GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

June-July 2004

David Palmar (Newsletter Editor)

Next Newsletter Deadline 15 July 2004

GNHS is a Registered Scottish Charity Web-site: http://www.gnhs.freeuk.com/

CHANGES TO COUNCIL

The three vice presidents are Bob Gray, Norman Grist and Richard Weddle. We no longer have an assistant librarian. The changed councillors are: - Ian McCallum, David and Janet Palmar, Robin Jones, Edna Stewart and Ruth Dobson

EVENTS AND EXCURSIONS LIST JUNE/JULY 2004

Contact Organiser to check dates, transport, and to confirm interest. Buses leave Kelvin Way near the car park entrance to Kelvingrove Museum and Art Galleries.

JUNE

Sat.12th. Millarrochy, Loch Lomond. Botany. Bus 9.00am. Please use booking form. Edna Stewart.

Tues. 22nd. Highways & Byways. Botany. Meet Uddingston Station 7.00pm. John Lyth.

JULY

Sat. 17th. Yellowcraig, East Lothian. General interest. Bus 9.00am. Please use booking form. Joyce Alexander.

Wed. 21st. The Necropolis. Plant recording. Evening excursion. Peter Macpherson.

Sat. 31st. Callander, Water Meadow am/Loch Ard Forest, archaeology pm. Bus 9.00am. Please use booking form. Joyce Alexander.

REPORTS BY MEMBERS

Troglodytes troglodytes — Junella McKay

Oh dear - poor wrens! If only I could explain and somehow let them know why I'd done it. That beautifully constructed dome; days of patient happy work, during which they sang their hearts out with that melodious song of theirs. They were so bright and so happy, so confidingly tame, as they built their wonderfully crafted nest. So close to the house. So close to the ground. As I destroyed it, pulling out handful upon handful of hard-won leaves and moss, I felt a murderer. Though in truth, by acting now before the eggs were laid, I was forestalling actual murder. But how could they understand?

Why did I do it? The cat was quietly biding her time and watching their every move.

Noisy Urban Gulls — Norman Grist

Twice a year the noise of gulls pervades Glasgow city - in March-April on the return of those lesser blackbacks that have wintered further south greet the familiar city with its rich pickings of garbage and discarded foodstuffs. Their social gatherings and search for old or new mates add to the excitement and clamour, especially at dawn and dusk on their way across the city between daytime scavenging and nocturnal bathing and resting in safety - often on our reservoirs! Some are so adapted to city life that they don't bother to leave but overwinter with us here.
Then around August-September the noisy excitement rises again as groups gather before flying south, joined by a new generation, now fit to fly. For some time before that the clamour has included the piteous squeals of the young birds of the year who for many weeks have been "spoiled" by parents bringing food to them, but now must learn to fly and forage for themselves. The parent may fly nearby dandling a tasty morsel, encouraging the youngster to stir itself, "get on your (wings)" and come for it.

Sometimes the youngster is both hungered and confused. I recall walking to visit colleagues at the Brownlee Centre, Gartnavel General Hospital, one August in 2002. On the grass near the entrance (often then used by swans from Bingham's Pond to loaf and preen) I noticed one grey-plumaged young gull on the turf.

As I approached, it was squealing, apparently to myself, and gradually walking towards me. I had nothing to offer, and eventually at a distance of maybe two yards it stopped, sensing something was not quite right, perhaps my lack of the red spot target for hungry young gulls to peck and provoke a tasty parental regurgitation. It slowly turned, and walked away to solicit elsewhere.

These, like many other gulls, are no longer really "sea-gulls", exploiting the copious foodstuffs and cliff-like nesting facilities provided by the city instead of beachcombing by the seashore.

Glasgow Museums Resource Centre, 24th April 2004 — Bob Gray

The Society's visit to the purpose built Museum storage area at Nitshill was led by Richard Sutcliffe, Research Manager (Natural History). This was the first public tour of the natural history collection for which special arrangements can be made for individual or group study. The facility is new and permanent. Separate "pods" are being prepared to hold different disciplines. Some items will change annually as they are removed for exhibition purposes.

Our tour started, appropriately enough, with the Strathclyde University herbarium, based on Scouler's collection, on loan to Kelvingrove. This teaching collection was put together by Professor Blodwen Lloyd-Binns and catalogued by Keith Watson. We looked firstly at some samples of algae and then at some type material ("type" = 1st time it was described) of mosses and lichens, put together by James Stirton, a member of our Society in the 1890's and founder member of the Glasgow Society of Field Naturalists, subsequently incorporated into what is now the present Society. His daughters donated his collection to Kelvingrove in the 1920's.

The geological collection consists of minerals and fossils. The rocks are currently kept in the Museum of Transport and will be moved in phase 2. The Hey system of classification is used for the arrangement of minerals. For such a modern facility it was found amusing that the letters C, D and S are used to catalogue items by cupboard, drawer and shelf. Amongst other items we were introduced to gypsum from Ballagan Glen and prehnite from Barrhead.

The bird and mammal store contains many examples of Scottish wildlife although more material is temporarily retained in the Museum of Transport and Maryhill stores. The museum staff will be very busy for the next two years preparing new exhibits based on topics such as alien species, extinct Scottish and endangered native species for the new displays at Kelvingrove. Four types of preservation have been used: traditional mounted, painted plaster cast if the specimen is difficult to preserve, freeze dried real specimens with perhaps an inserted glass eye and specimens narcotised and then moulded.

Birds are stored in their systematic order. Arguably the most valuable specimen in the collection is a great auk, the last live one having been seen in the 1840's. Only c.100 are in existence and this one probably dates from the early 1800's. We were shown a red kite, the last one in western Scotland, having been shot in 1829 on Holy Isle. A photograph of this specimen appears in "Birds of the West of Scotland", published in the 1870's. An example of the Huia, a flying but ground nesting bird that became extinct in New Zealand in 1911 was also seen.

In the section devoted to aquatic life we saw some magnificent glass models of cuttlefish, which, owing to the difficulty of moulding, were made in Dresden in the 19th Century. Fine examples of fibreglass fish were also seen including a so-called common skate, which is so rare that Glasgow Museums are involved in a UK biodiversity action plan working party trying to conserve this long-lived species.

Finally we were taken to pod 1, which contains the research collections, not normally open to visitors. Currently this contains bird and mammal skins and skeletons as well as a large part of the mollusc collection. Examples seen included biometric information about crossbills and two different ways of laying out birds such as the fulmar for investigation. The traditional round skinned method has drawbacks for examination purposes but in the "Schmoo" method, introduced from the USA, as well as having the skin, most of the skeleton is kept as well. This method is better for research although it takes up more space.

The Society is most grateful to Richard Sutcliffe for taking the trouble to show us round and interpret this marvellous facility. There will be another chance to look around on Saturday, 28th August. There are still some places available.

Members' Slide Night, 6th April 2004 **Norman Tait**

A group of enthusiasts turned up for what proved to be a unique Members' Slide Night - there were no 35mm slides to be shown! It would seem that our members have now entered the 21st Century and have 'gone digital'.

Two digital presentations were shown. The first show, which ran for about 15 minutes, was by Bill Hansen who took the members on a botanical tour round

Mugdock and Milngavie and was imaginatively titled *Flora Mugdockii*. Bill used a digital camera which was capable of close-focussing. This permitted him to illustrate interesting plants both in their habitat and in close-up. For some reason which Bill could not explain, over 80 percent of the plants illustrated were yellow species! All the pictures were carefully titled underneath and presented against an attractive blue background.

The second digital show was by Norman Tait who showed a large selection of pictures taken on the Isle of Jura under the title of *Jura Journeys.* Norman has visited this island annually for over 30 years and was therefore able to present a wide variety of photographs covering both the social history and natural history of this beautiful Hebridean island. Impressive shots of plovers, skuas, divers and shorebirds were mixed with spectacular machair orchids and dramatic images of raised beaches for which Jura is world-famous. Photographs of thatched cottages taken as long ago as 1911 had been coloured by computer and pictures of the old islanders who once lived in them added a human perspective. Norman's talk filled the rest of the evening after which there was much chat over tea about the best software for digital presentations and other such technicalities.

This event, it would seem, should now be entitled "Members' Photographic Evening" on future Winter Programmes.

Trinidad Expedition 2003 **Roger Downie**

The Blodwen Lloyd-Binns Bequest helped fund the 11th Glasgow University Trinidad expedition in 2003. The team included two staff, two postgraduate and 16 undergraduate students, mainly in biological sciences. They worked on three main projects.

On Trinidad's north coast, the marine turtle team worked closely with a Trinidad NGO to access a series of remote beaches by boat. There, they patrolled the beaches by night to monitor nesting behaviour, mainly of leatherbacks, but with the occasional green, hawksbill and olive ridley. They also checked the beaches by day for hatching nests to check on hatching success. These remote beaches have turned out to be very important especially for leatherback turtles, whose nesting beaches around the world are under threat from human development.

On the east side of Trinidad, in Nariva swamp, the monkey team studied the behaviour of white-fronted capuchins and also estimated the population sizes of these monkeys and Trinidad's other species, the red howlers. Both species have suffered from poaching and human encroachment on their habitat. Good conservation requires knowledge of their habitat requirements and also of their reactions to human presence.

Finally, all over the island, our frog team studied varied aspects of frog reproductive ecology and distribution. Perhaps the most exciting finding this year was the discovery of new populations of the stream frog in Central Trinidad, living in very different habitat from their normal mountain streams in the Northern Range. The team hopes to do more on this in 2004. The team also climbed Trinidad's two highest mountains, El Tucuche and Cierra Del Aripo to take tissue samples of the golden tree frog, a rare Trinidad endemic, for DNA analysis. The results have shown that the separate populations on these two

mountains are genetically indistinguishable: this is good from the conservation point of view since it means that there is no great need for separate conservation plans.

A full report of the expedition's work is deposited in the GNHS library. All team members are very grateful for BLB support.

Glasgow University Campus: the Wild Side **Roger Downie**

As publicised in the last Newsletter, the University has called in GNHS to help survey its biodiversity. A convivial wine and nibbles session on 14th April acted to set the ground rules for an initial survey on a pleasant morning, Saturday 17th (we were lucky: it turned cold and wet by lunchtime). A good turn-out of over 20 keen naturalists (GU staff and students, including the "Dirty Weekenders" conservation group, GNHS members etc.) including two small children, divided the Gilmorehill Campus into three study areas: the frontage down from the main flagpole; the "wildlife-enhanced" areas behind Professors' Square; and the wildlife garden behind the Adam Smith Building.

Agnes Walker led the wildlife garden team: they were impressed by the work already done to make this a really diverse area (the pond was full of frogspawn) and had some useful suggestions for future planting and maintenance. Bob Gray led the tree team: they quickly realised that the time of year was less than ideal, being in-between buds and leaves, with the large number of planted aliens making precise identifications difficult. The map provided of existing trees also proved to be very out of date. One of the team was a professional tree surgeon, and he commented adversely on some of the tree maintenance. Another comment was that some aliens were excellent for wildlife such as sycamores and relatives, already supporting aphid populations to feed birds; and evergreens, providing cover for wildlife at a time when native species are still bare.

Geoff Hancock and Mike Rutherford led the creepy-crawly team: many soil and tree invertebrates remain asleep in April, but they noted aphids, and some potentially interesting sap runs (Geoff's favourite habitat). Their prize find, unfortunately, was a large New Zealand flatworm. The group recommended that some of the less formal parts of the Campus would benefit (in terms of biodiversity) from rocks as refuges and rotting timber as food.

Keith Watson led the plant team: they were pleased with the encouragement of plant diversity in the "wildlife-enhanced" areas and recommended that management of the slope down to Kelvingrove Park could benefit from a lighter touch, with fewer cuts a year to encourage plant diversity: there were already some unexpected plants which indicated that more could colonise with sympathetic treatment.

In a round-up at the end, everyone agreed that this was simply the start of the exercise. More surveys later in the year would be needed to further catalogue what life the campus supports. We hope that even more GNHS members will be willing to take part.

Caerlaverock Weekend, 8-9th May 2004 **Joyce Alexander**

Eight members arrived at The Grey Mare's Tail in the Southern Uplands on Saturday morning where we were met by NTS ranger, Dan Watson, who accompanied us to Dobb's Linn, there to look for graptolites from the Ordovician period of Earth's history. Fossil graptolites are to be found as markings on rock surfaces. The markings are thin, often shiny and look like pencil marks, indeed the name comes from the Greek which means *'writing in the rocks'.* During the 19th Century Charles Lapworth, a schoolteacher, studied the graptolites he found in the rock strata in his wanderings over the Southern Uplands. Through his detailed studies he was able to establish the order of strata in which the graptolites occurred and proposed that the series of rocks be called the Ordovician System.

Many interesting species of plant and animal were found on route to the Linn and GNHS members would like to thank the person or persons who had previously found many graptolites and left them on a conveniently placed boulder! It meant we didn't have to work too hard to find them!

Returning to the cars the next stop for some of us was the café at The Moffat Woollen Mill where we enjoyed a refreshing cup of tea before driving on to the Nith Hotel at Glencaple where we were joined by two more members. After an excellent meal we were on the move again, this time to Caerlaverock W.W.T. Reserve where we hoped to see some of the reserve's colony of rare natterjack toads. There are few areas in Britain where this small toad lives and Caerlaverock is home to the most northerly colony. The toads breed in May and the reserve management set aside each Saturday in May as a 'Natterjack Toad' evening where the public are escorted to certain areas on the reserve, hopefully to see the toads. We were given a slide show and talk on various amphibians before setting off. The air was full of the noise of the toads' mating calls from several ponds on the reserve and we were lucky not only to hear them but also to see a few of the creatures.

On Sunday morning we met SNH ranger, Tim Dawson, at Kirkconnell Flow near New Abbey. The Flow is now an excellent example of a raised bog, a rare habitat throughout the world. Dumfries and Galloway, however, have some of the finest examples in Europe. Tim explained that the Flow had been under threat from the numerous pine trees growing on it and that in order to save it those trees had been removed from the deepest areas using aerial cables. A floating road has been constructed around the bog using chopped wood from the pine trees. Bog plants such as Bog Rosemary, Cranberry, Sundew and some rare mosses are now thriving. Roe deer, adders and red squirrels also frequent Kirkconnell Flow.

After our picnic lunch we drove on to Arbigland Gardens which was to be the last excursion of the weekend. However, to our disappointment we found that the gardens are no longer open to the public. It was decided to drive a little further on, to Carsethorn, to view this attractive little coastal village. Here we discovered a great need for coffee or tea, which was easily purchased at the local hotel, and, as we were all feeling somewhat wabbit after the exertions of the weekend, it was decided to head for home.

ABERFOYLE, 1st May 2004 **Ian McCallum**

This was a combined outing of the Edinburgh and Glasgow Natural History Societies. The members met at 11.00am at the Woollen Mill where sustenance was available. Outside the Mill there was a display of birds of prey and a collection of sheep including a magnificent 4-horned ram.

The party, which comprised 9 Edinburgh and 5 Glasgow members, was given a short description of the excursion before setting off. The route followed the disused line of the Glasgow to Aberfoyle railway to Cobleland, returning to Aberfoyle on the other side of the River Forth via Robert Kirk's church. Thanks were given to Sandra and Kathleen for agreeing to make lists of species.

The sun was shining and bird song was much in evidence. Swallows, House Martin, Willow Warbler, Robin, Chaffinch, Greenfinch and Blackcap, Stonechat, Jay etc. were seen or heard. Some of the best views were on the river, where we had good sightings of dipper and goosander.

Along the banks of the Forth were animal tracks and the leader illustrated a method of recording tracks using overhead projector film and drawing the tracks on the overlay. Unfortunately, the wrong type of marking pen was used which would not mark the film, which just illustrated the importance of having the correct type of pen. On the path the party found the Maze-Gill fungus *Daedalea quercina* on oak and further on a Song Thrush's anvil surrounded with the broken shells of its last meal.

Spring flowers were everywhere. Areas of mature woodland were carpeted with Wood Sorrel *Oxalis acetosella*, Wood Anemone *Anemone nemorosa* and Wild Hyacinth *Hyacinthoides non-scripta*. Alongside the track was a succession of flowers including Three-veined Sandwort *Moehringia trinervia,* Germander Speedwell *Veronica chamaedrys* and Golden Saxifrage *Chrysosplenium oppositifolium*.

A short talk was given describing the geology of the area. The Highland Boundary Fault runs from Stonehaven in the east to Arran and beyond in the west. It runs through Aberfoyle and at Dounans quarry a wedge of limestone has been exploited. This limestone has fossils of trilobites, brachiopods and ostracods, which date the rocks to being 475 Ma (Ordovician Period). These fossils together with the fossils found in the Bofrichlie Burn are the same as North American fossils, which prove that the Highlands were connected to North America. At that time there was no Atlantic Ocean, no North Sea and an Ocean called Iapetus separated Scotland from England and Wales. The Iapetus Ocean closed by the end of the Silurian Period (405 Ma) when Scotland and England were joined due to Tectonic Plate movements.

South of the fault lies the Old Red Sandstone which includes the conglomerates (Devonian period - 400 Ma.) which were formed by enormous rivers flowing from the north and the south. The red colour is due to the oxidisation of iron, which presumably took place during periods of high temperature. To the north of the fault lie the older Highland rocks comprising schistose grits amongst others. During the much more recent Ice Ages, the action of the ice sheets had a major effect on the scenery. The ice stripped the rocks and soil from the hills and when the ice melted, dumped the morainic material in the valleys.

Butterflies were everywhere – mostly Orange Tip, Peacock, Small Tortoiseshell and Green Veined White.

On the bridge over the Forth there was Wall Rue *Selenium ruta-muraria* and Common Maidenhair Spleenwort *Asplenium trichomanes.* After walking through the caravan park the group had lunch on the banks of the Forth. The sun shone warmly and after lunch the party reluctantly moved off but only after watching a common sandpiper and examining closely a longhorn type of wood beetle. As the beetle was released it was not possible to identify it.

The members continued following the Forth upstream past banks of primroses *Primula vulgaris* and sweet smelling Balsam Poplars *Populus trichocarpa*, Geans *Prunus avium* and stopped at a fine example of a Douglas Fir *Pseudotsuga menziesii* where the diagnostic features were described – the citrus smell of the crushed foliage and the trapped mouse under the cone scales.
The next stop was at the top of the Doon Hill where messages to the fairies were read.

The last stop was in the Auld Kirk where mortsafes were examined and Robert Kirk's grave inspected. Robert Kirk was the fairy pastor who translated the psalms into Gaelic and wrote *The Secret Commonwealth*, which dealt with the second sight and the fairies. The question was, did Robert Kirk lie under the gravestone, or was he still in the world of the fairies?

In the car park there was an interesting information board on the Bailie Nicol Jarvie of Rob Roy fame and his poker still hangs from the tree.
The parties returned to their transport about 16.15 hrs. Most then disappeared into the Woollen Mill for a rejuvenating cup of tea prior to heading home.

On The Trail Of Loch Lomond Otters **Dominic McCafferty**

Ten members of the society met at Gartocharn on Saturday 17th April 2004 at 10.00am to look for signs of otter activity on Loch Lomond. It was a pleasant spring morning and we left our cars at the caravan park (permission required) and made our way into the National Nature Reserve. The footpath has been improved in recent years and we were quickly able to make our way down to the loch shore where we came upon an otter spraint (faeces) on a large rock by the water's edge. Otters mark their home range by depositing their spraint on prominent rocks and tree roots. Spraints contain the undigested remains of fish that the otter has eaten and we found one site where the large otoliths (ear bones) of the freshwater fish, the ruffe were particularly obvious. The ruffe is a member of the perch family and was accidentally introduced to Loch Lomond by pike anglers. It is now the most frequent prey found in otter spraints around the loch. After a quick photo call we cut back on to the path and bravely waded through a muddy track towards the river Endrick. When we reached the river we discussed the features of otter footprints that distinguish them from other mammals and then spent some time searching the riverbank for fresh tracks. On one section of soft mud we were lucky enough to find tracks of otter, mink and domestic dog - a great opportunity to compare the size and general appearance of all three. We were pleased to have seen signs of otters and hoped that we would be lucky enough to catch a glimpse of these elusive animals on the loch in the future. The rain caught us out on the return and we quickly said our goodbyes back at the cars.