GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

August 2012

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
1 October 2012

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

Winter Programme 2012-13

September
Tuesday 18th Zoology Museum
7.30pm Exhibition Meeting: members' exhibits, wine and nibbles. Let Maggie Reilly know your table or board requirements

October
Tuesday 9th Boyd Orr Building
6.30pm Lectures: Goodfellow Re-visited- the role of microscopy in natural history: Roger Downie, Geoff Hancock and Richard Sutcliffe, followed by demonstrations in the Zoology Museum

November
Tuesday 13th Boyd Orr Building
6.30pm Tutorial: (to be confirmed)
7.30pm Lecture: Monitoring the fish community in the Clyde estuary under the water Framework Directive. Myles O'Reilly

Wednesday 28th Graham Kerr (Zoology) Building
5.00pm Blodwen Lloyd Binns Lecture:
How to conserve bumblebees in a crowded world. Dave Goulson

December
Tuesday 11th Zoology Museum
Christmas buffet dinner: see Newsletter for booking form and details.
Lecture: Big cat conservation. Graham Law

2013 Highlights

January: Hopkirk Bicentenary, jointly with Friends of Glasgow Botanic gardens
February: Members photographic night
March: AGM
April: Joint meeting with Paisley and Hamilton NHS
June: Natives, Aliens and Re-introductions conference

Please remember to look at the GNHS website www.gnhs.org.uk for details of society activities, including any changes to meetings or excursions.

Excursion Reports

Bridge of Weir Lade Walk, 13th May 2012 — Alison Moss

One word summarises this meeting - WET. There is no doubt we know how to do rain properly in Bridge of Weir. Four stalwarts and I attended and did a rather curtailed version of my plan. It was, however, agreed that there was a lot to see of plants and the extraordinary way in which the waterpower of the River Gryffe had been used for grain mills, tanneries and cotton mills. Plant life highlights included a primrose, yellow water avens (i.e no purple/red pigment in sepals or petals) and many different hybrids of the Water and wood avens. Moschatel occurred on two sites and there were fine stands of dame's violet and Pyrenean valerian in addition to remnants of bluebell woods. Birds and insects were rendered invisible by the increasingly heavy rain. The general opinion was that the site should be revisited in better weather. My thanks for the good-humoured and up-beat manner in which Mary, Bob, Kathleen and Pam got soaked.

Millersneuk Marsh, Lenzie, 26th May 2012 — George Paterson

Two members took part in this excursion to Millersneuk Marsh. Part of the wetland area here is new and was created as mitigation for the recently completed Kirkintilloch link road which now bisects the marsh. We also ventured down to the Bothlin Burn which flows into the Luggie Water and eventually the Kelvin.

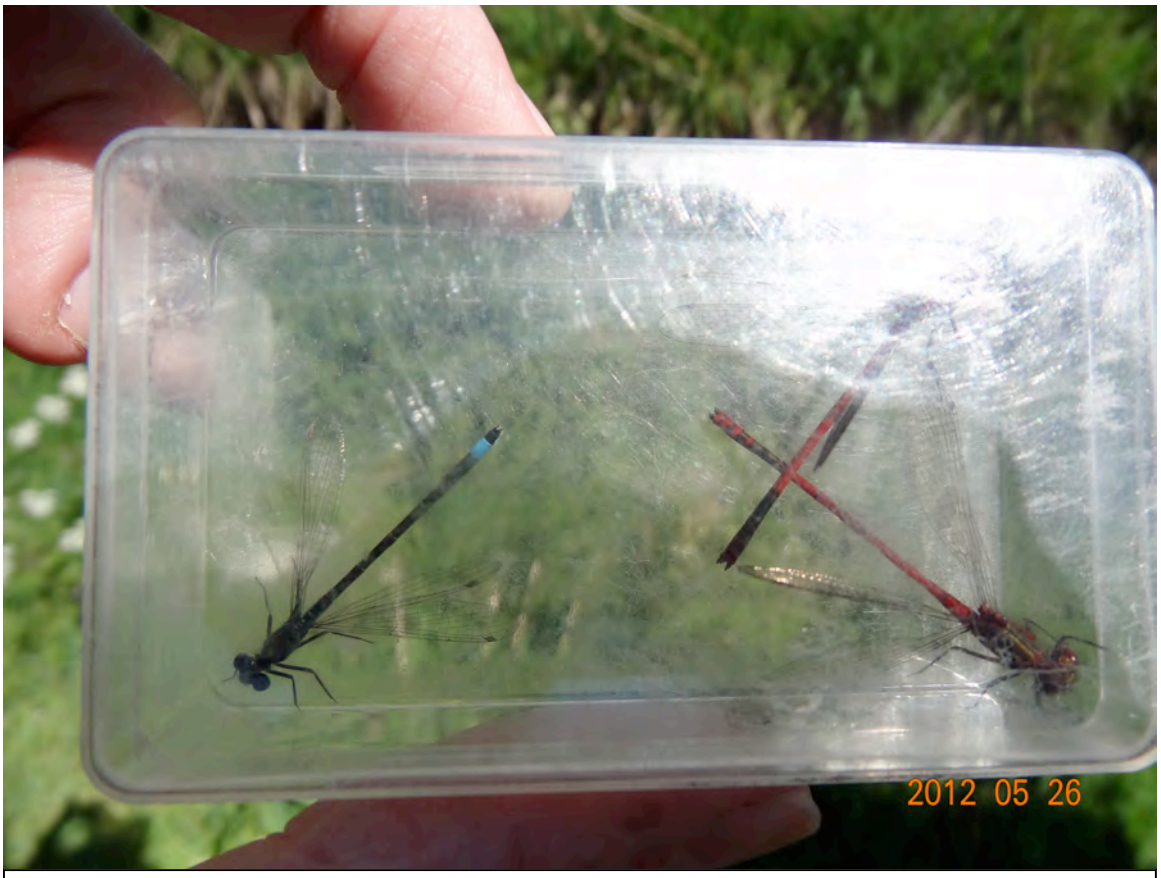
The excursion was led by Steve Jackson who has been involved in the link road project from 2006. He carried out the ecological impact assessment for the link road project, with one of the key challenges being the temporary removal and re-introduction of the local Water Vole (*Arvicola amphibius)* population. The voles were captured, then transported to a facility in the south of England while a new series of ponds, to the east of the road, were created for them on their return. However the ponds were so successful that other voles moved in while the previous residents were sunning themselves down South. Fortunately many of those voles have been used in re-introductions to other areas by the Forestry Commission.

A short walk down an embankment brought us to a series of culverts built to allow Otters *Lutra lutra* to pass under the road. This also seems to have proved successful as there was a fresh Otter spraint near the entrance to one of them.

Hoverfly
Rhingia campestris

The weather was hot, dry and a little windy, which did affect the number of flying insects we saw, but among the most notable were the hoverflies *Anasimyia lineata*, *Melanostoma dubium, Rhingia campestris* and *Eristalis abusivus* (needs confirmation). We also saw a Seven Spot Ladybird *Coccinella 7-punctata*, Small Tortoiseshell *Aglais urticae* butterfly and the Rainbow Leaf-beetle *Chrysolina fastuosa* and an enormous Caddis Fly *Phryganeidae*, at least twice normal length, hiding in one of the culverts.

Three Roe Deer could be seen in a field bordering the marsh and a variety of birds in the marsh including Reed Bunting *Emberiza schoeniclus* and at least two Grey Heron *Ardea cinerea* while Lapwing performed aerial acrobatics overhead and Skylark *Alauda arvensis* could be clearly heard but, as is usual, not so easily seen.



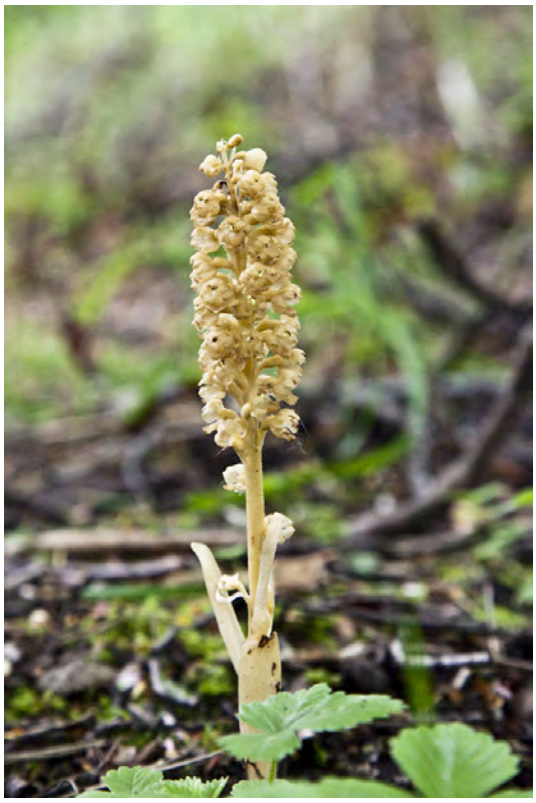
Blue-tailed *Ischnura elegans* and
Large Red *Pyrrhosoma nymphula* Damselflies

We walked the short distance from the marsh over the roundabout to the more sheltered Bothlin Burn area where a small overflow burn was teeming with caddis fly larvae, all of which seemed to have chosen almost exactly the same type of plant material with which to decorate themselves. Some stickleback *Gasterosteus aculeatus* were also visible and amongst the reeds numerous Blue-tailed *Ischnura elegans* and Large Red *Pyrrhosoma nymphula* Damselfly were seen flitting about. In a small sheltered field of tall grass and sedge near the burn Green-veined White *Pieris napi* and Orange Tip A*nthocharis cardamines* were active. In a shorter grass area surrounded by gorse and the occasional flowering Hawthorn *Crataegus monogyna,* a few species of Hymenoptera could be seen including the Common Carder Bee *Bombus pascuorum* and a Mining bee *Andrena haemorrhoa.*

Hopefully this will be the first of many trips by the GNHS to this site which on this visit showed it has a great deal to offer. Many thanks to Steve Jackson for turning up whilst suffering from flu and Richard Weddle for identifying so many species.

RSPB Reserve, Lochwinnoch, 12th June 2012

Sighting of Bird's nest orchid (*Neottia nidus-avis*) **Bob Gray**



Without drawing attention to the precise location of this rare plant, a few salient features of it are worthy of comment.

1. It is a flowering plant, which reproduces sexually by means of seeds, unlike fungi, which reproduce sexually by means of spores.

2. Like many fungi it is a saprophyte, i.e. as it does not contain chlorophyll it cannot make its own food using sunlight and so lives on dead or decaying organic material (normally, apparently, beech or pine litter). It is not a parasite as it does not feed on living material and certainly not on plant roots.

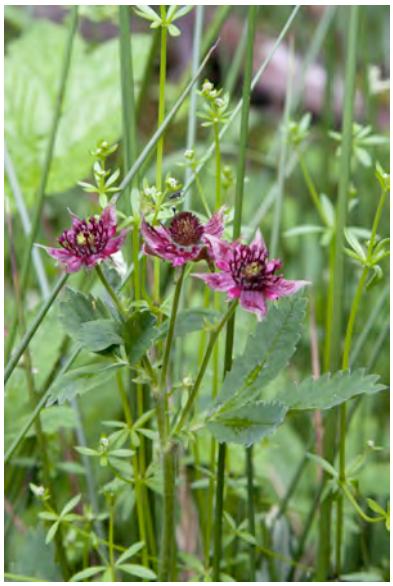
3. a) It belongs to the Orchid family, all of which are monocotyledons (their seeds produce only one seed leaf; floral parts in threes and leaf veins parallel to each other)

b) It is not to be confused with two other non-green plants – the saprophyte, Yellow bird's nest (*Monotropa hypopitys*) and the parasite, Common broomrape (*Orobanche minor*), both of which belong to different families and are dicotyledons.

Thanks are due to Zul Bhatia for drawing this plant to our attention and to Jane Christie for information.

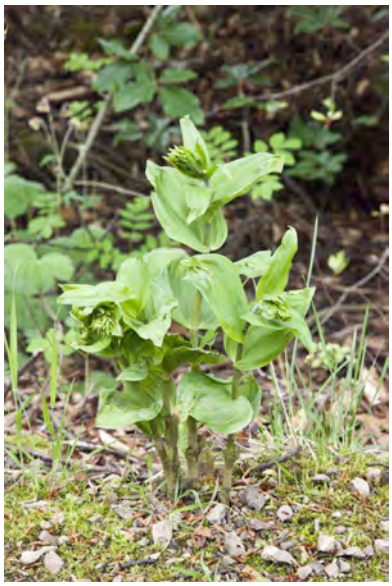
Plants seen at Lochwinnoch **David Palmar**

Before the Summer Social at the Hungry Monk, Lochwinnoch, Zul Bhatia led us on a walk around the Lochwinnoch Reserve. Plants of note on this excursion included:



Marsh Cinquefoil

Water Horsetail

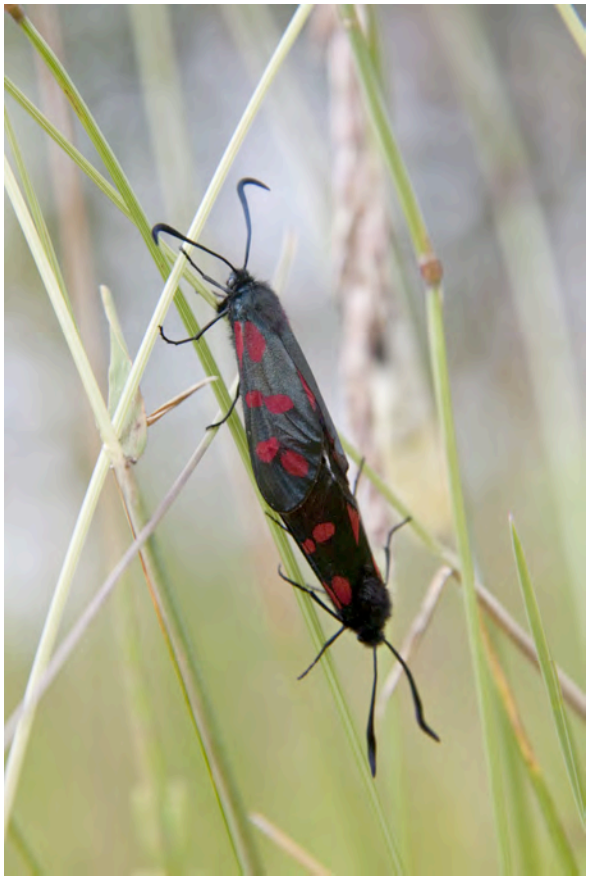


Broad-leaved Helleborine

Robroyston LNR, 15th July 2012 **Richard Weddle**

Robroyston Country Park is one of Glasgow's 7 Local Nature Reserves; it includes a diversity of habitats such as flowery grasslands, wetlands – including several ponds – and woodland; the northern part is also designated as a Site of Importance for Nature Conservation (SINC).

This excursion was planned to focus on moths after a GNHS excursion last year found an unexpectedly large number of day-flying moths, together with a few nocturnals that were disturbed into flight. Unfortunately, unlike last year, the weather on the day was cool and dull; however 12 determined souls turned up and set off down the path to the meadow areas.



Six-spot Burnet moths (*Zygaena filipendulae*) mating

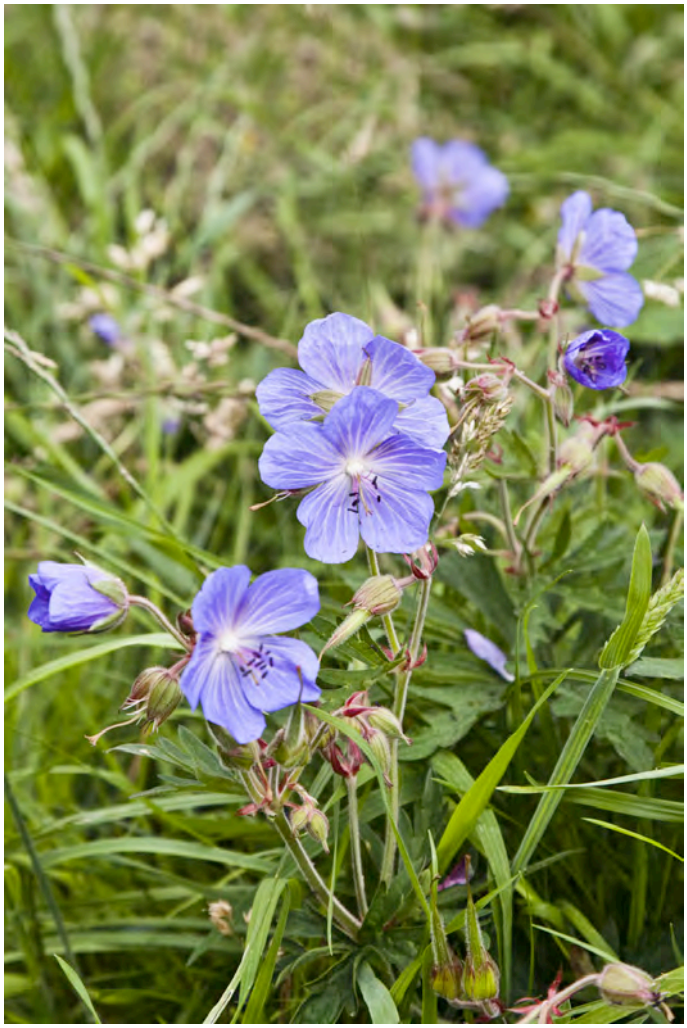
We almost immediately found a number of moths in the grass beside the path: the Clouded Border, Straw Dot, Latticed Heath and, moving into the flowery meadow area near the south pond, a good number of six-spot Burnets – Robroyston is one of the best sites in the city for this moth – we also found a number of Burnet cocoons attached to grass-stems, and one adult in the process of emerging from a cocoon. Other moths included the Yarrow plume (*Gillmeria pallidactyla*) in which the wings are more or less divided into a series of feathery plumes, and *Celypha lacunana* (a brownish micro-moth sometimes called Common Marble).

The meadow area was also good for a number of butterflies: Ringlet, Common Blue and Small Heath, together with surprisingly few Meadow Browns.

In an area of longer grass and woodland-edge we found a Gold Spangle moth, several Yellow Shells, a Large Yellow Underwing and a Peacock butterfly, as well as more six-spot Burnets and other moths that we'd seen earlier. After a brief outbreak of sun, during which we caught tantalising glimpses of other species of moths flying off away from us, the rain came on and we were forced to abandon the excursion as wet nets would be useless.

In the couple of dry hours we'd managed to find nine species of moths and five butterflies; we also noted three species of damselflies, three hoverflies including the splendid *Sericomyia silentis*, a snipe-fly (*Rhagio lineola*), a cleg (*Haematopota pluvialis*), and the red soldier beetle (*Rhagonycha fulva*). The botanical diversity of the meadows would have merited an excursion of its own, but we did note that both Northern Marsh-orchid (*Dactylorhiza purpurella*) and Common spotted-orchid (*D. fuchsii*) were quite frequent.

Plants on the Field Excursion to Robroyston LNR **Alison Moss**



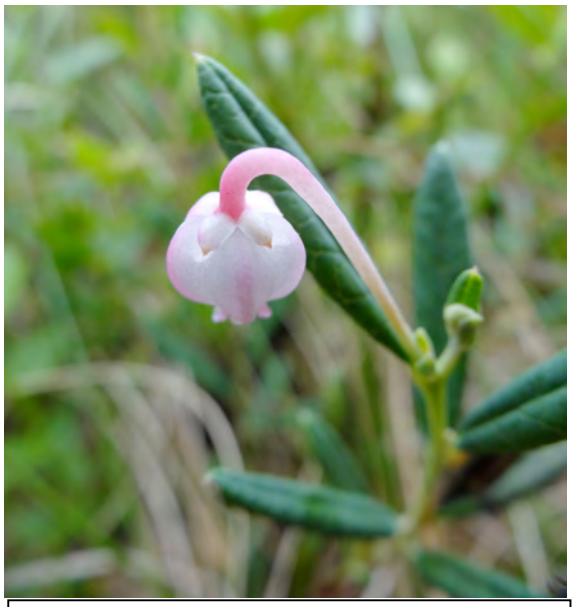
Meadow cranesbill (Geranium pratense)

The diversity of plant species was remarkable. Orchids were represented by the northern marsh orchid and the common and heath spotted orchids. The birds-foot trefoils (common and greater), clovers (white, red and hybrid), tufted vetch and meadow vetchling provided an abundant food source for the many six-spot burnet moths.

The damp meadows with marsh thistle, meadowsweet and large swathes of meadow cranesbill were an excellent feeding ground for the insects. There were heathlands too with tormentil, cross leaved heath, heather and eyebright.

Throughout all the habitats there was a rich mixture of grasses, sedges and rushes. Jimmy Huis, the Countryside Ranger explained that the wildflower area had been enriched by wildflower seeding and some planting in their reclamation from a mixed history of land use. The wild flower areas are mown only once a year. This regime seems to be working very well.

Lenzie Moss Local Nature Reserve, 21 July 2012 **George Paterson**



Bog rosemary *Andromeda polifolia* by George Paterson

Ten members turned up on a fair day at Lenzie Moss Local Nature Reserve. Before we even left the car park at Lenzie station a small tortoishell *Aglais urticae* fluttered by. After a short walk through some birch woodland and past some unusually tall foxgloves we arrived at the boardwalk to the west of the raised bog - the centrepiece of the reserve. Just off the path was a sizeable patch of the nationally rare bog rosemary *Andromeda polifolia* which was just coming into flower.

We then took a shortcut through the bog via a muddy path towards an area of unimproved grassland, during which one of the members temporarily lost a Wellington boot in two feet of bog. This showed that the dams installed to keep the bog a bog were doing their job.

There was also evidence of removal of birch, which had threatened to dry out the bog, by Mugdock Ranger Service and Friends of Lenzie Moss volunteers.

Flying insects were at a premium on this trip, but ringlet butterflies *Aphantopus hyperantus*, a male meadow plant bug *Leptopterna dolabrata*, a scorpion fly *Panorpa communis* and *Helophilus pendulus* were seen amongst the tall grasses. We continued the circuit of the reserve and just past a large mound of peat (used over 100 years ago for rifle practice) we came across a healthy number of round-leaved sundew *Drosera rotundifolia*.

Looping back round to where the *Wellington incident* occurred we walked in towards the centre of the bog along a raised ridge. Here, in one of the pools, we managed to find an interesting assortment of aquatic invertebrate include hawker nymph *Aeshna sp*, four spotted chaser nymph *Libellula quadrimaculata,* damselfly nymph and several diving beetle adults. The jet propulsion used by the dragonfly nymphs surprised and impressed many of the members.

Books received in exchange for reviews in *The Glasgow Naturalist*
From the Reviews Editor **Bob Gray**

A Field Guide to the Micromoths of Great Britain and Ireland **P. Sterling & M. Parsons ill. R. Lewington**
British Wildlife Publishing **2012** **Paperback £29.95**

This comprehensive field guide covers all 45 families of 'micros' found in the British Isles and includes both detailed drawings and photographs as well as many distribution maps.

The introduction describes the characteristics used for the identification of each family and species, followed by a useful section on field study, distribution and conservation. Following on a chapter containing an innovative key to families are many chapters of species descriptions of some members of each family. More than half (about 5/8) of all British and Irish species are described. These species' descriptions include field characters, similar species and larval food plants. The authors, who include expert contributors beyond those named, are well qualified and the illustrator is considered to be Europe's leading insect artist.

Urban Trees **Steve Cox**
The Crowood Press **2011** **Hardback £19.99**

Although aimed at the arboriculturalist this book contains chapters and sections of interest to the urban natural historian. It is intended as a practical management guide.

The first chapter consists of an outline of tree physiology and the environmental factors that control the growth of trees. There follows a brief history of urban development that concentrates on the inter-relationships amongst trees, buildings and people, which can be either beneficial or harmful. While planning and legal issues are addressed, much of the book concentrates on tree management from planting to maturity in both public and private spaces. The book contains many fine photographs as well as useful diagrams and tables. The author runs his own arboricultural consultancy company, having been both a tree officer and lecturer.

Notes from Members

Freshwater Invertebrates Course, Kindrogan — Robert Williams

As a project officer for Froglife I can often be found around the edge of ponds, net in hand, looking for signs of amphibian life. On too many occasions our amphibian search will go unrewarded, and yet after a single sweep through the pond, the net it is normally jumping with life....aquatic invertebrate life that is!

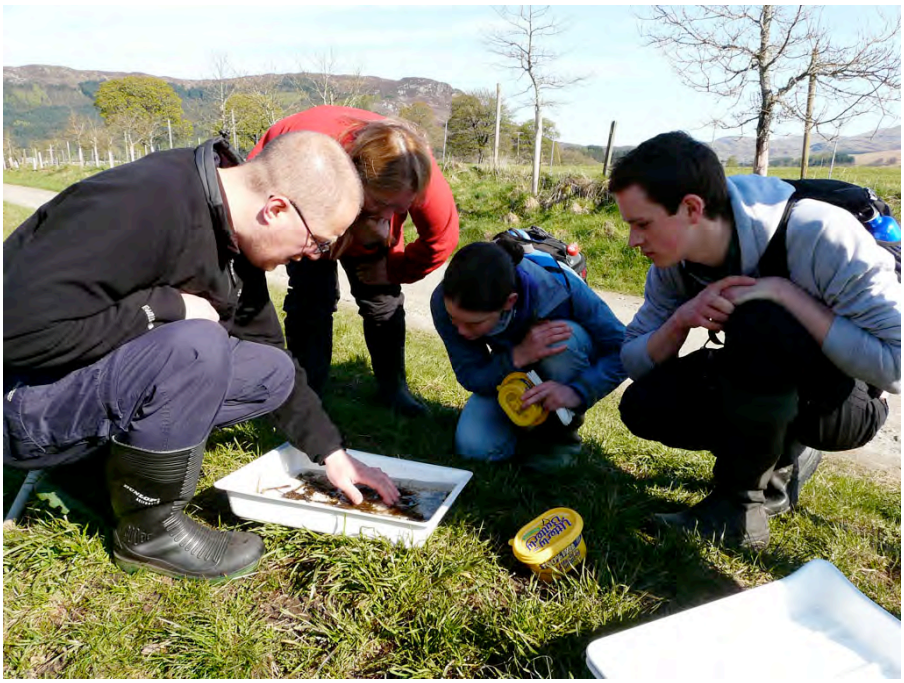
I realised that if I could improve my identification skills I could turn the net full of mystery invertebrates into valuable biological records. Thanks to a bursary kindly provided by Biological Recording in Scotland and Glasgow Natural History Society I was able to take my first step toward that goal. In May, I attended the Identifying Freshwater Invertebrates course taught by Craig MacAdam of Buglife/BRISC and hosted by the Field Studies Council at Kindrogan Field Centre.

Sampling in a pond at Kindrogan Centre
Photo taken by Irene Tierney

The course ran for three full days and luckily for us the sun shone the whole time! After an initial introduction to aquatic invertebrate groups and the sampling techniques, everyone was keen to grab a net and get stuck in. The first sample site was the Loch of the Lowes and during the course we sampled a variety of different habitats, from ponds and lochs to rivers and burns. The first thing that struck many of the course participants was just how much invertebrate life is hiding above and below the surface. Each sample seemed to have hundreds of aquatic invertebrates and even after 10 minutes staring into the same sample tray 'new' invertebrates were still appearing. With Craig's patient guidance participants were all soon telling the difference between stoneflies and mayflies and water bugs and water beetles.

After sorting our samples it was back to the labs at the field centre, and now for the tricky part! Microscopes at the ready, participants started to get to grips with the subtle differences between the unique cases of Caddis fly larvae and between the relative length of a Stonefly larvae's tarsal segments! With Craig's help, people were soon getting their eye in and everyone's ID skills were coming on in leaps and bounds. It was really useful being able to sample a variety of different habitats as each one brought new invertebrate groups and species to develop our skills. Our final day at the course was spent collecting and identifying samples from three points along the River Ardle to enable us to calculate a Biological Monitoring Working Party (BMWP)

score. This was a great test of our new skills and everyone successfully managed to identify their samples and correctly calculate their scores.



Craig talking about the invertebrates in our samples
Photo taken by Robert Williams

One of the best things about the course was that I left feeling I could now go out and use the Biological Monitoring Working Party (BMWP) system to score a water body for its quality. While species identification will take more practice having a practical application to apply what I learnt is a real motivation to continue learning about aquatic invertebrates.

The course was great fun and all credit to Craig as he successfully transferred his endless enthusiasm for aquatic invertebrates to all course participants. I would recommend the course to anyone with an interest in learning more about aquatic invertebrates and their identification. As a result of the course, I have already started to collect records of species that can be identified in the field and have also started to gather the equipment to collect and identify my own samples. Best of all, due to this opportunity I will never again need to come back from a survey and exclaim "I didn't find anything!"

[Rob was the recipient of one of four bursaries awarded by BRISC and GNHS; one of the conditions of the bursary is that the recipient writes an account of their experience for publication in the BRISC and GNHS Newsletters. - Richard Weddle]

Recent butterfly sightings **David Wardrop**

While taking a wild flower survey for Plantlife International on a sunny, warm and partly cloudy day (21st July 2012) in Balmore, I saw a sight that has been rather rare this year - a Small Tortoiseshell *Aglais urticae* sunning itself on a rock and four Ringlet *Aphantopus hyperantus* and one Small White *Pieris rapae*. The Ringlet has been a common sight. I have even seen this small dark brown almost black butterfly in the garden.

The Big Butterfly Count aims to record butterfly numbers during summer to get a better indication of the population of butterfly around the UK.

I submitted this information to the Big Butterfly Count www.bigbutterflycount.org running from 14th of July to 5th of August. Many members might have already done this but I thought I would give it a mention just in case.

Letter from the Goldenland **Jim Dickson**
Nature in Haute-Saône, late March 2012

Haute-Saône is one of the departments of Franche-Comté, that region of France which lies between Burgundy and Switzerland. Why the Goldenland? In the early spring the roadsides and rough grass are golden with Oxlips (Primevère des Bois), in the later spring the arable fields are golden with Colza (surely a much nicer name than Oilseed Rape), in the early summer golden with Sunflowers (Turnesol), in the later summer golden with Wheat (Blé) and in the autumn golden with turning Beech (Hêtre) leaves. The Goldenland is where Jenny (Geneviève) has her family home, an almost 300 year old farmhouse with a courtyard in front and a gently sloping back garden with fruit trees, certainly about an acre or so.

Oxlips - Photo by Jim Dickson

Right now Jenny's back garden is golden because, apart from Daffodils, there are hundreds of Oxlips, with large pale yellow flowers on tall stalks, in the grass under the apple, cherry, pear and walnut trees. A few seconds walk from the house and there are Oxlips brightening up the roadside banks. This abundance of Oxlips is in great contrast with Britain where it is a rarity, confined mostly to a few woodlands of Cambridgeshire and Oxfordshire. I had never seen it till I went to Cambridge as a research student. It is not native anywhere near Scotland. Sometimes it is grown in gardens and has on occasion made a bid for freedom as it did in north Lanarkshire some years ago. Where the diggings up by gardeners have not happened, around Glasgow here and there we have Primroses (Primevère Commune) which I have yet to see in the Goldenland. Rarely we also have Cowslips (Primevère Officinale) but long suspected as non-native in the west of Scotland. The Goldenland has many a native Cowslip with small bright yellow flowers on rural roadsides and in pasture.

This spring has been compressed as shown not just by Daffodils flowering at the same time in Angus and far to the south in Cornwall. To catch a plane to Paris on the way to the airport across the Erskine Bridge I noticed Blackthorn bushes in full flower at roadside hedges. That same day on the train from Paris all the way to Vesoul in the Goldenland there were Blackthorn (Prunelle) bushes in full flower. All of Franche-Comté is south of the whole of Britain.

Invertebrate identification workshops
TCV (formerly BTCV) are running a series of identification workshops in Stirling. Each course costs £40. The beetle workshop is run jointly with Buglife

To book email Tricia Burden: Scotland-Training@TCV.org.uk or Telephone: 01786 479 697.

Introduction to Spiders (Aranae) Workshop. Monday 20th August 2012
Introduction to Beetles (Coleoptera) Workshop. Wednesday 4th September 2012

The bust of Roger Hennedy **Richard Weddle**

At the time, about 100 years ago, when the Natural History Society of Glasgow met in rooms in Bath Street (close to where Adelaide's now is), they were very proud to possess a bust of Roger Hennedy, author of the Clydesdale Flora of 1878. The bust has not been heard of since the Society gave up the rooms and started meeting in Royal College – a building which now forms part of the University of Strathclyde.

The bust has now been located in Texas, in the possession of a descendent of the Hennedy family. The discovery came about after I added a copy of Eric Curtis' biography of Hennedy (*The Glasgow Naturalist* 25(2)) to the website of The Friends of Glasgow Necropolis (FoGN) - Hennedy and some of his family are buried in The Necropolis. The link was discovered by one of the Hennedy family in Texas who contacted FoGN with the news, and also the offer to return it to Glasgow; apparently there had been a plan use it as a garden ornament in Honduras! They didn't know how the family came to possess it, but it seems reasonable to assume that, as the Society didn't own any space in Royal College, they had nowhere to put it, and gave it to Hennedy's family.

Ashley Jameson, a student at Texas University, who visited Glasgow last year and did some very useful (unpaid) work for FoGN, has kindly agreed to collect the bust and deliver it to Houston, from where we think we can arrange to have it shipped to Aberdeen via contacts in the oil industry (probably free of charge).

When it arrives, we will still have the old question of where to put it, of course. Suggestions will be most welcome, and will be discussed by GNHS Council. In the short term, I think it may be appropriate to show him off at the events commemorating the bicentenary of the publication of Flora Glottiana by Thomas Hopkirk in 1813, as this was the immediate predecessor of Hennedy's Flora.

Photo courtesy of Richard Weddle

Receiving Newsletters by email saves GNHS distribution costs, and allows you to see photos in colour. If you haven't already done so, please send the Society your email address - info@glasgownaturalhistory.org.uk and indicate that you wish to receive Newsletters by email. Thank you.

General Correspondence to the General Secretary:

Next Newsletter - copy to David Palmar by 1st October please.