Editorial

The third issue of *The Linnean* contains the final part of last year's Proceedings as well as the current Proceedings. From now on there will be more space available for members' communications.

In the last issue mention was made of the changing landscape. It now transpires that not only are our ancient woodlands under threat as a consequence of the EEC agricultural policy, but work is also soon to begin on draining and ploughing part of the largest expanse of wild wetland on the Norfolk Broads, the Halvergate Marshes, designated as a Grade 1 landscape. One farmer has agreed to refrain from ploughing for a year in return for compensation of £258 per acre, while a further proposal has been drawn up by the Environment Department to compensate another four landowners involved—by paying them £1·5 million! Perhaps Wallace was right in his proposition of 1880 that "Unrestricted private property in land is inherently wrong, and leads to grievous and wide-spread ills". The attempts to develop land, however, do not always succeed, and it is good to learn that the green belts around our cities (the setting up of which was one of Wallace's original suggestions in *Land Nationalization: its Necessity and its Aims* 1882) are still to remain sacrosanct.

As you may have read in the last number during the 1982–83 Session the British Ecological Society took up residence with us at Burlington House and the Society for Experimental Biology joined us this January. The Mammal Society's registered office has been here since last October. These moves are a consequence of Council's policy of closer cooperation with other biological societies and institutions, and in this issue there is an article explaining the reciprocal arrangement for borrowing books we now have with the University College library.

Once again may I reiterate that the quality and interest of *The Linnean* depends on your response.

SOCIETY NEWS
Important Notices

Amendments to the Bye-laws

As recommended by Council, the Anniversary Meeting adopted the proposal that Contributions should be increased as from 1985.

Council also asks the Fellowship to note that, due to the changed status of many of the world's nations, the definition of a Foreign Member as in the Bye Laws is no long correct.

The following changes to the Bye-laws are therefore proposed:

(1) Page 18, Chapter 5. Delete Section 6 and insert:

"6. No person of British nationality nor any person usually residing in any part of the United Kingdom shall be elected a Foreign Member of the Society and thereby be entitled to use the initials F.M.L.S."

(2) Page 28. Delete whole page (including amendments to 1980) and insert:

"28

Bye-laws of the Linnean Society

APPENDIX 1.

Contributions

Fellows and Associates

The Annual Contribution to be paid is:
Fellows £30, Associates £15.

(for entitlement to Journal see Chapter 17)

For those who wish to receive a second journal the Annual Contribution is:
Fellows £35, Associates £20.

For those who do not wish to receive any journal the Annual Contribution is:
Fellows £25, Associates £12.50

The Annual Contribution of any Fellow may be waived at the discretion of Council.

Student Associates

The Annual Contribution to be paid by Student Associates is £2.50.

APPENDIX 2.

Composition

A Fellow of 20 years' standing or over who has reached the age of 65 may compound for five times the current Annual Contribution. This may be paid in the form of five Annual Contributions."

Specialist Group—Biogeography

Biogeography is a discipline to which the Linnean Society has contributed directly or indirectly in its publications since the earliest years and Council has agreed to the formation of a Specialist Group to extend this interest. For this Group to be a success, there must be a satisfactory representation of both botanists and zoologists, and from the beginning a truly biological integration of ideas will be expected.

Like other Groups, informal discussion meetings will be arranged, with occasional more formal symposia in response to the needs of the members.

The first informal meeting of the Biogeography Group will be held at Burlington House on 6 December 1984 at 14.30 and will include a discussion on *What are Biogeographically Interesting Groups?—With Particular Reference to Higher Taxonomic Categories.* If you are interested in this meeting or in the project in general, please contact Mr I. B. K. Richardson F.L.S., c/o The Linnean Society.

Specialist Group—Computer Applications in Biology

Plans to form a Specialist Group on computer applications in biology will be included in the next issue of *The Linnean.* If you are interested, please contact Dr F. A. Bisby F.L.S., c/o The Linnean Society.

Notes

Publications and Research Grants

The Society administers the income from several small Trust Funds set up to benefit biological research and to further scientific knowledge. Applications close on 31 March annually.

The Royal Society administers a Publications Grant for the assistance of scientific publications in the U.K., particularly those of scientific societies and

institutions. Applications, which should be made on forms obtainable from the Executive Secretary, The Royal Society, 6 Carlton House Terrace, London SW17 5AG, are receivable only from societies and institutions in the U.K., and *individuals* of British nationality. The closing dates are 22 May and 22 October each year.

Details may be obtained by writing to Burlington House.

Deadlines

The response to *The Linnean* has overwhelmed us with copy and regrettably your contribution may have fallen to the editor's axe. If it has, please accept our apologies but continue to keep us well primed and to send us your news and views. The deadlines for the next two issues are 28 September 1984 and 4 January 1985.

Rooms Closure

The Society's Rooms will be closed over Christmas and the New Year from 22 December to 1 January inclusive.

Back Numbers

We sometimes get requests to the Society for missing issues of journals. Whilst we will do our best to meet these, it should be realized that we only hold very limited stocks at Burlington House and do not have the capacity to run major mailings. On receipt of your new journal please check the last issue as a matter of routine and let Academic Press Subscriptions Department (telephone: 01-300 0155 know at once if the previous number is missing. We cannot, in general, replace journals free of charge if notification is not received within 4 months of publication.

Address List

The new address list is now being compiled. Please ensure that we know of your latest address and post code, and changes as they occur, so that it is correct at the time of going to press.

Correspondence

Dr M. T. Almeida has very kindly responded to our plea for cheerful mail with coloured photographs from Portugal. Thank you.

'Heard at the Hatch'

Elderly lady with Box Brownie, "I wonder if you have a cupboard; I want to take the film out of my camera?"

Man, making new gates for Victoria station, "Does the bolt for the main gate work?"

Middle-aged upper class tramp, "Where's the music bit—I know there's a music bit here somewhere?"

Bell ringing, man at the hatch, "I've made rather a lot of noise for someone who wants to find the Royal Society of Chemistry!"

Workman, "Excuse me, is there a Burlington House here somewhere?"

Young man, clattering through the doors with canvasses, brushes and other things and claiming to be Salvador Dali, "Have you a room I can work in? Have you somewhere I can leave my things? Well, can I just leave my suitcase?"

Informal Society Evenings

These have been regarded as successful by those who were present but would have been greatly enhanced by bigger attendances. In the new session we have planned them for 8 November, and 31 January and 20 June 1985. Details will be found elsewhere in *The Linnean*. The format is a general interest talk followed by refreshments on each occasion. Tickets at £2.50 may be obtained at the time, but an indication in advance of your intention to attend will help with the catering. Guests are especially welcome.

Membership

We welcome the following who were elected on:

12 April 1984

Fellows

Peter Roland Ayliffe B.D.S
Adam C. Cade B.Sc.
Helena Mary Corinne Danielli Ph.D.
Nicholas John Gandy M.Sc.
Dulcie Gray C.B.E.
Richard J. Hobbs B.Sc., Ph.D.
Zahid Husain M.Sc., Ph.D.
Donald William Kirkup M.Sc.
Sabina Georgina Knees M.Sc.
J. V. Krishnamurthy Ph.D.
Devon Lynne Masarati B.Sc.
Peter Joseph Maudsley B.Sc.
Paolo Mazzoldi
Michael Nangle B.Sc.
James L. Reveal Ph.D.
Malcolm Reeve B.Sc.
Jacobus Petrus Roux
James Teacher M.A.
Sybil Patricia Vlasto
Prof. William A. Web
Ronald Douglas Wooller Ph.D.

Associates

Clifford Thomas Harold Gray
David John Nicholas Hind B.Sc.
Paulo S. Oliveira

24 May 1984

Foreign Members

Prof. Abraham Fahn, Israel
Dr Peter Hamilton Raven, U.S.A.

Fellows

Dawit Abebe
Robert Allkin Ph.D.
Mrs Vijaya Batra M.Sc.
Bernice Brewster B.Sc.
Adria Casinos Ph.D.
Iris Sheila Collenette
Andrew Peter Dobson D.Phil.
Else Marie Friis
Farah D. Ghani-Bauer Ph.D.
Alan John Edward Harman
Stephen Raymond Hoskins Ph.D.
Anthony Harold Magdon Jayasuriya Ph.D.
Sum-wah Lam
Thomas Eugene Lovejoy Ph.D.
Kenneth R. McKaye Ph.D.
Nigel Maxted B.Sc. (from Associate)
Prof. George Robert Morgan Ph.D.
David Ronald Morrey
Virginia Nightingale
Alfred Joseph Emilien Orian Ph.D.
Kaj Raunsgaard Pedersen Ph.D.
Tommaso Racheli M.D.
Walter M. Robertson
Andrew Jonathan Anthony Sheldon M.Sc.
David Ian Whiteside Ph.D. (from Associate)

Meetings

18 October 1984 at 17.00. Tea will be served at 16.30 and refreshments on conclusion.

1. Admission of Fellows
2. Confirmation of the Proceedings of the Scientific Meetings on 15, 29 March and 12 April 1984, of the Anniversary Meeting held on 24 May 1984, and of the Scientific Meeting held on 21 June 1984.
3. First reading of proposed amendments to the Bye-Laws (1968) (see Important Notices: pp. 1–2.
4. Communication: ***Biological Aspects of Forensic Science*** by the staff of the Metropolitan Police Forensic Science Laboratory, Lambeth.

Mr G. Willott—*Body fluids*
Abstract

In criminal cases, especially murder, rape and assault, it is frequently necessary to search for stains of biological fluids. These may provide crucial evidence to link a suspect and victim or show that a suspect has been at a scene of crime. The location, identification and grouping of stains will be described and illustrated with case examples.

Mr R. Cook—*Textile fibres and botany*
Abstract

Trace materials such as textile fibres and botanical fragments can also be useful evidence to connect individuals or to link suspects with scenes of crime. The identification and comparison of these materials will be described using casework examples.

Dr G. Roe—*Drugs*
Abstract

Many plants contain drugs and poisions of commercial or recreational value. Some are clearly restricted by law e.g. *Cannabis sativa* L. but in other cases the Law is obscure. The talk will describe some interesting cases involving plant materials.

8 November 1984 at 18.30. Refreshments at 19.30.

General Interest Lecture: ***Biological Research at Home*** by Professor C. T. Ingold F.L.S.

Professor Ingold will speak mainly about his own recent mycological research in retirement, but he will also consider in general terms how significant individual research is possible at home, even when little outside support is available.

22 November 1984 at 14.30. Tea will be served at 16.40 and refreshments on conclusion.

1. Admission of Fellows.
2. Second reading of Amendments to the Bye-Laws (see Important Notices: pp. 1–2).
3. Ballot for the election of Fellows, Associates and Student Associates.
4. Communications: ***Linear Habitats***. Introduced by Dr C. Sargent (Institute of Terrestrial Ecology, Monks Wood).

14.40 Dr M. D. Hooper (ITE Monks Wood)—*Hedges and woods*
Abstract

Most vegetation types can exist in linear and planar forms: hedges and woods, rivers and lakes, or meadows and roadside verges. The fact of linearity might be expected to cause major edge effects but these effects on and from the immediately adjacent, different, vegetation can be surprisingly small. The thesis that linear habitats have an integrity of their own will be developed for hedges as compared with woods.

15.20. Dr N. Holmes (NCC Huntingdon)—*Rivers*
Abstract

Rivers are the most natural linear habitat in Britain and their physical features and peripheral land frequently form the only wildlife refuge for many species in developed areas. Different catchments have different characteristics and thus support different wildlife communities. This will be the focus of the lecture, principally dealing with plants and how they can be used to classify rivers throughout Great Britain.

16.00. Mr J. O. Mountford (ITE Monks Wood)—*Ditches and canals*
Abstract

Though these artificial linear habitats normally have still water, pumping and the operation of locks, lead to occasional rapid movement. They are both regularly managed, to allow for effective removal of drainage water, or for navigation. The grazing marsh ditch network has recently been acknowledged as a valuable wildlife resource and studied intensively in Norfolk, Somerset, Gwent and Kent/Sussex. Canals have been the subject of investigation for longer but not with the same thoroughness. This talk will discuss the special features of ditch and canal vegetation in relation to management and their designed function.

16.40. Tea. Posters will be displayed in the Library.

17.00 Dr Caroline Sargent—*British Rail land*
Abstract

Railway land provides a continous habitat which is almost always unique in a local context and contributes to considerable diversity. The land is already protected (both by statute and fences) and wildlife exists despite, and often as a direct consequence of, the primary engineering function. Stretches of line of outstanding biological interest and conservation importance occur.

17.40. Mr E. G. Philp F.L.S. (Maidstone Museum)—*Roads and motorways*
Abstract

Roadside verges have always been of interest to the natural historian but with the effects of modern farming, particularly in the more fertile areas, they are becoming an important habitat for the fauna and flora of the countryside. Motorways are a major part of this scene and, because of restrictions on access, have a very significant conservation potential.

18.20. General Discussion.

6 December 1984 at 17.00. Tea will be served at 16.30 and refreshments on conclusion.

1. Admission of Fellows
2. Ballot for Amendments to the Bye-Laws (see Important Notices: pp. 1–2)
3. Communication: ***Recent Trends in Biological Archaeology.***

Introduced by Professor D. R. Harris (Institute of Archaeology).

Abstract

The biological sciences are making increasingly important contributions to archaeology, both to the study of how past human populations obtained and used biotic resources, and to be palaeoecological reconstruction of past human environments. The biological approach to archaeological problems rests fundamentally upon detailed taxonomic, anatomical and ecological knowledge of relevant groups of plants and animals, but in recent years other skills have come to be recognized as essential for the practising bioarchaeologist. These include greater awareness of the aims and methods of archaeology itself, in particular an understanding of how the archaeological record is formed and transformed and of the problems inherent in recovering and interpreting archaeological evidence. Bioarchaeologists need to be aware of the potential of both on-site and off-site data, and of the problems involved in their integration. Such data comprise not only plant and animal remains but also present-day environmental and ethnographic information which can aid the bioarchaeologist in interpreting the human ecology of the past.

At this Meeting, four members of the Department of Human Environment of the Institute of Archaeology, University of London, will exemplify these trends by discussing aspects of their current research in bioarchaeology. Dr K. D. Thomas and Mr D. R. Brothwell will speak about their zooarchaeological research on, respectively, land-snail bioarchaeology and the husbandry and health of British Iron Age livestock, and Professor D. R. Harris and Mr G. C. Hillman will discuss archaeobotanical approaches to the study of plant exploitation by pre-agricultural and early agricultural populations.

17 January 1985

1. Admission of Fellows.
2. Communications: ***The Evolutionary Genetics of the House Sparrow***

Dr D. T. Parkins F.L.S. (Department of Genetics, University of Nottingham) — *The relationship between population structure and genetic differentiation in the house sparrow*

Abstract

The house sparrow, *Passer domesticus*, is a widespread and familiar bird. Polymorphisms have been identified at a series of enzyme loci, and these can be used to determine the genetic structure of populations. Combining this with historical and ecological data has allowed the explanation of much of the variation in terms of population biology. It has also been possible to estimate the rate of evolution of endemic and introduced populations, and use these to establish the possible age of some subspecies.

Dr T. A. Burke (Department of Zoology, University of Leicester)—*The use of enzyme electrophoresis in the analysis of breeding systems*

Abstract

The mating behaviour of many animals has been studied by direct observation. For an analysis of the adaptive value of this behaviour, it is important to know the genetic contribution of individuals. Gel electrophoresis of proteins allows an assessment of this. The protocol will be described, examples given and the limitations of the technique illustrated with data relating to the house sparrow.

CORRESPONDENCE
Evolution Group?

I strongly support Dr Vane Wright's proposal to set up a Linnean Society 'Darwin Group'. But though I admire Darwin greatly I would urge that its name should simply be the Evolution Group. Evolutionary biology is far wider and deeper than any one man's contributions, however great; rather than looking back to the past by naming the group after Darwin, and overemphasizing his contribution to modern evolutionary ideas compared with that of Wallace, Mendel, de Vries, H. J. Muller, J. B. S. Haldane and R. A. Fisher to name but a few, we should be looking forward to the new evolutionary synthesis that will be made in the next two decades, and to which I hope the activities of such a group might contribute. The impact of new molecular methods on our understanding of the mechanisms of development should revolutionize our understanding of the connection between genes and the characters studied by systematists and therefore transform our still rather primitive understanding of macro- and mega-evolution.

At present a tremendous gulf of knowledge and understanding exists between many, if not most, practitioners of mechanistic and systematic biology. Though lip-service has often been paid to the unifying role of evolution, evolutionary studies in this country are still the Cinderella of biology and are given much less prominence in education or research than their potential unifying role merits. Too often evolutionary studies are seen as optional extras, merely speculative, too woolly or controversial, unattractive to grant adjudicators, intrinsically second rate or derivative, or merely as occupational therapy for senile professors who have made their name in some other field. Formation of a forward and outward looking Group that would seek to interact postively with a variety of other biological societies such as the Genetical Society, Society for Developmental Biology or Ecological Society might help to place evolutionary biology in its rightful place at the fundamental core of biological science.

TOM CAVALIER-SMITH
King's College,
26–29 Drury Lane, London WC2

Frederick Law Olmsted

Gordon Reid's paper, 'Green and Pleasant Liverpool' in the March issue of *The Linnean* is an appropriate reminder of Merseyside's horticultural heritage and its contribution to landscape architecture. Frederick Law Olmsted (1822–1903), the designer of Central Park, New York, the Boston Park system and countless other landscapes in the developing cities and towns of the fast expanding U.S.A., was greatly influenced by the public parks he inspected during his visit to England in 1850. Having disembarked at a fog-enshrouded Liverpool, he travelled to London via Chester, Hereford, Bristol and Winchester. In his *Walks and Talks of an American Farmer in England* (1859), he wrote "Not a town have I seen in England but has a better garden republic than any town I know of in the United States". Roper (1973) observed, "The park at Birkenhead, across the river from Liverpool, was the first he (Olmsted) had ever seen and it broke on him like a revelation." The universal enjoyment of Birkenhead Park impressed Olmsted far more than the design, and he noted, "All this magnificent pleasure ground is entirely unreservedly and for ever the peoples own." Olmsted, however, was less impressed by the private parks he visited; it offended him that their beauty and horticultural merit should be debarred from the general public, and concluded beauty should not be disassociated from its social benefaction."

T. H. R. HALL
South Lodge,
South Parks Road, Oxford

Marble busts in the Linnean Society

The Society has in its possession six marble busts and is fortunate that three of these are by the celebrated Regency sculptor, Sir Francis Chantrey (1781–1814). Sir James Edward Smith, waxed and shining, studies everyone going up and down the stairs, while Charles Hatchett and Sir Joseph Banks look down from the Library bookshelves.

Chantrey's technique of working is very interesting and we are indebted to the National Portrait Gallery's forthcoming Regency Catalogue for a detailed account of his methods. He began his sittings with drawings, profile and full-face, made with a device which traced the outlines of the head on to a sheet of paper. He called it a camera lucida, adapted from an instrument patented by his friend, the physicist W. H. Wollaston; it was a variation of the accepted form and does not tally with examples in the Science Museum.

The drawings finished, clay models were made by studio assistants and completed by Chantrey himself, usually at several informal sessions taking place at breakfast time. This was a lively meal shared with friends who ensured that

their conversation kept the sitter animated. Among the conversationalists was George Jones, Librarian and Keeper at the Royal Academy and one of Chantrey's intimate friends and eventually his executor. The clay was then transferred to plaster casts (many of which were presented to the Ashmolean Museum by his widow in 1842) and finally to the marble bust.

The actual process was described vividly by one of the sitters, Sir Henry Russell. "On the day we were to begin he appointed me to breakfast with him . . . The first day he only made a rough sketch of the face, using an instrument with a tube, through which he looked, while, with a pencil fixed on one arm of it, he traced an outline of the full size on paper." There is another account of a sitting in 1836. "Mr Dunlop had been sitting to Chantrey, who fixed the back of his head in a wooden machine to keep him perfectly still and then drew with a camera lucida the profile and front face the size of life. He afterwards gave a little light and shade to the drawings and said, 'I shall not require you to sit after this'."

Chantrey's account ledger in the Royal Academy library records an order of 1825 from the Linnean Society for a marble bust of the President, Sir James Edward Smith (1759–1828), and the sum of 120 guineas was paid in 1827. The bust is incised on the back: *"Sir James Edward Smith/Chantrey Sc./1828"*. We have an impression of the mezzotint of the bust by William Say which was used as the frontispiece to Smith's *Memoirs and Correspondence* (1832). The Society also owned two plaster casts, one of which was accidentally knocked over by a visitor and smashed to pieces (1954) and the other given away (1973) because of shortage of space.

The bust of Sir Joseph Banks (1743–1823), the Society's first Honorary Member, was ordered and paid for by subscribers and is dated 1822. The camera lucida drawing for this is in the National Portrait Gallery and the plaster model in the Ashmolean Museum. Chantrey made other versions of the Banks bust and the Society's is very similar to the original in the Royal Society.

The bust of Charles Hatchett (1765?–1847), a chemist and Fellow of the Linnean Society, cost the Society 100 guineas in 1822, the date incised on the back. It was presented in 1931 by Miss E. C. Hatchett-Jackson, the sitter's great-granddaughter. There is a long-winded correspondence in the archives over the conveyance of the bust to London. She was most anxious that her great-grandfather should travel in comfort, well-wrapped and "preferably by night, as the roads would be clearer and they could travel faster".

The busts of Robert Brown and Thomas Bell, both in the inner library, were made by Peter Slater, known for his sculptured heads of Scottish worthies. For the bust of the botanist Robert Brown (1773–1858), not completed until after his death, the sculptor was paid £50 in small sums over a period of 22 months. Did this mean no confidence in the sculptor or was it an insight into the state of the Society's finances? It was exhibited at the Royal Academy in 1860. In 1894 permission was given to have a bronze copy of Brown's bust cast and placed in a public building in Montrose, his home town. There was another request in 1934 for a bronze copy for Brooklyn Botanic Garden.

The bust of Thomas Bell (1792–1880), zoologist, dental surgeon and President of the Society, was presented by the Linnean Club in 1862. Mrs Bell was given an illuminated address to celebrate the occasion, which the Society now owns.

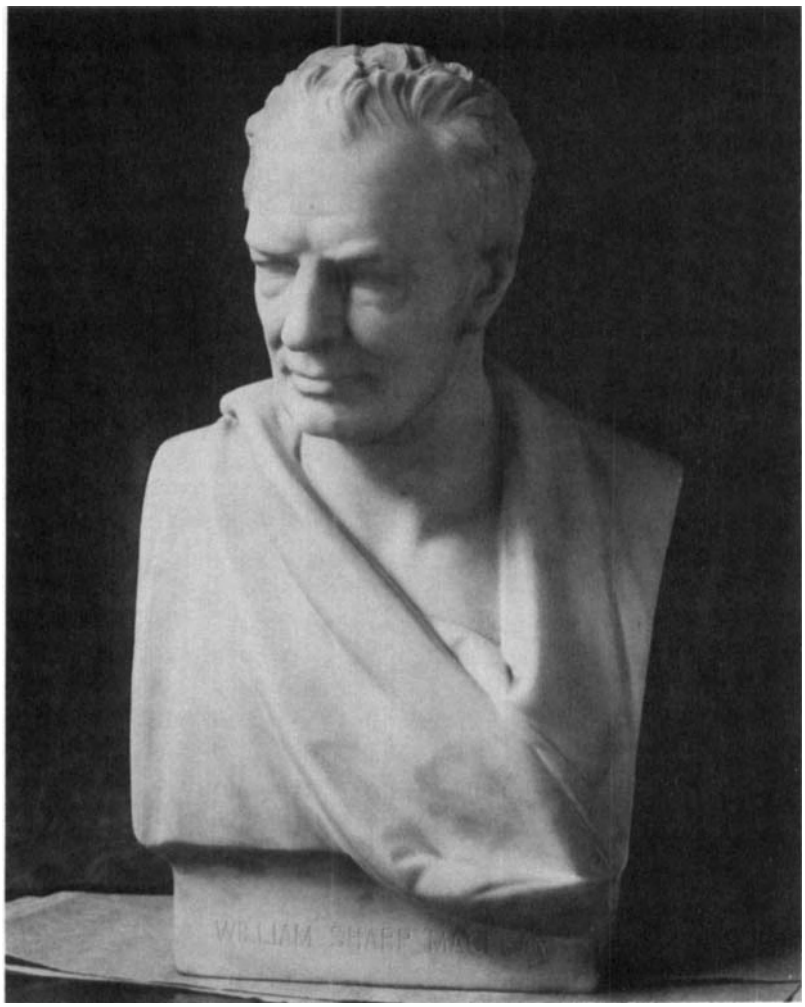

Figure 1. William Sharp Macleay. A founder member of the Zoological Club and the Zoological Society. His bust sits in the alcove to the left of the meeting room door.

The remaining marble bust (in the hall), dated 1870, is of the zoologist William Sharp Macleay (1792–1865). It is by Charles Summers and was made posthumously in Rome in 1870. The sculptor had a centenary exhibition of his work in Weston-super-Mare in 1978. He is better known in Australia where his busts constitute a record of celebrated Australians in the mid 1860s; he sculpted a colossal group to commemorate an unsuccessful bush exploration during which the leaders died of starvation, and for this he was paid £4000. He later went to Rome and had the honour of decorating the hilt of Garibaldi's sword. His obituary claimed him to be "entirely free from self-assertion, which makes some artists intolerable in private life".

Marble busts, especially those by Sir Francis Chantrey, are very highly regarded today and clearly an important asset. No learned society's library would look right without them; they give an air of solidity and distinction. Long may they remain in place.

MARGOT WALKER

The library of University College London

The largest of the College Libraries in the University of London contains almost 900 000 books, pamphlets, and bound volumes of periodicals in a wide range of subjects reflecting the multidisciplinary nature of the College. Some 7000 periodicals are currently subscribed to. The College itself was founded in 1828 as London University, and the Library was first opened to students on 19 January 1829. Since 1946 the Library staff have been organized on a pattern of subject specialization. The assistant librarians, who have academic status, are deployed throughout the Library as subject specialists, and the arrangement of books follows the same pattern in an attempt to produce a series of specialist libraries to reflect and match the teaching and research of the College.

Since March 1982 the catalogue has appeared at monthly intervals on microfiche and lists items added to the collections or recatalogued by author and title. This catalogue covers items in all parts of the College Library as does the old catalogue on cards in the Main Library. Older material is also listed in card catalogues in the subject libraries. On microfiche there is a subject headings catalogue used to find books on a chosen subject and for a systematic view of what the library has on a particular subject there is a classified catalogue. Entries are arranged in the same way as the books on the shelves. There is a classified catalogue on cards for the older material. All catalogue entries since March 1982 also appear on the microfiche produced by the University of London Shared Cataloguing Scheme which lists the holdings of the major colleges in London. A similar listing is available for periodicals giving locations of some 81 000 titles in 51 institutes and colleges in the University.

The Natural Sciences Library occupies the first, mezzanine and ground floors of the DMS Watson Building and comprises collections of books, periodicals and offprints in biology (including microbiology), botany, geography, geology, psychology and zoology. The valuable libraries of the Hertfordshire Natural History Society and Field Club and the Malacological Society have been deposited together with the Johnston Lavis collection on vulcanology, Smith Woodward and DMS Watson collections on palaeontology and the Dobell collection of offprints on protozoology.

The libraries in College are normally open from 9.30 am to 9.00 pm in term time with shorter opening hours during vacations. There is no Saturday opening except during the summer term.

Fellows of the Linnean Society may consult the College collections with a minimum of formality and borrow books subject to the usual library regulations.* Periodicals are generally available on a week loan and books for longer periods except for heavily used student texts. Members of the College may use the Society collections by a reciprocal arrangement. This is seen as the first step towards greater cooperation between the two libraries for the purchase of expensive research monographs and perhaps periodical acquisition.

SUSAN GOVE
Medical and Natural Sciences Librarian,
University College London

*Fellows must carry their Meetings card as proof of identity.–Exec. Sec.

Wallace's Notebooks (4) and Journals (5)

The Society is fortunate to possess the unpublished notebooks relating to Alfred Russel Wallace's journeys in the Malay Archipelago (1856–1862) and to his American lecture tour of 1886–1887.

Below is an extract from his first notebook relating to the Mias or Orang-utan. In all Wallace shot twenty-five orang-utans, the skins and skeletons of which are said to have fetched a good price back in the United Kingdom.

"On June 24th I was called by a chinaman to see a Mias which he said was in a tree near his house at the coal mine. Arriving at this place we had some difficulty in finding the animal as he had gone off into the jungle which was very rocky and difficult to traverse—However at last we found him up a very high tree and saw that he was a male of the largest size—I got a good shot at him and he soon moved away higher up the tree. I got two more shots when he had got to the highest part of a very lofty tree, and we could see that the arm was broken. He then began to make a nest by breaking large boughs, bending over to pull them towards him and placing them across each other so as to make a complete nest so thick that when laid down upon it he was quite invisible. Before I had reloaded my gun he had completed this and I then waited some time to get a shot but not being able to see him I fired several times by judging where his body was. After each shot he generally moved and at length after being quiet a considerable time he eased himself up so that half his body was visible and then gradually lowering himself remained with his head above the nest. Finding it almost impossible to make him fall I wanted the chinamen who had accompanied me to cut down the tree as it was late and the tree was very large nothing would induce them to attempt it. As it was now getting dark I could do nothing more so fired two parting shots with great care, but not the slightest motion was perceptible so we concluded the Mias was dead and were obliged to leave him there. Next morning early I came to the spot and found our conjecture was correct as he still remained in exactly the same position. I now offered 4 chinamen a full days wages to cut the tree down, which they could have done in two hours, but after looking at it and trying it for a considerable time they determined that it was very big and very hard and would not attempt it, so I was obliged to leave this fine animal to rot on the top of a tree hoping to get his skull and perhaps his skeleton when it fell."

The Society hopes eventually to publish all of these notebooks. Offers of help in transcribing and editing them are solicited.

RECORD OF THE PROCEEDINGS OF THE LINNEAN SOCIETY OF LONDON FOR THE SESSION 1982–83

Anniversary meeting

24 May 1983. Professor R. J. Berry, President, in the Chair.

Election of Council and Officers

After extracts from the Bye-Laws governing the election of Council and Officers had been read, the President appointed Mr A. G. H. Osborn, Mr T. Pain and Dr N. K. B. Robson as Scrutineers of the Ballots and then declared them open. The results of the Ballots were as follows.

New Members of Council:	replacing:
Dr M. J. Andrews	Dr Daphne Fielding
Professor B. C. Clarke, F.R.S.	Dr S. L. Jury
Professor P. B. Gahan	Dr E. Lodge
Dr D. A. Goode	Dr H. M. Platt
Professor P. J. Peterson	Dr S. M. Walters

Officers:

President: Professor R. J. Berry, F.R.S.E.
Treasurer: Mr C. M. Hutt
Secretaries: Dr D. F. Cutler (Botany)
Dr Doris M. Kermack (Zoology)
Dr C. Patterson (Editorial)

The President appointed as Vice Presidents:

Professor A. E. Bell
Professor W. G. Chaloner, F.R.S.
Professor T. R. E. Southwood, F.R.S.
Dr A. R. Stone

Presentation of Medals and Awards

The President read the citations and presented the Linnean Medals and the Bicentenary Medal. He read the citation for the H. H. Bloomer Award which was then presented at a later date.

Linnean Medal for Botany
Professor Terence Ingold, C.M.B., D.Sc., D.Litt., F.L.S.

Terence Ingold started his formal education at Bangor Grammar School, County Down, and from there went to Queen's University, Belfast. His first teaching post was in Queen's, Belfast but from there he moved in 1930 first to be a lecturer in the Botany Department at Reading University and subsequently to be lecturer-in-charge of the Department of Botany at University College, Leicester. He was appointed to the Chair of Botany at Birkbeck College in 1944, and held that post until 1972. He was Botanical Secretary of this Society from 1962 to 1965.

His research work, and his many widely read text-books have one prime, common theme—the formation and discharge of spores, the biology of their

dispersal, and their subsequent fate. It is in the fungi, in particular, that he has pursued this theme, but not to the neglect of spore discharge in other plants.

Terence Ingold is probably best known for his research on the freshwater aquatic Hyphomycetes, that group of fungi which are abundant and cosmopolitan on leaves and twigs in rapidly flowing streams. He has focussed attention particularly on spore development, and in a large number of papers over 30 years has described many of the known species, and a large proportion of the currently-used genera. He gave a characteristically elegant and scholarly account of one aspect of this group in the Hooker lecture to this Society in 1974. However, many other groups of fungi have received his searching attention, and his research interests have reached out into groups as diverse as the Chytrids, the Mucorales and the Basidiomycetes. His research activity and publication continue with undiminished energy and vigour.

His books include *Spore Discharge in Land Plants* (1939), *Dispersal in Fungi, The Biology of Fungi, Spore Liberation* and *Fungal Spores—their Liberation and Dispersal.* His readers' enthusiasm obviously surpasses even the expectations of his publishers, since the latter work is sadly already out of print.

To all his research, his teaching and his text-book writing, he has brought to bear a quick and penetrating mind. He rapidly gets to the heart of a problem and can be relied on to produce a direct and elegant approach to solving it. He has illustrated his many papers and books with his own drawings and these reveal his personality with as much fidelity as the plants he draws: they combine precision of observation with artistic talent, and clarity with (when the subject warrants) a hint of a Puckish sense of humour.

Terence Ingold's influence on mycology has been enormous, and it has earned him recognition internationally. He is one of the small, distinguished group of British workers to be made a corresponding member of the Botanical Society of America, and he was elected President of the first International Mycological Congress in Exeter in 1971.

All this scientific work would have richly deserved the award that we make today. But this was merely one side of Ingold's life. For he also played a major role in the work and development of his college, of London University and particularly in the expansion of university education in the third world. He served as Vice-Master of his college, Birkbeck, and as deputy Vice-Chancellor of the University.

As another facet of his interest in the aquatic end of mycology, he also served as Chairman of the Council of the Freshwater Biological Association for some nine years.

In a manner quite as astonishing as the discharge of the fungal balistospore, Terence found time among his many activities, to discharge himself on numerous journeys to assist in the founding and development of universities in other parts of the world. Indeed, his tireless propagation of the philosophy and spirit of the British University system was as successful (and its products almost as prolific) as that of the fungi that he studies. His role in this activity was particularly noteworthy in Nigeria, and in the University (as it then was) of Basutuland, Bechuanaland and Swaziland, and closer to home in the founding of the New University of Ulster.

For this remarkable range of contributions to science and to the university world, he has not only been awarded the C.M.G., but honorary doctorates of the Universities of Ibadan, of Exeter and of Kent.

The Linnean Medal for Zoology
Professor Michael James Denham White, D.Sc., F.R.S.

Michael James Denham White was born in Chelsea 20 August 1910, the first of three children of James Kemp White and Una Chase White. From his father he learned Latin, classical Greek, algebra, geometry, and trigonometry, but he was never taught history, geography, or science. Rather, his father encouraged him to read about history and geography on his own. Not until he entered University College did Michael attend a formal school.

It is not clear exactly when Michael's great interest in biology began. He seemed always to be interested in natural history. He was usually rewarded with a new natural history book for enduring extractions of his milk teeth. At a very early age he had available many natural history books written in (or translated into) Italian. His father provided him with a home-made butterfly net, pinning box, killing jar, and spreading board so he could make successful forays against the local insect fauna. One of the early critical stages in his scientific education occurred on his seventh birthday when the family went on a picnic. In one day he learned about sexual dimorphism in dragonflies, gill respiration in freshwater crabs, and periodic molting of the arthropod cuticle. By the end of his birthday he had collected a box full of insects but more important had had his head filled by the exposure to many new biological ideas and concepts.

Michael began his university career with the intention of becoming a botanist. Indeed, a few years earlier he had made a special herbarium of orchids and had studied the alpine species of orchids while mountain climbing. He was particularly interested in the natural hybrids of *Gymnadenia odoratissima, G. conopsea,* and various species of *Orchis.*

Unfortunately, the botany professor at University College, London, Edward Salisbury, was unimpressive as a lecturer and a disappointment to an aspiring young botanist. On the other hand, Professor D. M. S. Watson in the zoology department, was a much more dynamic lecturer and inspired students with his confidence and self-assurance. It was Watson's influence that led Michael to become an evolutionary zoologist rather than a botanist or forester. At that time there was no course in entomology at University College so he travelled to the Royal College of Science to study entomology with O. W. Richards. It was Richards' lectures in entomology that influenced him to devote his career to the study of insects. In 1931, Michael received a B.Sc. with First Class Honours in Zoology and Human Physiology, which was followed by an M.Sc. in 1932.

Two publications which came out of the London period had a significant impact on the fields of chromosomal cytology and evolutionary biology. The first was a book entitled *The Chromosomes,* published in 1937. This not only provided a description of chromosome behaviour in mitosis and meiosis but also included a terse but highly lucid discussion of chromosomes and evolution. The second book *Animal Cytology and Evolution,* published in 1945, was the first critical account of cytology in twenty years. It provided an encyclopedia of information on animal chromosomal cytology and established evolutionary cytology as a discipline in its own right.

From 1947 to 1953 Michael worked at the University of Texas learning to take a position as senior research fellow with the CSIRO Division of Plant Industry in Canberra, Australia, where he remained until 1956. From January 1957 to June 1958 he was Professor of Zoology at the University of Missouri

before returning to Australia to assume the Chair in Zoology at the University of Melbourne. From 1958 until 1964 he was the prime mover in establishing a new Department of Genetics at Melbourne. He became its first professor and occupied the chair in genetics until his retirement from the University of Melbourne in 1975. Since then he has been a visiting fellow in the Department of Population Biology at the Australian National University in Canberra. He was elected a Fellow of the Royal Society in 1961.

In 1978 Michael White published his most recent book, appropriately entitled *Modes of Speciation.* His conclusions lend strong support to the thesis that the modes of speciation in animals and plants are diverse and that geographic speciation represents only one of several ways new species can arise. This latest book has stimulated many students interested in evolution to re-examine their views on speciation. He has been a notable contributor to zoological thought and research for many years, and is a very worthwhile recipient of the Linnean medal.

The Bicentenary Medal
Dr John Richard Krebs

The Bicentenary Medal for Scientists under forty is awarded to John Krebs. He was born in Sheffield in 1945 and attended the City of Oxford School before taking an Honours Degree in Zoology from Pembroke College. He held junior teaching positions in the Edward Grey Institute of Oxford, the Institute of Animal Resource Ecology, Vancouver, and the University College of North Wales before being appointed to his current post as a University Lecturer in Zoology at Oxford and a Fellow of Pembroke College.

From his early work on the behavioural ecology of tit mice, his researches have expanded to make distinguished contributions to the analysis of the ecological and evolutionary significance of behaviour. He has tested many theoretical concepts, including those developed by himself, through field observation and elegant experimentation. His work has made a major contribution to our understanding of territoriality, flocking, vocal communication, spatial memory and feeding strategies in birds. His analytical and experimental studies on foraging strategies are of wide significance throughout biology.

John Krebs' work has been recognized by other awards such as the Nuffield Foundation Science Fellowship in 1981, a Distinguished Visiting Professorship at the University of Miami in the same year, and in 1982 the Scientific Medal of the Zoological Society. He is the author of nearly 100 scientific articles and notes and, with N. B. Davies, a book *An Introduction to Behavioural Ecology* (1981). Also with Dr Davies he edited an important volume of collected papers *Behavioural Ecology: An Evolutionary Approach* (1978). In addition to his University work and research, John Krebs contributes generously to the work of scientific societies and organisations and is a member of several editorial boards.

Whilst recognizing Dr Kreb's contribution to biological work at the interfaces of evolution, behaviour and ecology, by making this award the Society looks to further innovative research in the future.

The H. H. Bloomer Award
Mr Oleg Vladimirovitch Polunin, M.A., F.L.S.

In spite of a distinguished Anglo/Russian parentage, which provided ample

genetic and environmental resources for a career in the arts, Mr Polunin undertook a training in biology like his older brother Nicholas, whose work as a plant geographer and conservationist will be well known to many Fellows. He was educated at St Paul's School and then at the University of Oxford. In 1938 he was appointed to the staff of Charterhouse and apart from war service, remained there in charge of the Biology Department until his early retirement in 1972. Those botanical holiday-makers, both amateur and professional, who rely on his books on the flora of Europe, are apt to forget that he has also established claims to respect in relation to the British flora. Thus he was a founder member and chairman of the Surrey Naturalists' Trust and, during the field work for the Botanical Society of the British Isles' Distribution Maps project, he literally put Godalming on the map by demonstrating that the 10 km square in which it is situated supports more species of flowering plants and ferns than any other area of comparable size in the British Isles.

His activities as a plant collector have been extensive. In addition to collections resulting from travels in southern Europe, he was the first western collector for over forty years to visit Nepal in 1949 when he travelled with Tilman's expedition. Later, in 1952, he was a member of the British Museum (Natural History)/Royal Horticultural Society Expedition that set the scene for the recently completed *Enumeration of the Flowering Plants of Nepal.*

However, it is as the author of soundly based, but accessible, guides to the plants of Europe that Mr Polunin's name has become a household word to those who like to combine holiday recreation with the pursuit of their natural history interests. There has been a great increase since the war in holiday travel, and the package deal has brought hitherto only dreamt of areas within the resources of even those with quite slender means. Museum curators and librarians receive many requests for a 'book I can use to identify the plants I shall see on my holiday'. Botanists as a whole have been slow to meet this demand, and this has been reflected by the translation of several of Polunin's books. His first book provided an introduction to the Mediterranean flora and this was followed by a guide to the plants of western Europe as a whole, soon supplemented by a concise version convenient for actual use in the field. More detailed treatments of the floras of the Iberian Peninsula and the Balkans followed, which not only provided guides to the plants, but also included substantial introductions to the ecology and plant geography of the areas, with summaries for the main regions of special botanical interest. All his books have been well illustrated with coloured plates from his own photographs. His early Himalayan interests are reflected by a new book, still in press, on the Himalayan flora, a region to which more botanical travellers are now managing to find their way.

The Society takes pleasure in recognizing the achievements of one who has brought pleasure to thousands during the course of a most fruitful secondary career. Since knowledge leads to understanding, his work has also contributed to the conservation and appreciation of the floras now easily accessible to so many.

Presidential Address

Professor Berry addressed the meeting on the *Evolution of British Biology*. This is printed in the *Biological Journal of the Linnean Society, 19:* 327–352, 1983.

Treasurer's Address

Excess of income over expenditure in 1982 was £4700. This helped us decide

that for the fourth year in succession there was no need for Council to recommend an increase by Fellows in their annual contribution.

Leaving aside the privilege of belonging to the Society it might be well to review briefly what Fellows receive for their membership. In 1982, contributions amounted to £35 000. From this Fellows received journals at a cost to the Society of £26 000. This is a direct return to Fellows of 74% of their contributions. The difference between income from Fellows and the cost of the journals, that is to say, £9000, contributed towards the maintenance of the building, staff salaries, the library, etc., which in all, for 1982, came to £64 000. The shortfall was made up by dividends and interest from capital, £14 000, the renting of rooms, £5500, profit from publications with Academic Press, £10 000, and other minor items that can be seen in the balance sheet. The market value of our investments, in other words our capital, at the end of 1982, was £189 000 with an average yield of 6.5%. In 1981 the figures were £137 000 yielding 8.0%. These changes, dependent upon factors entirely beyond our control, we regard as a satisfactory swing and roundabout between capital and income.

It would be dangerous, of course, to be too complacent. £189 000 may sound a healthy sum but whilst the Property Services Agency is responsible for the outside of Burlington House, the Society is responsible for everything that happens within. The fabric is always at risk and it would not take much to make savage inroads into capital.

Nevertheless, as the oldest Biological Learned Society in the world with a magnificent library but comparatively few Fellows, I think that financially we do rather well. For this we owe much to my predecessor, Jack Gardiner, to the Finance Committee who watch so carefully over our investments, to Sue Darrell-Brown who keeps so watchful an eye on our daily income and expenditure and, of course, to our publishers, Academic Press.

Referring to other matters, our collaboration with the British Ecological Society started well and is carrying on in the same fashion on both sides. The Mammal Society will be joining us later this year and we are negotiating to welcome to Burlington House the Society for Experimental Biology. I always stress that we aim for full collaboration between the Societies housed in this building and ourselves, but with no loss of independence or authority. I hope Fellows will agree that the significant academic status with which our name should always have been associated is once again coming to the fore.

Report of the Council

The year 1982–83 saw the retirement of Miss Elizabeth Young as Executive Secretary and the appointment of Commander John Fiddian-Green, R.N. (Retired) in her place.

Elizabeth Young worked herself unstintingly in the service of the Society. Although she was Executive Secretary for only three years, she achieved much in that time. Theodosius O'Grady's long reign at Burlington House was not an easy one for anyone to follow, and Council and Society owe a great debt to Miss Young for the way the Society's affairs continued to run so smoothly. Fellows throughout the world have contributed to a testimonial to Miss Young, and a cheque for £740 has been sent to her.

John Fiddian-Green has come to the Society after a distinguished career in

the Royal Navy. He was the unanimous choice of Council from a strong list of over sixty applicants. He took up his appointment on 10th November 1982.

The Society has seen changes on a number of other fronts, most of these representing initiatives from Council. The most important of these has been the successful conclusion of negotiations, referred to in the Treasurer's Report, with the British Ecological Society, which is now installed here—and we hope for a similar arrangement with the Society for Experimental Biology. The Mammal Society will be using Burlington House for its official address from 1 October 1983.

Aims and Objectives

These initiatives accord with a report to Council from a Committee chaired by the Botanical Secretary on 'Aims and Objectives', which drew largely on the questionnaires completed last year by a high proportion of Fellows. Council accepted firstly that the Society is ideally placed to act as a focal point for other more specialized or less well established organizations and to which governmental and non-governmental organizations can turn for advice.

As an example, the role played by the Society as co-sponsor of work concerning an umbrella organization for local Natural History Societies has led to a report from the Society to the Learned Societies' Committee of the Royal Society and British Academy. We are indebted to Sir Eric Smith for his continuing chairmanship of an *ad hoc* working group on the subject.

Secondly, Council agreed that better use ought to be made of the Rooms. The involvement of other Societies and the more flexible use of the Library for work, for research, and for social occasions is already seen as a short term outcome, which is, we believe, to be the benefit of the Society, our visitors, and our guests. For the longer term a detailed professional study of this building has been authorized.

The Library now has a reciprocal arrangement with the Library of University College London for the use of facilities and to conserve resources by avoiding the duplicate stocking of books.

The Fellows' comments in the questionnaire on the value of a Newsletter have led Council to agree to a trial of a regular bulletin.

In our efforts to look outward and forward, Council is aware of the need for publicity. The best publicity we had during the year was the filming and subsequent screening of the series of Evolutionary lectures in connection with the Darwin celebrations by Thames Television. However, to maintain some semblance of balance, our door plate also appeared on BBC Television in the Wallace programme over Christmas.

In pursuing the aim for closer co-operation with other Societies, Council now has a reciprocal exchange of observers on Council with the Systematics Association, many of whose members are, of course, Fellows of the Society anyway.

To maintain freshness Council has agreed that there should be a regular turnover of Committee membership. This is not in any sense of dissatisfaction with the long serving members, for whose devotion Council is most grateful, but rather to allow a younger and wider membership an increasing share in the running of the Society.

Meetings and Symposia

The series of Sixth Form lectures, which were again most ably organized by Mr Nigel Purchon, ran to packed houses—indeed we could easily fill a much bigger meeting room judging by the interest engendered.

1982 was of course the year of the centenary of Charles Darwin's death. In the Rooms here, in addition to the TV series, we ran a most successful joint symposium with the Systematics Association, 'Darwin—a hundred years on', and later in the year, to quote *Nature,* "Darwin himself might have liked most to attend the last public event—a symposium on 'Evolution in the Galapagos' hosted by the Linnean Society on 8 December in London".

Publications

The journals continued to increase their circulations, albeit slowly. A further six volumes, Nos. 20–25, of the *Synopses Series* appeared. Council is grateful to the Zoological Secretary for her past and continuing efforts with the *Synopses,* also to the Journal Editors who do so much to keep the Society in the forefront of biological thinking and, equally important, financially viable, and to all who help with refereeing and the like.

Personalities

His Royal Highness The Duke of Edinburgh honoured the Society by his presence on 17 March and signed the Roll and Charter book to become an Honorary Member.

The Rooms have also been visited by His Excellency the Swedish Ambassador and his wife, Mrs Leifland.

Staff and helpers

The thanks of the Society, in addition to those already mentioned, must be extended to the Staff and the army of helpers. Amongst the former are the two Executive Secretaries, and Sue Darell-Brown and Gina Douglas who spent many hours running the finances, the Rooms and the Library for the benefit of the Fellowship. Amongst the latter are Margot Walker who has now finished the portrait catalogue, Ann Whitehead with her advice on cataloguing, Dr Ethel Barrow who has continued with her augean cleaning task, Mr Desmond Cull who has completed the cataloguing of Sir J. E. Smith's carpological collection, and the 'Ladies of Kent' who visit us every Thursday and continue with the cleaning of books and cataloguing of the opuscula.

The future

Council's thoughts now turn to the future. The next few years will be important as we approach our bicentenary, and Council hopes that Fellows will be forthcoming with ideas and suggestions to ensure that the event is celebrated in proper style.

Fellowship

Total membership has remained steady at about 1700. During the year we have recorded the deaths of 24 Fellows and Members, including Professor Tom Harris who was President from 1961 to 1964, three Foreign Members and Mr Arthur Ellis, a former H. H. Bloomer Award winner. We also recorded the death of Miss Blanche Henery who was also a former H. H. Bloomer Award winner.

Report on the membership
Foreign members elected

Professor Zofia Kielan Jaworowska Poland
Dr Wu Hsien Wen P.R.C.

92 Fellows elected

18 November 1982

Prof. Derek John Anderson, BSc., Ph.D.
Yasmin Shaheeda Baksh, BSc.
Prof. George Baron, Ph.D.
Alfred Linn Bogle, M.S., Ph.D.
Herbert James Campbell, BSc., Ph.D.
Jane Sara Churchfield, BSc., Ph.D. (from Associate)
John Edward Duckett
Prof. Enrique Forero, Ph.D.
Paul Geoffrey Mills Foster, M.A.
Anthony Edmund Gentil
Prof. Malcolm Howard Hast, MSc., Ph.D.
Jean Hawkswell
David Julian Heath, BSc., Ph.D.
Timothy Hooker, M.A.
M. E. Howgate
David Thomas Jones, M.A.
Dr Mohammad Ali Khan
John Massey Stewart
Prof. Alessandro Minelli
Rodney Oliver Moffett, MSc.
Frances Mussett, BSc.
Virginia Mary Purchon
Stan Philip Rachootin
Amar Nath Rai, MSc., Ph.D.
Anantanarayanan Raman, MSc., Ph.D.
Joseph H. Reichholf, Ph.D.
Louise Roth, Ph.D.
Hilke Ruhberg
Bernard A. Wood, Ph.D.
Prof. Michael Zohary, Ph.D.

17 February 1983

Clive Edward Bowman, BSc.
Anne-Maria Brennan, MSc. (from Student Associate)
Kenneth Ley Ian Campbell, BSc., Ph.D.
Robert John Francis Carr, BSc., MIBiol.
Prof. Richard Gareth Davies, DSc.
Geoffrey W. H. Davison, BSc., Ph.D.
Arthur Hollman, M.D., F.R.C.P.
Ingemar Lennart Sievert Jacobsson, BSc., LLM., LL.D.
Suresh Chandra Jain, MSc., Ph.D.
Hazel Peggy Jakes
Dr Jorge León
Walter H. Lewis, M.A., Ph.D.
Alex McArthur, M.A., BSc., MIBiol.
P.C. Pande, MSc., Ph.D.
Piero Piani
Joao Murca Pires, Ph.D.
Paul Anthony Rees, BSc., Ph.D., MIBiol.
Jakob Schneller, Dr.Phil.
Prof. Otto L. Stein, M.S., Ph.D.
Stephen John Torode (from Associate)
Lyall Watson, Ph.D.
Lars Arvid Werdelin, BSc., Ph.D.
Helen Balajama Wilcox, BSc., Ph.D.
Øystein Wijg

14 April 1983

Michael James Benton, BSc., Ph.D.
Richard David Burden, BSc.
Eric Frederick Freeman, MRSC.
James Halton Hemsley, BSc
Godfrey Ernest Koll
Prof. John Melville Malins, M.D.
Ivan Nielsen, MSc., Ph.D.
Timothy F. Paine, M.D., M.R.C.P.
Charles Aloysius Quest-Ritson, B.A.
John Pemberton Ryder, MSc., Ph.D.
Robert Pickford Scase
Johan van Scheepen

24 May 1983

Antoni Aguilella, MSc.
Adewale O. Akande, MSc.
Cyril Donald Bradshaw
Dr Santiago Castroviejo, Ph.D.
Paul Miles Catling
Mathhew John Colloff, BSc.
James Alwyne Compton
David George Dunham, BSc.
Michael Robert Etheridge, MA.
Dr Syed Wafadar Husain Husaini
Dr Syed Altaf Hussain, MSc., Ph.D.
Dr Mohammad Shamim Jairajpuri, MSc., DSc.
Robert James Johns, MSc.
Dr Yahya Ysuf Karatela, MSc., Ph.D.
Dr Phyllis Kathleen Knight-Jones, MSc., Ph.D.
K. G. Muralidharan, MSc.
Renato Nisbet.
R. I. Patel, MSc., BA.
Dr Christopher John Peat, BSc., Ph.D.
Thomas Harold Perkins, B.S., M.A.
Mark J. Plotkin.
Dr Andrew Anderson Siwela, MSc., Ph.D.
Perumal Mala Sivalingam, DSc.
William Russell Sykes, BSc.
Dr M. J. A. Thompson, MRCS., MB.
Prof. Dr. Bernhard Ziegler.

8 Associates elected

18 November 1982

Jeremy Howard Marshall
Lawrence Bernard Martin
Paul Simons

14 April 1983

Michael David Saunders, BSc.

17 February 1983

Gillian Eatough
Caroline Sheila Hughes
Robert Mark Andrew Nesbitt

24 May 1983

Elizabeth Evans, MSc

1 Student Associate elected

18 November 1982

Sally Hayns

27 Fellows and 1 Student Associate have withdrawn

32 Fellows and 2 Associates have been removed for non-payment of Annual Contribution, but 11 Fellows have been reinstated following payment of overdue Annual Contributions

Queen's birthday honours

Dr Miriam Rothschild	CBE	Mr Christopher Parsons OBE
Mr Martin Bendix	OBE	

21 Fellows have died

Dr Tyge Wittrock Böcher, Dr Phil. Died: March 1983. Elected: 24 May 1974.

Mary Sherwood Campbell. Died: 11 August 1982. Elected: 7 March 1935.

The Viscount Chaplin, Anthony Freskyn Charles Hamby, Born: 4 December 1906. Died: 18 December 1981. Elected: 29 April 1948.

Arthur Erskine Ellis, M.A. H. H. Bloomer Award 1970. Born: 1 October 1902. Died: 28 February 1983. Elected: 23 January 1931.

Professor George Eric Howard Foxon, M.A., M.Sc. Born: 1908. Died: 16 November 1982. Elected: 6 December 1934.

Dr Charles Aubrey Hamilton Franklyn, Hon. M.A. (Malaya), B.S., M.R.C.S., L.R.C.P., F.S.A. (Scotland). Died: November 1982. Elected: 28 November 1942.

Professor Karl von Frisch, Born: 20 November 1886. Died: 12 June 1982. Elected: 24 May 1956.

Stanley Earl Greenwood, PhC, M.P.S., F.R.S.A. Born: 3 October 1903. Died: 21 October 1982. Elected: 17 October 1968.

Professor Tom M. Harris, M.A., Sc.D., F.R.S. Born: 8 January 1903. Died: 1 May 1983. Elected: 25 November 1937. President Linnean Society 1961–1964. Linnean Medal 1968.

Murray Ross Henderson, Born: November 1899. Died: November 1982 Elected: 19 January 1922.

Clifford Bert Holliday, F.P.S. Born: 5 January 1913. Died: 17 January 1983. Elected: 16 March 1978.

Robert William Legge, Born: 31 July 1937. Died: 21 January 1983. Elected: 18 January 1973.

Professor Carl Hildebrand Lindroth, Died: 23 February 1979. Elected: 2 May 1963.

Chrystabel Prudence Goldsmith Procter, Born: 1894. Died: June 1982. Elected: 8 December 1932.

Lt. Col. Donald Rhind, C.M.G., O.B.E., B.Sc. Born: 26 September 1899. Died: 15 December 1982. Elected: 29 April 1948.

Dr Ouda Jumaa Salmeen, Born: 23 April 1952. Died: April 1982. Elected: 17 March 1977.

Peter Karel Sartory, F.R.M.S. Born: 1908. Died: 1983. Elected: 24 May 1950.

Frederick Charles Stinton, F.G.S. (H. H. Bloomer Award 1976. Born: 5 January 1916. Died: 17 December 1982. Elected: 4 November 1976.

Professor James Sterling Wilkie, B.Sc., Ph.D. Born: 1906. Died: 1982 (prob. June). Elected: 16 April 1959.

Professor Michael Zohary, Ph.D. Born: 9 April 1898. Died: 15 April 1983. Elected: 18 November 1982.

Benefactions

In accordance with the Bye-Laws, Chapter 19, Section 1, all donations of £20.00 and upward received in the past year are listed.

F. R. Goodenough, Esq. —£200 to the Goodenough Fund
Professor E. Mayr, F.M.L.S. —£700
Queen Elizabeth College —£30
D. P. Taylor-Pescod, Esq. —£36

Gifts to the Library

A further addition to the Library's collection of the works of Maria Sibylla Merian was the presentation by Mr Gelbtuch of Pion Press of the commentary to the facsimile edition of the *Metamorphosis Insectorum Surinamensium.*

Regular publications by Prof. G. Pilleri continue to be welcome additions, as are publications from the Royal Societies of London and Edinburgh, presented by Dr G. Pontecorvo.

A visitor from the Georgian Socialist Republic who came to work on the Linnaean Herbarium presented us on her return with Vols 1–7 of the flora of Georgia.

Fellows have continued to present us with copies of their publications and reprints for which we are most grateful. In particular, the Library Open Evening 'bring and buy' book sale on 17 February 1983 brought a large number of books into the building some of which were used to supplement the Library's holdings. Special thanks should again be given to Dr Isabella Gordon, and also to Mrs J. L. Burton, both of whom have made substantial donations of books and periodicals.

OBITUARY

Frederick Charles Stinton (1916–1982)

Fred Stinton, F.L.S. since 1976, the year in which he received the H. H. Bloomer Award, died in December 1982, aged 66. Fred spent his life in Bournemouth. After leaving Bournemouth School at the age of 16, he worked for 41 years in hospital pathology laboratories, first at Boscombe and later at Christchurch. He retired, as Senior Technician, in 1981. But Fred's international reputation came from his spare-time work as a palaeontologist. He began collecting fossils as a boy, and through Bournemouth Natural Science Society he met A. G. Davis and Arthur Wrigley, who helped direct his energies towards fossil otoliths, the 'ear-stones' of fishes. Here he found a rich and almost untouched world, and by the end of his life this self-taught man had described around 300 species of Mesozoic and Tertiary teleost fishes, mostly from the English Eocene. He realized that the success with which fossil otoliths can be identified depends on a wide and thorough knowledge of the otoliths of Recent fishes, knowledge which cannot be acquired by reading, but only from a collection of properly identified Recent otoliths. Fred built up a collection of Recent otoliths containing about 3000 species, many acquired by his own efforts in Hawaii, Hong Kong, Japan, South Africa and in European waters. This collection of Recent otoliths, along with his huge collection of fossils, have been bequeathed to the British Museum (Natural History), which was already in his debt for a lifetime's donations.

Between 1949 and his death, Fred Stinton published almost 40 papers, chief among them his Palaeontographical Society monograph on otoliths from the English Eocene (1975–1983), of which one part remained to be completed at his death. In addition to the Linnean's H. H. Bloomer award (see *Biological Journal of the Linnean Society, 8:* 357–8), he was awarded the Foulerton Award of the Geologists Association (1968) and the R. H. Worth Prize of the Geological Society of London (1969). He is survived by his wife and daughter.

LIBRARY

The first Manpower Services Commission team of Library Assistants has now completed a year of book cleaning and labelling and has dealt with most of the books in the Reading Room. A new team is being appointed to continue labelling books in the remainder of the Library. We say farewell and thank you to Lauren Agnew, Nick Bloom, Paul Chopra and Jeremy Johnson.

Donations

We are most grateful to the following for donations:

Miss P. Edwards	Edwards, P. (Ed.), British Museum (Natural History), 1981. *The Journal of Peter Good, Gardener on Matthew Flinder's Voyage to Terra Australis 1800–1803:* pp. 213, London.
Dr E. Barrow	Carr, D. J. (Ed.), British Museum (Natural History), 1983. *Sydney Parkinson, Artist on Cook's Endeavour voyage:* pp. 300. London.
The author	Gunther, A. E., 1984. *An Introduction to the Life of the Rev. Thomas Birch 1705–1766:* pp. 118. Halesworth.
Harley Books	Health, J. & Emmett, A. M. 1983. *The moths and butterflies of Great Britain and Ireland, Vol. 10. Noctuidae and Agaristiidae:* pp. 459. Colchester.
Dr G. T. Prance	Rizzini, C. T., Kubitski, K. & Prance, G. T., Instituto Nacional de Parques, 1982. *Flora de Venezuela Vol. IV(2) Loranthaceae and Chrysobalanceae:* pp. 487. Caracas.
The author	Kunkel, G., 1983. *Malas Hierbas de Almeria y su Importancia Socioeconomica:* pp. 181. Almeria.
Review copy	Margulis, L. & Schwartz, C. V., 1982. *Five Kingdoms, an Illustrated Guide to the Phyla of Life on Earth:* pp. 338. San Francisco.
Review copy	Moore, D. M., 1983. *Flora of Tierra del Fuego:* pp. 396. Oswestry.
The author	Perring, F. H., 1983. Royal Society for Nature Conservation, 1984. *Guide to British Wild Flowers:* pp. 126. Feltham.
The author	Wood, H. J., 1983. *Pelargoniums, Geraniums and their Societies:* pp. 96.

Accessions

Accessions to the Library during the period December 1983 to April 1984 include the following items:

American Ornithological Union, 1983. *Perspectives in Ornithology,* A. H. Brush & G. A. Clark (Eds): pp. 560. Cambridge, Mass.

Atlas Florae Europaeae, Vol. 6: pp. 176. Helsinki.

Bamps, P., Lebrun, J. P. & Stork, A. C., 1983. *Index Iconographique des Plantes Vasculaire d'Afrique 1935–1980,* Vol. 2. Cli-Hey, Maison Alfort.

Bentley, B. & Elias, T., 1983. *The Biology of Nectaries:* pp. 259. New York.

Brignoli, P. M., 1983. *A Catalogue of the Araneae Described Between 1940 and 1981:* pp. 755 Manchester.

El-Buni, A. M. & Rattan, S. S., 1981. *Check List of Libyan Fungi* (Supplement to the Flora of Libya): pp. 169. Tripoli.

Ellis, R. G., 1983. *Flowering Plants of Wales:* pp. 338. Cardiff.

Flora Neotropica, 1983. Monograph No. 36, Connaraceae: pp. 208. New York.

Monograph No. 37, Sarcosomataceae: pp. 15. New York.

Groom, N., 1981. *Frankincense and Myrrh, a Study of the Arabian Incense Trade:* pp. 285. London.

Harding, K. A., 1983. *Catalogue of New World Amphibians:* pp. 406. Oxford.

Kuhbier, H. *et al.,* 1984. *Biogeography and Ecology of the Pityusic Islands:* pp. 704. The Hague.

FORTHCOMING PAPERS IN THE JOURNALS

Biological Journal

ENDLER, J. A., Progressive background matching in moths and a quantitative measure of crypsis.

BOAG, P. T. & GRANT, P. R., The classical case of character release: Darwins' finches (*Geospiza*) on Isla Daphne Major, Galapagos.

LEAMY, L. & THORPE, R. S., Morphometric studies in inbred and hybrid house mice. Heterosis, homeostasis and heretability of size and shape.

JANSEN, K. & WARD, R. D., Microgeographic variation in allozyme and shell characters in *Littororina saxatilis* Olivi.

HALE, W. G., Evolutionary trends in wading birds.

CHARLESWORTH, D., Androdioecy and the evolution of dioecy.

FUSSEY, G. D., The distribution of the two forms of the woodlouse, *Irichoniscus pusillus* Brandt (Isopoda: Oniscoidea), in the British Isles: a reassessment of geographic parthenogenesis.

MCAULEY, P. J., Variation in green hydra. A redescription of three cloned strains of *Hydra viridissima* Pallas 1766 (Cnidaria: Hydrozoa) isolated from a single site.

ALLEN, J. A. & CLARKE, B. C., Frequency dependent selection: homage to E. B. Poulton.

LIVSHITS, G., FISHELSON, L. & WISE, G. S., Genetic similarity and diversity of parthenogenetic and bisexual populations of the freshwater snail *Melanoides tuberculata* (Gastropoda: Prosobranchia).

USHER, M. B. & EDWARDS, M., A dipteran from south of the Antarctic circle: *Belgica antarctica* (Chironomidae) with the description of its larvae

BLOCK, W., BURN, A. J. & RICHARD, K. J., An insect introduction to the maritime antarctic

HANKEN, J., Miniaturization and its effects on cranial morphology in Plethodontid salamanders, genus *Thorius* (Amphibia: Plethodontidae). 1. Osteological variation.

Zoological Journal

CLARK, P. F., A comparative study of zoeal morphology in the genus *Liocarcinus* (Crustacea: Brachyura: Portunidae).

RIEPPEL, O., The structure of the skull and jaw adductor muscle in the Gekkota, with comments on the phylogenetic relationships of the Xantusiidae (Reptilia: Lacertilia).

TILLIER, S., Relationships of gymnomorph gastropods (Mollusca: Gastropoda).

KATHIRITHAMBY, J., SPENCER SMITH, D., LOMAS, M. B. & LUKE, B. L., Apolysis without ecdysis in larval development of a strepsipteran, *Elenchus tenuicornis* (Kirby).

HARRISON, K., The morphology of the sphaeromotid brood pouch (Crustacea: Isopoda: Sphaeromatidae).

BATRA, V., Prevalence of helminth parasites in three species of cichlids from a man-made lake in Zambia.

McN. ALEXANDER, R., Mechanics of posture and gait of some large dinosaurs.

PLATT, H. M., The free-living marine nematode genus *Sabatieria* (Nematoda: Comesomatidae). Taxonomic revision and pictorial keys.

MOORE, P. G., A new deepwater species of Amphipoda (Crustacea) from Otago, New Zealand and a note on another little known species.

RUDMAN, W. B., The Chromodoridae (Opisthobranchia: Mollusca) of the Indo-West Pacific: *Chromodoris aureomarginata, C. verrieri* and *C. fidelis* colour groups.

McCARTHY, C. J., Monophyly of elapid snakes (Serpentes: Elapidae). An assessment of the evidence.

GIBSON, R., Antarctic nemertens: Heteronemertea—descriptions of new taxa, reappraisals of the systematic status of existing species and a key to the heteronemerteans recorded south of latitude 50°S.

Botanical Journal

DULBERGER, R. & HOROVITZ, A., Gender polymorphism in flowers of *Silene vulgaris* (Moench) Garcke (Caryophyllaceae).

YEO, P. F., Fruit discharge type in *Geranium* (Geraniaceae) and its evolutionary implications.

SAM, S. J., The structure of the apical meristem of *Isoetes engelmannii, I. riparia* and *I. macrospora* (Isoetales).

DICK, M. W., WONG, P. T. W. & CLARK, G., The identity of the oomycete causing 'Kikuyu Yellows', with a reclassification of the downy mildews.

EDMONDS, J. M., *Solanum* L. section *Solanum*—a name change in *S. villosum* Miller.

CHANDEL, K. P. S., LESTER, R. N. & STARLING, R. J., The wild ancestors of urid and mung beans (*Vigna mungo* (L.) Hepper and *V. radiata* (L.) Wilczek).

SCHMID, R. S., CARLQUIST, S., HUFFIRD, L. & WEBSTER, G., Systematic anatomy of *Oceanopapaver,* a montypic genus of the Capparaceae from New Caledonia.

ASHTON, P. J. &WALMSLEY, R. D., The taxonomy and distribution of *Azolla* species in southern Africa.

HAQUE, M. Z. & GODWARD, M. B. E., New records of the carpogonium in Compositae and its taxonomic use.