GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

November 2014

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
10 January 2015

GNHS is a Registered Scottish Charity Web-site:
www.gnhs.org.uk/

GNHS Indoor Meetings - in Boyd Orr Building unless noted

November 2014
Tuesday 11th
6.30pm Tutorial: Froglife's Scottish Dragonfinder and Green Pathways projects; James Stead and Lauren Lochrie
7.30pm Lecture: Voices in the reeds: passive acoustic monitoring of water rail; Anna McGregor

Thursday 20th
5-6pm Graham Kerr Building Lecture Theatre 1
Lecture: Danger management: lion conservation on a crowded continent;
Prof Craig Packer, University of Minnesota. This talk is joint with GU ZooSoc and additional to the original programme. Craig Packer is an expert on the behaviour and conservation of large mammals, especially lions, and is on study leave in the UK at present.

7.30pm **in the Bower Building**, University Avenue
GNHS members are invited to the annual talk organised by Glasgow Tree Lovers' Society and Friends of Glasgow Botanic Gardens. This year's presentation is by Malcolm Muir, Countryside and Greenspace Manager for North Lanarkshire Council. The title of his talk is "Hamilton High Parks: Restoring an Ancient Treescape".

December 2014
Tuesday 9th
7 for 7.30pm: **Zoology Museum**: Christmas buffet dinner – see later in Newsletter for details and booking form; including Lecture - Bravo Charlie Lemur; Tony Payne

January 2015
Tuesday 13th
6.30pm Tutorial: Glasgow's aquaphobic water voles: Robyn Stewart
7.30pm Lecture: The Scottish Marine Protected Area network: are we considering climate change? Charlotte Hopkins

February 2015
Tuesday 10th
7.15pm Photographic Night:
Members' slides or digital slide shows, plus photographic competition results. Members are invited to send in advance to David Palmar (Email address above) the topic of their presentation.

GNHS/BRISC bursaries **Richard Weddle**

As in previous years, GNHS and BRISC (Biological Recording in Scotland) are offering bursaries towards attending a training course in natural history field studies skills. The bursaries will be for £200 or 75% of the cost of the course, whichever is lower. This year there will be seven bursaries available; the closing date for applications is 31 January 2015; for full details, and an application form, see www.gnhs.org.uk/bursaries.html - this currently shows the 2014 bursary info, but will be updated shortly (the 2014 application form is not valid for 2015).

2015 Subscriptions **Richard Weddle**

Subscriptions fall due on January 1st 2015 (except for those who have joined in the past few weeks). A subscription renewal form is enclosed for those who don't pay by Standing Order; email recipients will receive a separate reminder by email. We would be grateful if you could pay your subscription as soon as possible, to save us having to send further reminders. Remember that if you pay by the end of January you may deduct £1.

Excursion Reports

Linn Park, 22nd May 2014 **Bob Gray**

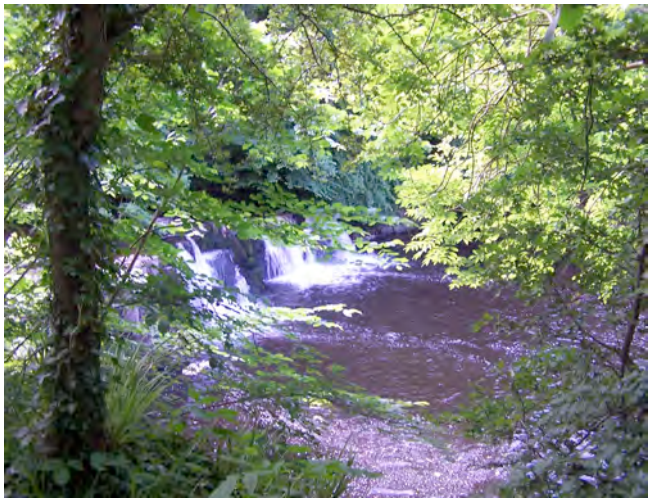
Linn Park, at 82 ha (203 acres) the second biggest park in Glasgow after Pollok, is so large that the decision was taken early on to restrict our visit to the southern end only. The north will have to await a future excursion. So seven of us gathered at the Netherlee Road entrance where, as well as the usual tree list and map for the park, a map (modified from that in 'Archaeology Around Glasgow' by Sue Hothersall [Glasgow Museums 2007]) summarising the industrial archaeology of the area was handed out. The industrial heritage has left its mark in various ways and depends very much upon the geology of the park. The bedrock is 300 million year old Carboniferous sandstone, coal and limestone penetrated by two harder dolerite sills that form the basis of the waterfalls and the crag on which stood Cathcart Castle. The castle (1450) was owned by Alan de Cathcart associated with the Wars of Independence and Mary, Queen of Scots reputedly stayed there prior to the Battle of Langside (1568). It was demolished in 1980.

Erosion caused by the White Cart Water has exposed steep cliffs in places and seams of coal, sandstone, limestone and shales. The local sandstone was used to build the old castle. The waterfalls enabled two mills to be built (paper and snuff) and coal from the five main coal seams, relatively shallow and easily worked, was used to provide heating in the mills and to burn limestone in kilns. The resulting lime (calcium oxide) was used for the coating of buildings and agricultural improvement. This industrial and agricultural activity occurred mainly in the 18th and early 19th Centuries. In 1820 the area, part of Hagtonhill, was sold by the Maxwells of Pollok to Colin Campbell one of the 'sugar' Campbells, who developed the area as parkland. He called it "The Lynn" (an old Scots word for waterfall), built the Mansion House and created much of the woodlands and gardens. Thereafter one John Gordon purchased the land in 1840 and supposedly planted the lime tree avenue in the 1850's to commemorate the marriage of his daughter to 'Black

Mungo' Campbell. The city purchased 180 acres of Linn Park in 1919 and subsequently added the lands at the castle and Court Knowe.

Today the park links up with other green spaces to form a Green Network important for biodiversity and highly valued for nature conservation. The park was established as a site of importance for nature conservation (SINC) in 1989 and as a local nature reserve (LNR) in 2012, the 8th in Glasgow and the first to be so designated in the south of the city. A woodland management plan has been drawn up for the 21 compartments into which the park is divided so that the area is managed by the Council as a "Woodland Park".

Trees near the entrance where we met included a number of Corsican pine (*Pinus nigra* ssp. *laricio*) inside the Netherlee Road fence as well as a group of cone festooned Lawson's cypress (*Chamaecyparis lawsoniana*). The signpost at this entrance indicated that that Linn Park is one of the 11 Commonwealth Hub Parks, each one twinned with a different part of the Commonwealth – in this case the Caribbean. The curving entrance drive is lined with an avenue of mainly common lime (*Tilia* x *europaea*). Halfway down a silver pendent lime (*Tilia* 'Petiolaris') was found and a gap caused by tree loss had been filled with a pair of small leaved limes (*Tilia cordata* 'Greenspire'). Beyond the avenue on its southern side were growing a considerable number of yews (*Taxus baccata)* and, outwith this area, where more light was available, was much natural regeneration of ash and sycamore as well as a ground flora, common to many such sites within the park, that included much sanicle (*Sanicula europaea*) and ramsons *(Allium ursinum*), which are indicative of a fairly rich soil. Just before the path reached the White Bridge, which is the oldest cast iron bridge in Glasgow (1835), was a fine pedunculate oak (*Quercus robur*), one of five trees in Linn Park designated as Commonwealth 60 trees (selected to commemorate both the Queen's Silver Jubilee and the Commonwealth Games). These trees have been chosen from the Hub Parks referred to above.



Having crossed the bridge we swung left and tarried awhile at the White Cart waterfall viewpoint. This waterfall is the original "linn", or waterfall, where the **river flows spectacularly over a**

Low Wood canopy

dolerite sill. Here we spotted the turquoise flash of a kingfisher. A downriver stroll, high above the river passing many fine beech *(Fagus sylvatica*) with occasional common lime, European larch (*Larix decidua*) and saplings of beech and ash growing

on the steep slope to the water, brought us to the "Low Wood". This consists of many fine specimens of Corsican pine mainly, together with the occasional Norway spruce (*Picea abies*) and Scots pine (*Pinus sylvestris*). This area appeared wooded on Roy's map of 1750 and so is a PAWS (Plantation on an Ancient Woodland Site).

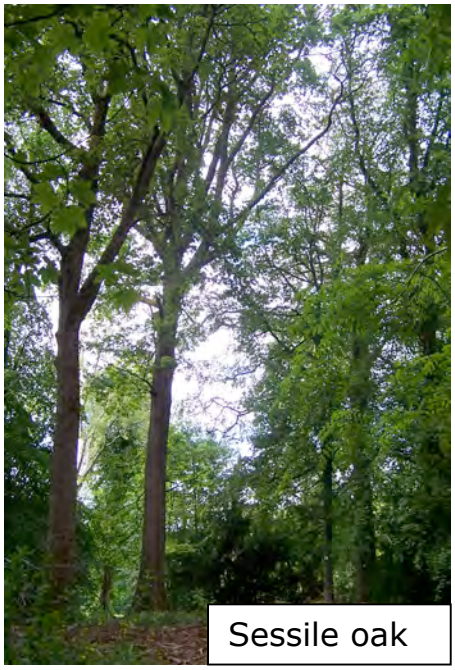
Copper beech

Pam Murdoch drew our attention to three-veined sandwort *(Moehringia trinervia*), an indicator of old woodland. It is also interesting because its seeds contain an oil rich structure (an elaiosome) that attracts ants which disperse the seeds. However the relatively impoverished ground flora indicates a certain amount of soil deterioration, no doubt deriving from the acidic effect of conifer needle fall over many decades. One of the fine Corsican pines has been included in the list of Commonwealth 60 Trees.

From here a short stroll took us to the entrance to the old garden area. Outside, north of the garden gate, grows a fine **copper beech (*F. sylvatica* f. *purpurea*)**.

Shrub layer

Nearby the shrub layer included **butcher's broom (*Ruscus aculeatus*)** together with a shrub identified by June McKay as ***Ruscus hypoglossum***. This latter possesses unusually what are botanically known as cladodes, modified stems that look like leaves. Also near here, just northeast of the house grows a c.27 m **tall sessile oak *(Quercus petraea*)**, perhaps the tallest in Glasgow.



Sessile oak

Within the garden we just had time in the fading light to examine what is, in height and girth, arguably the city's biggest **field maple (*Acer campestre*)**. Moving swiftly back towards the White Bridge we noted a very old, pollarded common walnut (*Juglans regia*) just to the south of the mansion house. Two younger specimens have been planted by the path at the side of the field in front of the

Field maple

house. Unfortunately the old weeping ash before the house has been recently felled. Finally retracing our steps up the avenue towards the entrance we observed a row of three old hornbeams (*Carpinus betulus*) a few metres away from the path. The many different habitats found in Linn Park, its semi-natural riparian woods, plantations, parkland, avenues and meadows, reflect its history both ancient and modern. The management plan for the period 2011 until 2015 includes prescriptions for the removal of rhododendrons, planting native species for ground flora enhancement and woodland re-establishment as well as the monitoring of the parasite toothwort (*Lathrea squamaria*) at one of only 3 sites in Glasgow. The Forestry Commission through its WIAT (Woodland in and around Towns) scheme is funding much of this work both in woodland and more open habitats within Linn Park. Tree lists and maps are available on request from the author.

Govan Graving Docks, 16th July 2014 **Peter Macpherson**

The evening botanical field meeting as above was held round the Govan Graving Docks, an abandoned basin of the River Clyde. There was an attendance of ten. A total of 110 taxa were recorded (one less than last year's excursion to Crossbasket and the Rotten Calder!).

In relation to the river, plants of note were Giant Hogweed (*Heracleum mantegazzianum*), Garden Angelica (*Angelica archangelica*), Valerian (*Valeriana officinalis*) and Sea Aster (*Aster tripolium*).

Over the whole site the abundance of White Melilot (*Melilotus alba*) was commented upon.

Tree regeneration included Italian Alder (*Alnus cordata*), Field Maple (*Acer campestre*), the Sycamore cultivar (*Acer pseudoplatanus* 'Atropurpurea') and three whitebeam (*Sorbus*) taxa.

As always in Glasgow, we saw many Broad-leaved Helleborines (*Epipactis helleborine*) and Common Spotted-orchids (*Dactylorhiza fuchsii*).
The most surprising and interesting record was that of a little colony of Common Wintergreen (*Pyrola minor*) adjacent to the surrounding wall.

Lockerbie, 9th August 2014 **George Paterson**

This was a joint Meeting with Butterfly Conservation.
A lovely sunny day for a trip to the only location in Scotland where the Essex Skipper can be seen. Three GNHS members were joined by five from the BCS, one of whom provided cake which was a bonus. There was a huge number of peacock *Aglais io* butterflies all over the site, mainly found on knapweed *Centaurea nigra*. However, the highlight was undoubtedly seeing the nationally rare Essex Skipper *Thymelicus lineola* which can only be found at this location in Scotland. You have to head over 100 miles further south before it is seen again.

Moths: Chevron *Eulithis testate*
Common Carpet *Epirrhoe alternata*
Shaded Broad-bar *Scotopteryx chenopodiata* 3
Straw Dot *Rivula sericealis*
Silver Y *Autographa gamma*
Golden Y *Autographa jota* (or beautiful golden Y)

Butterflies:
Peacock *Aglais io* 175
Small Tortoiseshell *Aglais urticae* 10
Red Admiral *Vanessa atalanta* 19
Painted Lady *Vanessa cardui* 2
Essex Skipper *Thymelicus lineola* 8
Meadow Brown *Maniola jurtina* 1
Green-veined White *Pieris napi* 25
Small White *Pieris rapae* 3
Large White *Pieris brassicae* 2
Common Blue *Polyommatus icarus* 4

Also: seven-spot ladybird *Coccinella septempunctata* , Common Darter *Sympetrum striolatum*, Common Hawker *Aeshna juncea*, Golden Ringed dragonfly *Cordulegaster boltonii*, Large Red Damselfly *Pyrrhosoma nymphula*.

Arran, 16th August 2014 **Morag Mackinnon**

Just two hardy and determined souls made the crossing over to Arran and again we were unable to get over to the Holy Isle, but Avril and Morag braved the wind and rain and did a shore walk which pleased us very much and the hot soup in the café revived us. The pipefish was an unexpected bonus which we found when we were waving bits of seaweed about in our collecting pail!

Pipefish – Lamlash
Photo Morag C Mackinnon

Moine Mhor, 30th August 2014 **James Milner-White**

Five of us drove to Moine Mhor (near Kilmartin, Argyllshire, just over 2 hours from Glasgow). The area is rich in lichens, for example the large tree lungwort and the wispy *Usnea cornuta* which festoon the barks of the trees there.

We found several interesting tree galls (common everywhere); the red tongue fungus gall that grows on alder fruits is especially striking, and there were plenty of wasp galls

Button Galls
Photos: Morag C Mackinnon

Fungi - *Ascomycetes Taphrina*
- Alder fruit tongue gall

of the spangle, silk button, pea, oyster and marble types on the oak leaves. Two generations of these gall wasps alternate within one year, the first sexual and the second asexual; the spangle and other galls we saw belong to the second, containing Silk larvae that turn into asexual females which lay eggs without fertilization.

Moine Mhor itself is an interesting, and relatively uncommon, example of a raised bog including sundews, cranberries (with berries that seem too big for the leaves), and, unexpectedly, a bright yellow jelly-like substance that we took to be a slime mould. How long this raised bog will last some of us wondered as the young trees seem to be encroaching. After Moine Mhor we walked along the canal at Crinan harbour, sea views making a pleasant contrast with the bog.

Loch Libo, Uplawmoor, 28th September 2014 **James Milner-White**

Nine members attended. We examined plant galls caused by gall midges, which occur abundantly at this time of year on leaves of stinging nettles, meadowsweet, beech (see photo), ash and sallow. Each is a separate species with its own characteristic gall shape containing an orange, yellow or white larva. Apart from galls, leaves can be eaten in other ways; many exhibit the wiggly shapes of leaf miners, which are usually larvae of either agromyzid flies or microlepidoptera.

Beech Leaf Galls
Photo - Morag C Mackinno

One rarity we saw is cowbane, which is uncommon in the rest of the UK but occurs in profusion round the shores of Loch Libo. In summer the thick but very hollow stems make it easily recognizable and in winter the bare corms lie around at the water's edge. Another plant often lurking among lochside rushes is skullcap. Although the paired blue flowers were just over then, the paired fruits were visible and we agreed that their peculiar dark shape probably gave rise to the name skullcap. Looking for fungi, although the dry weather may have discouraged them, we found a huge polypore, dryad's saddle, growing on dead wood.

Kelvingrove Bioblitz **Richard Weddle**

The Bioblitz held on May 23rd generated records of over 170 species previously unrecorded in the park (or perhaps we haven't found / processed the records yet). Many of these were highlighted in Sarah-Jayne Forster's talk to the Society on Tuesday October 14th; they included a Purple Hairstreak caterpillar, a rather large toad, several lichens, and the notable hoverfly *Didea fasciata*. Rather surprisingly, there were also a good number of flowering plants and birds for which we had no previous records – in many cases that may have been because previous sightings may have been deemed by the observer not important enough to report.

The full list is at www.glasgownaturalhistory.org.uk/biodiversity/kg_splist.pdf - look for the asterisked species.

You can see lists for other sites in and around Glasgow via www.glasgownaturalhistory.org.uk/bio_sites.html - scroll down to the site of interest, and click on 'species list'. There are currently only a few sites listed; more will be added gradually.

Letter from the Goldenland 9 **Jim Dickson and Geneviève Lécrivain**
Birthwort (*Aristolochia clematitis*)

Whenever we can Jenny and I attend the excursions of the Botanical Society of Franche-Comté, a fairly new organisation. The field meetings are just like those of any natural history group in Britain and every bit as enjoyable both for successfully hunting plants and pleasant sociability (nice, generous packed lunches with sharing of cake and wine).

At the most recent botanising the objective was to refind Birthwort (Aristoloche in French) which our good friend Albert Piguet had found near Avrigney-Virey some years ago. Only a few minutes after we left the cars we found it as a large patch in full flower on the broad grassy side of a rural track. Additionally, in grassland later we saw several orchids: Burnt, Fly, Fragrant, Green-winged, Lizard, Military, Pyramidal and Twayblade –a goodly haul.

Birthwort has been recorded from only 13 places in Franche-Comté and moreover at no less than ten it has not been seen since in the 19th Century. In Britain and France Birthwort is likely to be an archaeophyte, that is to say an introduction but an ancient one. As the photo shows it is an attractive, one might say garden-worthy, plant but that is not why medieval or even earlier people may have wanted it in cultivation. The clue is in the vernacular and formal names and it has medicinal properties which it shares for instance with the Mint called Penny Royal and Savin, a kind of Juniper. Birthwort is an abortifacient.

According to Michele Bilimoff (2005; p. 60) the formal generic name is Greek and means excellent birth. In his book on the book of hours of Anne of Brittany, an illuminated manuscript produced between 1503 and 1508, this author states "If the mother prefers to have a son she must according to Pliny eat this plant with beef." He goes on that there was a belief that smoke from burning Birthwort under the

bed will bring the sick back to health, expel the devil and supress torment and all bad things.
The *New Atlas of the British and Irish Flora* states that it is "often found by abbeys or nunneries". There are no reports from Scotland at present but there is an unusual, ancient one from Glasgow. See Dickson and Gauld (1988). At about 1550-1560 it may have been grown at Glasgow Cathedral by Mark Jamieson, a priest connected with both Glasgow University and the Cathedral. He owned a 1549 edition of Fuchs's herbal and he heavily annotated it especially on the back papers where he wrote a list of 26 plants to be "grown in the garden". It is a special list of plants used to treat intestinal and gynaecological troubles. The garden would probably have been at the Cathedral.

The leaf shape is very distinctive as are the flowers. Confusion with any other wild plant in Britain is very unlikely.

Birthwort (Catherine Duflo).

Bilimoff, M. 2005. *Promenade dans des Jardins Disparus. Les Plantes au Moyen Age d'apres les Grandes Heures d'Anne de Bretange.* Editions Ouest-France; Rennes.
Dickson, J.H. and Gauld, W.W. 1987. Mark Jameson's physic plants. A 16th Century garden for gynaecology in Glasgow? *Scottish Medical Journal* 32, 60-62.

Christmas Social **Janet Palmar**

This year Council has again decided to hold the Christmas Social in the Museum in the Graham Kerr Building, with the talk in lecture theatre 2.
Following its popularity of the last two years, we are again trying a "bring a dish" formula.

Everyone brings enough savoury or sweet food for at least two servings (for example, couples can bring four servings of one dish.) The food is laid out, and

everyone can have a taste of any dishes they choose. This year, please bring your own knife, fork and spoon which will make setting up the tables and clearing away much easier No good at cooking, or run out of time with all the arrangements for Christmas? – no problem, just buy cakes or cold meat!

As the kitchen facilities are limited, it would be best to choose dishes which can be served cold. Although there will be no charge for the evening, it is essential to let me know if you intend to come, so that we can set out the right number of tables and chairs. It would also be most helpful if you can let me know what type of dish you intend to bring, e.g. savoury, salad or sweet.

Please **either** (preferably) email me **or** fill in the form and return it to me at the 11th November meeting,

GNHS Christmas Dinner – 7.00 for 7.30pm, Tuesday 9th December 2014 Bookable *as soon as possible please* by sending the form below to Janet Palmar

Name(s) (please print) ……

Address……

……

Phone no……

I/we intend to bring (describe type of food - savoury, salad or sweet) and my/our own knife/knives, fork(s) and spoon(s).

GNHS welcomes contributions to the Newsletter from members, without which the Newsletter would be a poor production! It would be of enormous help in getting the Newsletter out in time if you could please send them either as plain text or in a Word file as Verdana 12 points, which saves them being reformatted by the Editor. Scientific names should be italicised if you have time.

The more photos, the better the Newsletter!

However, **please do not send photos in Word documents**, as it takes a long time to reformat them to fit into the Newsletter, but instead send them separately from the text **as jpg files**, and indicate where you would like them inserted into the text.

Thank you David Palmar, Newsletter Editor

General Correspondence to the General Secretary: Mary Child