



GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

**Next Newsletter Deadline
22 October 2018**

**GNHS is a Registered
Scottish Charity**

August 2018

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(Newsletter Editor)**

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[**www.gnhs.org.uk**](http://www.gnhs.org.uk)

Winter Meetings Programme 2018-19

Roger Downie

Meetings will be held in the Boyd Orr Building, University Avenue except where otherwise indicated, and will begin at 7.00pm. Where there are two lectures listed for an evening, each will last about 30 minutes. At the start of most meetings there will be a short time when members can present their recent observations: these can be short talks (about 2 minutes), or interesting specimens, or photographs. It will be helpful if members intending to make such a presentation can let Roger Downie know in advance.

There is usually a pre-meeting meal with the speaker, which any member may attend. Members interested in going to this can email Mary Child by the Sunday before the meeting and ask to be included. The cost is £10 per head, subsidised by the BLB fund.

2018

September

Tuesday 18th, 7.00pm

Lecture: Evolution education in Scotland, and around the world; Roger Downie

October

Tuesday 9th, 7.00pm

Lecture 1: Orchid bee responses to human disturbance in tropical forests; Laura Allen

Lecture 2:

Observations on the behaviour of juvenile cuckoos, 2007-2017; Darren O'Brien

November

Thursday 8th, 7.30pm

Bower (Botany) Building Seminar Room (jointly with Friends of Glasgow Botanic Gardens and the Glasgow Tree Lovers' Society):

Lecture: The adventures of three Perthshire plant hunters in the Pacific north-west: Archibald Menzies, David Douglas and John Jeffrey; Syd House

Tuesday 13th 7.00pm

Lecture 1: Did we find the wildlife in Ayrshire? Helen Embleton

Lecture 2: Floristic biodiversity in fragmented tropical landscapes; Emily Waddell

Wednesday 28th, 5.00pm

Graham Kerr Building Lecture Theatre 1 (jointly with University of Glasgow)

Blodwen Lloyd Binns Lecture: Surviving the Anthropocene - a story of biological gains as well as losses; Chris Thomas

December

Tuesday 11th

Christmas buffet dinner- see November newsletter for details and booking form; includes Lecture: Dead useful - what strandings can tell you about the marine environment; Andrew Brownlow

2019 lectures – see November newsletter or website

www.gnhs.org.uk/winter.html for details

Summer-Autumn Excursion Programme 2018

Alison Moss

August

Sun 12th, 10am, Glasgow Botanic Gardens. Botanical recording excursion. Contact Michael Philip

Sun 19th, 11am, Cathkin Braes LNR. Note change of date. Mixed interest. Meet at car park NS609 579 on Cathkin Road B 759. Contact Alison Moss

There will be joint meetings with Clyde and Argyll Fungus Group in the autumn - to be notified by email and on the website www.gnhs.org.uk/summer.html as details become available.

Conference Report - Amphibians and Reptiles of Scotland:

Current Research and Future Challenges

Roger Downie

GNHS has now organised several conferences as contributions to the Glasgow Science Festival. The latest, with the above title, was held on 9th June 2018. The organising team comprised Roger Downie and Chris McNerny (GNHS, Clyde Amphibian and Reptile Group), Erik Paterson (CARG), Debbie McNeill (Glasgow Science Festival) and Louise Smith (Froglife).

The meeting was sponsored by many organisations (Glasgow Natural History Society, Froglife, British Herpetological Society, Scottish Natural Heritage, Friends of Angus Herpetofauna, ARG-UK and ARC), and this allowed the meeting to be free to attend (as well as light refreshments being free). The event attracted over 80 participants, including speakers and many GNHS members.

A stimulus for the conference was the 2016 publication of the first book devoted to the herpetofauna of Scotland - Chris McNerny and Pete Minting's *Amphibians and Reptiles of Scotland* - which, in addition to providing a comprehensive account of what is known of the Scottish species, highlighted areas where we need to know more, especially on distribution.

In introducing the conference, Roger Downie noted that 2018 is Scottish Year of Young People and that, in addition to including talks by younger presenters, the meeting included a display of work from Froglife's Glasgow Green Pathways project, which engages with vulnerable and disadvantaged young people. He also noted Scottish Environment Link's Species Champion scheme in which Members of the Scottish Parliament can choose a species to promote: three reptile and four amphibian species are currently championed, a high proportion of the total, and Roger read out messages of support from two of the MSPs.

The day included 15 presentations, plus a set of posters and sponsor-group stalls. Three of the presentations were by invited speakers: Silviu Petrovan on road mitigation schemes; Matthew Witt on marine turtles in British waters; Andrew Cunningham on disease threats to amphibians.

Of the remaining talks, five focussed on reptiles and five on amphibians. In addition, James Stead and Louise Smith reviewed the achievements of Froglife's Scottish Dragonfinder and Green Pathways projects. One of the posters addressed the problem of patchy distribution records, reporting on *Where's Wildlife in Ayrshire's* findings.

A key feature of the day was Rob Raynor's presentation, on behalf of SNH, of a draft amphibian and reptile strategy for Scotland. Several conference participants had contributed to the development of the strategy, and Rob emphasised that the meeting provided an opportunity for anyone interested to make their views known during following workshops, before the strategy was finalised.

In closing the day, Roger Downie thanked all the speakers for their fascinating talks, emphasising the high quality of the work being done related to the Scottish herpetofauna, and looking forward to the publication of SNH's strategy paper. He also noted that the full proceedings would be published in *The Glasgow Naturalist*, with the papers freely available online as soon as accepted. The only regrettable aspect was the surprising lack of contributions from research centres such as Edinburgh, Stirling, Aberdeen and Dundee.

The next day, Froglife ran a stall at the Science Festival's Science Sunday, a full-on event for families, highlighting the diversity of Glasgow science. Thanks to all volunteers who helped on both days, but especially to Louise Smith who was on duty most of Science Sunday.

Next Newsletter - copy to David Palmar by 22nd October 2018 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 100Kb each for emailing).

PhotoSCENE 2017-18 Natural History Photographic Competition

Win your share of £800 worth of prizes!

David Palmar

This competition is sponsored by Glasgow Natural History Society and the University of Glasgow Institute of Biodiversity, Animal Health and Comparative Medicine. Its aims are to promote interest in Natural History and the work of SCENE (Scottish Centre for Ecology and the Natural Environment) at Rowardennan, linkage between the Institute and the Society, and providing pictures for publicity.

During the last 6 years, participation in the competition has usually increased. Last year there were 74 entries to the competition, with 10 of the 18 entrants winning a prize – compare your chances with that in the National Lottery!

It is hoped that GNHS members, and the staff and students of the Institute will again support the competition. The deadline for submitting entries is the end of October 2018. GNHS members and students and staff of the University of Glasgow Institute of Biodiversity, Animal Health and Comparative Medicine are eligible to enter. Entries should be submitted to Lorna.Kennedy@glasgow.ac.uk. Prizewinners will be announced at the GNHS photographic night on Tuesday 12th February 2019. Full details are on the GNHS website at www.gnhs.org.uk/photoscene.html

Book Review

Anthony Payne

The following book has been received for review.

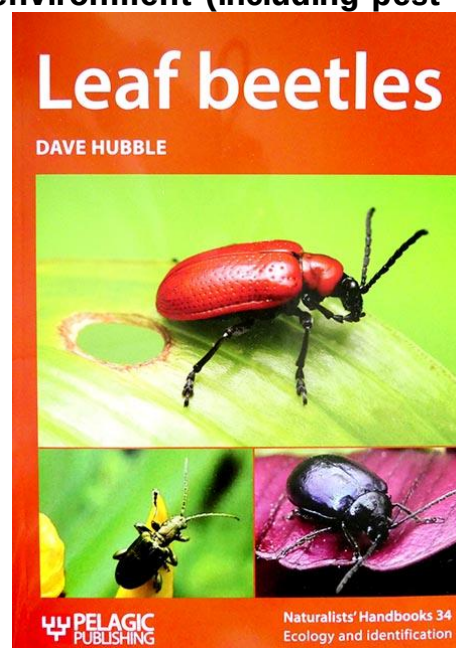
Leaf Beetles by David Hubble (2017) Naturalists' Handbook # 34. Pelagic Publishing. 149 pages. £19.99.

Written by the organiser of the UK Recording Scheme for these insects, this is the latest identification guide from Pelagic Publishing. There are chapters on the life cycle of leaf beetles, on their interaction with the environment (including pest species), and on natural enemies.

The bulk of the book deals, firstly, with the identification, distribution and abundance of British leaf beetles, with the aim of getting the reader to subfamilies and genera – and to species in many cases.

Secondly, there is a lengthy final section on study methods from trapping to the formation of specimen collections and the value of dissection. There are numerous maps, line diagrams and colour photographs throughout.

A full review will appear in *The Glasgow Naturalist*.

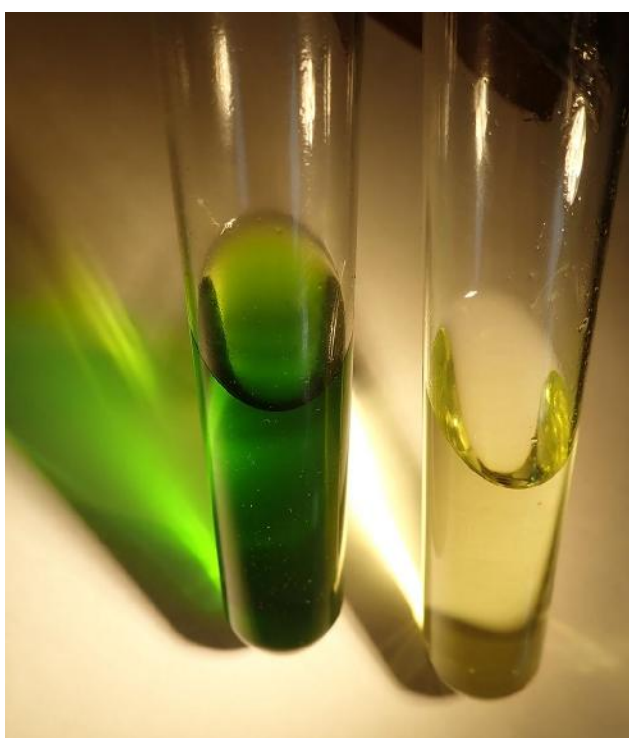


After the thorn apple stopped growing last year just one fruit had properly formed. The plant was the inadvertent result of bird seed scattered by the chickens. It appeared to be the case that the plant can self-fertilise, although insects can also be involved, which is just as well given the poor weather in 2017. The fruit was gathered and after a short period of drying out, 340 seeds were counted and put in a paper bag until spring of this year. Twenty seeds were planted and exactly half germinated and put out in a flower border. They could probably have benefited from watering this year but have developed successfully to maturity. So this small test has demonstrated the potential of the flower to reproduce and survive here, albeit with a little help.



Thorn-apple (*Datura stramonium*)

By coincidence I happened to look in Geoffrey Grigson's marvellous book *The Englishman's Flora* (1958). The title disguises the fact that it is a text about the folklore of plants of all kinds covering the whole of the UK. For thorn apple it has the enticing suggestion that if the fruits are infused in alcohol a green fluorescence is revealed when passing light through the glass tube. I tested this and after 24 hours a pale green liquid formed. This didn't look very impressive but in the meantime I had read that on some countries a green dye is extracted from the leaves. Also, that it has medicinal qualities - as is often the case poisonous substances can be beneficial in smaller doses.



So, my experiment continued with colour, rather than taste, and some crushed leaves in alcohol produced a bright green after less than an hour. The photograph shows the results. The paler extract from fruits has a faintly luminous quality although I'm not sure it qualifies for fluorescence. Perhaps with different wavelengths of light some other effect might be seen. One could do this and have fun with any number of garden flowers but my kitchen chemistry experiments stop at this point.

The left test tube shows the green colour extracted from the leaves.

The right test tube shows the yellow colour extracted from the fruits.

2018 Excursion Reports

Hessilhead Wildlife Rescue Centre and Quarries

James Milner-

White

Ten of us visited Hessilhead Wildlife Centre, near Beith in North Ayrshire on Sun 29th April 2018. I was not sure what to expect but it turned out to be interesting. It is where you can take animals that are injured; they are cared for and released back into the community. We saw a great variety of animals, often young ones. There were bats (see the long eared bat in the picture), tawny and barn owls, hedgehogs, foxes, a red squirrel, otters, swans, ducks and even Jeremy Corvid, the albino rook. Some ethical issues are raised. Alien grey squirrels cannot be released so face being euthanased. On the other hand numerous feral pigeons, considered by many as a pest, are cared for and released back in the city.



Next was a walk around Hessilhead quarry. This limestone quarry, now disused, has filled with water over the last 30 years and, as well as the birdlife, has mosses characteristic of alkaline places: the golden-coloured hook mosses *Cratoneuron filicinum*, *Palustriella commutata* and *Palustriella falcatum*. Also abundant are cushions of crisp moss *Trichostomum brachydontium* and the olive green pocket moss *Fissidens adianthoides*.

Nearby is the even bigger Trearne quarry. It is a working quarry and on weekdays is busy with lorries. The fossils are amazing and include crinoids, brachiopods, trilobites, sponges, corals and so on. One end of the quarry is being used to dump rubbish which seems a pity. However it appears the company intends to leave part of the quarry unsullied so naturalists will eventually be able to view some of the fossils *in situ*.

Pollok Country Park, 17th May 2018

Bob Gray

Ten of us enjoyed the fine weather of this early summer visit to Glasgow's only country park. Occupying some 360 hectares (360 acres) it is the city's biggest park, which in 2006 was voted Britain's best park and in 2008 Europe's best. On our way from the car park at Pollok House towards the nearest mapped trees we had the opportunity to observe closely the number of stamens on an azalea (5) and compare this with the number on a rhododendron (10).

We encountered some specimens of the Katsura tree (*Cercidiphyllum japonicum*) of an age that suggested they were probably planted in the time of Sir John Stirling Maxwell Bart., who died in 1956 having owned the estate since 1888. This dioecious tree (male and female flowers are produced on separate specimens) is endangered in China and S. Japan where it is native.

To the west of the house is a small, mature beech wood, below which the shade and acidity of the leaf fall ensures lack of ground cover. In the light of the woodland verge, however, much germination was seen, especially of native holly (*Ilex aquifolium*), but also of sycamore (*Acer pseudoplatanus*), Norway maple (*Acer platanoides*) and even much coppice growth from a stump of red oak (*Quercus rubra*)² which is not considered to coppice well.



Coppice growth from a stump of red oak (*Quercus rubra*)

Behind and to the north of Pollok house grows a double lime avenue consisting of c. 24 pairs of common lime (*Tilia x europaea*) mainly but including a few broad-leaved lime (*Tilia platyphyllos*). This splendid feature was planted as a gift to Sir JSM for his coming of age in 1888.



Pedunculate oak (*Q.robur*)

At the south end of this avenue grow two pedunculate oak (*Quercus robur*) which had been putatively identified the previous winter by the presence of knopper galls. This i/d was confirmed by the growth of peduncles (stalks) below the acorns.

Near the westerly oak is a tree that looks like a hybrid between a rowan and a common whitebeam (*Sorbus thuringiaca*). Each leaf has one or two leaflet pairs at the base of each longish leaf.

We gate recently on which fine stump

Farther on a distance with



proceeded northwards through a leading to a path where we found a felled large sawn pedunculate oak 268 annual rings were counted – a indeed.

we spotted three trees which from appeared to be small-leaved lime characteristic upturned bracts.

James Milner-White however collected a specimen of what

k section

turned out to be a Mongolian lime (*Tilia mongolica*), a first in the Glasgow area. This tree possesses distinctively small leaves with sharp points. The bracts each support many flowers that help to explain the superficial resemblance to a small-leaved lime from a distance. A pink-flowered hawthorn, however, proved to be more of a challenge, as this was



longolian lime (*T. mongolica*)

thought to be a type of midland hawthorn (*Crataegus laevigata*) but closer inspection revealed that the flowers possessed only one pistil (female part) like the common hawthorn (*Crataegus monogyna*). So this tree is likely to be 'Pink May', a variant of the common hawthorn, which has delicate pink flowers and is much rarer than the various red cultivars of midland hawthorn. Nearby grows a small-leaved lime (*Tilia cordata*) which showed its characteristic features.



Small-leaved lime (*T. cordata*)



Grey alder (*Alnus incana*)

The double lime avenue referred to above continues for some distance over the hill north of the house and is crossed by the path we were walking along. Near this junction, which is relatively low-lying, a number of grey alder (*Alnus incana*) have been planted and are growing well.

More interestingly about five

sizeable southern beech, Antarctic beech (*Nothofagus antarctica*) with tiny, crinkled leaves, are well established here. It is most unusual to find this tree growing in the Glasgow area.

Continuing eastwards between two drumlins we came across some mighty Corsican pines (*Pinus nigra* ssp. *laricio*). Originating in the mountains of Corsica where they grow to some 150 feet on granite derived acidic soil, they seem to have been introduced to the UK in the second half of the 18th century. It was discovered that they are tolerant of soil conditions and strong winds and are pollution resistant as well as producing 50% more timber than Scots pine growing in the same environment. In polluted, industrial Glasgow of the late 19th century it is not difficult to appreciate why Sir JSM decided to plant so many of them in his policies at Pollok. They are well known for being used to stabilise the sand dunes of the Culbin Sands in Moray.



Antarctic beech
(*Nothofagus antarctica*)

Although the management plan for the woodlands refers to improvement of the age structure of the Corsican pine plantations, management of these mature trees into the future will pose a problem. They are not reproducing here, whereas ash and sycamore do so in abundance. The native ash (*Fraxinus excelsior*) is susceptible to ash dieback disease, the fungus *Hymenoscyphus fraxineus*, although it produces a flexible and strong timber used for many purposes. The naturalised sycamore may not be the conservationists' choice but it produces a good quality timber useful for furniture making and so on and is home to some 186 different species of plants and animals.



Natural regeneration of Horse chestnut (*Aesculus hippocastanum*)

Another introduced species that is regenerating well in the woods here is the horse chestnut (*Aesculus hippocastanum*), the offspring of some fine specimens. Its timber is not the best (lacking tannin or resin it is non-durable) and the tree is susceptible to a leaf mining moth *Cameraria ohridella* and to a bleeding canker, *Pseudomonas syringae* pv. *aesculi* but is nonetheless an iconic species much loved by youngsters.

Continuing around our circuit, west of the entrance to the Burrell Collection, we came to an attractive short avenue of c. 8 pairs of sweet chestnut (*Castanea sativa*) mostly about 6 m. tall.

Finally, with the sun setting, we walked along the impressive avenue of mainly mature Turkey oak (*Quercus cerris*). This tree originating in S. Europe and Asia Minor was introduced about 1735 by Lucombe to his Exeter nursery and, significantly, is pollution resistant. Its timber

however is liable to crack. This avenue represents probably the biggest concentration of Turkey oaks in the city.



Turkey oak (*Quercus cerris*) avenue



Sweet chestnut (*Castanea sativa*) avenue

To the northeast of the house grows a fine Indian bean tree (*Catalpa bignonioides*).

During this evening's visit only a limited proportion of this large park could be visited and, even although the Pollok Woodland Garden was viewed in 2007, a further visit will be needed in order to do justice to the variety of habitats that occur here. As far as Sir JSM is concerned, his significance can hardly be over-rated: he was a commissioner of the Forestry Commission from its inception in 1919 and was Chairman from 1929 until 1932; he carried out pioneer peat planting on his estate at Corrour on the Moor of Rannoch that he purchased in 1892; he had very wide interests amongst which he helped to found the National Trust for Scotland in 1931; and he was Honorary President of the Glasgow Tree Lovers' Society from 1946 until 1955. His legacy is considerable.



Indian bean tree (*Catalpa bignonioides*)

Baron's Haugh RSPB Reserve and Dalzell Park, 3rd June 2018 Alison Moss

This excursion on 3rd June, 2018 was a follow up from August 2016, particularly to take in parts of the Dalzell Estate missed then. Aileen McKean from N. Lanarkshire Council joined us which was most useful. We were pleased to be able to add other species of plants and invertebrates.

It was a good day for flying insects - warm and humid and the rain held off till 3.30! Richard Weddle, Paul Cobb and James Milner-White delighted Aileen with lots of insect records. Green-veined white and Orange-tip butterflies were particularly abundant down by the Clyde on a profusion of Dame's violet and Comfrey flowers. 7-spot and 2-spot ladybirds were seen along with blue damselflies. We also learned that local mosquitoes give a nasty bite as well as the usual midges.

We spent little time on birds although the air was filled with song, Song thrush and warblers including Blackcap being loudest. We also noted Sand martin nest holes on the high mud banks on the far side of the Clyde. These were just above the wet flash flood marks from rain storms on the previous few days.

Fungi were represented by Smoky bracket, Dryad's saddle, and Oyster fungi. I had plant lists from our previous visit and it was interesting to note changes in the meadows enhanced by the RSPB. The meadows at the upper part of Baron's Haugh were still species rich, but with a tendency to grasses and shrubbiness. The poor soil areas were quite different with clovers, trefoil, and orange and mouse ear hawkweeds. The lower meadow had apparently lost some of its unusual species, e.g. Common toadflax and Wild carrot. Yellow rattle was still suppressing grasses, but there was no sign of orchids yet occurring on the site. It is interesting to reflect on how much the flora can be augmented or altered to enrich the diversity of plants for the birds and general biodiversity. This, of course, is a major issue in terms of management for all conservation bodies and our strange weather patterns compound these problems. It is good to see how much the RSPB is taking this on board. Perhaps our warmer, drier summer will push things in a different direction again.

**Invertebrates at Baron's Haugh and Dalzell Park
Weddle**

Richard

The invertebrate highlights were undoubtedly the *Parna apicalis* leafmine (on lime) and the *Eriosoma ulmi* gall (on elm) found by Paul, the soldier-beetle *Cantharis figurata* found by James, and the hoverfly *Eristalinus sepulchralis* found by Richard; there are no previous records of the *Parna* in the Glasgow area, and only one each of the *Eriosoma* and *Eristalinus*; the *Cantharis* has half a dozen records over the last 40 years or so, but is nonetheless rarely encountered. In all we noted about 70 insect species; about 14 of these were butterflies and moths, though many of were in the form of leaf-mines or larval spinnings. There were 14 different beetles; again some of them in the form of leaf-mines, but Richard found several examples of the shiny black beetle *Margarinotus striola* under a rotting piece of Dryad's Saddle fungus, and Paul netted a water-beetle *Ilybius ater* in flight; the Green Dock-beetle *Gatrophysa viridula* was seen as eggs, larvae and adults. There

were 16 species of Diptera, once again some of these were encountered in the form of leaf-mines or galls - Paul's expertise in identifying all these mines, galls, etc was much appreciated - however we saw remarkably few hoverflies, which makes the *Eristalinus sepulchralis* mentioned earlier all the more remarkable.

Blairskaith Quarry, 5th June 2018
Sutcliffe

Gill Smart and Richard

The Blairskaith Quarry excursion on 5th June was organised by former vice-president Laura Allen, who had kindly arranged everything, including parking instructions, and even the sunny weather! The quarry, an old brick clay pit closed in the 1970s, is set into Blairskaith Muir between Milngavie and Torrance. One of the main aims of the excursion was to find fossils in the old quarry. Everyone seemed to find something - mainly crinoid stem fragments, small brachiopods and orthocone nautiloids; and a couple of small goniatites - all dating from the Lower Limestone Formation of Carboniferous age (about 330 million years ago).

Green-veined white, orange-tip and peacock butterflies, seven-spot ladybird, and bee-fly, *Bombilius major* were seen. Palmate newts were discovered in a small pond near the entrance to the quarry, and a roe deer was glimpsed on one side of the quarry.



Gill Smart recorded mostly invertebrates, although a rabbit sneaked in to the list! Highlights were the bee fly, longhorn moths dancing in the sunshine above a willow tree and the 16 old spikes of common wintergreen.

The *Andrena ruficrus* (Northern mining bee) record is the first we know of in the West of Scotland for over 100 years, though there was one found in the Falkirk area a few years ago.

Fossil hunting at Blairskaith
© Richard Sutcliffe

Here is a list of Gill's records for the day.

Group	Scientific Name	Common Name
bee	<i>Andrena chrysosceles</i>	a bee
bee	<i>Andrena ruficrus</i>	a bee
bee	<i>Bombus lucorum</i>	white-tailed bumbebee
bee	<i>Bombus pascuorum</i>	common carder bee
bee	<i>Bombus terrestris</i>	buff-tailed bumblebee
bee	<i>Lasioglossum albipes</i>	a bee
bee	<i>Lasioglossum calceatum</i>	a bee
bee	<i>Lasioglossum fratellum</i>	a bee
fly	<i>Bombylius major</i>	a bee fly
fly	<i>Cheilosia bergenstammi</i>	a hoverfly
fly	<i>Eristalis pertinax</i>	a hoverfly
fly	<i>Eupodes latifasciatus</i>	a hoverfly

fly	<i>Melanostoma scalare</i>	a hoverfly
fly	<i>Platycheirus albimanus</i>	a hoverfly
fly	<i>Rhingia campestris</i>	a hoverfly

fungus	<i>Daedaleopsis confragosa</i>	blushing bracket
fungus	<i>Entyloma ficariae</i>	a fungus
fungus	<i>Ganoderma applanatum</i>	artist's bracket
fungus	<i>Glyphium elatum</i>	chisel fungus
fungus	<i>Hypoxylon petriniae</i>	a fungus
fungus	<i>Kretzschmaria deusta</i>	cinder fungus
fungus	<i>Leptosphaeria acuta</i>	nettle rash fungus
fungus	<i>Peniophora limitata</i>	a fungus
fungus	<i>Rhytisma acerinum</i>	sycamore tarspot
fungus	<i>Trametes versicolor</i>	turkey-tail
moth	<i>Adela cuprella</i>	a longhorn moth
butterfly	<i>Aglaia io</i>	peacock
butterfly	<i>Anthocharis cardamines</i>	orange tip
butterfly	<i>Pieris napi</i>	green-veined white
mammal	<i>Oryctolagus cuniculus</i>	rabbit
plant	<i>Convallaria majalis</i>	lily-of-the-valley
plant	<i>Pyrola minor</i>	common wintergreen
wasp	<i>Diplolepis rosae</i>	Robin's pincushion gall

Bargeny Hill Meadows, 12th June 2018

Alison Moss, Richard Weddle and Richard Sutcliffe

Nine members answered Jackie Gillespie's request for a recording update of this site. It was a beautiful evening on 12th June, allowing an easy recording session for plants and invertebrates alike. Close on 100 species of plants were noted, the highlights being several plants of broad-leaved helleborine (*Epipactis helleborine*) and greater butterfly

orchid (*Platanthera chlorantha*). We

estimated there were around 300 of the latter in scattered patches over the site.



Plant and invertebrate hunting at Bargeny Hill meadow. © Richard Sutcliffe

Richard Weddle and Richard Sutcliffe were in charge of invertebrate interest. It was particularly interesting to find the well camouflaged green and white caterpillars of the orange-tip butterfly on lady's smock plants and

also to see the mature, green caterpillar attached to a sorrel stem ready to pupate.

Several adult moths were identified: Cinereous Pearl, *Anania fuscalis*; Garden Grass-veneer, *Chrysoteuchia culmella*; Twin-spot Plume, *Stenoptilia bipunctidactyla*; Silver-ground Carpet, *Xanthorhoe montanata*; Chimney Sweeper, *Odezia atrata*; and a caterpillar of what was probably a Smoky Wainscot, *Mythimna impura*. Other insects of note included a ground-beetle, *Nebria brevicollis*, a 7-spot ladybird, *Coccinella septempunctata*, two colourful plant-bugs, *Calocoris roseomaculatus* and *Leptopterna dolabrata*, two picture-winged flies, *Herina frondescentiae* and *Urophora jaceana*, and four common species of hoverfly.

Orange-tip caterpillar
© Richard Sutcliffe



Jackie hopes to make a case for the protection of this attractive site with its varied meadows, both well drained and boggier. This would involve putting into action a management plan with the agreement of the owners that would maintain the site's rich biodiversity. We wish her every success in this and hope the contribution of our members has been of help.

Probable Smoky wainscot moth caterpillar. The black dot on its side suggests it's been parasitised.
© Richard Sutcliffe

Croy Hill and Auchinstarry, 17th June 2018

James Milner-White

Ten of us visited Croy Hill near Kilsyth on Sunday 17th June. As well as being a pleasant area to visit, it is one of the best places to see the remains of the Antonine Wall, although it looks more like a straight ditch than a wall. Afterwards we walked down the hill and along an unspoilt towpath of the Forth and Clyde canal.



Male orange-tip butterfly
Anthocharis cardamines
© Sarah Longrigg

In mid May almost every cuckoo flower plant had a single orange egg attached among the flowers. By mid July they had hatched out and were away.

Beside the canal damselflies were in evidence. Their eggs are inserted in slits made in the

This year orange-tip butterflies, as in the picture, have been common. Their caterpillars live

on cruciferous plants.



stems of water plants in the canal and the carnivorous larvae emerge and live in the water, usually for at least two years in Scotland.

The adult damselflies are also carnivorous, but they only live for a few weeks in midsummer, during which they mate and produce eggs.

The three commonest species in the West of Scotland are the large red, the common blue and the blue-tailed. The picture shows an adult blue tailed damselfly beside the canal. The colours of damselflies are variable, but the ring of bright blue at abdominal

Blue-tailed damsel fly
Ischnura elegans
© Sarah Longrigg

segment 8 leaves little doubt about this one. Another species living in the canal is the tufted loosestrife (it is the flowers that are in tufts) *Lysimachia thyrsiflora*. This is a rarity in the UK but does occur regularly in fresh water in Renfrewshire. Its apparent rarity may be compounded by its supposed reluctance to flower. However on 17th July plenty were to be seen.

Iceman: the movie
Dickson

Roger Downie and Jim

As many GNHS members will know, Jim Dickson has done considerable botanical archaeological research on Ötzi the Iceman. Ötzi is now housed in a specially made cabinet in a museum in Balzano, northern Italy, attracting around 250,000 visitors each year. Scientists have seized on the opportunities of a well-preserved ancient body to ask many questions about early human life, and about 800 scientific papers have resulted from their work. Now, a feature film, directed by German film-maker Felix Randau has been made (released in the UK on 27th July). Reviews have been mixed: the *Guardian* saw the film as essentially a revenge/survival drama, but the *New Scientist* felt it was better on the science.

Jim saw it at the Glasgow Film Theatre, and felt it was a missed opportunity. He writes: 'The film gives no obvious indication of paying much attention to the science. The science from the intestines and my discovery of bogmoss in the colon make the last days more hectic than shown in the film. If what Klaus Oeggl and I found is correct, the iceman was firstly high up, then lower down below 1000 m, then finally very high up, in 48 hours or perhaps a bit less. He probably did not live in the mountains as shown in the film, but lower down where there was both arable and pastoral farming'.

Information from Richard Weddle

"Britain has lost half its wildlife. Now's the time to shout about it."
Michael McCarthy, in the Guardian describes the recent loss of UK biodiversity:
www.theguardian.com/commentisfree/2018/mar/26/wildlife-modern-farming-insects-birds

This article highlights a call by a Holyrood Scrutiny Committee into failures of conservation and reporting of biodiversity by local authorities, despite statutory duties to do so, and makes recommendations on how the situation should be improved by the Scottish Government and Scottish Natural Heritage.

www.parlamaid.scot/newsandmediacentre/109176.aspx

Guyana Expedition

Here is a link to a paper by Crinan Jarrett, Amber Mathie and Leo Jhaveri on the University of Glasgow Exploration Society's Guyana Expedition of 2017, which was supported by the society's Blodwen Lloyd Binns bequest, and is to be found on the GNHS website:

www.glasgownaturalhistory.org.uk/blb_reports/Guyana_Expedition_2017.pdf

The paper includes information on research in the Kanuku Mountains into amphibian diversity, chytrid fungus in amphibians, bat diversity, and a camera trap survey of animals of the forest understory, including Ocelot, Tapir and Armadillo.