura urticae*. Stuart spotted a Peregrine (*Falco peregrinus*) diving in the distance. Fungi were represented by some fine examples of the larger species and complex carpets of lichens.

As we left Wilsontown we looked at a patch of Common Toadflax (*Linaria vulgaris*). Suhail Schehade commented on the value of using a smartphone to video them when we were all attracted to the bumblebees forcibly landing on the lip to access the nectar within and bouncing off to another flower. David photographed an interesting bumblebee, *Bombus soroensis*, a declining species with no nearby records. Having walked a hybrid walk of the red and blue routes created by Forestry and Land Scotland, the green route of the Glen offered a contrast. A small piece of wall was all that remained of the old house. However, a 'glen' running parallel to the burn had been created using more of the coal waste seen in the Wilsontown area. Here the plants were a mixture of garden types, local and less local native plants. David found another plant gall *Jaapiella veronicae* growing on Germander Speedwell (*Veronica chamaedrys*). This area was full of typical woodland birds chattering to each other and warning us to keep our distance.

This week was Gall Week 2022 and although we were not looking specifically for galls this biodiverse area would make a good place to survey for galls. It is a site for all seasons and can be reached by road from Edinburgh in about 45 minutes.

Sarah Adamson



CAMMO 29th September 2022

Leader: Wilma Harper

This was an afternoon walk to explore Cammo and the surrounding area to show the range of habitats which are there and how these are changing.

We started near the 31 bus stop on Maybury Road. This busy dual carriageway was built in the 1930s and will become ever busier with new housing to the west. Our route took us along Cammo Walk which is now traffic free and a pleasant lane with a good mix of trees and shrubs either side. These give on to fields some of which have been uncultivated for several years awaiting decisions on future housing developments and some are still growing arable crops.

As we approached Cammo Estate we noticed a large branch from an oak (*Quercus sp.* probably *robur* but I didn't check) had fallen across the field, a victim of summer branch drop and something the Nats had encountered at Faskally some years before.

Once in Cammo Estate proper we headed for the new pond in the South field. This was installed in spring of 2022 by capturing the water from field drains into a stream and small pond before converting an existing wet area. The pond was dug to a depth of maybe a metre and about 50m across so is a significant feature. The project has been led by the Friends of Cammo and in particular Nick Bengé. His evening talk on the project will feature in the report for 2023.



Cammo Pond – April 2022



Cammo Pond – September 2022

Although still very new, the local wildlife soon settled in. It's a good spot for dragonflies and damselflies. I've seen Four Spotted Chaser (*Libellula quadrimaculata*), Blue Damselfly (*Enallagma cyathigerum*) and Common Darter (*Sympetrum striolatum*). The local Heron (*Ardea cinerea*) and Moorhens (*Gallinula chloropus*) visit it from the canal pond up the hill and I have stood on a late afternoon, watching Swallows (*Hirundo rustica*) dipping into the water maybe to drink or catch insects. The plants in the pond include: Broad-leaved Pondweed (*Potamogeton natans*), Purple Loosestrife (*Lythrum salicaria*), Water Mint (*Mentha aquatica*), Water Plantain (*Alisma plantago-aquatica*), Flowering Rush (*Butomus umbellatus*), Bog Bean (*Menyanthes trifoliata*), Bulrush (*Schoenoplectus lacustris*), Sweet Galingale (*Cyperus longus*) and Bur Reed (*Sparganium erectum*).

While the planned planting was all native species, there is also growth of a non-native species of *Elodea*, possibly *E. crista*. This may have come from the canal pond, or someone dumping the contents of a fish tank. We moved across to the Home Field. It and the other fields are managed for wild flowers. They are left to grow and each winter are cut and the arisings baled with the bales placed around young trees, along with old Christmas trees. Making our way to a bench by the hedgerow for a snack we remarked on how these field boundaries have become a broad feature with a mix of trees and shrubs in the centre merging into a broad wildflower margin. These are a haven for insects in summer and birds in winter but have value for wildlife all year. Cammo Estate is intensively and sympathetically managed for conservation and has an active and reasonably well-resourced friends group. It is well used by local people, birdwatchers, dog walkers, archaeologists, runners and others. As the fields around it change from what was once green belt to housing, it becomes much more of an island site where the wildlife corridors will change.

On a warm September afternoon, we had seen a range of habitats in a small area and a snapshot in the sometimes-turbulent history of Cammo Estate.

Wilma Harper



HERMITAGE OF BRAID 14th October 2022

Leader: Ellie Mayhew

On Friday 14th October, a group of 9 ENHS members met for an outing at the Hermitage of Braid in Edinburgh. The site is adjacent to Blackford Hill and is predominately an old woodland garden comprising of mixed deciduous woodland with areas of scrub, planted non-natives and steep rock faces laden with bryophytes which flank the burn that runs through the lower reaches of the site. It is popular with dog walkers, runners and cyclists. Our route took us through woodland and along the burn, where highlights included: a Cream-spot Ladybird (*Calvia quattuordecimguttata*), multiple hoverfly larvae (likely *Syrphids*), some of which were bright green and some which were cream-coloured and strikingly

patterned, a lacewing larva which had covered itself with debris as a form of camouflage, Wall Pennywort or Navelwort, (*Umbilicus rupestris*), growing on a rocky outcrop and galls of *Mikiola fagi*, a gall-midge which attacks the leaves of Beech (*Fagus sylvatica*) and was, until recently, thought to be extinct. The group also spotted several species of fungi, including Candlesnuff Fungus (*Xylaria hypoxylon*) and Honey Fungus (*Armillaria* sp), and also some nice bryophytes.

We were very lucky with the weather as the rain held off and we enjoyed a sunny and crisp autumn afternoon. I believe a good time was had by all.

Ellie Mayhew



MUSSELBURGH LAGOONS 3rd December 2022
Leader: Stan da Prato

On a relatively mild December morning fifteen members assembled with telescopes and binoculars near the mouth of the Esk at Goose Green. High tide was in less than an hour, so most of the waders had flown into a group of shallow man-made ponds called the Scrapes. Some Redshank (*Tringa totanus*) and a few Turnstone (*Arenaria interpres*) were still at the tide edge in an area free from disturbance by the many dogs which are exercised here. These Turnstone are from the population that breeds in Greenland and Arctic Canada, one example of the distance that many birds fly to winter in Scotland. The calm waters of the Forth Estuary allowed those with powerful telescopes to pick our distant rafts of Velvet Scoter (*Melanitta fusca*) and Long-tailed Duck (*Clangula hyemalis*) while those with binoculars enjoyed the spectacle of Goldeneye (*Bucephala clangula*) closer inshore.

We followed the path between the temporary fencing and the sea wall, pausing to search for birds offshore. In addition to Eiders (*Somateria mollissima*) and Red-breasted Mergansers (*Mergus serrator*) there were a few Red-throated Divers (*Gavia stellata*) and many Shags (*Gulosus aristotelis*), outnumbering the Cormorants (*Phalacrocorax carbo*). Andrew pointed out a Slavonian Grebe (*Podiceps auritus*), and we were able to compare it with the larger Great Crested Grebes (*Podiceps cristatus*) which obligingly appeared nearby.

Before turning inland to the Scrapes we saw a Stock Dove (*Columba oenas*) foraging on cut grassland, the dark eye and lack of any white patch distinguishing it from Feral (*Columba livia domestica*) and Woodpigeons (*Columba palumbus*). We also watched two pairs of Gadwall (*Mareca strepera*), a pair of Mute Swans (*Cygnus olor*) and a Moorhen (*Gallinula chloropus*) on the yachting pond.

The Scrapes are fed by water from the Esk, kept at a level to attract birds. There is no public access to the ponds themselves and viewing is from three concrete, vandal proof bird hides, all of which we visited. Winter sunshine brought out the subtle green colours of Lapwings (*Vanellus vanellus*) as well as the brilliant greens of Teal (*Anas crecca*) and Shelduck (*Tadorna tadorna*) and the warm red-browns of Wigeon (*Anas penelope*). Some Shoveler (*Spatula clypeata*) showed off their enormous bills. Waders such as Dunlin (*Calidris alpina*), Redshank (*Tringa tetanus*), Snipe (*Gallinago gallinago*) and Curlew (*Numenius arquata*) probed for invertebrates while a Black-tailed Godwit (*Limosa limosa*) preened itself in front of one hide. As well as ducks and waders the grassland around the Scrapes attracted a pair of Mistle Thrushes (*Turdus viscivorus*) and a flock of six Twite (*Linaria flavirostris*). From time to time the big Lapwing flock took to the air, perhaps disturbed by a deer, dog, or raptor. At one point a Roe (*Capreolus capreolus*) doe ran in front of a hide, panicking the Wigeon. However, the Kestrel (*Falco tinnunculus*) which hovered over one of the Scrapes didn't appear to disturb anything.

The former lagoon by the Esk mouth is now fenced off for landscaping to create wildlife-friendly habitats. It seems some birds are already using the area which is why we didn't see the expected Grey (*Pluvialis squatarola*) and Ringed Plover (*Charadrius hiaticula*), Knot (*Calidris canutus*) and Bar-tailed Godwit (*Limosa lapponica*) - something to look forward to when the fences are removed early in 2023. We returned to Goose Green by the side of the racecourse. The ebbing tide exposed sandbanks and mud at the river mouth on which were many waders, ducks, and five species of gull, including one adult Lesser Black-back (*Larus fuscus*) which hadn't migrated south to Iberia or North Africa.

Although it was still early afternoon, the light was beginning to fade, and the slight chill of an easterly persuaded us that it was time to bring a very enjoyable and interesting day to a close. Thanks to Stan for leading this outing and for sharing his extensive knowledge of the birds of Musselburgh Lagoons.

David Adamson, with ornithological notes from Stan da Prato



CHRISTMAS WALK – DREGHORN WOODS 29th December 2022.

Leader: Frances Dunn (in place of Janet Watson)

Fourteen of us assembled beside the recycling bins in the far corner of Morrisons' CP, Dreghorn. We were sad to learn of Janet's illness which meant that she could not be with us. This must be the first time Janet had not led the post-Christmas walk for many years. However, Frances kindly took her place, with Janet's hand-written notes for guidance. The day was raw with a chill wind, but a weak sun shone through some gaps in the cloud with patches of blue sky. We were fortunate as it was sandwiched between two days of torrential rain. We seemed naturally to split into two groups, the walkers and the fungi hunters, the latter group forever playing catch-up. We did eventually decide to split officially as the front group was continually having to stand and wait for the fungi hunters!

Surprisingly for the time of year, we noted Meadow Buttercup (*Ranunculus acris*), with a stem carrying five open flowers. More commonly in flower in December is Gorse (*Ulex europaeus*), with a few bright yellow beacons in dull surroundings. The first fungus we saw was Stump Puffball (*Apioperdon*, formerly *Lycoperdon, pyriforme*) growing on buried wood beside the path, and Scurfy Twiglet (*Tubaria furfuracea*) which grows on twigs or woody debris. There were many log piles of decaying wood, including Ash (*Fraxinus excelsior*) after much felling in the summer to eradicate Ash Dieback (*Hymenoscyphus pseudoalbidus*), Sycamore (*Acer pseudoplatanus*) and Beech (*Fagus sylvatica*), all with a host of fungi. A few noted were, the fruiting bodies of Purple Jellydisc (*Ascocoryne sarcoides*), whose ID was confirmed by Vlad, Jelly Rot (*Phlebia tremellosa*), Bleeding Broadleaf Crust (*Stereum rugosum*), Smoky Bracket (*Bjerkandera adusta*) and Yellow Brain Fungus (*Tremella mesenterica*), another belisha beacon of colour on a dullish day. We also found possibly *Mycena rubromarginata* but were unable to confirm ID as the specimen taken home disintegrated before microscopical examination could be done.

Birds seen and/or heard were Jay (*Garrulus glandarius*) calling (always heard, rarely seen!), Buzzard (*Buteo buteo*), Bullfinch (*Pyrrhula pyrrhula*), Long-tailed Tit (*Aegithalos caudatus*), Goldcrest (*Regulus regulus*), Treecreeper (*Certhia familiaris*) and Nuthatch (*Sitta europaea*) calling.

Towards the end of the walk, we passed the Dreghorn Training Trenches, two major systems used by the Army in trench warfare training which was characteristic in WWI and to a lesser degree in WWII. The trenches became overgrown and infilled through erosion and were gradually forgotten. Re-found in 2012, an archaeological survey was commissioned by the City of Edinburgh Council and subsequently the area was cleared of trees and debris. The site is now listed as a scheduled monument by Historic Environment Scotland.

After the walk we met in the Hunter's Tryst for lunch. Some didn't stay for lunch and others, who had not been on the walk, joined us. It was so nice to see old friends and meet new members. Sue Jury, who unfortunately missed us at the meeting point, did a walk of her own. She identified 70 species in the Woods (not flowering) including Sanicle (*Sanicula europaea*), Bugle (*Ajuga reptans*), Sweet Cicely (*Myrrhis odorata*) and Alpine Strawberry (*Fragaria vesca*), and at lunch she showed us a grass that is found mostly around coastal southern England, which has moved north and is now seen fairly commonly in and around Edinburgh. The grass is Water Bent (*Polypogon viridis*), and Sue found it on Oxfangs Road. BSBI Botany in Scotland states in Sept 2020 "... Plant Life of Edinburgh and the Lothians, published 20 years ago Musselburgh 1913, Braehead Quarry 1978".

Joanie McNaughton

Evening Meetings

MEETING AT THE EDINBURGH QUAKER MEETING HOUSE 21st September 2022

There was still some daylight as people arrived at the top of the building for our first post-pandemic indoor gathering. It was more about getting together after two and a half years than an evening with a guest speaker. In the fading light, looking out of the windows showed the surrounding area of the Old Town which does have some green spaces and natural history to study. Some of us had explored the locality; Greyfriars Churchyard and Johnston Terrace SWT Nature Reserve.

Sarah and David Adamson gave a quick run through of the kind of things they had done during the pandemic; mostly visiting Corstorphine Hill, the Union Canal, the Water of Leith and Gogarburn Estates. David showed photographs taken on Summer 2022 outings. Sarah had spent many hours recording via iRecord and later on iNaturalist, as well as getting to know other groups of people, in person and online, both in the UK and further afield.

An informal chat continued where others told us about their activities.

Sarah Adamson

AGM 19th October 2022

The business part of the meeting included the reporting of Council voting results and some lively discussion.

Natalie Todman, Tragus Training, and a former president of ENHS, gave a talk about 'Bats in the Lothians'. After a short introduction to bats covering anatomy, echolocation, life cycles, legal protection, and how bats benefit humans, we went on a virtual bat walk. Starting just before dusk we travelled through different habitats discussing the different species that could be found there and learned a little about each, including how they sound on a bat detector. The talk ended with an overview of the 'Lothians Lockdown Bat Survey' – a project that Lothians Bat Group undertook during lockdown to engage with people and get everyone recording the presence, or absence, of their local bats. Lothians Bat Group can be found on Facebook and Twitter (@lothiansbats).

Lots more information on bats in the UK can be found on the Bat Conservation Trust website www.bats.org.uk

Sarah Adamson, Natalie Todman

BIRD RINGING 16th November 2022 *Ellie Mayhew*

Ellie joined us for her first outdoor meeting at Wilsontown and offered to do a talk. She has been a bird ringer and worked in places across the world and feels that this kind of study is important for understanding the global populations of birds.

We were enthralled by her knowledge and experiences as a bird ringer. Her photographs clearly showed how to measure the bird's vital statistics and assess the health of the bird. Ellie's ringing equipment for small birds, including her personal sets of rings, was available for us to see and handle. She stressed that training, up-dating and experience are essential when handling live birds in order to limit any stress.

MEMBERS' OBSERVATIONS

MC – Mary Clarkson, JL – Jean Long, JM – Jackie Muscott, DL – Dorothy Lyle, JMcn – Joanie McNaughton, LB – Lyn Blades, LY – Lynn Youngs.

JANUARY 2022

- 09-Jan Lesser Celandine (*Ficaria verna*) showing flower buds outside Kingscavil Church (east of Linlithgow). Also, female flowers on Hazel (*Corylus avellana*) seen by Union Canal. JL
- 11-Jan Some flowers on Common Rock-rose (*Helianthemum nummularium*) in square metre planters in Craigmillar Castle Park. JL
- 14-Jan Redwings (*Turdus iliacus*) and Common Gulls (*Larus canus*) at The Meadows. JM
- 15-Jan Flock of Long-tailed Tits (*Aegithalos caudatus*) seen from the bridge over the old railway Clark Road Trinity. LB JM
- 22-Jan A Skylark (*Alauda arvensis*) singing as it rose above a field north of the River Leven south of Farmlands (NO233013). JL
- 23-Jan Fluted Bird's Nest (*Cyathus striatus*) at RBGE with Edinbugh & Lothians Fungi Enthusiasts (ELFE). JMcn
- 26-Jan Scarlet Elfcup (*Sarcoscypha austriaca*) at Scottish Wildlife Trust's (SWT) Bawsinch NR and Hazel (*Corylus avellana*) female flowers with male catkins. JMcn
- 26-Jan Watched two cygnets (*Cygnus olor*) displaying on Blackford Pond. JL

FEBRUARY 2022

- 03-Feb Red Squirrel (*Sciurus vulgaris*) in a garden near Dalgety Bay Sailing Club. JL
- 07-Feb Treecreeper (*Certhia familiaris*) seen in Melville Castle Woods. I got to within 3 metres of it at the base of a tree. JL
- 16-Feb Brown Hare (*Lepus europaeus*) seen in a field north of Hailes Castle. Looked closely at the flowers of Wild Radish (*Raphanus raphanistrum*), some white, others lilac and all veined. JL
- 22-Feb In Dalkeith Country Park Scarlet Elfcup in a wood near Westgate Park and Dog's Mercury (*Mercurialis perennis*) in flower. JL
- 22-Feb Back green Warrender Park Road a male Bullfinch (*Pyrrhula pyrrhula*) appeared on the feeder – first ever. JM
- 22-Feb Seen in Grange Cemetery for Cemetery Wildlife Watch (CWW) Ladybirds - Striped (*Myzia oblongoguttata*), 10-spot (*Adalia decempunctata*), Orange (*Halyzia sedecimguttata*) and 2-spot (*A. bipunctata* v. *quadrimaculata*) - plus a lovely show of Winter Aconite (*Eranthis hyemalis*). JMcn
- 26-Feb Seen from the Sanctuary (west) hide at Bawsinch, a pair of Gadwall (*Mareca strepera*) on Duddingston Loch. White Butterbur (*Petasites albus*) in flower. JL
- 27-Feb First butterfly of the season a Peacock (*Aglais io*) sunning itself on Spring Heather (*Erica* sp) at Astley Ainslie. JM
- 27-Feb At Cammo a lot of Scarlet Elfcup - various sizes, male and female flowers on Alder (*Alnus glutinosa*) and looking downstream from Cramond Old Brig, a Little Grebe (*Trachybaptus ruficollis*) and one Kingfisher (*Alcedo atthis*). JL

MARCH 2022

- 01-Mar Large flock of Fieldfare (*Turdus pilaris*) at Cloich, north-west of Eddleston. JL
- 06-Mar Slime Mould (*Metatrichia floriformis*) at Newington Cemetery with ELFE. JMcn
- 06-Mar Juniper Shieldbug (*Cyphostethus tristriatus*) on a gravestone in Newington Cemetery. DL
- 15-Mar Frogspawn (*Rana temporaria*) in ditches, south side of Whitburn. JL
- 18-Mar Male and female flowers on European Larch (*Larix decidua*) in woods at Raven Craig north of Bathgate. JL
- 23-Mar Small Tortoiseshell (*Aglais urticae*) at Mortonhall. JL
- 23-Mar Several (hard to count!) male Hairy-footed Flower Bees (*Anthophora plumipes*) seen visiting Lungwort (*Pulmonaria* sp) at Cyrenean Community Garden, Royal Edinburgh Hospital. I didn't see any females but they are present I was told. JMcn
- 25-Mar In Burdiehouse Burn Valley Park, Blackthorn (*Prunus spinosa*) was flowering. In Moredun Woods, I saw Wood Anemone (*Anemone nemorosa*) in flower. JL
- 27-Mar In the Bo'ness area Wych Elm (*Ulmus glabra*) fruiting. JL
- 28-Mar Peacock (*Aglais io*) seen in Astley Ainslie grounds and a 2-spot Ladybird (*Adalia bipunctata*) in Inch Park. JL
- 28-Mar My first of the Year, Comma (*Polygona c-album*), Small Tortoiseshell and Peacock seen, all nectaring on Giant Butterbur (*Petasites japonicus*) at Bawsinch. Also Dark-edged Bee-fly (*Bombylius major*). JMcn

28-Mar Chiff-chaff (*Phylloscopus collybita*) singing - first I've heard this year. JMcN

APRIL 2022

- 02-Apr Roof-nesting Lesser Black-backed Gull (*Larus fuscus*), LBBG, returned from wintering grounds in Africa - three birds seen. They nest on the flat roofs of St Alban's Road, which look over our gardens. JMcN
- 03-Apr Common Dog Violet (*Viola riviniana*) and Wood Sorrel (*Oxalis acetosella*) both flowering in Heriot-Watt Edinburgh Campus (Riccarton). JL
- 09-Apr Dark-edged Bee-fly, Small White (*Pieris rapae*) and Common Frog tadpoles found in the grounds of King's Buildings. JL
- 10-Apr Heard my first Chiff-chaff in Blackford Glen. JL
- 12-Apr Somewhat incongruous sight - LBBG balancing on bird feeder, arrived just after I'd put fresh fruit out. It became a regular on the feeder. JMcN
- 14-Apr Nuthatch (*Sitta europaea*) on the ground near Newbattle Golf Club Clubhouse. JL
- 15-Apr In Figgate Park on the pond, one Otter (*Lutra lutra*) unsuccessfully trying to catch a Woodpigeon (*Columba palumbus*) on a low overhanging branch. JL
- 15-Apr My first of the year, Willow Warbler (*Phylloscopus trochilus*) and Blackcap (*Sylvia atricapilla*) singing, at Bawsinch NR. JMcN
- 18-Apr First butterfly in our garden - a Small Tortoiseshell. JL
- 19-Apr Cherry blossom (*Prunus sp*) beginning to flower in front of Mayfield Saliisbury Church.. JL
- 20-Apr In Dalkeith Country Park I noticed Plantain-leaved Leopard's-bane (*Doronicum plantagineum*). I first learned to identify it from Jackie Muscott on an outing in Craigmillar Castle Park, May 2018. JL
- 26-Apr On a visit to our garden, Joanie McNaughton spotted a Hairy-footed Flower-bee and a Common Carder Bee (*Bombus pascuorum*). JL
- 27-Apr Saw a Wall (*Lasiommata megera*) on Gorse (*Ulex europaeus*) and a Hairy Shieldbug (*Dolycoris baccarum*) on the road under Samson's Ribs, Holyrood Park. Managed to trap the Shieldbug and moved it to the verge. JMcN
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MAY 2022

- 01-May Saw my first Swallows (*Hirundo rustica*) around Stonelaws, south-east of North Berwick. JL
- 02-May Osprey (*Pandion haliaetus*) pair are back at nest site near Lake of Menteith, male bringing fish to his mate sitting on nest. JMcN
- 03-May My first Cuckoo (*Cuculus canorus*) of the spring at Flanders Moss. JMcN
- 14-May Lots of False Blister Beetles (*Oedemeridae sp*) on Dandelion (*Taraxacum sp*) flowers near Moffat. DL
- 15-May Swifts (*Apus apus*) heard screaming over the house. No count as I was indoors and didn't see them. JMcN
- 19-May In Lover's Loan Marchmont Round-leaved Cranesbill (*Geranium rotundifolium*) has survived "tidying up". JM
- 25-May Cinnabar (*Tyria jacobaeae*) seen west of Darnhall Mains near Eddleston and in the Portmore Estate, Fern-leaved Beech (*Fagus sylvatica* 'Asplenifolia'). JL
- 28-May Beautiful Green Silver Lines (*Pseudoips prasinana*) in my bedroom window moth trap which was a lovely surprise. DL
- 28-May From Back Green, Marchmont got first sight of Swifts (*Apus apus*) flying high - apparently already seen further east. JM
- 29-May Lots of Horse-chestnut Leafminer (*Cameraria ohridella*) adults, which I have unsuccessfully searched for many times, found at last in Comely Bank Cemetery. DL
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JUNE 2022

- 01-Jun At Bawsinch, Comma (*Polygona c-album*). JL
- 02-Jun My first sighting of evidence of Avian Influenza when a dead Gannet (*Morus bassanus*) floated past at Skateraw. JMcN
- 02-Jun Angle Shades (*Phlogophora meticulosa*) in our garden. JL
- 03-Jun In Back Green Marchmont, the first Speckled Wood (*Pararge aegeria*) was seen. JM
- 04-Jun Released a Small Magpie Moth (*Anania hortulata*) from my friend's summerhouse near Dunbar and then caught my first Spectacle Moth (*Abrostola tripartita*) in a trap there that night. DL
- 05-Jun At Aberlady after the timber bridge, lots of Bogbean (*Menyanthes trifoliata*) flowering in ditches beside the footpath. Washed up on the beach at Gullane many Sea Potatoes (*Echinocardium cordatum*). JL
- 11-Jun Bullfinch and Chaffinch (*Fringilla coelebs*) drinking in Back Green, Marchmont. JM
- 12-Jun Bell Heather (*Erica cinerea*) in flower in Holyrood Park. JL
- 14-Jun Saw a Small Copper (*Lycaena phlaeas*) as I passed by Mary Clarkson's garden. JL

- 15-Jun A windless sunny day at last and more Swifts seen flying from the Back Green. . JM
 16-Jun In a hotel garden in Burton-on-Trent serenaded for half an hour by a Songthrush (*Turdus philomelos*) and a Wren (*Troglodytes troglodytes*) - lovely. JM
 18-Jun At Little Sparta found several young Emperor (*Saturnia pavonia*) caterpillars which I didn't recognise as they were so different from the bright green later instars. DL
 19-Jun A Brimstone Moth (*Opisthograptis luteolata*) came to our garden - a first. Obliging it settled on a shrub so I had a good look at it which confirmed its identity. JL
 21-Jun Mating pair of Small China-mark (*Cataclysta lemnata*) seen at this new site, the 'platform' pond within Bawsinch NR. I have now recorded these micromoths at four sites on the reserve. The earliest seen this year was 28th May. DL
 23-Jun Four Banded Longhorn Beetle (*Leptura quadrifasciata*) found on Bramble (*Rubus fruticosus*) in Gifford. DL
 24-Jun Large Puss Moth (*Cerura vinula*) caterpillar and several smaller ones found on Sallow (*Salix caprea*), by the pond in Gifford. DL
 28-Jun A Mottled Beauty (*Alcis repandata*) was resting on our front door. I put it in a container and later Joanie identified it for me. JL
 28-Jun Found in Gifford Wood, a December Moth (*Poecilocampa populi*) caterpillar with parasitic cocoons attached. Passed to Dr Mark Shaw for rearing. DL

JULY 2022

- 05-Jul At Leadburn Community Woodland saw one male and two female Sabre Wasps (*Rhyssa persuasoria*), a Speckled Longhorn Beetle (*Pachytodes cerambyciformis*) and a Small Fleck-winged Snipefly (*Rhagio lineola*), both new to me, and a Large Heath (*Coenonympha tullia*) on Wild Thyme (*Thymus polytrichu*) and Cross-leaved Heath (*Erica tetralix*). There was a beautiful carpet of Bog Asphodel (*Narthecium ossifragum*) across the peat bog and Round-leaved Sundew (*Drosera rotundifolia*) in the bog flushes. JMcN
 05-Jul A Walnut Tree (*Juglans regia*) on The Meadows was seen with two young nuts and mite galls *Aceria erinea*. JM
 09-Jul On Blackford Glen Road, by the Council Depot, saw young Swallows (*Hirundo rustica*) being fed on the wires. JM
 11-Jul Large ichneumon wasp *Heteropelma amictum* found at National Museum Collection Centre, NMCC. DL
 12-Jul Sticky Catchfly (*Viscaria vulgaris*) gone over and a healthy population of Forked Spleenwort (*Asplenium septentrionale*) seen in the same area under Samson's Ribs, Holyrood Park. Across the road lots of Red Valerian (*Centranthus ruber*) was attracting Grayling (*Hipparchia semele*). One was also sunning on the basalt rocks. JMcN
 19-Jul Lots of Black Garden Ants (*Lasius niger*) flying in our garden - never seen them there before. JL
 23-Jul In the Back Green the Bullfinch is still coming for water. JM
 26-Jul Wonderfully camouflaged Cork Moth (*Nemapogon cloacella*) spotted on a rotting trunk in Cammo. DL
 30-Jul Four or possibly five Sabre Wasps seen on a log pile where we had lunch at Leadburn Community Wood (ENHS field trip). JMcN
 30-Jul Found, at Leadburn, a young green Elephant Hawkmoth (*Deilephila elpenor*) caterpillar looking very unlike the later dark form. DL

AUGUST 2022

- 04-Aug At Glen Lonan near Oban, Scotch Argus (*Erebia aethiops*) and Black Clock Beetle (*Pterostichus madidus*) JMcN
 06-Aug Swallow nests in the barn opposite our chalet at Cologin, near Oban, and a very confident juvenile Robin (*Erithacus rubecula*) visited us every day. Also juvenile and adult Buzzards (*Buteo buteo*) regularly seen in the adjacent field and Scotch Argus just about everywhere I went. JMcN
 09-Aug At NMCC several final instar and new adult Parent Bugs (*Elasmucha grisea*). DL
 12-Aug At the weir on the Water of Leith, Trinity, there were Moorhens (*Gallinula chloropus*), Mallard (*Anas platyrhynchos*) with half-grown young and Kingfisher (*Alcedo atthis*). JM
 13-Aug Little Grebe (*Tachybaptus ruficollis*) at Blackford Pond feeding young and Mallard with chicks - the first for many years. Perhaps this is the result of reed growth and getting rid of the rats. JM
 13-Aug Parent Bug with eggs seen at Prestongrange - presumably a second generation. Also a parasitised Alder Moth (*Acronicta alni*) caterpillar, forwarded to Dr Mark Shaw, and an Alder Sawfly (*Eriocampa ovata*) larva. DL
 14-Aug Shaggy Soldier (*Galinsoga quadriradiata*) by railings outside main entrance to Commonwealth Pool, was surviving despite the hot weather. JL
 21-Aug Hawthorn Button-top Gall (*Dasineura crataegi*) in a farm hedgerow near Dunbar.

- 25-Aug Robin's Pincushion (*Diploloepis rosae*), also known as Bedeguar Gall, found at Bawsinch - the first time I've seen it there. JMcN
- 25-Aug Copper Underwing (*Amphipyra pyramidea*) found hanging on the outside of my south-facing window. It was dead. Joanie sent it to Mark Cubitt, East Lothian VC Moth Recorder, who confirmed its identity. JL
- 27-Aug In our garden two Forest/Red-legged Shieldbugs (*Pentatoma rufipes*). JL

SEPTEMBER 2022

- 01-Sep In Astley Ainslie grounds was stung by a Wasp (*Vespula vulgaris*). There seem to be a lot of them around everywhere - many flying along just an inch or two above the ground. JM
- 19-Sep By the first old mill at Cramond there was lots of Goldenrod (*Solidago vigaurea*) on the wall and round about, with some still in flower and lots of seed heads. There was also Brittle Bladder Fern (*Cystopteris fragilis*) and Ivy (*Hedera sp*) in flower complete with happy Wasps. MC JM
- 27-Sep Got super views of Kingfisher (*Alcedo atthis*) fishing close to the Sanctuary Hide and a Gadwall (*Mareca strepera*) pair with a young bird.
- 27-Sep Another Angle Shades appeared in our garden. It's only in the last two years I've been seeing them here. JL

OCTOBER 2022

- 10-Oct In the Back Green saw a Greenfinch (*Carduelis chloris*) on the feeder - hope to see more. JM
- 25-Oct At Selm Muir Wood, West Lothian, some interesting fungi I have never seen before - Jelly Tongue (*Pseudohydnum gelatinosum*) and Earthfan (*Thelephora terrestris*). JMcN
- 25-Oct Dog Vomit (*Fuligo septica*) Slime Mould at NMCC. DL
- 25-Oct From the Back Green saw a noisy skein of Pink-footed Geese (*Anser brachyrhynchus*) flying over - lovely to see and hopefully free of disease. JM
- 26-Oct Tawny Owl (*Strix aluco*) and a Sparrowhawk (*Accipiter nisus*) in Gilmerton House woods, just east of Athelstaneford. JL
- 26-Oct At NMCC found a Green Shieldbug (*Palomena prasina*) - the first I've seen in Scotland. DL
- 28-Oct Near Holy Well, Water of Leith heard an unusual birdsong - a Dipper (*Cinclus cinclus*). LB JM
- 31-Oct In various places saw Holly (*Ilex sp*) with large clusters of bright red berries already. JM

NOVEMBER 2022

- 04-Nov At Selm Muir Wood, Wood Hedgehog (*Hydnum repandum*) and Trumpet or Winter Chanterelle (*Cantharellus tubaeformis*). JMcN
- 09-Nov Along the Water of Leith by Trinity Weir, a Grey Squirrel (*Sciurus carolinensis*) crossing the river by leaping between trees on either side, a young Heron (*Ardea cinerea*) by the weir and a male Holly (*Ilex sp*) in flower nearby. LB JM
- 26-Nov In Blackford Glen a particularly large patch of Bramble was in full flower with a pink Dog Rose (*Rosa canina*) in its midst. MC JM
- 27-Nov Holly flowering in Grange Cemetery. JM

DECEMBER 2022

- 03-Dec Green Elfcup (*Chlorociboria aeruginascens*) and another cup fungus *Rutstroemia sp* at Bavelaw Marsh, near the road leading to Redford Bridge and at the hide four Reed Bunting (*Emberiza schoeniclus*), six Long-tailed Tits (*Aegithalos caudatus*), one Great Spotted Woodpecker (*Dendrocopos major*) and five Chaffinch (*Fringilla coelebs*). JMcN
- 18-Dec Wall Pennywort (*Umbilicus rupestris*) doing well by the side of the path from Waterloo Place going up to Calton Hill, despite the dry, hot summer. JL
- 30-Dec On the path above Blackford Pond I spotted Yellow Brain (*Tremella mesenterica*) on Gorse (*Ulex europaeus*). I stopped to look at it when a Goldcrest (*Regulus regulus*) appeared. I was so close to it. I stood absolutely still and then two Long-tailed Tits joined it. They made my day! Further along was lots of healthy Wall Pennywort. At the side of the pond on the grass, was a dead Fox (*Vulpes vulpes*) with no obvious signs of injury. JL



Bifid Hemp-nettle *Galeopsis bifida* (JMcN)



2 Spot, Cream, Pine and Harlequin Ladybirds (LY)



Lesser Clover-leaf Weevil (RW)



Gadwall *Anas strepera* (JMcN)



The Spectacle *Abrostola tripartita* (DL)



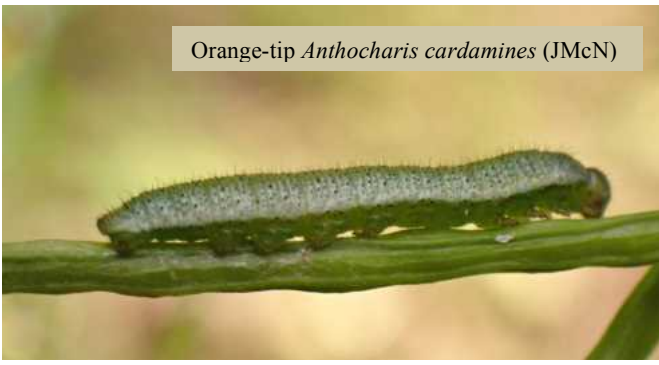
Birch Leaf Roller *Deporaus betulae* (JMcN)



4-Spotted Chaser *Libellula quadrimaculata* (WH)

MEMBERS SIGHTINGS FROM 2022

Orange-tip *Anthocharis cardamines* (JMcN)



Tipula Cranefly chrysalis (JMcN)



Larch flower *Larix decidua* (JMcN)



Grey Heron *Ardea cinerea* (WH)



Female Sabre Wasps (JMcN)



Small Skipper *Thymelicus sylvestris* (JMcN)



Parent Bugs *Elasmucha grisea* (DL)



Hound's Tongue fruit *Cynoglossum* (LY)





Pollen Beetles *Meligethes* (DL)



Hawthorn Shieldbug Nymphs *Acanthosoma* (DL)



Thistle Tortoise Beetle *Cassida rubiginosa* (JMcN)



Rhinceros Beetle *Sinodendron cylindricum* (JMcN)



Waxwings (LY)



Zootoca vivipara (DO)



Puss Moth caterpillar *Cerura vinula* (DL)



Dromius quadrimaculatus (JMcN)



Dunnoek *Prunella modularis* (LY)



Yellow Brain *Tremella mesenterica* (JMcN)



Glyphipterix simpliciella (DL)



Purple Toothwort *Lathraea clandestina* (JMcN)



Four-banded Longhorn (DL)



Earth Tongue *Geoglossum fallax* (LY)



Pholiota squarrosa (DO)



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