



GLASGOW NATURAL HISTORY SOCIETY NEWSLETTER

January -February
2004

David Palmar
(Newsletter Editor)

Next Newsletter Deadline
23 March 2004

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INTRODUCTION

David Palmar, Newsletter Editor (temporary)

I hope you all had a good Christmas, and are ready to enjoy the New Year programme. May I on behalf of the Society record our appreciation to Professor Norman Grist not only for his expert editing of many previous Newsletters, but also of the excellent contributions he makes to the content.

Please send me contributions, by email to the address above (keep it private to Society members please), or if really necessary by snail mail. I cannot hope to emulate Norman's understanding of the natural world and write large sections of the newsletter myself.

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NOTICES

Deadline for next Newsletter is Tuesday 23rd March 2004. Please send any items to the Newsletter editor by that date.

BLB Grant – Feral Goats

At the last meeting of the BLB executive a £500 grant was awarded to Tracy Livingstone to assist her group in establishing a count of feral goats in the Loch Lomond area. She is very keen that our members could assist and the following weekends are earmarked for this work:

30 & 31st January; 28 & 29th February; 26, 27 & 28th March; 23,24 & 25th April; 22 & 23rd May; 4 & 5th July; 17, 18 & 19th July and 1 & 2nd August.

Find out more about their work on <http://britishferalgoat.freeservers.com/>

Note from the Treasurer

The accounts will not be ready in time to mail out to all members a month before the AGM, but those members wishing a preview of the accounts should get in touch with Morag Mackinnon.

2004 EVENTS

Jan 13th: 7.15pm: Paisley International Slide Show, Natural History Section.
Winifred Brown & colleagues....

Jan 27th: 7pm: Tutorial. Falconry. Graham Neilson - with some of his birds. It should be a fascinating event.

Feb 10th: 6.30pm: Tutorial: Roger Downie - Evolution in Health and Disease: the links between evolution and medicine.

7.15pm: Roy Watling - Encapsulating Field Mycology : interactions between fungi, plants and animals

Feb 24th: 7.15pm: **AGM** The vacancies on Council are for one Vice-President and three Council Members.

The Constitution states: "Nominations for persons for vacancies to be filled by election of the AGM must be in the hands of the General Secretary no later than one calendar month beforehand, except in the case of nominations by Council. Nominations, duly signed by two members must contain the consent of the nominee".

The AGM will be followed by a talk from Peter Meadows: "Noah's Flood".

Mar 9th: 7.15pm: Kenneth Cox - Plant Hunting in Tibet - Riddle of the Tsangpo Gorges - The 150 year search for the great Asian Waterfall

The little-known Tsangpo Gorge in South-East Tibet is world's deepest gorge and, in the early part of the 19th Century, when "discovering" big waterfalls was all the rage, rumours abounded about a giant waterfall hidden within its unexplored depths. Frank Kingdon Ward set about finding it. He wasn't the only one.

Kenneth Cox's presentation covers:

1. The historical perspective. This 19th Century obsession with the Tsangpo River saw some incredible feats. With cannibalistic tribes and treacherous terrain, the exploration in this area is riddled with wonderful stories.
2. Plant-hunting. Frank Kingdon Ward was one of the great explorer-plant hunters. Many of the plants he brought back are still in cultivation today. He introduced the now famous blue poppy, *Meconopsis betonicifolia*.
3. Sacred Tibet. Pemako is one of the most important pilgrimage areas for Tibetan Buddhism. Slides of ceremonies and the sacred geography of Pemako.
4. Contemporary Exploration. This follows Kenneth Cox's own explorations of the Tsangpo Gorges area. He retraced Kingdon Ward's journey and penetrated further into the unknown in search of the mysterious waterfall.

Mar 23rd: 7pm: Tutorial: Diarmid Finnegan - History of natural history societies in Scotland

Apr 6th: 7.15pm: Members' slide night

LIBRARY NEWS from the Reviews Editor Ruth Dobson
Publications Received in Exchange for Reviews in *The Glasgow Naturalist*

1 *Atlas of Cetacean Distribution in NW European Waters*

Compiled and edited by

James B Reid, Peter GH Evans and Simon P Northridge

Joint Nature Conservation Committee

2003

£17.00

The atlas maps the dispersion patterns of whales, dolphins and porpoises in the seas around the UK. It depicts the distribution and abundance of the 28 species recorded in this part of the north-east Atlantic during the latter part of the 20th Century.

Most of the book comprises chapters covering individual species, including information of identification, behaviour and social organisation, diet and habitat preference. There follow some details of the species' worldwide distribution and its status in the north Atlantic, followed by a description of its occurrence in north-west Europe accompanied by a map depicting this.

2 *Fossils at a Glance*

Blackwell Publishing

Clare Milsom and Sue Rigby

2004

£19.99

This book is written as an introductory level course in palaeontology. Short chapters introduce the main topics in the modern study of fossils. The most important fossil groups are discussed – microfossils, invertebrates, vertebrates and plants, followed by a brief narrative of life on earth. Diagrams are central to the book and allow the reader to see most of the important data 'at a glance'. Each topic provides a self-contained suite of information or a starting point for further study.

3 *Britain's Butterflies*
WILD Guides

David Tomlinson and Rob Still
2002?

This is a comprehensive photographic guide to the sixty regular species of butterflies in Britain and Ireland in a format which allows easy identification. Colour photos produced by digital image technology show typical view of each butterfly as well as its larval stages. The text gives key identification features and includes information on behaviour, habitat, population and conservation. Colour distribution maps are given for each species.

4 *Arable Plants – A Field Guide*
English Nature and WILD Guides

Phil Wilson and Miles King
2003?

This book concentrates on the rapidly declining plants which grow amongst crops, in an easy to use format which makes for easy identification. The text covers the history and includes practical recommendations for managing the places where these plants still occur. Colour distribution maps show where they have been seen in the last 25 years.

5 *Niko's Nature - a Life of Niko Tinbergen and his Science of Animal Behaviour* **Hans Kruk**
Oxford University Press **2003** **£20**

In this, the full-length biography of Nobel Prize-winner Niko Tinbergen, Hans Kruk tells the story of the man who invented 'Ethology', the biological study of animal behaviour. Beautifully illustrated, and told with insight by a student and long-term friend, *Niko's Nature* reveals the true story of this remarkable scientist.

6 *Biodiversity – An Introduction* **Kevin J Gaston and John I Spices**
Blackwell Publishing **2004** **£19.99**

This concise, introductory text provides a complete overview of biodiversity – what it is and how it arose, its distribution, why it is important, human impact upon it and what should be done to maintain it. It has been designed for undergraduates but is also essential reading for anyone requiring an overview of the vast literature on this topic.

REPORTS BY MEMBERS

Wot - no slugs??

Norman Grist

The saga of our pillaging *Limax flavus*, invaders of our Hyndland Court garage, has been recorded in GNHS Newsletters and *The Glasgow Naturalist* 2001, 23(6): 33-34). In winters they retire for a month or two into their underground retreat beside the doorway. In 2003 the fine sand placed across their exit from the "nest" remained undisturbed until the thaw on Feb. 22.

Since then there were only a few occasional short trails on the floor near spilt seeds, but not up the walls on to the bird-food bench - hardly any evidence of invasion and sand still undisturbed. One thin trail on July 22 suggested a casual forager, another on October 19 and none since then.

Perhaps my diligent transposition of any caught onto a lime tree over 10 metres away across tarmac had removed any colony members with experience and memory of the bird-seed and biscuit stocks and the route of access to them. Their scavenging slime trails had been weathered, swept and rain-washed over the months leaving none to lead novices to the goodies.

Yes, of course the garden still has slugs, mainly the same species, as shown on the outside garage block by the splendid grazing trails on the algae on parapets of the outside garages and by slime trails over their brick walls and on the bird-feeding cover of the composter. We await developments, but meantime have no trouble with slugs thieving bird-food and biscuit stores, or hiding in watering cans. One day perhaps another enterprising foraging explorer may cross the tarmac desert to discover the treasures. As a hermaphrodite, one may be enough to start another colony!

Penguins, Whales and Ice

Jane Palmar

Thanks go to the BLB for helping to fund a Glasgow University expedition to Brazil, in which I took part in August and September 2003.

A group of students and graduates from Glasgow University carried out research in the River Paraná to examine the effect of hydro-electric dams on the flora and fauna of the area.

Accommodation was either in the University of Maringá field station on the banks of the Paraná (with its mosquito nets and ant invasions), or in one of several hotels, some of which contained cockroaches!

This field trip was a continuation of a study lasting over 6 years, which has seen contributions from a variety of students. We carried out 6 weeks of research in total, which will hopefully be published in several journals. We learned about many new plant and animal species, while fishing plants out of muddy cayman-infested waters, to give to our smiling lecturer, who had been sunning himself on the banks!

For me the highlight of the trip was snorkelling down the river seeing the fish, some of which were about 3 feet long (everything's big in South America!).

As to the penguins, whales and ice –after the fieldwork was over, we travelled southwards using planes, buses and backpackers hostels, via the Iguazu Falls, Uruguay, Buenos Aires, the Valdez Peninsula (where we saw penguins and whales), Tierra del Fuego, then north again via el Calafate on Lake Argentino near the Andes to see the Moreno Glacier, then on to the Chilean Lake District.

From there we went to Santiago (which for a large city feels very small), from which we caught another bus to Mendoza, the main wine producing area of Argentina (where we indulged our thirst for knowledge at the Moët-Chandon vineyard).

From Mendoza, there were 5 flights in 2¹/₂ days – to Buenos Aires – Sao Paulo – Zurich – London – Glasgow – whew!

Walk Strathkelvin

Ian C McCallum

Walk Strathkelvin was published in 2002. There was a contribution from the BLB fund and a thousand copies were sold. The profits enabled stiles, walkways and footpath signs to be erected in places like Loch Ardingning, the SWT Reserve, just north of Milngavie. The book gives descriptions and maps of walks in the Strathkelvin area including the Campsie Hills. Because of a demand for further copies of the book, it was decided to reprint a further thousand copies. There are excellent historical essays by Don Martin. The foreword is by Tom Weir and the introduction by Cameron McNeish. I have supplied the natural history notes. It has been decided to offer the book to Society members at a discount price of £6.00 (P&P £1.50 extra). Copies can be ordered from myself Ian McCallum or the Editor, John Logan.

Eight people attended the last fungal foray of the season. The dryness of the summer and autumn this year suggested fewer fungi would be found but this proved not to be the case. The weather was chilly, clear and dry apart from a brief shower.

Amongst many species identified a few noteworthy specimens might be mentioned:

Tricholoma cingulatum, the only member of the genus possessing a ring was found under a willow, its usual habitat.

T. lascivum (possibly), an uncommon species not previously noted in this area.

Amanita citrinum (The False Death Cap), which smells distinctly of raw potatoes, was found under Beech. (It is probably less usually found under Beech than Oak.) This was found in an area close to where, on a previous visit, the Society had noted *A. virosa* (Destroying Angel).

Calocera viscosa on a conifer branch was noticeably more orange than usual because of the dry conditions.

Cystoderma amianthimum. A beautiful ochre yellow fungus with a bell shaped ap and fimbriate margin in younger specimens.

Found in particularly large numbers on this visit were *Hygrophoropsis aurantiaca* (False Chanterelle) and *Marasmius androsaceus* (Horse-hair fungus).

Amongst species found previously in this area but not on this occasion were *Phaeolepiota aurea* and *Amanita virosa* (mentioned above).

We completed the day having lunch in the local bird hide where we were approached by about fifty rowdy mallards obviously hoping to be fed. As Robin Jones commented this must be the only hide where the birds knowingly approach the observers. Of more interest was the small flock of five goosander on the water. Earlier in the day a red kite was spotted.

All of us were most grateful to Robin for once more sharing with us his expert knowledge of fungi.



**Here's
one I
picked
earlier!**

Members
identifying
fungi on
the
October
fungal
foray to
Aberfoyle.

**New Year Thoughts: "Vive La Différence"
(based on ACP News Autumn 2003: 66)**

Norman Grist

"Nobody's perfect" said Joey Brown, to Jack Lemon, in the memorable last line of "Some Like it Hot", as he powered his launch from the jetty of what purported to be a Florida hotel but was recognisably the Coronado Hotel at San Diego, California. This was one of two remaining big, elegant hotels constructed in the previous century from the abundant timber of the North American forests. The others had all burnt down. It was there in 1957 that we enjoyed a delicious Sunday "eat all you can" breakfast in the dining room off the lofty timbered atrium, among the giant palms, brilliant hibiscus & bougainvillea blossoms. .

"Nobody's perfect" - and thank goodness for that! If it were otherwise I would not be writing this, nor would you be reading it. So "Vive la différence" - within as well as between sexes. "Perfect" implies complete adjustment to the environment - a good fit both ways. But the environment changes, no longer to fit such previously- "perfectly" adapted life forms. Only from differences within populations does "natural selection" find a basis for favouring better-adjusted variants. Clones of genetically-identical life forms can succeed brilliantly while their environment remains stable, but cannot readily adjust to changed climate or to unfamiliar parasites or predators etc. - except for the tiny chance that a replication error in some individual's nucleic acids (RNA/DNA) happens to produce a heritable "better fit" with the environment, heritable only to its descendents. Some agricultural monocrops carry this risk. Salutary historic examples are potato blight and *phylloxera* in vines.

In most "wild" populations genetic diversity has a better random chance of providing progeny adjusted to new conditions and so able to survive, reproduce and transmit their genes. This is even better where sexual reproduction entails mixing of genes from genetically non-identical parents. Reproduction without "sex" is vulnerable to termination by "Muller's ratchet", "Kondrachov's hatchet", or "The Red Queen" (infection) which may extinguish clones (GM or other) and monocrops as explained light-heartedly by "Dr Tatiana" in the entertaining book by Dr Olivia Judson (2002)[¶]. Variation under pressure of infections (or other parasites and predators) has probably been a strong force for natural selection and evolution by our own and many other species.

So "**Vive la différence**" - both between and within sexes!

¶ *Muller & Kondrachev referred to accumulation of harmful genes in clones until a threshold was reached and the "hatchet" fell - extinction.*

The "Red Queen" refers to the co-evolving infectious agents, to counter which the host species must constantly counter-evolve (by survival of "resistant" variants) to run like Alice in Wonderland to hold its place.

Judson, O. *Dr Tatiana's Sex Advice to All Creation*. Chatto & Windus, 2002.
Chapter 13.

Diary date

Biodiversity survey of University of Glasgow Gilmorehill Campus: Saturday 17th April. More details later. Anyone interested, please put this date in your diary.

Some of you already know about this outing, which I am organising on behalf of the Strathclyde Branch of the NCCPG (National Council for the Conservation of Plants and Gardens) – I know, it's a terrible mouthful of a title isn't it! Cambo House at Kingsbarns, which is by the coast in Fife and about 20-minutes south south-east of St. Andrews, has a mouth-watering display of Snowdrops which by the time of our visit will probably have been confirmed as a registered National Collection.

Since Snowdrops usually bloom in February which can sometimes be an unpleasant time of the year to travel, it seemed a good idea to organise a coach. And since no single like-minded organisation is likely to have sufficient numbers to fill a bus, I thought it would be pleasant to invite members of the G.N.H.S., Friends of the Botanics and Glasgow and West of Scotland Horticultural Society. Some of the Greenbank Friends may also be interested.

All our organisations have members who, like me, are 'of a certain age' and who perhaps for health reasons are no longer driving, or who prefer not to drive long distances. In these circumstances it can be difficult to join outings that we would in younger years have leapt into our cars to attend. And not everyone has a car. Indeed one couple immediately asked for an application form without even knowing where or when – the word 'coach' opened up the possibility of a horticultural day out!

The bus has 51 seats and to date nearly 40 have been taken up. PLEASE do come and help to make this venture not only a pleasant outing, but also a financial success. And dare I suggest it is an idea which could perhaps be repeated. The booking form is elsewhere in this Newsletter, and I look forward to seeing many of you on the 22nd February.

The Christmas Dinner and Talk

This was a well-attended event, held as usual in the Glasgow University Staff Club. Thanks go to Hazel for organising the event which we all appreciated. Dr Stuart White gave us an interesting talk after dinner, about the birds of Ecuador, in which he took us first to a private nature reserve in the cloud forest of the Andes, then afterwards to the rain forests of the lowlands. Here one had to do a lot of paddling on rivers as the only way to travel, and obtain permission from the local tribesmen to do any research, and one dared not outstay one's welcome!

Garden Ponds Needed!

Do you have a garden pond where frogs breed in the spring? If so, please contact Roger Downie who is researching the occurrence of overwintering tadpoles. Most frog tadpoles metamorphose into small frogs in the summer following spawning, but under some conditions, a few remain on the water, grow larger, and metamorphose the following spring. Roger is interested in the conditions under which this happens.

Deadline for next newsletter – Tuesday 23rd March 2004 (tutorial night).