GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

May-June 2006

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
20 August 2006

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

General Correspondence to the General Secretary: Mary Child

NEXT MEETING Tuesday May 9th
The tutorial at 6.30pm will be by Bernie Zonfrillo on ringing birds, followed at 7.15pm by a film about the hen harriers at Muirshiel.

HELP NEEDED AT EVENTS

BIODIVERSITY DAY **David Palmar**
An event to tie in with National Biodiversity Week, and European Green Week 'Biodiversity is Life', is being organised on June 3rd in the Botanic gardens. It is intended that GNHS have a stall at this event. If anyone can help to man the stall, please contact David Palmar. Thank you

WOODLAND FAIR **Richard Weddle**
On Sunday May 28th there's to be a 'Woodland Fair' in Pollok Country Park. We've been asked if we'd like to take part - a similar sort of arrangement to the Botanic Gardens event, though the Pollok one is expected to be much higher profile as it's also highlighting the 75th anniversary of Guide dogs for the Blind which is being heavily promoted by Blue Peter, and there's a strong possibility that Blue Peter might be in attendance. Huge crowds are expected, so it would be an excellent opportunity for us to wave the GNHS flag. Please contact Richard Weddle if you can help to man a stall at this event

EXCURSION BOOKING FORMS **Joyce Alexander**
Please note that the leaders for the mini-coach excursions have been changed from myself to other Council members. I am unable to undertake the coach excursions this year and am very grateful to Mary Child, Ian McCallum and Richard Weddle for agreeing to lead the excursions. Please remember to send booking forms to the new leaders.

SUMMER SOCIAL – Balloch House Hotel on Tuesday 13th June
Please send Hazel the booking form at least ten days beforehand if you wish to attend the summer social as she has to confirm numbers with the hotel. Minibus (send Hazel £8) leaves Kelvin Way at 6pm. **Hazel Rodway**

ARGYLL WEEKEND 16th-18th June **Bob Gray**
The weekend will be devoted to an example of an Atlantic oakwood and to the geology of western Argyll. The services of a local SNH conservation officer have been arranged.

Taynish woodland reserve is an SSSI, representative of old sessile oakwoods in the southwest Highland bryophyte zone. The site has been designated a Special Area of Conservation (SAC) for several reasons: rare mosses at the southern end of their range, a rich ground flora and a rare marsh fritillary butterfly population isolated at the northern part of their range. We also hope to look at some interesting geological exposures in the area.

Accommodation has been booked in the Bridge House Hotel in Ardrishaig.
Time and weather permitting we will visit the fabulous woodland garden at Crarae on our way back.

LIBRARY **Janet Palmar (acting librarian)**

We have noticed that several books are missing from the library, so we intend to do a stocktake in the near future. Please return any overdue library books or journals you have borrowed as soon as possible.

EQUIPMENT PURCHASED AND GRANTS AWARDED **Morag Mackinnon**

Thomas Kinsey Bequest

Money from this bequest has been used to purchase the following items of equipment for members of the Society who applied to the bequest. The items remain the property of the Society and anyone wishing to use any of the Society's equipment should apply in the first instance to the secretary. In the case of Longworth traps you would require to have a certificate. A list of the equipment will, in future, be included in the accounts.

1 Bat Detector
10 Longworth Traps
In addition there are six microscopes available for membership use.

Blodwen Lloyd Binns Bequest

Petrina Brown has been granted £750 towards having a Sand Martin wall built and we look forward to hearing about its success.

At the March meeting of the BLB executive grants were awarded to:
Patrick Walsh - £800 - Overwintering tadpole studies in West of Scotland
Rachael Donnachie - £750 - Continuing work on Cyprus turtles
D Thornson - £750 - Amphibian research in Trinidad
Lynn Wylie - £400 - Work with chimps in Gambia

The next BLB committee meeting will be on the Tuesday 12th September. Any applications to be considered at this meeting should be with the Secretary Mary Child, (address on front page) one month before this date.

INSTALLATION OF PEREGRINE FALCON NEST BOXES - BLB Grant: £400
Grant recipient: James Munro Advice and assistance: Dr Bernie Zonfrillo

On 6th March 2006, one nest box was installed on the bell tower of the Gilbert Scott Building of Glasgow University, at the highest point reachable. It is constructed from marine ply, and painted grey with white streaks like raptor droppings. The bottom of the box is lined with gravel. The box is fixed with steel clips and cables, which will ensure it does not move in high winds.

The box is fully protected from human intrusion, being reached only by a locked staircase ascending through the middle of the spire to which only senior staff from the University's Department of Estates and Buildings have access. In the event of peregrines nesting on the tower, access will only be under supervision of a licensed bird-ringer.

There were problems with other sites within the University, so there is one remaining box to install. One obvious position would be on the Finnieston Crane at Stobcross Quay, a well-known roosting site for peregrines. Clydeport Plc have been contacted with a view to discussing installation on this structure.

One peregrine falcon was seen flying around the tower on 20th March 2006, although no one has had a closer look at the box since installation. Staff and students have been asked to report any further sightings.

LECTURE REPORTS **written and/or edited by Edna Stewart**

Tuesday 8th November 2005
New Natural History Displays in Kelvingrove Museum **Richard Sutcliffe**

Kelvingrove Museum was opened for the International Exhibition on 2nd May 1901, and as the Art Gallery and Museum on 25th October 1902. It closed for refurbishment on 29th June 2003.

The talk covered the project aims, planning, building work, conservation of objects, and the new displays. Kelvingrove is the most visited museum and gallery outside London, with over a million visitors a year, and contains one of the greatest Civic collections in Europe. The £27.9 million renewal includes building refurbishment, improved access, increased display space, new educational facilities, temporary exhibition gallery, and visitor facilities. The project aims to increase the display space by 35%, increase the number of objects on display by 50%, attract 350,000 more visitors a year and develop Glasgow further as a learning city. Funding was received from Glasgow City Council, the Heritage Lottery Fund, the European Development Fund, Historic Scotland, Scottish Natural Heritage and the Kelvingrove Refurbishment Appeal.

The Glasgow Museums Resource Centre was set up to store objects during refurbishment and also later. It is purpose built, at S. Nitshill Industrial Estate. Objects are on open display, but access is confined to guided tours.

At Kelvingrove there is to be a new lecture theatre for 100. The displays are in a modular system which allows them to be changed. Every object has its own passport - a number, position, and how it has been set up. The new displays are interdisciplinary, the two main themes being Expression in Arts, and People and the Environment. Some of the Natural History themes are Creatures of the Past – fossils including local fossils; Endangered Wildlife; Hunting; Camouflage; Wild about Glasgow – the LBAP Species such as the Reed Bunting and many more.

There will be a study centre with a computer bench and a library. The web site is www.glasgowmuseum.com

Wednesday 30th November 2005 The 5th DEEB/GNHS Blodwen Lloyd Binns Lecture *Cuckoo versus host: an evolutionary arms race*
Prof Nick Davies (Professor of Behavioural Science at Cambridge)

Our cuckoo, *Cuculus canorus*, is the only European cuckoo. Gilbert White in the 18th Century wondered why the cuckoo did not care for its young, but it was Darwin who realised that there were advantages in parasitism – more eggs could be laid and successfully develop. Not all cuckoo species are parasitic.

How does a cuckoo trick its host? The host can be Reed Warblers, Meadow Pipits, Pied Wagtails or Dunnocks. The cuckoo lays one egg in about eight nests. The Reed Warbler, the main host in the Fens, destroys about 20% of these. The cuckoo hatches before the Reed Warbler chicks, and flicks the other eggs out of the nest. The host does nothing to intervene. The research team looked at eggs, chicks and DNA. Each female cuckoo targets one host species. The cuckoo will lay an egg very similar to the distinctively coloured host's egg.

Radio tracking in Japan has found that the type of egg a female cuckoo will lay is determined maternally. A young cuckoo knows which race she belongs to due to the imprint of the host species while she was in the nest.

Why does the host accept the cuckoo chick? It is too big, its gape is the wrong colour and it has no tongue spots. It appears that the cuckoo chick presents a supernormal vocal stimulus. The noise of the begging call made by one cuckoo chick is as loud as a whole brood of the host. The begging call of the chick varies with the race of host.

The noise of chicks may attract predators, but parents give alarm calls to their chicks. Chicks respond only to their own species call. The Reed Warbler race of cuckoo is the only one which has innate alarm tuning.

Tuesday 31st January 2006 - T. Norman Tait
Illustrating Natural History – and some of the latest techniques

The first images of natural history were drawn on cave walls in central and southern Europe about 15,000 BC. Using earth colours, these early people painted accurate animals and birds. They also created portable images scratched on to pieces of bone and ivory. Mr Tait then illustrated images of Scottish Pictish symbol stones which were engraved with images of birds.

The invention of the mechanical printing press in the 16th Century allowed multiple copies of text and drawings to be produced. Engravings were first made on pieces of wood which were fitted alongside the text blocks. Engraving on polished copper plates later replaced the woodcut engraving technique. The first book on natural history published in Scotland by Robert Sibbald in 1684 contained interesting engravings. The first British bird book to be illustrated throughout with hand-coloured engravings was produced by Eleazar Albin in 1734.

Mr Tait then showed some early photography produced by William Henry Fox Talbot with pages from Talbot's first book illustrated entirely with real photographs

entitled *Sun Pictures of Scotland* published in 1845. The complicated chemistry involved in producing a photograph made it impossible to record active natural history subjects in the field until the introduction of commercially available dry plates in the 1870s. It was now possible to have a camera set up ready to capture an elusive moment without the need to process the picture immediately afterwards. The first exponents of wildlife photography in Britain were Richard and Cherry Kearton who travelled all over Britain photographing birds and their nests. In Scotland they recorded the first pictures of Dotterel, Ptarmigan and one of the last remaining pairs of breeding Ospreys. The first screen-printing was invented in 1890 and permitted the Keartons to publish in 1895 the first book in Britain to be illustrated entirely by mechanical reproductions taken from photos.

The pioneering Scottish wildlife photography of Charles Kirk and Seton Gordon at the beginning of the 20th Century was followed by a portfolio of pictures by more recent wildlife photographers such as Eric Hosking and Charles Palmar.
Mr Tait's own involvement with photography which began in 1960 and showed some examples of his early wildlife pictures. By the 1980s he photographed birds and insects in flight using a home made photo-electric trigger and recently available portable high-speed flash units. His work in this field was later awarded a Fellowship by the Royal Photographic Society.

The lecture was concluded by a discussion on digital imaging techniques. A subject may be isolated from an untidy background and copied and pasted into another more suitable background. In one example a picture of a Marsh Harrier photographed against the sky in Goa was placed in to a picture of a phragmites reed bed at Inchinnan! After the lecture Mr Tait then asked the audience for their opinions on these new approaches to illustrating natural history.

Tuesday 21st February 2006 - AGM Presidential Address
Why is the paradoxical frog paradoxical? Professor Roger Downie

Professor Downie explained that in the 18th Century it was thought that this frog's life cycle went backwards, from frog to tadpole to fish, and so the frog was known as *Rana piscis*. Linnaeus realised the mistake, and called it *Rana paradoxa*. As more types of frog were discovered, a new genus, Pseudis, was named, and the frog became *Pseudis paradoxa*.

The unusual feature of the life cycle is that whereas frogs usually change from egg to larva to juvenile and then adult, *Pseudis* goes from egg to larva to adult, without a juvenile stage. The tadpole is very large, and the change to adult simply involves the absorption of the tail. This situation is unique.

Pseudis paradoxa is known in Trinidad, Argentina, Paraguay and Bolivia.
Although related to Tree Frogs, it does not climb trees, but is fully aquatic. The fact that it lives in permanent swamps and has abundant food allows it to grow for 12–16 weeks as a tadpole, compared to the usual 2–5 weeks. Permanent swamps have a high predator rate, but *Pseudis* tadpoles have a vertical stripe that enables them to hide among the tall grasses of their surroundings. This is lost in older tadpoles, but they can move very quickly. *Pseudis* tadpoles have mature sperm and ovaries almost ready, while other species take much longer to mature.

Tuesday 28th February 2006 - extra talk suggested by Prof J. Dickson
Alaska and its wildlife **Robert Johnson**

Robert Johnson is a fishery biologist and photographer, who has lived in Alaska for many years. He has a special interest in salmon, trout and Brown Bear.

As background, he gave a brief history of the Gulf Coast of Alaska. To clear up any misconceptions – there are no Polar bears! Along the coast the main habitat is rain forest, fronted by sandy beaches. The climate is maritime. The two highest mountains are Mt Fairweather (4470 m) and Mt St Elias (5489 m).

Geological events – migration and collision of tectonic plates have resulted in the rise of the mountain range of the gulf. There has been advance and decline of ice resulting in erosion due to glacial action. In the last 100years the ice has generally retreated, although some glaciers such as the Hubbard are advancing. Due to tectonic plate activity it is an earthquake zone. Yakutat Bay had one in 1899. In the last 10 years earthquakes have increased in frequency and magnitude. Coastal sediment deposition is a feature along the Gulf. Drainage winds, blowing along major rivers, help this deposition.

The Tlingit tribe were the first to colonise the area. Although Europeans explored and fought with natives, they did not settle. The Tlingits claim they were the only tribe who defeated the Russians. The Gold Rush came briefly to the Gulf. Tourism is now the main source of income.

There is much seasonal migration in the lives of the creatures of the Gulf. Marine mammals such as the Grey Whale, raptors, fish like salmon, and Salmon sharks move south as winter approaches, returning as the water warms.

After this informative presentation, we were given a stunning slide show, featuring panoramic aerial views, birds in flight, brown bears fighting, fishermen with giant catches, lush forest vegetation, glaciers carving into the sea and much more.

GLASGOW CITY PLAN **Richard Weddle**

We recently received a copy of the Consultative Draft of Part 2 of Glasgow City Plan, which sets out how the Council would like to see Glasgow develop over the next few years. It defines a number of regeneration areas, principally a 'Metropolitan Growth Corridor' – along the Clyde and in the City Centre, and three 'Strategic Growth Corridors' (Maryhill, around the M80, and along the M8 in the east).

As well as outlining proposals for the built environment and infrastructure, the Plan contains specific proposals relating to Biodiversity and Greenspace, including establishing Local Nature Reserves at Darnley – Waulkmill and at Frankfield Loch, and extending Cardowan Moss and Bishop Loch. The strategy includes clarifying the 'function, importance, and future use' of existing greenspaces.

The Plan can be seen at http://www.glasgow.gov.uk/en/Business/ and clicking on **City Plan**. Council has discussed the idea of a response from GNHS as a body.

FROM THE REVIEWS EDITOR **Bob Gray**

Books received in exchange for reviews in *The Glasgow Naturalist*:

Mosses and Liverworts **Ron Porley & Nick Hodgetts**
HarperCollins **2005** **Hardback £40**
Number 97 in the New Naturalist series, this is the first comprehensive treatment of this group of plants in the British Isles. The authors explain how amateurs can make exciting discoveries and improve our knowledge of these plants. Porley is chief adviser on bryophytes to English Nature. Hodgetts is co-author of bryophyte Red Data books.

Ecology: From Individuals to Ecosystems **Begon, Townsend & Harper**
Blackwell Publishing **2006** **Softback £37.50**
For almost two decades this has been the basic textbook for advanced level ecology. This new, 4th edition, continues to maintain the text as the primary textbook on all aspects of ecology. It continues to deal with this wide-ranging subject from first principles, building up from its evolutionary basis. Clarity of treatment remains the hallmark of this text. A number of new chapters on applied ecology have been introduced, bringing the subject matter up-to-date. The rest of the book has been updated with margin notes and useful chapter summaries.

AUCHENCRUIVE - West Of Scotland Agricultural College **June McKay**

Last autumn four of us went to Auchencruive to hear a Wednesday afternoon talk on Medicinal Plants. On a fine day we took the decision to go early, hoping for a brief view of the arboretum and garden.

In the short time at our disposal we were not disappointed. Bob Gray hurried enthusiastically through the trees, noting that the site does indeed grow many rarities. We took a quick look at the garden, admiring a magnificent Liquidambar at its colourful best heightened by a warm sun, and noting various other plants of interest.

We understand that the college is scheduled to close, and, sadly, much of this beauty will indeed be lost, although the arboretum, which is now the site of many scattered family ashes, is to be retained. It will not be quite the same when surrounded by new housing estates!

A full-day Society outing is planned for Wednesday 27th September (see outings programme) when staff member Michael Hitchon will conduct us around both the garden and the arboretum.

This may well be the last opportunity to see the grounds of this historic college where so many of our horticulturalists have trained.

GLASGOW WEST END TAWNY OWLS **Norman Grist**

A move to Lorraine Road in 1954 brought us to a house with small garden areas back and front, looking behind to a rough area with trees and many common birds of gardens and scrub.

Our bird table attracted many birds, including flocks of greenfinches that flew in across rooftops from the nearby Botanic Gardens - the presumed origin also of the owls (Tawny) that often called and were sometimes seen at night. We laughed at one perching on a chimney-pot across the road and calling down the chimney - perhaps happily resonant, like a human singing in the bathroom! The evening classes at Kelvingrove by Charles Palmar, who also introduced us the Glasgow Natural History Society, furthered our bird interests.

The recent Tawny Owl Survey organised by the British Trust for Ornithology stimulated me to participate and look at my old notes. They recorded these local owls as common, continuing after our 1970 move to Sydenham Rd nearby. Both houses are within a half kilometre of the Botanic Gardens where resident Tawnies have long been known - indeed they were a noisy nocturnal nuisance to resident Gardens staff at the time of our GNHS Survey of the Gardens (Grist & McCallum. Birds for all seasons. *The Glasgow Naturalist* (1998) 23(3): 52-55). Recorded sights & calling by these owls at Hyndland Court declined from 1978-79 and none were recorded since 1997 - a nil return to BTO. The whole data are too bulky to list here, but the trend (months when owls recorded) is shown below.

Once removed to our new-built flat in Hyndland Court we put out peanuts in a bag suspended from a rod projecting from the parapet of our roof garden. This was ignored for a few days, then attracted interest and feasting for about 20 minutes by a lively southbound party of mixed tits. They then left southbound (this was September), but leaving as resident customers our local tits, mainly Blue, who from below had learned from the commotion. From then our bird feeding continued and developed. The gardens below have shrubs, grass, untidy hedges, mixed and mature trees with ivy, holly and hawthorns, but are plagued by predatory cats. Data for other species await analysis.

1971:	Jan, Feb, Nov
1976:	Jan, Feb, Mar, Apr May, Jun, Jul, Aug, Nov, Dec
1981	Nov
1986:	Sep
1991:	May
1996:	Apr, May, Jun
1998-2005+	none seen or heard

Next Newsletter deadline 20th August please, for September publication.

Newsletter contributions are welcomed from all members, and should be sent by 20th August, preferably to the email address on the front cover, or on a floppy disc in plain text, i.e. the ordinary contents of the email is best, or a .txt file or a Word document with no special formatting applied. If you must use a different font from the default, then please use Verdana.
Thank you - David Palmar, Newsletter Editor