GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

August 2023

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
22 October 2023

GNHS is a Registered Scottish Charity
www.gnhs.org.uk

Summer-Autumn Excursion Programme 2023 Alison Moss

August

Sun 6th, 11am, Portencross, mixed interest. Meet at Portencross car park, NS1766 4882. The turning to Portencross is at the north end of the A78 through Seamill, West Kilbride, signposted Portencross B7048. The car park is on your left at the end of the road. There are no facilities here. We will head north towards Hunterston. Stout shoes or boots essential as paths are rough and venturing off them rougher. The area is rich in wild flowers and insects and includes the possibility of newly discovered harvest mouse nests. It includes woodland, some shore, meadows and brown field habitats.

Leader Gill Smart

Late Summer - Autumn

As usual, for the rest of the season, there will be at least 2 joint meetings with the Clyde and Argyll Fungus Group. Their programme retains a degree of flexibility to respond to the whims of the fungus world, so notification will be given a few days in advance of each meeting by email and on the website.

Talks Programme September to December 2023 - Roger Downie

Our talks programme will include both in-person and on-line (via Zoom) presentations, but we will not attempt hybrid talks, because of the cost and unreliability. For the on-line talks, watch out for the Zoom links sent by email nearer the time. In-person talks will be in the Boyd Orr Building or the Graham Kerr Building, University of Glasgow. Most talks will be on the second Tuesday evening of the month at 7pm, as usual, but watch out for a few irregular dates and times. Talk abstracts will be circulated later.

September

Thursday 21st: Boyd Orr Building, Lecture Theatre C, 7.30pm

Jointly with Friends of Glasgow Botanic Gardens

Prof Alexandre Antonelli, Director of Science, the Royal Botanic Gardens, Kew: The Hidden Universe: adventures in biodiversity.

Tuesday 26th: on-line by Zoom at 7pm

Leif Bersweden, author and botanist: 'Where the wildflowers grow'. Leif last talked to us about his epic travels around the UK as a school-leaver, aiming to see every orchid species in flower. Now, two degrees and two books later, he is BBC Springwatch's botanist, on a mission to promote our wonderful wildflowers.

October

Tuesday 10th: Two on-line talks at 7pm

Shannon Clifford: 'Are Northern Gannet (*Morus bassanus*) chicks heat stressed?' Lisbeth Hordley: 'Lepidoptera and climate change' .

November

Wednesday 1st: Graham Kerr Building at 5pm- the annual BLB lecture: Prof Helen Roy: 'Documenting and predicting biological invasions globally'. Jointly with staff and students of the University's School of Biodiversity. The BLB Lecture will be followed by a reception in the Zoology Museum

Tuesday 14th: Boyd Orr Building, Lecture Theatre C, 7pm

Keith Watson and Michael Philip: 'The flora of the Clyde area: past, present and future'.

Thursday 16th: Boyd Orr Building, Lecture Theatre C, at 7.30pm

Laura Gusberti of the Woodland Trust: 'The Atlantic rainforest'. Jointly with Friends of Glasgow Botanic Gardens and the Glasgow Treelovers Society.

December

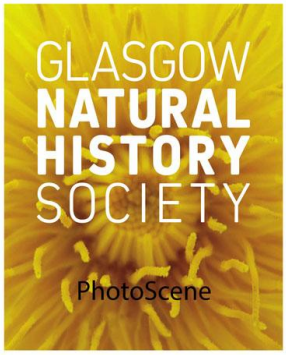
Tuesday 5th: Boyd Orr Building, Lecture Theatre 2, at 7pm

Roger Downie: 'Sir John Graham Kerr and the flourishing of Glasgow zoology'

This is a special lecture to celebrate the centenary of the opening of the Graham Kerr (Zoology) building. Jointly with staff and students of the School of Biodiversity.

Christmas Social - details to be confirmed in the November newsletter and by email.

PhotoSCENE 2023-24 Announcement — Andy Wilson



This year's PhotoSCENE photographic competition is now being launched, with the usual deadline of the end of October, so please keep taking photos of wildlife and look out for full details in a separate email attachment. Full details will also be published on the website, and a summary on Facebook.

Other Autumn Events:

Botanic Gardens RSPB event - August 12th-13th Sarah-Jayne Dunn

Join the RSPB Glasgow team at the Glasgow Botanic Gardens outside the Kibble Palace, on Saturday 12th and Sunday 13th of August 10am-4pm to learn all about our hero species - Salmon!

Come along to find out more about this creature that we can even find in the River Kelvin, and join in our activities and games. We will be joined by salmon conservation experts Clyde River Foundation.

We hope to have a GNHS table, so will be looking for volunteers to engage with the public.

Botanic Gardens Bat and Moth Night - Fri 1st Sep Richard Weddle

The annual Bat & Moth Night at the Botanics this year is on September 1st at 7:30. Booking required - via Eventbrite nearer the time; there will be an email!
(booking link will go live in mid-August).

Kibble Palace © David Palmar

National Park City Event - Sat 2nd September Dominic Hall

I am pleased to say we have confirmed a venue and date for our major Glasgow National Park City event of the year:

Saturday 2nd September: 12 noon until 5pm
The Hidden Gardens, 25A Albert Dr, Glasgow G41 2PE

We want to make this our biggest National Park City event ever: to celebrate the community groups, organisations and National Park City supporters who together work to make Glasgow a greener, healthier, wilder place for everyone.

It will also be our last event before we submit our application to achieve recognition for Glasgow as a National Park City - so we need everyone's input, ideas and support.

Therefore please put the date firmly in your diaries NOW.

If you can help to run an activity, promote the event or help in the coordination and organisation - please do get in touch. Thanks very much. Dom

N.B. GNHS did send this organisation a letter of support some years ago.

Richard Weddle will be there as The Hidden Gardens is one of his regular moth-trapping sites, and he is hoping that some of the usual members will be able to be there to run a GNHS table.

Roe Deer at Malls Mire© David Palmar

Malls Mire Bioblitz - Thu 7th September 2023
Nicole Digruber

I'd like to invite GNHS members to a BioBlitz at Malls Mire with NatureScot on 7th September 2023 11am-3pm.

We are planning the following:

11.00-12.30: Tour of the site
12.30-13.30 Free picnic lunch provided by NatureScot
13.30-15.00 Bioblitz

EuroBioBlitz and NHM London Urban Biodiversity Toolkit Launch

Fri 29th Sep and Sat 30th Sep Sarah-Jayne Dunn and Richard Weddle

On Friday 29th September and Saturday the 30th September, the Natural History Museum, London are coming to Glasgow to launch their urban wildlife resources. The long-term aim is that it will be a 'one stop shop' for people who want to monitor and improve outcomes for nature in urban areas. Through their partnership with RSPB Glasgow they will provide information and training on how to use the toolkit over a two day event. The resources can then be used to identify wildlife and generate biological records by taking part in the Europe-wide wildlife recording event EuroBioBlitz, contributing to the study of Europe's wildlife, helping to shape conservation efforts and support scientific research.

Friday 29th Sep 11am-1.30pm - Talks in Kelvingrove Museum Conference Room

Bookable event

Talks and practical activities aimed at interested individuals and members of community groups who want to learn more about wildlife ID and biological recording.

Introduction to the Urban Biodiversity toolkit from the NHM as well as information about the Urban Nature Project, and some of the eDNA/acoustic monitoring at RSPB partnership sites in Glasgow.

There will also be some short talks from Glasgow Museums/Glasgow Natural History Society given by Robyn Haggard, Glasgow University GALLANT project, and Hunterian Museum given by Jeanne Robinson and RSPB Glasgow. Refreshments will be provided.

Kelvingrove
© David Palmar

EuroBioBlitz - Kelvingrove Park 2-4pm Practical demonstrations and recording activity

We will then work in groups to do bioblitz/ recording activities in the afternoon in Kelvingrove Park with NHM demonstrating some survey and monitoring techniques.

Claypits EuroBioBlitz day - Saturday 30th September 11-4pm

GNHS members at Hamiltonhill Claypits © David Palmar

Partners including RSPB Glasgow, the Natural History Museum, Glasgow Natural History Society and the Hunterian Museum will be holding a Bioblitz day in Claypits nature reserve. This is a beautiful diverse site so a great place for community partners to practice some of survey techniques learned the day before and bring along their families to learn more about wildlife, help record species and join in fun activities. This is also an open event with no booking required.

As with other recording events RSPB Glasgow would also encourage you to take part elsewhere in Greater Glasgow over the two days. We have created an iNaturalist project to keep track of records.

https://www.inaturalist.org/projects/eurobioblitz-2023-greater-glasgow
Sarah-Jayne Dunn, Project Manager - Giving Nature a Home Glasgow

We also plan to have the usual GNHS display (in the afternoon at both sites), so this is a plea for volunteers - please contact Richard Weddle.

5th annual Great Scottish Squirrel Survey 2nd - 8th Oct 2023 Katie Berry

We are pleased to announce that the 5th annual Great Scottish Squirrel Survey will be taking place between the 2nd and 8th October 2023 (National Red Squirrel Week).

During this week, Saving Scotland's Red Squirrels will be calling on the nation once again to explore the great outdoors and record all red and grey squirrel sightings on our website here: https://scottishsquirrels.org.uk/squirrel-sightings/.

Red Squirrel © David Palmar

The information gathered by the survey is invaluable to the work that SSRS undertakes, creating a 1-week snapshot of red and grey sightings around the country, helping us improve our understanding of how squirrel populations are changing over time, and enabling our regional teams and other organisations and red squirrel volunteer groups to take direct conservation action.

We will be sending out further communication about the survey in the coming weeks including our stakeholder toolkit, which will have advice on hosting and

promoting local survey events, promotional materials including posters, and social media details. Interested GNHS members could join the SSRS mailing list via the website's https://scottishsquirrels.org.uk/get-involved/ link.

Please do pass this information on to anybody whom you think may be interested, and if you have any queries in the meantime please do get in touch.

Katie Berry
Communications & Engagement Officer
Saving Scotland's Red Squirrels

UK & Ireland Lakes Conference - 10/11th Oct 2023 Jan Krokowski

This year's conference in Glasgow will bring together practitioners and stakeholders to connect and share good practice under the theme of 'Urgency, Innovation and Collaboration for Lakes, Lochs & Wetlands'.

Day 1 Field Visits
On the 10th of October attendees are invited to the Seven Lochs Wetland Park, Scotland's largest urban nature park, where the partnership will host a series of visits around the area.

Day 2 Conference
We invited expressions of interest from those wishing to share short presentations or posters in the University of Strathclyde, on the 11th of October which fit the theme: Urgency, innovation and collaboration exploring new routes for

- nature recovery
- community health and well-being
- reducing climate impacts

To book the conference, see https://www.ukandirelandlakes.org/conferences/ or to express interest get in touch via email.

Citizen Science in Scottish Freshwaters meeting - Thu 26 October 2023

The Scottish Freshwater Group's autumn meeting will shine a spotlight on "Citizen Science in Scottish Freshwaters" and is being coordinated by SFG's Citizen Science Action Team. It will take place on Thurs 26 October 2023 as a hybrid SFG event hosted by Nigel Willby in the University of Stirling, with support from key partners at UK CEH, and the SFG Team.

We aim to bring together a range of citizen science activities happening in and around freshwaters across our SFG community and beyond. The agenda will offer a variety of contributions spanning two main themes: (1) current and innovative Citizen Science projects which have or could have relevance to Scottish freshwaters and (2) the future for Citizen Science in Scotland, where do we go from here?

We are eager to learn from emerging and established Citizen Science groups. This knowledge-exchange may include sharing insights into experienced-based

challenges of delivering Citizen Science projects on the ground and potential opportunities for enthusiastic SFG members to get involved in work you do.

We welcome offers to talk about relevant Citizen Science opportunities and poster presentations on any topic related to freshwaters. Please contact Rebecca Lewis to offer your work ASAP. It is possible to tweet about this upcoming SFG event @Scottish_FwGrp @BeckL76388162 using the #SFG109 hashtag. More information can be found on the SFG website at https://www.ceh.ac.uk/scottish-freshwater-group and by email to scottishfreshwatergroup@gmail.com

Reports from GNHS members

City Nature Challenge weekend 2023 (28 Apr–1 May) Richard Weddle

The weekend was indeed a challenge this year; the event at Kelvingrove Park on the 29th took place on a dull, chilly day; nevertheless a good number of species were recorded, mainly by the RSPB 'Giving Nature a Home' team in the area between the Museum and the River Kelvin.

Diving-beetle and mayfly larvae
© Iain McLaren

There was a second event at Dawsholm LNR on the 29th, run by the Friends of Glasgow's LNRs. As far as we're aware there were no GNHS members present, but the sightings were again flowering plants, plus some birds including Treecreeper and Ring-necked Parakeet.

The 30th was brighter but had some heavy showers; the latter didn't affect the well-attended pond-dipping event masterminded by Louise Smith (Froglife) at Hamiltonhill Claypits, as the visitors had come prepared. Otherwise the recording was again mostly flowering plants, as the terrestrial insects were mainly in hiding, though we did find a couple of species of ladybird and a Large Red Damselfly. The highlight of the pond-dipping was a diving-beetle larva which had caught a mayfly larva.

In total, over the whole 4-day period 94 people took part in the Glasgow area, and they contributed 1,863 records, covering 553 species - according to the CNC website www.citynaturechallenge.org/past-results

My apologies for this rather lack-lustre account, though it seems appropriate to that particular weekend!

Large Red damselfly (*Pyrrhosoma nymphula*)
© Robyn Haggard

iNaturalistUK – Two years on

In April 2021 iNaturalistUK became a formal member of the iNaturalist Network, a move supported by the NBN Trust, Biological Records Centre (BRC) and the Marine Biological Association (MBA).

Over 2 million observations of an additional 4,000 species have been added to iNaturalistUK in that time.

The NBN Trust took on the lead role for iNaturalistUK. We wanted to ensure that it was embedded as part of the range of recording tools available to the UK biological recording community to complement the existing established platforms such as iRecord, iSpot and BirdTrack.

The BRC has been key in working with the recording community to enable this and, for example, data from iNaturalistUK now regularly flows to iRecord for verification and when possible is added to the NBN Atlas.

When you join iNaturalist you are presented with a "Yes, license my photos and observations so that they can be used by scientists" checkbox. Checking this adds a default Creative Commons licence (CC BY-NC) to your content. GNHS members who use iNaturalist are encouraged to **change from the default setting to CCO**, to waive their copyright so that their records can be shared.

Creative Commons (CC) licences allow anyone to use your intellectual property without having to negotiate with you individually and without having to pay you, as long as the terms of the licence are respected, e.g. that they give you credit.

The change can't be done on an iPhone; it's best done on a Windows or MacOS desktop or laptop, as that option gives the opportunity to 'update previous records' which is of course highly desirable!

See https://nbn.org.uk/news/inaturalistuk-two-years-on/ for more details of iNaturalistUK.

Excursion Reports

Cowlairs Park, 18th May 2023 **Bob Gray**

It was a dry, cloudy evening when some twelve members assembled outside the northwest entrance to Cowlairs Park only 2 kilometres northeast of the city centre. The site is located on top of two drumlins, altitude 80m a.s.l. with relatively steep slopes towards the south and west, which is where grow most of the area's mainly deciduous trees. Towards the north of the site is the campus of Keppoch primary school; but the bulk of the area consists of eight level blaes pitches[1] unused for over 20 years. (A lot of natural regeneration is occurring on these blaes pitches and, together with the southeast and southwest of the site, is worth a subsequent visit.)

1- Blaes pitches
© Bob Gray

2- Hornbeam leaves and fruits © Bob Gray

Plans exist to develop 850 new houses on the bulk of this Council owned derelict but stable land. Since old mine workings exist to the north of the school and so is unstable, this area is to be developed into a 1.2 ha park. The intention of the planners is to retain as much as possible of the natural habitat to the south and west in order to minimise disruption to wildlife. Roe deer are currently much in evidence. Maps show no tree growth on the site prior to 1983. So the woodlands are no more than 40 years old.

Close to the entrance we noted a row of about five hornbeam[2] (*Carpinus betulus*) and a solitary Crimean lime (*Tilia x euchlora*). Hornbeam was one of the last trees to reach Britain before the final inundation of the land bridge c 8200 years ago. The pollen record indicates it was widespread at the later stages of previous interglacials when temperatures were higher. It requires an absence of spring frosts to grow well. Its timber is one of the hardest known and was widely used before iron for such things as cogwheels. Today it is still used for piano hammers. We observed its fruits held in distinctive 3-lobed bracts. The Crimean lime has the great advantage that its glossy green foliage is not colonised by aphids and so does not produce the honeydew that other limes produce to the detriment of underparked cars. Since about 1932 this introduced tree has been widely planted in city streets. Its yellow flowers are large and appear later than in other limes.

3- Silver birch and *Cotoneaster* colonising © Bob Gray

4- Sea buckthorn colonising © Bob Gray

The pioneering ability of silver birch[3] (*Betula pendula*) was then observed over an extensive area of tarmac, the foundation of a former school. Large numbers of tall saplings were growing in the cracks between the tarmac along with *Cotoneaster horizontalis*, apparently the remains of an old hedge. Another plant exhibiting similar tendencies was the sea buckthorn[4] (*Hippophae rhamnoides*) which was colonising some open areas. Its sharp spines[5] help to protect both itself and the seedlings of other species from herbivores. The origin of this

5- Sea buckthorn leaves and spines © Bob Gray

shrub growing here is not obvious. It is common on the sand dunes of East Lothian and on parts of the Ayrshire coast.

6- Poplar 'Robusta' catkins © Bob Gray

We came to the top of the west facing slope where a sizeable poplar, *Populus* 'Robusta' grows. This is a hybrid between the European black poplar and the American cottonwood. Its foliage, which flushes coppery red before other poplars in the spring, and its fat red male catkins[6] are distinctive. Being a male clone it does not produce the fluffy white catkins of female poplars.

7- Norway maple bark and flowers © Bob Gray

A row of five Norway maples[7] (*Acer platanoides*) grow here and their corrugated bark distinguishes them very clearly from the smooth bark of the occasional sycamore found in the area. At the slope top we also noticed many common alders[8] (*Alnus glutinosa*), which are the main tree colonisers in Cowlairs, willows and birches being the other two. All are light demanders, producing lightweight, windborne seed.

8- Alder saplings © Bob Gray

Alder has the added advantage on a nutrient-poor substrate of possessing nitrogen fixing root nodules which produce soluble nitrate from nitrogen thus enabling the tree to increase its nitrogen uptake. Roger Griffith described how he had dug up such nodules from his lawn! In addition we found here a solitary sessile oak (*Quercus petraea*) which, being a climax tree species, is rare in this habitat.

9- Small-leaved lime parent © Bob Gray

Farther down the slope we came across the highlight of the evening. In the deciduous woodland there and below a small-leaved lime[9] (*Tilia cordata*) we found a few of its seedlings[10]. At the time of fertilisation (July, 2021 in this case as the seeds exhibit delayed germination) this lime species requires a higher temperature for the growth of its pollen tubes than either broadleaved or common limes. Hence, as this latitude is near the northern limit of lime regeneration in Britain, small-leaved lime regeneration is much less common here and rarely found.

10- Small-leaved lime and Norway maple seedlings
© Bob Gray

11- Sycamore saplings
© Bob Gray

Amongst the natural regeneration occurring in this part of Cowlairs, sycamore[11] seedlings and saplings predominated with occasional seedlings and saplings of grey poplar.

Whether sycamore (*Acer pseudoplatanus*) is native is debatable. The similarity of its pollen to the native field maple (*Acer campestre*) and reference to its name in 6th century Gaelic texts suggests it may be native. It is certainly invasive as noted here. It is extremely windfirm and its timber, especially when curly grained, is useful and valuable. The grey poplar (*Populus canescens*) is a hybrid between the native aspen (*Populus tremula*) and white poplar (*Populus alba*). Its leaves are less white and less deeply lobed than white poplar. They are usually pale grey and hairy, like a coarse version of the aspen. The sucker leaves[12], however, are similar to those of the white poplar.

12- Grey poplar seedling
© Bob Gray

Its bark[13] is pitted with lines of diamonds like the white poplar.

13- Grey poplar bark
© Bob Gray

Proceeding anti-clockwise we next encountered a collapsed, phoenix willow[14] which seemed to be the hybrid, sometimes called Smith's willow (*Salix x sericans*).

14- Phoenix hybrid willow
© Bob Gray

15- Hybrid willow leaves © Bob Gray

This had broad boat shaped ovate-lanceolate leaves[15] intermediate between those of the parents, goat willow (*Salix caprea*) and osier (*Salix viminalis*). Several examples of this phoenix type growth by this willow occur throughout the south and west woodland of the park. This behaviour provides willows with a colonising advantage in areas susceptible to water-logging, the preferred habitat of most willows.

We came across several tall, mature ash saplings (*Fraxinus excelsior*), the majority suffering from ash dieback (*Hymenoscyphus fraxineus*) disease.

On the other hand several mature, big coppiced white willows[16] (*Salix alba*) were in evidence. This is the biggest of all the willows and is typically conspicuous with its leaning form, often stabilising river banks as is common along the banks of the Clyde. Its bark has been used for the tanning of leather and also for providing salicylic acid - the precursor of aspirin, (acetylsalicylic acid). In fact the chemical name is clearly derived from the generic name, *Salix*.

16- Coppiced white willow © Bob Gray

17- Poplar 'Balsam Spire' boundary © Bob Gray

The most conspicuous large trees in the park, however, are undoubtedly balsam poplars (*Populus* 'Balsam Spire') which are widespread in the southeast of the park. This tree is a female clone, a hybrid between the American western and eastern balsam poplars and is resistant to poplar canker (caused by a bacterium, *Aplanobacter populii*). It has steeply rising branches with an open fan at the top. They form the internal boundary[17] of a large clear grassy area as well as being scattered randomly through much of the woodland.

Towards the south side of Cowlairs we came across a row of Leylandii[18] (x *Cuprocyparis leylandii*). We found a sizeable 2 cm cone indicating that the female parent of this vigorous hybrid is Monterey cypress (*Cupressus macrocarpa*).

18- Osier in front of Leylandii hedge © Bob Gray

19- Mainly sycamore rows
© Bob Gray

The pollinator is Nootka cypress (*Cuprssus nootkatensis*). So this tree is 'Leighton Green', the most common type of Leylandii hybrid encountered in Glasgow. The straight row beside the path suggested the trees had formed some kind of a boundary. In this area of the park many of the trees appear to have been planted in straight rows[19].

Perhaps they were planted by the Council post 1983.In fact the origin of many of the trees and shrubs throughout Cowlairs is unclear. Many may have derived from gardens adjoining the original streets, evidence of which is abundant.

Something that has not been mentioned was the presence of many brown-lipped snails[20], *Cepaea nemoralis*, on the bark of a number of different tree species. There seemed to be no obvious reason for this phenomenon. We returned towards our starting point via the top of the northwest drumlin which provided us with a good overall view of this interesting brownfield site.

20- Brown-lipped snails on Norway maple © Bob Gray

Newlands Park, 27 May 2023 Richard Weddle

Seven GNHS members, joined by Louise Smith (Froglife) and four or five Friends of Newlands Park, took part in the event. The park is relatively small (5.6ha), and includes a pond which was re-wilded by the council some years ago and designated as a Site of Importance for Nature Conservation. On the day of our visit the pond-water was much depleted after several hot weeks without rain.

Ramshorn snail, Newlands Park
© Richard Weddle

Star of Bethlehem, Newlands Park
© Richard Weddle

Louise nevertheless found several species which hadn't previously been recorded: a Lesser Water-boatman (Corixidae), a Ramshorn snail (Planorbis sp.) and a pea-mussel (Pisidium sp.). Around the pond there was a Large Red Damselfly (*Pyrrhula nymphula*), also previously unrecorded.

Most of the park is relatively formal with mature trees, shrubberies and flowerbeds, but the Friends of the park have been promoting wilder areas, and gradually planting wildflowers with help from the Countryside Ranger Service. There was much discussion between members and Friends about choice of plants and maintenance of the wilder areas.

Pollinating insects were rather few, but that was true elsewhere in the city at that particular time. However there were a several bumblebees around, and a solitary bee *Lasioglossum calceatum* (Common Furrow Bee), which was a further welcome addition to the species list.

In all we added some 35 species to the list for the park, including 15 flowering plants and 9 beetles, bringing the total number of species for the park to 228; the full list can be seen at www.gnhs.org.uk/biodiversity/NewlandsPark_splist.pdf

There is still plenty of scope for adding more species, particularly the summer-flowering plants, and insects such as the blue dragonflies, and hopefully many more pollinators.

Shewalton Wood, 11th June 2023 **Alison Moss**

Shewalton Wood is a Scottish Wildlife Trust reserve in Ayrshire, near Irvine. It has many interesting features including several types of woodland, 2 large ponds, various meadows and long pathways. These reflect the varied history of the site from coal mining, agriculture and forestry to Wildlife Reserve for the last 27 years. The range of woodlands is unusual. There is a residue of amenity conifer woodland and some older birch and alder blocks, but the bulk of the woodland cover is now naturally regenerated native woodland augmented with planted broadleaved trees. Thought-provoking comparisons can be made between the different types. We were lucky to have Gill Smart with the group of 9 of us. Gill is the Trust's local Reserves Manager and I must thank Gill for her input on site and collating much of the data we collected.

Large Skipper butterfly (*Ochlodes sylvanus*) © Pat Thomson

It was a hot sunny day with the wildflowers by the pathways and in the meadows in full bloom. This led to a wonderful show of insects. Thanks to the special input from Paul Cobb, Gill and Richard Weddle, a long list was gathered and checked, greatly aided by Pat Thomson's excellent and intrepid photography. Everyone present contributed something to the total. Gill has added our many finds to the database for Shewalton Wood, available on request.

However, I will give you some highlights:

- Large Skipper butterfly (*Ochlodes sylvanus*), uncommon in Ayrshire - see Pat's photo.
- Marsh Pug moth (*Eupithecia pygmaeata*), new for reserve, rare in Ayrshire.

- An abundance of Azure Damselflies (*Coenagrion puella*).
- *Bruchidius villosus* - this was a beetle swept by Richard from broom bushes. Astonishingly, this was a beetle familiar to Richard as a suspected garden centre introduction. He is now reviewing his thinking so watch this space!

Common Blue Damselflies (*Enallagma cyathigerum*) © Pat Thomson

The number of invertebrate species was 62, recorded across 13 different groups. 19 of them were Paul's galls and leaf mines. We never cease to be amazed at the tiny creatures Paul shows to us. Who else would find a minute green sawfly caterpillar on a 3 inch blade of grass? There were other larger invertebrates about, including four-spotted chaser dragonflies, a drinker moth caterpillar, meadow brown butterflies and ringlet butterflies, to name a few.

The challenge of botanical recording was lifted from us because Gill has full lists for the site. However, at the very beginning of our walk Climbing Corydalis (*Ceratocapnos claviculata*) was spotted - a new site record and uncommon in Ayrshire.

Coincidentally, as we entered the site we encountered Bruce Kerr, a significant recorder of birds. I don't know when he got on to the site that morning but by 11 o'clock he could real off 31 species he had noted by then. This included surprising numbers, e.g., 36 willow warblers, 20 blackbirds, 12 sedge warblers, 18 jackdaws. There was a lot of bird activity about but Bruce's records were amazing.

Partly due to hot conditions and partly due to so much being found, after lunch we decided to retrace our steps with a few meanders, instead of completing the 5km circuit of the full site. We were rewarded with another sighting of a Large Skipper butterfly amidst the abundance of wildflowers at the path edges. Also, we had a look at the huge solar farm associated with the Glaxo SmithKline factory next to the reserve. The developers plan to sow wildflowers and manage the ground round the panels as pollinator-friendly meadows.

We really only scratched the surface, seeing less than half the area. This reserve deserves another visit to see woods, grassland, wetland, post-industrial land and other habitats we did not have time to explore. It is an interesting and developing site serving local people and visitors alike. My thanks to all who contributed to such an enjoyable day.

Some of the Exmoor Pony herd © David Palmar

After much deliberation, with rain storms possible, the excursion to the Jaw Reservoir above Cochno Farm, went ahead. 9 of us set out from Auchnacraig car park with a wary eye on the weather. We headed up the 1 mile footpath, past the Cochno Farm's mown meadows and on through relatively recently planted native woodland.

We had arranged to meet Debbie Davy and her Exmoor ponies. She and the ponies' vet were watching for us and beckoned us over to the meadow where the ponies were grazing. So after a quick glance at the cranberries in the bog, we headed up to the ponies.

Exmoor Pony mother and foals © David Palmar

It was fantastic being so close to the ponies. This herd are used to people, but Debbie prefers that they stay a little wary. Debbie owns this herd and she filled us in on the state of the herd and an outline of the content of her PhD, which she is writing up at the moment. Debbie's herd was introduced to the high ground of Cochno Estate between the Jaw and Black Lochs in 2019. Her studies, funded by the Exmoor Ponies Society, were to study the genetics of the Exmoor Ponies and their environmental impact.

Exmoor ponies are a rare breed and they reached threateningly low numbers for a time. They are the basal genetic ancestors of all the European horses and ponies. The Cochno herd presently has 4 breeding mares and their un-weaned foals, the youngest of which was only a few weeks old.

Tormentil © David Palmar

Debbie swapped her older stallion, with another breeder, for a young stallion this season, who is now integrated with the herd. This is to reduce inbreeding and hopefully produce new youngsters to join the breeding herd later. This breed thrives on rough pastures and are

ecosystem engineers, their grazing greatly increasing the floristic biodiversity. Debbie has conducted detailed studies of this with her herd in the Highlands.

Orange Ladybird
© David Palmar

Their diet seems to keep them particularly healthy, not even needing worming and other treatments. They can live a hardy and independent existence and are increasingly in demand for rewilding projects and meadow restoration. It was a joy to spend over an hour sitting in the meadow with Debbie, Vivienne the vet and the ponies.

This highlight was followed by walking round the Jaw Reservoir to the walkway separating it from the Cochno Reservoir. There were many different habitats with shoreline, bogs, streams and remnants of conifer plantation. David was busy with his camera, photographing meadow flowers.

White Clover and Wild Pansy
© David Palmar

We continued round the reservoir and down the footpath at a leisurely pace, stopping to examine several clumps of nettles covered with peacock butterfly caterpillars. A red admiral was spotted, but apart from grass moths, moths were in short supply.

Peacock butterfly caterpillars
© David Palmar

However, I noticed the buzzing of bees on the flowering clovers edging the path. These clovers are largely hybrids which are being sown with grass to examine the effect on yield in comparison to sowing grass alone. The meadows have recently been harvested.

This was a longer walk than our usual excursions, but the weather was kind, warm with a cooling breeze and the ponies alone would have been worth the climb. With the input from Debbie it made a splendid and much enjoyed day all round.

Scottish Herpetological Conference, June 3rd **Roger Downie**

Tales and displays in the foyer © Andy Wilson

As advertised in previous newsletters, the 4th Scottish Herpetological Conference took place on Saturday 3rd June in the modern setting of the University of Glasgow's ARC building. The conference was a contribution to the Glasgow Science Festival which managed bookings, publicity and provided the location. As organisers, we were anxious that the warm June weather would lure everyone to the beach or the field, but we were really pleased to have an attendance of over 80 (including a good contingent of GNHS members) whose feedback rated the event as excellent (70%) or very good (30%).

In addition to 11 full talks, four short presentations were given accompanied by posters. The meeting ended with two parallel discussions (on the threats facing Scottish amphibians and reptiles; and the international wildlife trade) and a brief round-up. We also had stalls showing the work of seven NGOs, including GNHS.

Chris McInerny © Andy Wilson

The meeting was opened by Chris McInerny, who introduced Brian Whittle MSP, the Scottish Environment Link Nature Champion for the leatherback turtle: Brian described how diving in the Red Sea had awakened his enthusiasm for marine biodiversity and turtles in particular. Three of the talks had to be delivered as recordings or on-line because of various issues, like the ongoing rail strikes. The only downside of the meeting was that our on-line link to people who had signed up to attend remotely did not work well. We plan to publish a permanent record of the meeting, as a set of Proceedings in *The Glasgow Naturalist* next year, hopefully including the two talks which could not be given on the day for various reasons. The organisers wish to thank all those who helped to ensure that the meeting was a success, including several GNHS members.

Reports from GNHS members

Oak Slug Sawfly larvae (on Lime) — Paul Cobb

At various times in the past I have noticed, without really paying much attention, Lime leaves nibbled and skeletonised, causing large brown dead patches, sometimes over almost the entire leaf. Recently on the Forrest Estate in Kirkcudbrightshire I took the trouble to turn such leaves over, and found slug-like larvae with a green streak along their length which were clearly sawfly larvae. A Google search for "sawfly larvae on lime" produced their identity, the Oak Slug Sawfly *Caliroa annulipes*, which feeds on various trees including Oak but seems to have a preference for Lime.

Oak Slug Sawfly larvae
© Paul Cobb

So I then checked the National Biodiversity Network map, and according to that I have the first vice-county record for Kirkcudbrightshire. There are two NBN dots for Ayrshire, and a Glasgow area species list I have a copy of has just two 19th century records.

I then started looking at the many Lime trees in and around where I live at Catrine in East Ayrshire to see if I could find more of this apparent rarity. I quickly found it to be abundant at 6 sites, but I failed to find it at 6 other sites, so it is widespread but not everywhere. It seems to be only in open situations such as roadsides and municipal plantings, and is absent from trees in the interior of woods.

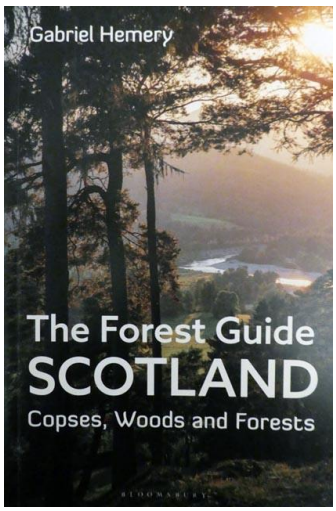
Lime leaf upperside
© Paul Cobb

How can something common and conspicuous be overlooked and regarded as rare? Perhaps the answer is in my first sentence.

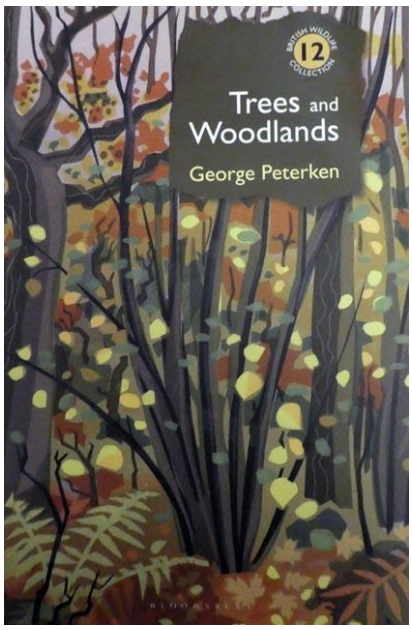
Books Received — Anthony Payne

Quite a number of new books have been received in the last few months.

"The Forest Guide Scotland: Copses, Woods and Forests" (2023) by Gabriel Hemery. 320 pp PB £20.00. Bloomsbury Wildlife Press. ISBN PB 978-1-4729-9464-6.



This is a gazetteer to 365 woodland locations in Scotland arranged geographically. Most entries occupy a single page (including a photo) and the information includes the size, forest type, ownership and OS reference to the access point. Relevant information depends on the wood, but can include its history, notable features and species, and ease of walking through it.

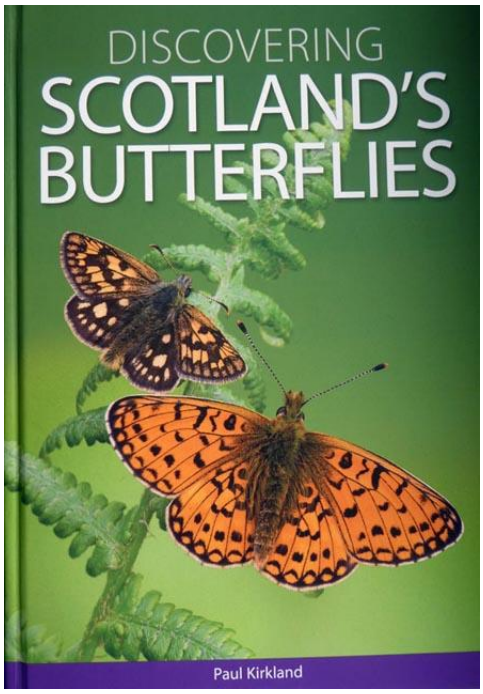


"Trees and Woodlands" (2023) by George Peterken. 416pp HB £40.00. Bloomsbury Wildlife Press. ISBN HB 978-1-4729-8701-3.

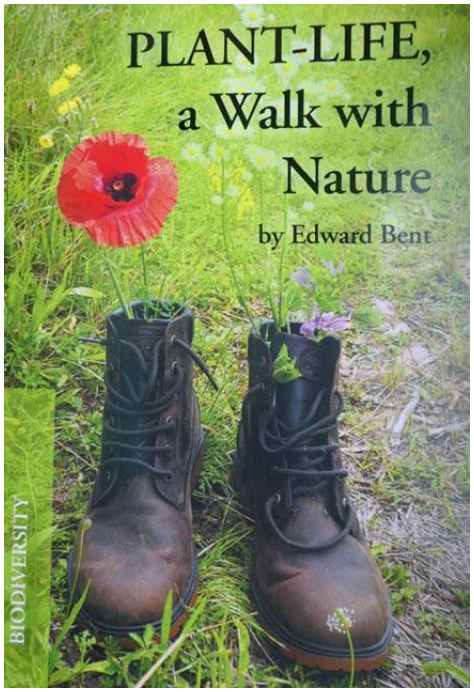
This is the 12th. volume in the British Wildlife Collection series. Peterken separates trees into groups such as "forest dominants" which we use descriptively (an oak wood, a pine forest etc) and the "pioneers" which only dominate temporarily or in marginal locations – the small trees and shrubs.

The book looks at natural woodland, and the habitats and wildlife it contains, but also explores the way humans have used and moulded the woodlands of Britain, their role in our culture and how they contribute to our wellbeing.

"*Discovering Scotland's Butterflies*" (2022) by Paul Kirkland. 272 pp HB £20.00. Pisces Publications. ISBN 978-1-874357-99-5.

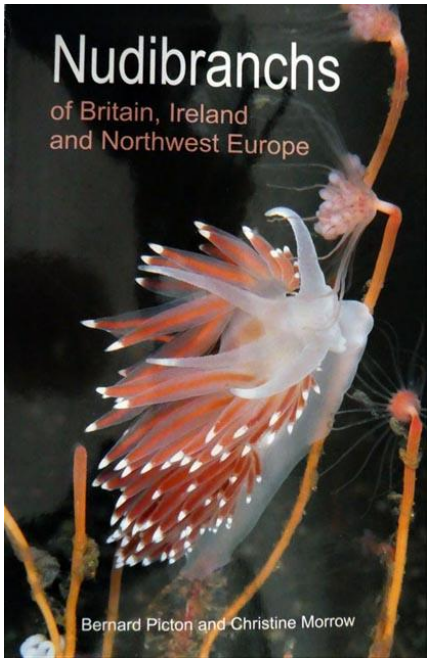


From the same stable as "*Life cycles of British and Irish butterflies*" by Peter Eeles (reviewed in TGN 27(3)) this book has a more focussed remit. There is a short general section at the beginning of the book covering an array of FAQs (how far do they fly ? can they fly without scales ? do they need nectar ? why do they bask ?) to an overview of Scotland's landscapes and habitats, historic collections, subspecies and genetic bar-coding.
The meat of the book covers the 36 species which are currently found in Scotland. Each species has 4 pages devoted to it, with photographs of the adult as well as eggs, larvae and pupae. "Discovering" involves a map, a paragraph on broad distribution and (where necessary) a highly detailed "where to see" section. For example, the entry for the purple hairstreak (*Favonius quercus*) names six specific sites in the Glasgow area and six more further afield. There are sections on ecology and behaviour, trends in distribution and prevalence, one or more anecdotes by well-known butterfly enthusiasts in Scotland, and even the occasional poem. There are short sections on rare visitors and day-flying moths which could confuse the unwary. The book ends with sections on the future for Scottish butterflies and citizen science activities such as gardening, recording and volunteering.



"*Plant-Life, a walk with nature*" (2022) by Edward Bent. 240pp PB £21.00. Nartura. ISBN 979-12-210-0957-6

This is a highly unusual book. The author is a botany graduate who has spent his working life as a plant breeder, author and consultant, and has organised botanical trade exhibitions and trade missions. The book is aimed at people approaching botany and the environment from every possible direction, including art, philosophy and spirituality. The author bemoans our current educational over-specialisation but this does not mean the book is always an easy read. Petal arrangements derive from Fibonacci numbers (as do seed arrangements in *Compositae* florets); the photoreceptor molecule phytochrome responds to darkness and temperature to produce photoperiodism. Nature's conventions of beauty and harmony are an interaction between mathematical principles and physiology/ecology, leading to human responses such as curiosity, inspiration and joy. The book is beautifully illustrated and contains considerable information on plant-life, especially wild flowers, with a strong bent towards holistics.

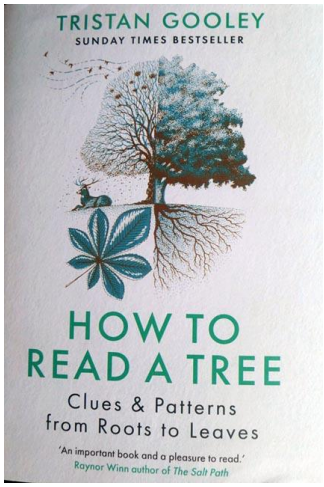


"***Nudibranchs of Britain, Ireland and Northwest Europe***" (2023) by Bernard Picton and Christine Morrow. 360pp PB £35.00. Princeton University Press. ISBN 978-0-691-20879-4.

Intended for divers, underwater photographers and naturalists, this book covers nearly 170 species. In each case there are sumptuous colour photographs of the adult and the spawn coil (which often alerts people to the presence of the adult). Each entry covers two pages and includes a description of the species, their ecology and distribution. The reader also gets information on similar species (some of which have identical DNA barcodes !) and key features for differentiation. There is a short introduction on general nudibranch biology, but this is primarily an identification book.

"***How to Read a Tree: Clues and Patterns from Roots to Leaves***" by Tristan Gooley. 312 pp HB £22.00. Sceptre/Hodder & Stoughton. ISBN 978-15-293-3959-8.

Subtitled "clues and patterns from roots to leaves" this book encourages you to apply Sherlockian techniques to the evaluation of trees. Some features are determined by the prevailing winds (usually SW), including the angulation of



branches, the prevalence of guy roots and the trunk compass. Others are affected by the direction of the sun, such as the density of flowers, the onset of autumnal colours, the presence of "eyes" on the trunk and the wax content of conifer leaves. There are chapters on trunks and stumps, roots, branches (including missing ones), leaves and bark. The author deals with seasonal changes and explains how an area's history can be deduced from an assessment of its present-day trees.

It is hoped that full reviews of these books will appear in a future edition of *The Glasgow Naturalist*.

Report on Courses Supported by GNHS and BRISC

Solitary bee identification course

Stephanie Glendinning

From the 2nd to 5th of June, I attended a course on the identification of solitary bees at Preston Montford FSC centre in Shropshire, taught by Ian Cheeseborough. I was particularly interested in this course as I am starting a PhD in pollinating insects this autumn.

There are over 250 British species of solitary bee; as a consequence, this group has typically been less thoroughly recorded and studied. I hope to use my new knowledge to more accurately identify and record my sightings.

A cleptoparasitic Nomada species (possibly *N. fucata*) at the Cliffe Heritage Site. © Stephanie

After the long journey down, we gathered on the first evening to meet our tutor and the other course members, and to have an introductory lecture on bee anatomy. We learnt the names of important features, and practised spotting these with the eye, and under a microscope, using specimens from the cleptoparasitic Nomada genus. It was great to have the chance to meet people who shared my passion for pollinating insects, including ecologists, students and volunteers.

Cliffe field trip: Examining an Andrena species © Stephanie Glendinning

On Saturday, we met in the morning for another lecture on bee ecology and behaviour, and to look at some common genera. We then set out on a field trip to the Cliffe Countryside Heritage Site, a sandy lowland heath habitat. The weather was warm and sunny, perfect for spotting bees. I learned how to catch specimens using a net, and transfer them to a tube (without being stung!) to better observe their features. We saw an amazing variety of species, including Andrena mining bees, more Nomada species and Osmia mason bees. The highlight was spotting Andrena barbilabris, which 'swims' through loose sand to reach its nest beneath.

Through Ian's expertise and patient guidance, I felt like I was beginning to be able to distinguish between the genera.

We started early on Sunday afternoon for a field trip to Llanymynech Rocks nature reserve, an old limestone quarry between Welshpool and Chirk. There was amazing floral diversity: bird's-foot trefoil, oxeye daisy, hawkbit and bee orchids. Given this bee haven, we observed surprisingly few individuals. Again, we found Andrena, Nomada, and Osmia species, as well as Chelostoma florisomne, the males of which are often found resting in flowers. The evenings after both field trips were spent going through the complex genera key, and cementing our knowledge by studying specimens under the microscope.

Practising identification of specimens under the microscope. © Stephanie Glendinning

On our last day, we explored the grounds of the field site. Andrena haemorrhoa was particularly abundant, with its distinctive bright orange hairs at the tip of the abdomen. It was fascinating to see the variety of species using the centre's bee hotel, including cavity-nesting Chelostoma and Osmia species.

A bee hotel shows nest cells lined up along the cavities, filled with pollen for the grubs. © Stephanie Glendinning

The hotel included blocks with clear Perspex on one side, so it was possible to see the nest cells lined up inside, some stocked with bright pollen. We also looked at the resources available on the UK Bees, Wasps and Ants Recording Society (BWARS) website, and the importance of distribution data for informing solitary bee conservation.

I am very grateful to BRISC for this amazing opportunity, which the bursary towards course costs made possible for me. I am looking forward to being able to put my new knowledge to use during my PhD, and being able to submit records of my sightings with confidence.

Dasypoda hirtipes, the Pantaloon Bee, under the microscope © Stephanie Glendinning

Reminder of PhotoScene Competition Deadline **Andy Wilson**
The end of October is the deadline for entries to be submitted to this year's PhotoScene Competition. You are encouraged to enter, so please send entries to Lorna Kennedy by then.
For full details see: http://www.gnhs.org.uk/photoscene.html

General Correspondence to the General Secretary:
Alison Park

Next Newsletter - copy to David Palmar by 22nd October 2023 please.

Thank you very much to all the contributors who have made the newsletters so interesting and worthwhile publishing. Please send contributions by email, preferably as .rtf, .doc or .docx (Word 2007) format.
If you have time, please italicise taxonomic names, and use Verdana font, size 12 points.
If sending photos, please submit only a few as **separate** jpg files (not as part of a Word document), and make them under 200Kb each for emailing).