



GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

April 2010

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
22 July 2010

GNHS is a Registered Scottish
Charity Web-site:

<http://www.gnhs.org.uk/>

Forthcoming Meetings

David Palmar

April

Tuesday 13th - Tutorial: The Glasgow Living Water Project: Eilidh Spence. 6.30pm
Lecture: Red Squirrels: Mel Tonkin. 7.30pm
(jointly with Hamilton NHS and Paisley NHS)

May

Tuesday 11th - 6.00pm – Book launch, followed by
Lecture: 7.30pm - Clyde River Trust: Willie Yeomans.

John Knowler's book - *An Annotated Checklist of the Larger Moths of Stirlingshire, West Perthshire and Dunbartonshire* - which is being published by Glasgow Natural History Society, will be launched at a joint GNHS/ Butterfly Conservation event beginning at 6.00pm in the Graham Kerr Building of Glasgow University.

John will give a talk on the importance of moths and moth recording in central Scotland to be followed by wine and nibbles at which the book will be available at a special launch price (because costs have been significantly covered by grants, the book will in any case be sold at well below publication costs at £6.50 plus P & P).

Butterfly Conservation members and other non-members attending the launch will be welcome to stay on and attend the society's programmed evening talk on the Clyde River Trust which begins at 7.30pm.

June

Tuesday 8th - Summer Social - details and booking form at end of Newsletter.

Speakers for Next Year

Roger Downie

I will soon be putting together the Winter Programme for 2010-11. If you know of any good speakers you would like to see at GNHS, please let me know as soon as possible, including contact details. Thanks.

Peter Macpherson

Richard Weddle, Membership Secretary

I am pleased to announce that the Council decided, at their meeting on 19th January, to award Honorary Membership of the Society to Peter Macpherson in recognition of his service to the Society over many years.

This year's Excursion Programme is now available as a separate card and/or emailed file, and on the website <http://www.gnhs.org.uk/summer.html>. There is some supplementary information below, in addition to that provided in this Newsletter by some of the leaders:

Spring Moth Event – Saturday April 10th

To kick off our Summer Programme, John Knowler will give an indoor talk at Mugdock Country Park followed by an examination of moth-traps that will have been run the previous night. He will discuss the advantages and disadvantages for moths around in late winter and early spring, and hopefully there will be an opportunity to look at some of the moths brave enough to be on the wing at this time of year.

Please note: The maximum number for this is 15. Bookings should be made direct with East Dunbartonshire & Mugdock Country Park Ranger Service – 0141 956 6586, rangers@mugdock.org (The event is also being advertised by the Park.) Note the early start time of 9.00am. The moth event will finish by 10.30am.

Lichen and Fungal Forays – Sundays 18th April and 16th May

First I would draw your attention to the excursion to record and find out more about lichens at Muirshiel Park on Sunday 18th April. As there was considerable interest in the lichen excursions last year, particularly to Pollok Park, this will be a good chance to extend your knowledge. Alan has pointed out that at least some of the lichens should be photogenic and that a fair range of species should be seen, including a number of *Cladonia* species and *Protopannaria pezizoides* – a seemingly rare species in SW Scotland. A list of likely species will be provided on the day and there will be a short introduction to lichen structure and key features in identification before we go out and look at them. Alan does not require prior notification of attendance, as he will be going anyway to record species there.

You will see that our hunt for fungal specimens starts early this year on Sunday May 16th with an excursion to the Falls of Clyde. All our fungal forays this year are linked in with the newly formed Clyde and Argyll Fungus Group (CAFG). If you are interested in finding out more about this group, you can ask any of our Fungal Foray leaders, Alan Silverside, Robin Jones or Keith Watson.

Local Nature Reserve Celebration – May 23rd Hogganfield Park

This is a large public event, which members of GNHS are very welcome to attend. Different organisations will be carrying out activities such as pond dipping and guided walks for people of all ages. BTCV Wildlife Counts will be there. Activities will include wildlife counts, guided walks, stalls, displays and lots more. Call the Countryside Rangers on 0141 773 1895 for more information.

Andersonian Society – 125th Anniversary

The Andersonian Society was the predecessor of Glasgow Natural History Society, and we felt it appropriate to mark this special anniversary in some way. Our Summer Social will be the main function to do this (see separate article), but we

have also arranged a botanical excursion on 28th August to Stonelaw Wood which was the first site the Andersonian Society visited in 1885.

Scottish Association for Marine Science

Last year's visit to the Marine Station on Cumbrae was extremely interesting. This year we have arranged a visit to the marine centre at Dunstaffnage near Oban in September and plan to make this an "Argyll Weekend" with other sites of interest to be visited. Watch this space for further information! If you cannot manage both days, you can attend either Saturday or Sunday. Numbers will be limited to a maximum of 15 for the Marine Centre visit, so if you are interested please let me know. If it looks as if numbers will be high for this, I will send out a booking form when information about the rest of the weekend is available.

Travel

As in previous years, we have several excursions which are away from Glasgow and we are keen to share transport where possible. A number of people do not have cars, so it would be helpful if members could indicate when confirming attendance if they can offer, or require, any car places.

I hope you enjoy this year's programme. If you have any comments (good or otherwise!) please let me know. Also, any ideas for the future are always welcome.

Anne Orchardson

Summer Excursions

Gargunnoch Estate & Hill Visit (joint with Edinburgh NHS)

Bob Gray

Saturday 12th May 11.00am

This date has appeared erroneously in an early email issue of the programme as 12th June. We meet and park at Gargunnoch Estate Lodge (NS718943). The Hill part of the visit includes the local beauty spot 'Downie's Loup' waterfall.

Ayrshire Visit - Saturday 12th / Sunday 13th June

Bob Gray

We meet at 9.45am at Dumfries House (541203). Access is by the north entrance from Barony Road by the railway bridge (543219), west of Auchinleck. Follow the signs that lead to the Dumfries House car park. Saturday night accommodation has been booked in the historic Stair Inn (439235). Early booking is essential. For further details and booking please contact Bob Gray on 339 9802.

Botany and General Interest - Saturday 3rd July

Edna Stewart

Meet at car park SE of Kilsyth at 10.30am. Drive east though Kilsyth and turn right at turning signed Dullatur. Drive down narrow road – single track in places, to park next to the canal.

We intend to walk west along the towpath towards Auchenstarry, cross the canal, passing the Boathouse restaurant, and take a track leading uphill to Croy. A path runs along the crest of Croy Hill following the Antonine Wall, with great views over to the Campsies. It descends to enter the wood at Craigmarnoch, and back down the road to the car park. There is a lower track, avoiding Croy Hill for anyone looking for an easier route back. Lifts and car sharing can be arranged at Milngavie Station at 9.45am. Bring picnic lunch.

Urban Biodiversity: Successes & Challenges

Richard Weddle

The programme for the forthcoming conference, taking place in the Graham Kerr Building on 30th–31st October 2010, is almost complete.

On the Saturday morning we have contributions from Scottish Government, SNH, RSPB, Buglife, Glasgow City Council and South Lanarkshire Council; and in the afternoon, reports on research on: urban birds, invertebrates, bats; the biodiversity of woodlands, wetlands, waterways, gardens and allotments; and integrated habitat networks.

On the Sunday morning we have workshops: practical demonstrations and discussions on botanical aliens, pond life, moth-trapping, mammal identification, and environmental education; and in the afternoon, a choice of 3 excursions: Hogganfield Loch, Bingham's Pond, and Partick trail.

Full information about the programme and how to register will be available at www.glasgownaturalhistory.org.uk/urbanbio.html/ in April. Members without email will receive a registration form in the next Newsletter.

'TEK' Equipment

Richard Weddle

As the field-recording season is now upon us, it seems a good time to remind everyone that the Society possesses a number of items of equipment for the use of members. Many of these were purchased with the aid of a recent generous bequest from Thomas E Kinsey.

The list indicates that some items are 'in use'; this does not necessarily mean that they would not be available to others for a short time. However, there are also some items that have been purchased for particular research projects, and will not be available until the end of those projects.

Items such as nets and sorting trays are sometimes needed for GNHS field excursions and other such events. GNHS Council do stipulate that requests to use items for any significant length of time should be supported by an outline of the project for which they are required, and that the results should be submitted for publication in *The Glasgow Naturalist*.

I should also point out that though the bat-detector is quite easy to use, it requires some training and experience to interpret what it picks up, and the Longworth traps can only legally be used by a trained and licensed operator.

TEK Equipment	Availability	In care of
6 compound microscopes	occasional use	Hunterian Museum - Geoff Hancock
10 Longworth mammal traps	in use	Countryside Ranger Service
Batbox Duet bat detector	occasional use	R Weddle
2 Garmin GPS (basic)	occasional use	Anne Orchardson, Ian McCallum
2 Garmin eTrex GPS	1 in use	R Weddle
Skinner moth trap (mains operated)		R Weddle
Heath moth trap (battery operated)		R Weddle
2 pond nets: large / small	occasional use	R Weddle
2 sweep nets: large / small	occasional use	R Weddle
Butterfly net	occasional use	R Weddle
Beating tray	occasional use	R Weddle
3 sorting trays	occasional use	R Weddle
10 Video Cameras	not available	Pat Walsh
Data logger and amphibian cages	not available	Anna Muir

If you'd like to borrow any item, contact me or I can put you in touch with the current holder of the equipment.

Seabird research, Farallon Islands

Hannah Watson

I would like to extend my thanks to the GNHS for supporting research I carried out on the Farallon Islands in the summer of 2009 through the Blodwen Lloyd-Binns bequest. The Farallon Islands (pl. Farallones) lie within the California Current, one of five major regions of upwelling in the world's oceans. They are home to the largest seabird and marine mammal colonies in the continental United States south of Alaska.

Over the last four decades, extensive research has focused on the breeding biology, foraging ecology and population dynamics of the seabird community in relation to naturally-occurring and human-induced climate change. Such a long-term data set is quite unique and facilitates the examination of trends over multiple time-scales.

While working on the Farallones, I assisted with continued monitoring of the 12 species of breeding seabird and a study of the foraging ecology and diet of a diving seabird, the Cassin's Auklet *Ptychoramphus aleuticus*.

We deployed time-depth recorders to record foraging patterns, dive depth and dive frequency of auklets; collected diet samples; monitored chick growth rates; and, recorded breeding success. Boat surveys were carried out alongside this to determine distribution and abundance of auklets at sea.

Seasonal changes were demonstrated in the foraging behaviour, diet and distribution of Cassin's Auklets, all of which seems to be linked to seasonal changes in their prey. Such short-term changes (within just a few weeks) can have implications for the body condition of adults and affect the rearing of offspring and overall success of a colony.



This is the first study carried out in the region which has been able to integrate information from numerous simultaneous studies to gain a more comprehensive understanding of the mechanisms that link ocean conditions, food availability and breeding success of a seabird. The use of modern technology enables a more detailed understanding of the way in which seabirds forage in the open ocean and can complement traditional studies of diet and breeding success.

For more information contact Hannah Watson

Cassin's auklet with time-depth recorder attached

South-East Farallon Island



Understanding Scottish amphibians and the impact of environmental change

Anna Muir

Sudden and widespread declines have been well documented in amphibians, but the causes behind the losses are complex and as yet not fully understood. Likely causes put forward for the observed declines include habitat loss, increased UV-B radiation due to ozone depletion, invasive species, overexploitation, disease, and climate change.

Climate change has had detectable effects in the tropics on amphibian species distribution, with several amphibian species previously restricted to lower altitudes having ascended higher into the mountains. Within the UK, records show that frogs are spawning on average 10 days earlier than they were 50 years ago. There are also increasing reports of tadpoles failing to metamorphose during their first summer and remaining in their larval form overwinter. The consequences of environmental change on UK amphibians in general, and Scottish frogs in particular, are as yet unquantified.

I am in the first year of my PhD at the University of Glasgow. The aim of my research is to assess how local adaptation to climate may affect distribution shifts within mountain elevations here in Scotland. Specifically I will be asking:

- Are amphibians locally adapted to climate?
- How phenotypically plastic are they in their response to climate?
- What will be the effect of populations, previously separated by climatic adaptation, coming into contact through distribution shifts?
- Will amphibian survival be impacted by climatic changes and how can we form conservation policies to best protect them?

My research, generously supported by GNHS, will focus on the common frog (*Rana temporaria*). The common frog is widespread throughout the British Isles but its distribution and status is largely unknown in Scotland, especially in upland uninhabited areas. Commonly sighted by hill walkers, it is found high in the Munros, where its range extends from 0 to over 1000 m.

As part of this work I have set up a dedicated website, www.scottishfrogs.co.uk, which aims to give everyone access to the remote but fascinating environment of a Scottish mountain. You will be able to follow the progress of the hardy amphibians that inhabit this extreme habitat and read about the adaptations that allow them to survive here. The site will also allow an insight into my research being carried out to understand these populations and how environmental change may impact them. The site centres around a regularly updated blog, so you can sign up to receive Scottish amphibian updates.

I am also very interested to hear of sightings of amphibians from the base to the summit of the mountains of Scotland, both from this year and past experiences. Please visit the sightings page on the website to let me know as little or as much information as you can. I look forward to hearing from you.



A beautiful place to work



Frog measurements

Discovering dragonflies and damselflies

Cathy Fiedler

I feel very lucky to have been given the bursary to attend the dragonfly and damselfly identification course, and want to say a very big thank you to BRISC and GNHS. The Odonata are a fascinating and striking group of insects, very worthy of study and recording. With the beautiful setting of Kindrogan for our classroom, I thoroughly enjoyed learning how to recognise the Scottish species. Regular questions from our instructor Jonathan meant there was no time for slacking, and we soon learnt all about them.

I think that learning identify a new group of invertebrates can be a little daunting, but the course was broken down into what you might expect to find given the habitat type, geographical location, and time of year. This means you are left with a more manageable number of species that it could be.

The highlight was of course to see them in the field. We saw adults of the Northern, the common blue and the azure damselflies, and were treated to seeing adults of the large red damselfly emerging slowly from their larval cases. Seeing them flying around enabled me to fully admire these stunning creatures, and with all the facts from our classroom session still swirling about in my head, they even demonstrated the things we'd just learnt such as when they move around the stem to try to hide from you!

We identified them in their larval stage and learnt how to sample for them. This involved dipping a colander into the water, which lets the water drain out and leaves the larvae behind. But take note if you would like to try this technique – choosing the right equipment is a very important matter as colanders vary in how well they drain the water out, so shop around!

Looking at the records from the National Biodiversity Network, we were shown the need for more recording, which is the case for so many of our much-loved invertebrates. So now that I've been inspired, it's time to go off into the field with a book and binoculars to practise my identification and get recording.

Bingham's Pond

David Palmar

Bingham's Pond continues to be a source of delight and inspiration as I walk past it most days to school. One morning in March there was a Sparrowhawk nearby, with a starling and a blue tit screaming at it and dive-bombing it in the morning.

That same afternoon, a female Goosander caught a fish as I passed, and just as I was thinking how lucky I was to see two incidents in the one day, a third happened - a heron caught a frog before my very eyes, staying at the edge of the reeds as I walked past rather than flying off.

Thanks to Glasgow Council Land Services, who refurbished and naturalised the pond a few years ago, wildlife is alive and well in Glasgow!

Those of you with a large wardrobe will perhaps be hoping that the cold winter has helped to decimate the clothes moth population. I suspect, this is a vain hope since we all probably kept our houses somewhat warmer than usual to stave off the effects of the intense exterior cold, and no moth with a grain of intelligence would have ventured out of doors through a crack in the window frame.

Though I no longer possess my hitherto large collection of historical costumes, I still feel it prudent to take the usual steps to keep moths at bay and spend a not inconsiderable amount of cash each year on sachets from a well-known store. I was therefore delighted to read in the Radio Times, and to see demonstrated on BBC television, an inexpensive herbal method that I could easily adopt.

James Wong the presenter is a delightful young ethnobotanist who trained at Kew, having spent his childhood in Singapore and Malaysia where plants and natural remedies are taken a great deal more seriously than in Britain.

Here is his recipe for anti-moth sachets, which he also uses as insect repellent:

2 tbsp. each of dried rosemary (*Rosmarinus officinalis*) leaves; dried wormwood (*Artemisia absinthium*) leaves, and dried sage (*Salvia officinalis*) leaves; a dash of vodka.

1. Strip the leaves from the plants, and crush them finely. Mix in a shallow bowl and sprinkle on a dash of vodka.
2. Put a little dried mixture in the centre of a small muslin square. Tie with raffia. Repeat until you've used all the herbs.
3. When they first stop smelling, give them a squeeze and a bash to release more volatile oils. Next time they will need replacing.

Last season James Wong was a contributor to *Gardener's World* and took the gardening public by storm. Now he is embarking upon his own second series in which he demonstrates various extremely sensible and useful remedies in a highly palatable and delightful way. He also appears in *Countryfile* and is very definitely the flavour of the month. Let's hope the BBC doesn't indulge in its usual act of over-using 'a good find'.

Next Newsletter - copy to David Palmar by 22nd July 2010 please.

Please send contributions by email, preferably as .rtf, .doc or .docx (Word 2007) format. If you have time, please italicise taxonomic names. Please use **Verdana** font and size **12 points**. If sending photos, please submit only a few, and make them small if you know how to do that. (Please ask for advice if you want to know how to make them under 100Kb each for emailing) and always as **separate jpg files**, definitely **not** as part of a Word document.

This year’s summer social will take place on Tuesday 8th June and will be held at Glasgow University Field Station at Rowardennan. This is a new facility now known as the Scottish Centre for Ecology and the Natural Environment a.k.a. SCENE.

It is proposed that we meet there at about 6 p.m. when we will be given a conducted tour of the building. Our meal will take the form of a cold buffet and will be available at about 7-7.30 p.m. in the Meeting Room. The cost will be £20 a head to include wine and soft drinks. On account of space being limited, however, the number of people attending has had to be restricted to 24, so if you are keen to go please complete the form below and return it to Margaret Stead before May 29th.

MENU

Glass of wine /fruit juice

Borlotti bean pate with oatcakes

Mushroom vol au vents

Selection of Quiches

Seafood platter

Chicken

Selection of Salads along with Rice, Coleslaw and Wholemeal Bread

Cranachan and/or Cheese and crackers

Coffee/tea

.....
I/We wish to attend the Summer Social on Tuesday 9th June

NAME/S.....

ADDRESS.....

PHONE NO.....EMAIL ADDRESS.....

Amount enclosed £..... (Cheques made out to Glasgow Natural History Society)

I need transport.....

I can offer transport.....

Please complete this form and send, along with a cheque (£20 per person) to Margaret Stead.