



# GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

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GNHS is a Registered  
Scottish Charity

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## 2019 Subscriptions

Richard Weddle

Subscriptions fall due on January 1<sup>st</sup> 2019 (except for those who have joined since the start of the winter session). A subscription renewal form is enclosed with the newsletter for those who don't pay by Standing Order; email recipients will receive a separate reminder by email; and those who do pay by SO will, of course, not receive a reminder. We would be grateful if you could pay your subscription as soon as possible, to save us having to send further reminders. Proceedings of the Amphibians and Reptiles conference last June will be issued as a GN Supplement in January 2019, so subscribers will receive a printed copy shortly afterwards.

## GNHS / BRISC bursaries

Richard Weddle

As in previous years, GNHS & BRISC (Biological Recording in Scotland) are offering bursaries towards attending a training course in natural history field studies skills. These bursaries are open to all. A grant from SNH allows us to offer an additional three bursaries to candidates aged under 26.

In addition there are potentially two bursaries offered by The Malloch Society for courses to study true flies as advertised on the Dipterists Forum; and a further two offered by the Inverness Botany Group to candidates living or recording in the Highlands.

The bursaries will be for £200 or 75% of the cost of the course, whichever is the lower. The closing date for applications is 31st January 2019; full details, and an application form, will be available at [www.brisec.org.uk/Bursaries.php](http://www.brisec.org.uk/Bursaries.php) shortly.

## Sheila Litteljohn

Report and photos - Mary Child



It's not often that one of our GNHS friends reaches the age of 100, so we thought we would make the most of it. A dozen members of GNHS and friends of Sheila gathered on Sunday 20th May to celebrate Sheila's 100th birthday. She had already had lovely family celebrations and this party was for her natural history friends. We had a most delicious afternoon tea and a wonderful time catching up with each other and congratulating Sheila on reaching 100.



## **GNHS Indoor Meetings (in Boyd Orr Lecture Theatre 5c unless noted)**

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), interesting specimens, or photographs.

### **November**

#### **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 Newsletter for details and booking form;  
includes Lecture: Dead useful – what strandings can tell you about the marine environment; Andrew Brownlow

### **2019**

#### **January**

##### **Tuesday 8th**

7.00pm Lecture 1: Re-homing Ratty – balancing the needs of urban water vole populations with redevelopment in Glasgow; Robyn Stewart  
Lecture 2: Predicting the future – from house sparrow behaviour to population change; Ross MacLeod

#### **February**

##### **Tuesday 12th**

7.00pm Photographic Night: members' slides or digital slide shows,  
plus results of this year's PhotoScene competition

### **Excursions 2019**

Alison would welcome any ideas and suggestions for excursions. It would be good to have some fresh input especially in the Zoology related zone. During the winter ideas and potential 'leaders' are gathered and the program assembled for mid March and published in the April newsletter.

Any help will be much appreciated. Contact Alison Moss.

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| <p><b>General Correspondence to the General Secretary please: Mary Child</b></p> |
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## Excursion Reports

East Lothian Excursion, 23rd June 2018

Bob Gray and Dr Roger Kirby

We were kindly invited to visit Saltoun Hall near Pencaitland by Gregor Robertson who lives in an apartment there. He entertained 12 of us to tea before the start of our day. Saltoun consists of some 20 acres of gardens and park which are thought to have been formalised in the 1740's by one of the Andrew Fletchers of Saltoun, Lord Milton, a law lord and renowned plantsman. [He was a nephew of the famous Andrew Fletcher, patriot and politician who opposed the Union of 1707.] In the 19th century the Saltoun Hall was famed for its formally designed garden.

The bedrock in the area consists of mainly Lower Carboniferous sedimentary rocks which are overlain by Devensian (late ice age) till and fluvio-glacial deposits. So the soil parent material is of gravel, sand and silt with little clay. The low rainfall of less than 700 mm per year (compared to 4000 mm in the West Highlands) means little soil leaching occurs, which leads to the fertile soils of the rich farmlands of East Lothian. Although this is not a particularly windy part of the UK, wind was evidenced by a Lawson cypress (*Chamaecyparis lawsoniana*) the top of which had been snapped off in a powerful north-easterly.



Saltoun Hall © Pat Thomson



Saltoun Blue Atlas Cedar  
© Tony Payne

The garden is host to some fine Atlas (*Cedrus atlantica*) and Lebanon (*Cedrus libani*) cedars and the opportunity was taken to discuss the origins over many millions of years of several species of cedar. A common ancestor existed some 50 million years ago in Northern Eurasia. Tertiary cooling caused a southerly movement which led to a split between the Himalayan and Mediterranean areas. This isolation produced the Deodar cedar (*Cedrus deodara*) in the former and the Atlas cedar in the latter some 19 million years ago. The Atlas cedar in its turn split some 5 million years ago into the Lebanon and Cyprus cedars (*Cedrus brevifolia*). A fine yew tree avenue grows through part of the garden and a discussion took place (unresolved) as to whether it was planted at the time of

construction of the house or did some of the trees pre-date it. One sizeable yew was found but none of the yews had developed layer as found not far away at Ormiston and indeed at Craigends in Renfrewshire.

A very tall Chile pine (*Araucaria araucana*) grows here. This tree was introduced to this country originally by Menzies in 1792 but subsequently and in much greater numbers by William Lobb in 1840. We also encountered a sizeable European silver fir (*Abies alba*). This was introduced in 1603 but is not used now in forestry owing to its propensity to defoliation by an aphid, *Adelges nordmannianae*. Gregor took us to see a craggy, old hollow evergreen oak (*Quercus ilex*), a tree of much character and shooting both from its base and also higher up. Before leaving the garden we came across a lovely strawberry dogwood (*Cornus kousa* var. *chinensis*) in full flower from central China, a Persian ironwood (*Parrotia persica*), the rare plum yew (*Cephalotaxus harringtonii*) from the far East and some younger specimens of Colorado blue spruce (*Picea glauca*), small leaved lime (*Tilia cordata*) and Hiba (*Thujaopsis dolobrata*) with its distinctive foliage.



Strawberry Dogwood © Pat Thomson



Saltoun Home Farm Wood  
© Pat Thomson

Driving down the main driveway we paused to measure a most impressive Turkey oak (*Quercus cerris*) which, having a girth of 430 cm and height of 29.6 m, is one of the biggest in the country. From the foot of the driveway we walked across a bridge over the Birns Water to the entrance to Saltoun Home Farm wood<sup>4</sup> where a sign indicates that the whole area is being managed by a group including SNH, FCS, the local authority and community groups with a view to establishing continuous cover forestry, using natural regeneration and planting. No indication was given of what species might be envisaged but a glance around showed regeneration of ash (*Fraxinus excelsior*), pedunculate oak (*Quercus robur*), sycamore (*Acer pseudoplatanus*) and some yew (*Taxus baccata*). The

dominant mature trees here were some big Austrian pines (*Pinus nigra* ssp. *nigra*), some Scots pine (*Pinus sylvestris*) and pedunculate oak with a mature beech hedge

(*Fagus sylvatica*). Across the river from here were three of the biggest trees in the area: a yew 424 cm in girth, an Atlas cedar 550 cm in girth (the biggest in Scotland is 609 cm in girth) and a tall giant sequoia (*Sequoiadendron giganteum*) 32.2 m in height.

We then travelled to Haddington where Dr Roger Kirby took over and where we enjoyed a prolonged lunch in The Loft restaurant. Outside the restaurant grows an attractive, tall silver birch (*Betula pendula*), 60 cm in girth, which adorns a bookmark that Dr. Kirby kindly distributed around our group. This tree is referred to in his book, *The Trees of Haddington and District*, 2nd edition 2017, which contains comprehensive information about trees growing in the urban area and surrounding estates, in public spaces, gardens and orchards. By means of measurement of over 800 trees over a period of time growth rates have been worked out.

The location of some of the most important trees is shown on 6 maps and the book is well illustrated with many fine photographs. A selection of 20 special trees includes the bristle-cone pine (*Pinus aristata*), girth 265 cm at 0.90 m, which is probably the largest in Britain. He took us into Court Street where he showed us three generations of urban amenity tree planting [mainly common lime (*Tilia x europaea*), but occasional small-leaved lime (*Tilia cordata*)] and discussed the management



Lennoxlove Tree Avenue  
© Tony Payne



Lennoxlove Fern-Leaved Beech  
© Pat Thomson

problems associated with the small aprons surrounding tree bases and the difficulty of planting trees in massive containers owing to the need for watering. We spotted an impressive giant sequoia having a girth of c. 580 cm growing in Memorial Park near the junction between Station Road and Knox Place but time prevented us from investigating Haddington's trees any further.

Lennoxlove Estate, owned by successive the Dukes of Hamilton since 1946, was our next destination. We stopped inside the main entrance gates for Dr. Kirby to show us a map of Haddington surrounded by no fewer than six different estates each one possessing trees of interest. The double avenue here consists of English oak mainly,

some sycamore and beech, with a number of incongruously planted conifers including Douglas fir (*Pseudotsuga menziesii*), European silver fir and grand fir (*Abies grandis*). Driving on towards the carpark we paused to view a group of sessile oak (*Quercus petraea*) that the Forestry Commission uses as donor trees for the supply of acorns – some 10,000 being produced by a mature oak in a mast year. This is the most northerly registered stand of acorn providers in the UK and the fine trunks of these trees indicate the reason for the choice of these particular specimen trees. The car park near the house contained a big balsam spire poplar (*Populus* 'Balsam Spire'), a canker-resistant hybrid between the Eastern (*P. balsamifera*) and Western (*P. trichocarpa*) balsam poplars [it turns out that the biggest by girth in Scotland is also in the grounds of the estate; but we missed it!], as well as a noteworthy horse chestnut (*Aesculus hippocastanum*) and a big common lime, both of which were measured.

Dr Kirby drew our attention to a fern-leaved beech (*Fagus sylvatica* 'Aspleniifolia') whose girth we measured as 170 cm. The path to the house from here led us to an attractive dawn redwood (*Metasequoia glyptostroboides*), girth 165 cm, and a poorly tree of heaven (*Ailanthus altissima*), uncommon in Scotland. Growing on the other side of the path were a very fine blue Atlas cedar (*C. atlantica* f. *glauca*) and pyramidal hornbeam (*Carpinus betulus* 'Fastigiata').



Lennoxlove Sweet Chestnut  
© Pat Thomson

We then made our way east of the house to what is arguably the main feature of Lennoxlove – a sweet chestnut (*Castanea sativa*) measuring 703 cm in girth. At just over 280" this represents an age of under 300 years according to Mitchell's standard growth rate rule. However, two of the biggest sweet chestnuts in Scotland, at Castle Leod in Strathpeffer (planted 1550) and Cockairnie in Fife (348") visited by the Society a few years ago, have averaged an annual increment of about .73" per year (based on age and girth) and so, on this basis the Lennoxlove tree is about 384 years old, younger than the putative 600 years mentioned on the estate website but older than the 1" per year rule would suggest. It is certainly an impressive specimen. Nearby grows a fine red oak (*Quercus rubra*), one of at

least two we encountered, a member of the "black" oak group that possesses leaves with pointed lobes, acorns that take two years to mature and with smooth, grey bark.

Dr Kirby then took us passed an ancient, craggy sycamore, girth 440 cm, barely still alive and with lots of honey fungus, *Armillaria mellea*, flat bootlaces appearing between the bark and the wood. We then proceeded to The Politician's Walk, a tree

avenue so called apparently from the time of Mary, Queen of Scots in the 1550's and 60's. Her Secretary of State, William Maitland of Lethington (the original name of the estate) whose family owned the estate used to walk here pondering the lofty matters of the day. The avenue is some 400 m long and consists mainly of common limes and some broad-leaved limes (*Tilia platyphyllos*). Some limes have been replaced by ash, oak and sycamore. At the north end of the avenue grows a big, partly layering yew tree measuring 485 cm girth at 1 m.

Returning along the front of the main house we passed behind a yew hedge growing through which we found a small Douglas fir sapling, clearly naturally occurring and displaying on its needles many aphids, *Adelges cooleyi*, that it commonly tolerates. Nearby we somewhat surprisingly encountered a lime seedling with its characteristic pair of cotyledons that look like a pair of supplicating hands. Close to the car park and beneath a common lime four more lime seedlings were found growing on an exposed path of gravel that also boasted some seedlings of oak and sycamore and a horse chestnut survivor that seemed about three years old.

This marked an interesting end to a fascinating day for which we are much indebted to Dr Roger Kirby for sharing with us his extensive knowledge of the trees of this area and to Gregor Robertson for introducing us both to his own patch and to Dr Kirby.



Lennoxlove House  
© Pat Thomson

**Excursion to Cathkin Braes, August 19th, 2018**

**Alison Moss**

The Cathkin Braes LNR proved to be a very interesting site. It is the largest Local Nature Reserve in the Glasgow area with



Common Green Grasshopper  
© David Palmar

an exceptional range of habitats, from ancient woodlands to marshes and various types of meadows and heaths. There was a curious resurgence of spring-like growth particularly on the grass verges and the drier heaths. In many places devil's bit scabious was the predominant plant in flower and was very rich in invertebrates particularly hoverflies. We were amazed at the numbers of small green grasshoppers at our feet in the grasslands.

We were lucky to have insect specialist, Paul Cobb, with us. He added many new finds to the existing records for Cathkin.

Paul's list included 3 spp of bumble bee, small copper and small heath butterflies, 1 sp gall fly, 5 spp gall midges, 3 spp gall mites, 7 spp gall wasps and 19 spp moths. However, the highlight for me (and Paul) was a very small lacewing (*Micromus variegatus*). This little creature fell from a tree at the edge of the woodland. It is under recorded in Scotland and a good find.

It was also good for to see an awakening of fungi. In the grass, many small dung-lovers were popping up and in the woodland a dead beech tree gave us a splendid specimen of giant polypore (*Merilus giganteus*).

It was a good day out on a day which improved considerably from a misty, damp start. Thanks to all the enthusiastic participants.

**Editor's Note-** Richard Weddle has since done something to address the under-recording of *M. variegatus* by finding two at the Botanic Gardens, and one at The Saltings (Old Kilpatrick) this year- and was similarly happy to see them!

## Reports from GNHS members

### A Book of Ferns, Arran, June 1858

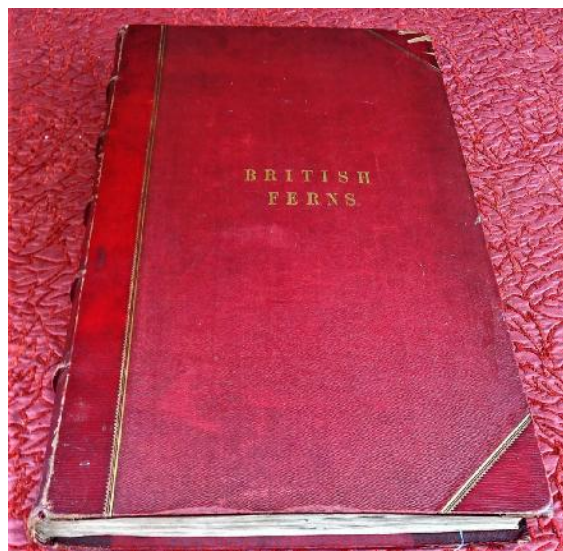
Roger Griffith

A bespoke folio size herbarium album with specimens collected from June 1858 to at least February 1861 containing ninety-six pages of pressed ferns from Scotland, Wales, England, the West Indies, Jamaica, South America, China, Japan, Norfolk Island, Australia, Tasmania, New Zealand, and Madagascar was purchased by the author from a Glasgow based antiquarian book dealer. The heavy paper sheets have tipped in acid free tissue paper, the whole is bound into a red decorated album with half leather and half calico covering and with a richly marbled inside board and first page.

The album cover has 'BRITISH FERNS' embossed centrally on the cover in gold lettering and a bookshop label records that it was made by Robert Forrester based in Stockwell Street, Glasgow. The collector is not identified apart from being a resident on the Isle of Arran in June 1858. The only named person occurs as several acknowledgements to Stephen Powell Esq. who supplied various specimens from Australia and New Zealand, indicating that the album's creator either corresponded with others, travelled widely or both.



Ichneumon wasp on  
Ribwort Plantain  
© David Palmar



British Ferns herbarium cover  
© Roger Griffith



The ferns appear to be displayed in the order that they were personally collected or obtained, regardless of the country of origin, classification relationships, etc and they are identified via a mixture of attached printed labels, copperplate writing, pencilled annotations and a few with hastily written temporary labels attached to the pressed plants themselves. The capitalisation convention is not always used for genus and species names, spelling errors are present, etc. suggesting that the collector was an untrained amateur. Dates and locations are very rarely given and the rarity status of specimens is only provided on a few occasions. The identifying characteristics are however well represented on the sheets and the specimens are well prepared and firmly attached with thin glued paper strips. Species collected on Arran dominate at first, mainland sites follow, such as green spleenwort (*Asplenium viride*) from Dunoon in September 1859 and later a random mixture of British and foreign are present. Attached sheets of course restrict the ability to organise a collection made over time.



Book of Ferns - Filmy ferns,  
Woodsia, etc  
© Roger Griffith

A significant number of visually impressive foreign ferns are present and a good representative selection of British species, including the filmy ferns and two species which are now considered extinct in Britain, namely the alpine bladder fern (*Cystopteris alpina*) only ever known from a site in Upper Teesdale, extinct since 1911 and the fountain spleenwort (*Asplenium fontanum*) once with several sites. A furcate and a normal specimen of Dickie's bladder fern (*Cystopteris dickieana*) is present, now known from only from several cave sites near Aberdeen. A number of depauperate,

furcate specimens and other sports or varieties of British species are present and as would be expected many of the species are given common names and/or binomials that are no longer officially recognised, such as Bree's fern, i.e. hay-scented buckler fern (*Lophodium foenisecii*, i.e. *Dryopteris aemula*). Some pages carry two or more different unrelated species, several duplicates are present and some ferns are not identified. A few club mosses are included, such as *Selaginella umbrosa*.

Hennedy's Clydesdale Flora illustrates how much easier it was for Victorian collectors to find what are now uncommon, rare or locally extinct species in the Scottish context, due initially to the effects of pteridomania as exemplified by this collection. The last dated specimen is from February 1861, a number of identified and pressed specimens were not mounted and nearly forty pages remain blank suggesting a sudden termination of collecting. The robust album is in good condition despite showing signs of frequent use. The collector was clearly a dedicated enthusiast who sought rare specimens and had contacts with other collectors, however the lack



Royal Fern  
© Roger Griffith

of a progression towards scientific methodology suggests a person who was not a member of learned natural history societies keen to contribute to species records, etc.

## References

- Hennedy, R. (1865). *The Clydesdale Flora*. Glasgow  
Lowe, E.J. (1874). *Our Native Ferns*. George Bell & Sons, London.  
Merryweather, J. (2007). *The Fern Guide*. Field Studies Council. Shrewsbury.  
Page, C.N. (1988). *A Natural History of Britain's Ferns*. Collins, London.

The following two articles report on activities which were partly funded by the GNHS bursaries – Ed.

### Report on Workshop at Malham

### Report and photos

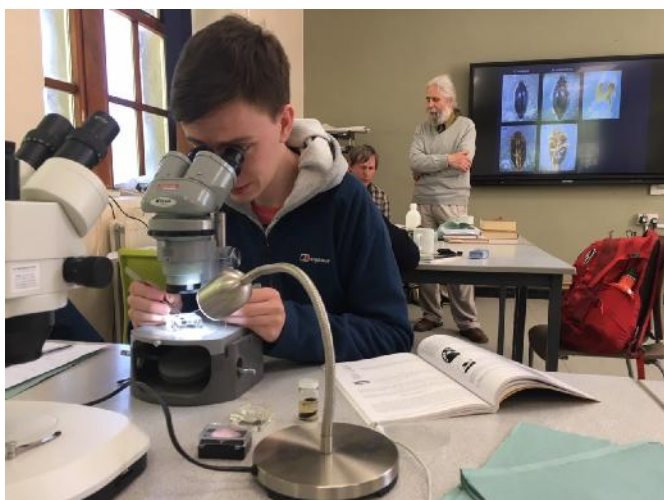
Alasdair Lemon

Ponds and freshwater habitats in general have always fascinated me because such a variety of species can call these habitats home yet they remain hidden to us as they live under the surface or hidden around the edges. One group that I have never really had the confidence to delve into more is Water Beetles, so thanks to the BRISC/GNHS/SNH bursary I was able to attend a three day workshop on identifying and recording water beetles at FSC Malham Tarn.



Most train journeys I undertake do not end in such quaint destinations as Settle and the final stop, Malham Tarn, was beautiful. The course was led by Peter and Sharon Flint, both superb ecologists, who provided a weekend full of learning from showing us aquatic survey

techniques to helping us get to grips with identification keys and water beetle anatomy (I even found myself extracting some genitalia).



The course provided a really good introduction on where to start when looking at water beetles, highlighting the resources available and where to go for help. It was great to be able to sit down and just spend a few hours each day going through specimens and being able to compare similar species.

Going forward I now have a better understanding of where to begin when I am trying to identify water beetles I have collected during surveys and am looking forward to getting more to grips with this group. The course has also given me more confidence to talk about water beetles while I am out doing pond dipping sessions with schools and at public events, allowing me to share the knowledge I have learnt with a wide audience of people and hopefully helping to inspire the next generation of freshwater biological recorders.



Heath Fragrant Orchid  
© Anthony McCluskey

In June 2018 I attended the *Wild Orchids of Scotland* course at Kindrogan, led by Martin Robinson and funded through a bursary from GNHS. I was already interested in orchids, and felt comfortable with most of the common species, as well as a few of the more scarce species which are found close to where I live in Highland Perthshire.

One of the key points that I took away from the course is that orchids are a promiscuous bunch, with little respect for the tidy groupings that we call 'species'! Within the spotted orchids, the *Dactylorhiza* genus, hybrids between species are regularly found. In some cases we can make good, educated guesses of the likely parent species, especially when those parents are still present at the site.

Orchids can even hybridise between genera, and on this trip we found at least one likely cross between a Heath Spotted Orchid (*Dactylorhiza maculate*) and Heath Fragrant orchid (*Gymnadenia borealis*) ! delightfully breaking all the rules. Then there are the

sub-species, and Martin showed us several sub-species of the Early Marsh Orchid (*Dactylorhiza incarnate*) which need to be seen in real life to appreciate the colour differences which are hard to reproduce in books.

So where does all this leave my recording efforts? Thankfully, I feel more confident and interested in recording orchids than ever! I don't feel put off when I find a plant that *just doesn't fit* the usual species characteristics. And I now know what to expect when looking for some of the rare, or just under-recorded, species. Some indeed, some species are most likely vastly under-recorded. Tiny gems like the Lesser Twayblade (*Listera cordata*) are often found underneath patches of heather where we don't normally look for orchids. I'll also now know to look for the Coralroot Orchid (*Corallorhiza trifida*) along the banks of lochs and ponds; they hardly look like flowering plants at all, being parasitic and therefore having no leaves, and a sickly yellow hue with flowers that look mangled. There were so many times on the course when I or the others in the group exclaimed 'So that's what it looks like!', when we were shown a species we'd only ever seen in books before and were confounded by the appearance of the living thing. Attending a course like this is therefore so useful as a starting point or an advancement to the next level of recording.

Later in summer I'll be looking for the various helleborines and lady's tresses, species which were not in flower in June. I'll first visit known sites for these to get my eye in by seeing the things themselves, and then keep an eye out for them when I go recording in future. And that's part of the real value of courses such as these; as well as showing me what to look for, it has certainly piqued my enthusiasm for recording and the provided guidance over how to submit my records to the correct place.

This year Council has decided to hold the Christmas Social in the Zoology Museum in the Graham Kerr Building, with the talk in Lecture Theatre 2 afterwards. Following its previous popularity, 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.

Please again 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!

Although there are kitchen facilities which can heat food, it might be simpler to choose dishes which can be served cold. There will be no charge for the evening, but 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 email me with the relevant details (see below) or fill in the form and return it to me by the 28th November meeting.

**GNHS Christmas Social – 6.30 for 7.00pm, Tue 11th December 2018**  
**Bookable as soon as possible please by sending the form below to Janet Palmar**

" .....

Name(s) (please print) .....

Address.....Postcode.....

Email 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).

.....for .....people

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.

**Please send photos separately from the text as jpg files, and indicate where you would like them inserted into the text. The more photos, the better!**

Thank you - David Palmar, newsletter editor