



CONTENTS

| | |
|---|---|
| From the President..... | 1 |
| From the Editor..... | 2 |
| From the Treasurer..... | 2 |
| Grants: | |
| The Botanical Research Fund..... | 2 |
| Meeting Reports: | |
| Lichens, London, January 1998..... | 3 |
| Forthcoming Meetings: | |
| Iridaceae, Rome, May, 1998..... | 3 |
| Monocots, Sydney, September 1998..... | 3 |
| SA Annual Conference, Glasgow August 1999...3 | |
| Book Reviews: | |
| Ecology & Conservation of Amphibians..... | 3 |
| Obituaries: Colin Patterson..... | 5 |

From the President

Peter Forey,
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This is the first Newsletter of 1998 and the first under the editorship of Neale Monks who is a new member of Council and our newest PhD, having successfully defended his thesis on heteromorph ammonite evolution in early March. Many congratulations!

Lest you should be thinking there is enough "news" here let me remind you that we have already had our first meeting of the year (Taxonomy, Evolution and Classification of lichens and related fungi) held at the Linnean Society — see report later. There are three further meetings, plus a training course to come this year.

It may also be timely to remind all of you that the Association exists to hold meetings and produce publications as a result of those meetings. As such, Council welcomes applications for financial support from all members (proposal forms with Eileen Cox — Department of Botany, The Natural History Museum,

Cromwell Road, London SW7 5BD, e-mail
E.Cox@nhm.ac.uk).

During this year we also look forward to the preparation of our second Biennial Meeting (August 1999) which is currently being steered along under the efficient helmsman ship of our treasurer Gordon Curry. Some preliminary notes are included with this Newsletter. Of particular interest is the fact that the Association is offering bursaries to help graduate students attend and participate actively in the meeting.

Finally, Council is trying to enliven and update our web site. This will be increasingly important as the years go by for communication and advertisement and it is important that we keep it up to date and informative without being wordy. I know a lot of members use the web frequently and I would really welcome any suggestions that you may have to build a successful web design. Pass any thoughts to me please.

Peter Forey

Reminder —

If your subscription is paid by banker's order, please remember to return the change of standing order form to the membership secretary by May 1, 1998.

Ken Johnson
Membership Secretary
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From the Editor

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I am sure that you will agree with me that my first task as the new Systematics Association Newsletter editor must be to thank my predecessor, Andy Purvis, for all his hard work, and to wish him well for the future. From now on please send on any articles for inclusion on to me, preferably electronically, either by e-mail or on disk. Microsoft Word articles (either Mac or Windows) are much the most convenient, but “plain text” or ASCII files will do just fine, and can be exported from most word processors and computer programs. Please — hard copy only as a last resort!

As you can see, the newsletter has had a bit of a face-lift, but it is still dependent on material being sent in by the members of the Association. Beyond the cosmetic changes, I hope this year to be able to tie this newsletter much more closely with our web pages, so that it will be available both on paper to members and electronically to as wide an audience as possible.

Until next time...

Neale Monks

Membership on the Up — A pat on the back and a “keep up the good work” from the Treasurer

Gordon Curry
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The membership of the Systematics Association has increased at a gratifying rate over the last year, largely as a result of the recruitment carried out at the First Biennial Conference and other courses and conferences. Well done to everyone involved, and let's keep the momentum going.

Even with the recent increase, the annual subscription is still a modest sum, and good value when you consider that it brings big reductions on books published by Chapman and Hall, cheaper registration at Conferences, and other benefits.

Even though the amounts are relatively small, it is your subscriptions that are allowing us to

support the publishing of new up-to-date books, the training of new systematists, the bursaries to bring students to conferences, and to keep registration at our conferences to low levels. Apart from our annual running costs, we do need money to invest for the future, to ensure that we can continue to support systematics in as many ways as possible. We also need a larger membership to help us argue the case for systematics with other societies, funding councils, and governments.

When looked at in the context of the number of scientist partially or completely working in systematics, our membership is very low. You, the members, are by far our best potential recruiters, so please do everything you can to encourage your colleagues, students, or indeed anyone interested in systematics to join. To make this easier, a membership application form can be downloaded from the WWW site for the 1999 Conference at:

<http://www.geology.gla.ac.uk/palaeo/syst99/>

We will also be sending out a poster for the 1999 Conference at Glasgow, that you can advertise in suitable places. We are also working hard to ensure that we can accept cheques in American dollars as well as UK Sterling.

To end on a less serious note, I have heard a wonderful story about a similar sort of recruitment drive for a society concentration on vertebrate palaeontology. In an attempt to widen the membership, as the story goes, various advertisements were sent out to catch the eye of anyone interested in “Digging Up Old Bones”. One scientist considered that his dog was a prime candidate for this, duly registered his as a member, and Rex (or Butch or whoever) subsequently corresponded at length with the society about such fundamental topics as “the best method of digging up bones” and somewhat more puzzlingly, “the best method of burying them again”.

Gordon Curry

The Botanical Research Fund

The Botanical Research Fund is a small trust which annually, in May, makes modest grants to individuals to support botanical investigations of all types and, more generally, to assist their advancement in the botanical field. It is available to amateurs, professionals, and students of any nationality who are sponsored by a British botanist and who are unable to obtain support from major grant bodies. Where

appropriate, grants may be awarded to applicants in successive years to a maximum of three.

Applications should be made in writing (there are no forms) to the Honourable Secretary, Professor Keith Jones, 57 Marksbury Avenue, Richmond, Surrey, TW9 4JE.

Symposium: Taxonomy, Evolution, and Classification of Lichens and Related Fungi — Linnean Society of London, 9–11 January 1998

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This highly successful meeting, co-organised with The British Lichen Society and The Linnean Society of London, attracted eighty delegates from eighteen countries. The programme included three half-day sessions focussing on taxonomic issues at species- and infra-specific levels, generic level, and of relationships at and above family level, respectively.

Of the fifteen papers presented, several were critical assessments of topical issues and ongoing debates, such as generic delimitation and hidden prejudices in lichen classification, and several addressed the integration of lichenised fungi into the general fungal classification. It was clear from many presentations that phylogenetic analysis, particularly using DNA data sets, has rapidly developed into being a most useful method for analysing natural relationships in lichens.

The presentations also showed that the many younger lichen systematists with a 'traditional' background, presently taking up molecular techniques, will be able to address many of the most interesting problems remaining in lichenology today. The importance of not formalising the molecular findings until results are corroborated by several investigations and supported by 'traditional' data-sets was widely stressed. These views were strongly supported by the audience, which contributed many lively discussions. The Proceedings of the Symposium, including all papers presented, is scheduled for an enlarged July issue of *The Lichenologist*.

Mats Wedin

Irises and Iridaceae: Biodiversity

and Systematics — Orto Botanico, Rome, 8–10 May, 1998

Paula Rudall
Royal Botanical Gardens,
Kew, Richmond, TW9 3AB
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An international conference organised by the University of Rome "La Sapienza", the Societa Italiana dell' Iris of Florence and the Linnean Society of London.

The aims of this conference are:

- Present up to date research on the genus Iris and the family Iridaceae.
- Discuss scientific and applied research on varieties and hybrids.
- Highlight the noteworthy work of the Iris Societies of the world.

Registration fee is 30 pounds sterling, payable to the Linnean Society. This will cover the Linnean reception, tea/coffee during breaks, and an excursion to the Garden of the Societa Italiana dell' Iris, Florence.

Contact:

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Paula Rudall

MONOCOTS II — UNIVERSITY OF NEW SOUTH WALES, SYDNEY, AUSTRALIA, 27 SEPTEMBER TO 2 OCTOBER 1998

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The Second International Conference on the Comparative Biology of the Monocotyledons and the Third International Symposium on Grass Systematics and Evolution

This will cover the latest research into the comparative biology of monocotyledons, both at higher levels and within particular groups such as grasses, sedges, aroids, lilies, palms and orchids.

Contact:

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<http://www.science.uts.edu.au/sasb/monocotsII.html>

Paula Rudall

Second Biennial Conference of the Systematics Association — University of Glasgow, 23rd–27th August 1999

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Planning for the above conference is now well in hand, and we hope that you have highlighted the dates in your diary. Although we are planning some thematic sessions, please remember that we want all systematists to participate, no matter what your discipline, your background, or your experience. This is your conference so please attend and support us, and encourage your colleagues and students to do so as well.

By way of an incentive we are introducing a new Bursary scheme, which is intended to help research students to attend the Conference. These bursaries will contribute towards the costs of registration, accommodation, and subsistence for students (or recently graduated students) giving a paper on own their research work. Bursaries will be competitive, and based on an assessment of an abstract which must be submitted by 15th December 1998 for decisions in February 1999. We will also be awarding substantial prizes for the best student talk and the best student poster.

We are also conscious that many overseas students are keen to attend, but have particular difficulty getting the necessary funding. We will consider such applicants for the Student Bursaries, but our funds are limited, and we can do much more if we are contacted far enough in advance for us to issue letters of invitation, approach the British Council, etc. So please get in touch with us as early as pos-

sible, and we will do everything we can to help you obtain the funding to attend the conference.

Details of the all of the above, and much more, will be found on the Conference World Wide Web site at:

<http://www.geology.gla.ac.uk/palaeo/syst99/>

This will contain more and more information as the Conference approaches, so please bookmark the site and return to it frequently. For those without internet connection, information can be obtained from Dr Gordon Curry, Systematics 1999, University of Glasgow, Gregory Building, Glasgow, G12 8QQ Scotland.

Gordon Curry
(on behalf of the Organising Committee)

BOOK REVIEWS —

BEEBEE, T.J.C. (1996). ECOLOGY AND CONSERVATION OF AMPHIBIANS. LONDON: CHAPMAN & HALL. 214 PAGES. £35.00.

Jack Gibson
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The author commences the preface to this excellent volume with the following statement — “Herpetology...can be a difficult science to sell. I guess that most of the practioners will recognize my experiences of cynical amusement from friends and colleagues astonished that anyone should spend a lifetime working with amphibians”. Yes, indeed. Later in the same preface he says “for me the real charm of amphibians lies beyond the strictly academic domain. Perhaps...it has something to do with...the role of frogs and newts as harbingers of the coming spring”, so we realise that, as well as being a committed scientist, the authors also loves his work.

Dr. Beebee emphasises the ecological importance of amphibians, both as predators and prey, but is at pains to point out that their populations can fluctuate widely over many years: “There is no shortcut to long-term studies”, and the purpose of this book is clearly to assist and encourage such studies.

The bulk of this book consists of ten widely-ranging chapters, including What, Why, Evolution, Behaviour, Populations and

Distribution, Threats, and Conservation problems. All the material is admirably concise, but very much to the point and extremely well arranged, so that any researcher will readily find the precise information required. There is also a bibliography of well over four-hundred references, and a really useful index. All told, this is a remarkably comprehensive survey of the subject compressed into 214 pages, but the author has a deceptively easy style of writing, by no means universal in the genuine expert, which gets the message across without difficulty, in a volume easily readable even for a beginner to the subject. We have been needing such a volume for years, and Dr. Beebee's book fills the gap splendidly.

Dr. Trevor Beebee has long been an outstanding figure in herpetology, and it is not too much to say that he has been one of the pioneers of our modern approach to the study of amphibians. With this volume on the *Ecology and Conservation of Amphibians* he has done us proud, which is what we would expect from such a recognised authority.

This is the seventh volume in the Conservation Biology series published by Messrs Chapman and Hall, and it well maintains and advances the high standards set by its predecessors. The price of £35 may seem rather high for a book of just over two hundred pages, which unfortunately so often seems the case nowadays, but this particular volume, so first-class in every respect, is well worth the money and will be invaluable to anyone really interested in the subject. Highly recommended.

J. A. Gibson

Obituaries: Colin Patterson

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It is with great sadness that we report the death of Colin Patterson FRS, one of the world's leading systematists of the last half-century. Colin died of a heart attack on 9th March while cycling to his office at The Natural History Museum. He was 64.

His commitment to systematics through the vehicle of his specialised study of fossil fishes led him to enquire into the many traditional systematic practices which most of us accepted without question. Colin entered the palaeontological world through his study of Cretaceous fishes (PhD London, 1961). In those days he

worked within the standard paradigm of palaeontology by searching for ancestor-descendent relationships. But he felt uneasy with this, and his discomfort was fuelled by meeting another ichthyologist, Gary Nelson (then of the American Museum of Natural History), who had been impressed with what later became known as cladistic methods of classification. Colin realised quickly that his search for ancestors in Chalk fishes had been doomed to failure because of theoretical and methodological difficulties of recognising ancestors. Colin, like several others in the 70's recast the questions we asked of the fossil record. Instead of asking questions about ancestry and descent - which are questions about process, Colin searched for cladistic sister-groups which can be discovered by examining structures in specimens.

Through this new approach Colin lifted the study of the origin of teleosts from the depths of authority to a level that everyone could understand and question on the same terms. But Colin went further than this and in 1981 published a paper¹ which questioned if the study of fossils could ever be the primary source of data for discovering relationships among Recent organisms. This, of course, was seen as an audacious broadside on the *raison d'être* of vertebrate palaeontology which, since the days of T.H. Huxley, had seen itself as the rosetta stone of phylogeny. Many vertebrate palaeontologists responded, but in doing so acknowledged that the questions posed by Colin needed to be aired and discussed - which they have and still are. In reality, Colin had a high regard for the value of fossils as taxa with unique combinations of characters. This questioning of the role of fossils also prompted Colin to look at the most fundamental concept in biology — homology. And in 1982 he published one² of his most significant papers bringing together the disparate ideas of homology to a single explanation that homologies are theories to be tested; and he set up three test we might apply. That paper too opened new doors into the theoretical rooms of systematics and modern discussions of homology are in Patterson's language.

During the 80's the science of molecular systematics was gathering pace and, as ever, Colin was there, playing with sequences and hoping this would be a panacea for phylogenetic reconstruction. What he found was a new class of difficulties surrounding the age-old problem of homology. He articulated the problems faced by molecular systematists in very lucid fashion through an introductory chapter to a symposium volume³. And through this he was regarded by many molecular biologists as an authority worthy of consultation.

He was invited separately by both French and Swedish biological councils to sit on panels to set up their respective research programs.

He was a fierce advocate for systematics in general. When, in 1989–1990 The Natural History Museum was re-evaluating its scientific direction, and systematics was apparently being downplayed he spoke up with his characteristic forcefulness. This led to him appearing before a House of Lords Committee charged with the responsibility of examining the state of taxonomy in Britain. And as a result of this several new opportunities arose.

Throughout this active, highly original and creative scientific life Colin had always been interested in the theory of evolution. His frank and open book⁴ on the subject was a refreshing and highly readable account with a sting in the tail about the scientific status of the theory. This book was highly successful and after much badgering he was persuaded to write a second edition (which has actually turned out to be a new, different book). On the Friday before his death he had submitted the edited manuscript, so completing yet another phase of his diverse interests.

Those who knew Colin will remember him as a generous and sociable person, ever ready to discuss aspects of fishes, systematics, evolution and the quality of the beer. Yes, he will be greatly missed but his scientific legacy will be with us well into the next century

Peter Forey
The Natural History Museum,
10th March, 1998

References:

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