

# THE BIOLOGY CURATOR

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BIOLOGY CURATORS GROUP

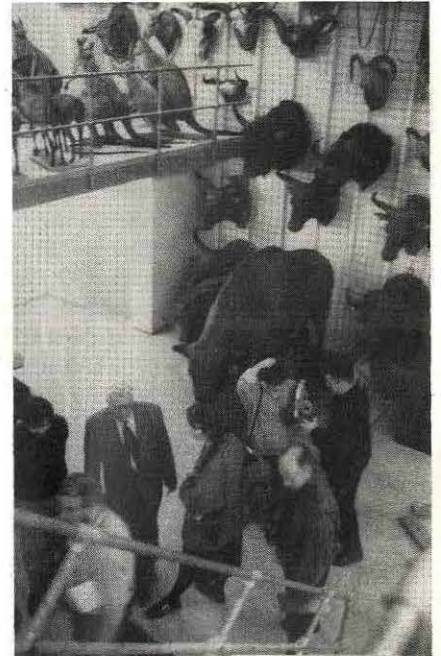


Well, you can't say that you weren't warned. If you missed it, you missed the event of the year (if not the century) and at least it's stopped people talking about Madrid. Yes, if you haven't already guessed it, I'm talking about the Amsterdam trip. By now you are bound to have been bored to tears by people who were actually there but - just to rub salt into the wound we feature no less than three accounts of aspects of the trip in this issue. (Well what did you expect?). The intrepid excursionists have already expressed their thanks to Kathie Way in a more tangible way (hic!) but just for the record we would all like to thank Kathie for all her hard work which led to a very successful and enjoyable study visit. We would likewise wish to thank our Dutch hosts for making the BCG so very welcome and of course for the ample sustenance which they kindly provided. Many of us will be

making return visits in the near future. Your committee is already considering future venues for study trips so watch out for news in future issues of TBC.

The new publication seems to have gone down well to judge from the comments received by the Editor and other committee members. But please don't be reticent if we are producing something which may not suit your needs - tell us. One or two cosmetic changes have been introduced in this issue but the format is basically the same as issue one. Your Editor now has a Fax for those last minute contributions - 0738 443505 (-though contributions in Wordperfect 5.1 are to be preferred-Ed.)

Many people seem to be beavering away on the documentation of their collections but there does not seem to be much pooling of information when it comes to the Natural Sciences. It was therefore very encouraging to take part



*Mounted vertebrate storage,  
Amsterdam.*



*Question is, what do we do with Mike now he's expired?*

in the MDA's SPECTRUM workshop at Portsmouth last October. Although dealing mainly with procedures (Spectrum is after all a procedural standard) there were sessions dealing with the natural sciences which your editor had the pleasure of chairing jointly with geologist Phill Doughty. The sessions were hard work but some very useful discussions took place which were all the more useful because not only were there natural scientists present from different types of museum but there were also documentation specialists and registrars from national and non-national museums. A suggested agenda for carrying forward the development of SPECTRUM was proposed and I am sure that BCG will be involved in this important work.

**FishGopher on line** - Yes, its one of those wonderful inventions now available for those of you who cruise the information superhighway. This is an integrated Internet fish collection catalogue allowing simultaneous query access to a simulated union of collection catalogues by using Gopher+ software to fan out a single query to multiple databases. Produced by The Academy of Natural Sciences of Philadelphia, Cornell University, Field Museum of Natural history, Harvard University, The University of Alabama, University of California at Berkeley and the University of Michigan, FishGopher can be accessed on the main menu of the Biodiversity and Biological Collections (BBC) Gopher, located on: muse.bio.cornell.edu.

## PEOPLE

More news from Bristol where **Mrs Anne Hollowell** retired as Keeper of Biology in December after 32 years service to Bristol Museum and Art Gallery. Anne began her career within the Schools Section before transferring to become Assistant Curator, Natural History and then Curator of Natural History. She was head of the Natural History section until it amalgamated with the Geology Section in 1994. Anne was an examiner for the M.A. Diploma and is a Fellow of the Museums Association.

**Samantha Hallett** moves from the National Museums and Galleries on Merseyside to be Curator of Biology at Bristol. Samantha took up her post on January 9th.

**Anne Abernethy**, Assistant Keeper of Natural Sciences at Perth Museum, moves to the Ulster Museum as Assistant Registrar in February.

**Jean Sinclair** a volunteer known to the Hancock Museum is looking for employment, preferably paid, in a museum in the UK or overseas. Jean's background is in marine biology and she has a wealth of expedition experience plus work for the Royal British Columbia Museum and the British Antarctic Survey. Anyone who has suitable work for Jean is asked to contact her direct on 091 265 4639 or at 142 Cartington Terrace, Heaton, Newcastle upon Tyne NE6 5SJ.

## DIARY DATES

**Feb 20 1995.** BCG 'Bones' Meeting. Grosvenor Museum, Chester. An instructive and entertaining day

guaranteed. Further details from Steve Woolfall, Grosvenor Museum, tel 0244 321616, Fax 0244 347587.

**Mar 8-9 1995.** The good, the bad and the disaster. UKIC Natural Sciences Section AGM and Conference at The Natural History Museum, London. Papers and short talks are still required. Offers or further information from Clare Valentine, The NHM, tel 071 938 9252.

**Apr 19-21 1995.** International Conference on the Value and Valuation of Natural History Collections. Manchester. Programme now available. Abstracts of papers will form the greater part of the next issue of The Biology Curator. Further details from Charles Pettitt (address on back page).

**Jun 2-6 1995.** Society for the Preservation of Natural History Collections (SPHNH) Annual Meeting. Royal Ontario Museum, Toronto, Canada. The programme of SPHNH '95 *Preserving the Record of Nature through Countless Ages* will include papers and posters on natural history collections management issues. The Education and Training Committee of SPHNH is offering a training workshop on "Managing the Modern Herbarium" on June 5-6. For further information on the meeting and/or the workshop, contact Janet Waddington, Royal Ontario Museum, 100 Queen's Park, Toronto, Ontario, Canada M5S 2C6.

**Jul 2-7 1995.** ICOM Triennial Conference. Stavanger, Norway. Conference programme now available. The theme for the Natural History Committee meeting is "Natural History Museums and Biodiversity". It is hoped that discussions will range widely over the political aspects of conservation, documentation, collection management, education and public awareness. Joint sessions with some other International Committees are also planned.

Remember: the conference is open only to ICOM members and, if you are not already one, you are urged to join now. You can then opt to be a voting member of the Natural History Committee. (Grants towards attendance are available from ICOM UK for members of more than one years standing - Ed). Further information about ICOM membership is available from Ms Nell Hoare, Textile Conservation Centre, Apt 22, Hampton Court Palace, East Molesey, Surrey, KT8 9AU. Tel 081 977 4943. For information on the

Natural History Committee contact Mr Christopher Hill, Clarence Road, Kew, Surrey, TW9 3NL. Tel 081 940 5272.

**Aug 6-10 1995.** American Institute of Biological Sciences Annual Meeting. San Diego, California. The AIBS is requesting proposals from groups or individuals seeking to organise discussions, workshops or Symposia at their 1995 meeting. The ABIS meeting provides an excellent forum for outreach/demonstration activities and for scientists and policy makers to express their views on issues relating to biology and biologists. Proposals should indicate type of session and include a provisional title, a one paragraph justification, special room requirements and any other information that might help AIBS determine the suitability of the proposed session. For further information contact The AIBS Meetings department, 730 11th St NW, Washington, DC 2001-4521, or tel (202)628 1500, Fax (202)628 1509.

**Sep 11-15 1995.** Museums Association Conference. Leicester. The two main themes are 'Beyond the Gallery' and 'Creativity in the Museum'. Delegates will be able to book their places by April and discounts will be offered for early bookings. Further details from the MA, 42 Clerkenwell Close, London EC1R 0PA.

**Aug 20-24 1996.** Second Congress and International Symposium on the Conservation and Preservation of Natural History Collections. Madrid 2!. Watch this space for future announcements.

## BCG COMMITTEE NEWS

The last BCG Committee meeting was held on November 6th in the middle of the North Sea. Ten of the twelve committee members were present, no-one was sea-sick!

Items dealt with since the last committee meeting included: letters to Portsmouth City Council and to Newham Borough Council about our concerns regarding collections at risk; contact with Nottingham Museum over a proposed taxidermy training course; articles on the Orphan Collections Working Party and the Brighton seminar; institutional memberships; 20th anniversary meeting; consultation over the Leicester Natural History Curators course; the bones meeting and index compilation.

Items covered at this committee meeting included: moving the bones

meeting from Birmingham to Chester (see diary dates above); holding the 20th anniversary meeting at Bolton; letter of protest sent to SEMS over the closure of the Natural Sciences Conservation Unit; offers of assistance to Leicester in the form of extra speakers for evening talks to complement the course; and next years M.A. Conference. The Linnaean Society received the support of BCG in the face of their potential eviction from Burlington House. BCG members are also to be involved in the planning of Madrid 2 - which will be held in Cambridge in 1996.

The nature of the venue prompted discussions on the BCG constitution, Registration Phase 2 and the M.A. annual report to be held over until the next meeting. This will be held in Chester on Sunday (that's dedication for you) 19th February.

As this meeting covered the agenda items in record time, it was suggested that we hold all future committee meetings on board ferries - with an option on trains and airliners. The idea of holding one in a mini going along the M1 is perhaps less than practical.

### ORPHAN COLLECTIONS MEETING: AN OVERVIEW

On 12 September this year BCG and GCG held a meeting before the MA conference in Brighton, which looked at the problems faced by orphan collections, ie collections with no qualified curator to care for them. This was the first important result of a working party set up to look at this problem.

The meeting was split into four sections. The first section looked at the current state of such collections in this country, as represented at this meeting by surveys and by work done in the North East, North West and South East regions, as well as the state of Archaeological collections in the West Midlands. Between them they gave what is probably a typical, and generally depressing, picture of the country as a whole.

The second section looked at the enabling side, with accounts of the setting of standards, so far in Biology, Geology and Archaeology, of registration, collections research and the potential of collections. This gave some idea of the background against which a strategy for the care of these collections might be developed.

The third section looked at ways in which the problems identified are

being or might, in the future, be tackled. This section concluded with a summary of the findings of the working party. As this also served to run quickly through the topics covered by the meeting itself, I shall give an even briefer version, consisting of the headings of this summary, here:

#### A) Aims of the working party:

- 1) To review activities to date.
- 2) To organise the Brighton meeting.
- 3) To try and develop strategy for the future.
- 4) To promote useful action on these collections.

#### B) Findings:

- 1) Efforts to date have tended to be short term projects.
- 2) They are often based on voluntary efforts, or
- 3) Based on the goodwill of institutions and/or individuals.
- 4) The efforts of the AMC's are stretched very thin by chronic underfunding.

#### Results of the above:

- 5) There is a lack of the necessary continuity and, often, consistency.
- 6) Goodwill is welcome and necessary, but is also irregular, variable, provides no guarantee of good workmanship and no recompense against poor workmanship.
- 7) After many short term projects, collections may be abandoned again, providing no long term benefit and wasting the resources that were put in.
- 8) Finally, no more than a small part of the whole problem can be dealt with on this basis.

As an adjunct to 6) above, I should say that poor workmanship is now very rare, but any activity based mainly on goodwill will always have this potential problem, which should not exist in a professional environment.

#### C) Factors for consideration:

- 1) Registration II. Will it have teeth, and what will the responses be.
- 2) DNH policy review. A possible opportunity for improvement.
- 3) Local Government reorganisation. Will certainly have effects, some good and some bad.

4) Cultural attitudes. The spending of (relatively) large sums on art collections but not on NH collections is still seen as justified.

5) Cessation of Natural Sciences Incentive Funding, just as its value was beginning to be appreciated.

6) Value and Valuation of Collections conference, 1995. This will give an airing to many of the relevant issues.

#### D) Possible options:

- 1) Employment of a professionally trained curator.
- 2) Shared curatorial services.
- 3) Use of freelance curators/conservators.
- 4) Use, (paid), of curators from neighbouring institutions.
- 5) Programs of voluntary work.
- 6) Transfer of collections.
- 7) Disposal of collections.

The issues and factors above were all discussed at some length during the meeting itself, either by way of the papers or during the discussion period, and much of this will be published in the near future. The working party did not feel able to discuss strategy at any length until after the Brighton meeting, although a couple of very general ideas were proposed at the meeting, to wit, the establishment of regional collections centres and schemes following the NWCRU/NWMS model, which has already achieved some modest successes.

The last section was a forum for discussion in which many points were covered and general support for the aims of the working party was established. With a few exceptions people were unable to commit themselves to direct support, though this was expected. No conclusions were drawn as to strategy, and it would have been misplaced to hope for any such conclusions. However two further main steps were decided upon. The first was to gather together the papers presented at the meeting with the aim of publishing them as the main theme of an issue of the *Museums Journal*. This should have the result of presenting the situation as it stands at present to the wider museum community, which we feel to be essential if anything meaningful is to be achieved in the long term. The second step is to develop the working party, by bringing in a wider range of participants, (eg MGC, MA, AMC's

etc), and encouraging some of the well established members of our community to sit on it. It would have the aims of developing strategy, generating support, especially financially, and initiating action. To this end a report will be presented to MGC, who will hopefully be able to provide direct support for the working party. I hope to be able to bring further news before long.

Steve Thompson, Scunthorpe Museum

## REVIEWS

### CONSERVATION AND THE HERBARIUM - CONFERENCE REPORT.

"If an extreme caricature were to be painted between the attitudes of botanist and conservator, the conservator might be seen by the botanist as a come-lately to the field, ignorant of the 400 year tradition of botanical curation. The conservator might paint an equally black picture of the botanist as thoughtlessly following out-of-date practices without any understanding of conservation principles and modern methods." Angus Gunn, Conservation and the Herbarium Conference Report.

The Institute of Paper Conservation's conference took place at Liverpool Museum on 14th May 1993 (see BCG Newsletter, Vol. 6, No. 2.). Its aim was to bring together botanists (i.e. curators/researchers) and conservators, both in terms of speakers and delegates, to air their views and experiences on a topic of common interest and so dispel any hint of the above stereotypes. Angus Gunn concluded his paper with a request for more dialogue and that is exactly what this report represents. 41 pages of curatorial points-of-view and conservational experiences introduced and edited by Bob Child (Head of Conservation, N.M.W.).

The order of papers in the report is at variance with that of the day and so, in keeping with this, this review pays attention to neither. There are two papers from Cardiff. Firstly, Bob Child's "Environmental and Pest Control in Herbaria" provides a marvellously comprehensive and yet succinct account of exactly what the title suggests while Vicky Purewal (conservation officer, N.M.W.) details how a wide range of conservational parameters and a variety of specimen material were combined to carry out a

"Collections' Condition Survey of Herbarium and Non-herbarium Material in the National Museum of Wales Botany Storerooms".

Curatorial perspectives are put forward by Angus Gunn (curator of the Extra-European Herbarium, N.M.G.M.) and Rob Huxley (Head of Curation Division, Department of Botany, N.H.M.). In "Past and Current Practices: The Botanist's View" Angus Gunn provides a brief history of herbarium methods and weighs up the need for information retrieval from the specimen versus their preservation, stating a museum fundamental - "herbarium specimens are collected to be used". Rob Huxley continues this theme in "Aspects of herbarium Conservation and Management at the Natural History Museum", identifying conflicts between use and conservation and describing his departments attempts to minimise these. Brief mention is also given here to a means of indicating the state of collections and identifying priorities for conservation by formatting data on specimen and label condition into a matrix.

The remaining three papers constitute case studies of ongoing conservation projects. Kate Edmondson (senior paper conservator, Kew) describes "The Conservation of Botanical Prints and Drawings at the Royal Botanic Gardens, Kew" through the establishment of the Preservation Unit, its consequent preservation programme to stabilise the collections and the particular hands-on conservation techniques employed. Returning to Liverpool, N.M.G.M.'s under-construction Conservation Centre heavily underlines its interest in developing conservational expertise. Two papers relating to current project serve to illustrate this. Firstly the conservation of one of Liverpool Museum's most important collections, the 10,500 strong Royle Herbarium, is described in detail (complete with photographs) by conservator Donna Hughes and senior paper conservator Nicola Walker. This exemplifies a joint project between the Paper Conservation and Botany Departments with the collection being simultaneously conserved and re-curated. Secondly, organics conservator, Tracey Seddon catalogues the range of equipment and materials (including saliva!) experimented with and ultimately used in the conservation of Liverpool Museum's mixed-media anatomical plant model collection. Two means of

transporting such large, and yet delicate, specimens are outlined.

Having read the report two things have stayed with me. Firstly, the balance, conciseness and readability of the papers and secondly, the amount of conservational equipment and material referred to, complete with lists of supplier addresses. My only question mark was to why the abstracts appeared at the end, and not at the beginning, of the papers.

The report (ISBN 0 9507 268 6 9) is available from The Institute of Paper Conservation, Leigh Lodge, Worcestershire, WR6 5LB priced £10.00 Members, £15.00 Non-members.

Mike Palmer, Natural History Centre, Liverpool Museum, NMGM.

CATALOGUE OF THE BRAMBLES OF BRITAIN AND IRELAND in the collections of the Liverpool Museum (LIV), by Michael Palmer, edited by John Edmondson. Published by the National Museums and Galleries on Merseyside as Liverpool Museum Occasional Paper no.8 on 3 Nov.1994. Price £12.00 net (ISBN 0-906267-70-0). Copies available from NMGM Enterprises Ltd, PO Box 33, 127 Dale Street, Liverpool L69 3LA.

This publication is taken from a much more extensive computerised database of the *Rubus* collections at Liverpool Museum. However it is not merely a list of data extracted from specimens as it also includes additional information provided by a great many people.

The 223 species of bramble in the catalogue, whose collection dates span over 160 years, are arranged in alphabetical order and are brought up to date using classification from Edees & Newton (*Brambles of the British Isles*, Ray Society, 1988) and Kent (*List of Vascular Plants...*, BSBI, 1992). In advance of publication, confirmation and redetermination of specimens were made, notably by Edees and Newton who during preparation for their own publication, examined *Rubus* specimens in many herbaria, including Liverpool.

Geographical accuracy is also brought up to date with the addition of a National Grid Reference on each entry. These were all checked with the vice-county recorders of the Botanical Society of the British Isles, enabling about 40% of the specimens to be given grid references to an accuracy of 1km.

Watsonian vice-county numbers are given for each specimen in addition to a modern county name, so satisfying both camps. Other expected categories in the catalogue are collector, date and accession number. The catalogue is clearly produced and easy to read. However, there seems to be an error on page 23 where two specimens of *R. chrysoxylon* (syn. *R. mercicus* var. *chrysoxylon*) are misplaced under *R. mercicus* in the alphabetic list. This has been taken into account in the index and both pages are referred to but, in addition, a cross-reference at both catalogue entries would have been useful.

The analysis of the dates of collection of *Rubus* specimens at Liverpool Museum will reflect that found in herbaria across the country, the study of this group of flowering plants peaking in the late Victorian era. For many herbaria this publication will be useful for comparison of specimen data with those at Liverpool. However, unless the nomenclature of the collection to be compared has been updated then direct comparison will be impossible. Access would be needed to other publications, such as those already mentioned, to cope with the many synonyms and nomenclature changes found in this group of plants. It could be interesting, if not already done, to find out if the species are still extant where their original locations still exist.

Museums need to communicate information on the collections in their care both to fellow workers and the general public. This can be done successfully by exhibitions but natural history reference collections present special problems. Specimens often occur in great quantity and are physically fragile. Published catalogues can adequately fulfil this communication role and offer the advantage of greater permanence over exhibitions but their appearance is rare. This is why Liverpool Museum is to be congratulated on the production of a complete catalogue of the over 2,000 bramble specimens in their care.

Patricia Francis, Bolton Museum and Art Gallery

**LEICESTERSHIRE DRAGONFLIES.** Steve Grover and Helen Ikin. 1994. 64pp. Paperbound. ISBN 0850223598. £6.50. Leicestershire Museums, Arts and Records Service.

In recent years dragonflies have become relatively popular insects and this increasing interest in the group has

led to the publication of accounts of the dragonflies of several counties. Leicestershire, the latest county to receive such treatment, has twenty-two certainly recorded dragonfly species (about half the number on the British list) together with the largest current county membership of the British Dragonfly Society. The aim of the book is to further stimulate interest in the dragonflies of the county, primarily by facilitating their identification (adults only) and showing from where within Leicestershire they have been recorded. The text is 'user friendly' with technical terminology fully explained and employed sparingly.

Short introductory sections outline the life histories of dragonflies, include a chart showing the period in the year when the commoner species may be seen on the wing, and briefly discuss conservation and the recording of Odonata. The major part of the book deals with the sixteen species known to breed in the county. Each of these is given a two-page spread that includes a distribution map of 1km squares in which the species has been recorded (the number of 1km squares is used to calculate a 'rarity score'), the total number of records, habitats depicted symbolically in order of frequency, a verbal account of status and distribution, identification features and flight period. Identification is aided by the provision of annotated colour illustrations which, although lacking artistic refinement, are admirably clear and emphasise the characteristics of each species. Interesting features include graphs showing the increase in recent years of the numbers of records of the Emperor and Migrant Hawker dragonflies, and a pie diagram of the numbers of five species visiting gardens. The six Leicestershire species for which breeding has not been confirmed are treated in less detail but two pages of ink drawings should ensure their identification. A simple but adequate identification key is provided to all twenty-two species.

There is much information in this book, but the scant reference to particular Leicestershire localities is disappointing. More details about the richer sites, with species lists, would have been informative and given a lead to novice observers on where to look. Admittedly, this information could be extracted from the distribution maps, but only after laboriously matching dots with places on the ground.

An erratum sheet inserted by the publishers lists thirteen errors. Unfortunately, there are several others, principally inconsistencies in type-setting which give the book a rather untidy appearance. Also, throughout the book, all species' authorities appear in parentheses irrespective of whether or not the species remains in its original genus. These shortcomings, however, hardly detract from the usability of the book, and it should certainly achieve the authors' aim of encouraging others to take a closer look at the Odonata of Leicestershire.

R.A. Askew

### ***Insect Collection News* - a review of some articles.**

For those of you who do not know about this Newsletter, it is edited by Ron McGinley at the Department of Entomology at the National Museum of Natural History, Smithsonian Institution, Washington, D.C.20560, USA. He can also be contacted on e-mail: mnhen011@sivm.si.edu

### **1 - New Technology And Museums**

One excellent article was originally published in the *Bulletin of Entomological Research* (83: 471-474, 1993) by Scott E Miller. It discusses the role of new information technology in entomology, but is of relevant interest to anyone involved in managing databases of collections, research or biological recording data. It is a fact that there are now one and a half million computers connected to the international network system called INTERNET. This is estimated to include about fifteen million users in over fifty countries. User levels have been doubling annually.

The article discusses many issues that are already being mentioned in the UK. I have recently been involved in several discussions concerning the availability of biological recording data. These discussions have often revolved around charging for data access and copyright of data. This article takes a very different view. I will quote a few interesting passages.

*"The vast amount of information becoming available at low cost on the Internet is also changing the economics and politics of information management. It is no longer viable to hoard information and try to sell it, because most or all of the information is available somewhere else at no charge. In recent years, some institutions have*

protected their specimen data-bases from public access in the hope of selling the data. But many are now abandoning this strategy because: (1) It has proven impossible to recover the real cost of creating and maintaining the data-base in this way — you can sell some data, but not enough; (2) Other institutions are committed to making their data available as widely as possible at no cost; and (3) There is great potential for conflict of interest, especially related to government grants and subsidies.”

The last point relates to pressure groups in the USA wanting to make all data collected using public money, publicly available! Of course we already have some legislation relating to Local Authorities in the UK which provides for open access to data.

The author discusses how all of this can be funded if you cannot recoup costs by selling data. He suggests that many areas will have to be subsidised. The ideas now developing as a result of the Rio Summit may provide funding to get more taxonomic and other environmental research information onto the Internet (via UK Systematics Forum?). He also suggests that selling the expertise to interpret the data is likely to be more lucrative.

There are problems though. Questions of control of intellectual and property rights remain. However, the advantages are so enormous that they must outweigh any problems.

OK, so where does this leave the local museum ‘curator’? How can this be relevant to her/him?

The cost of the equipment has been a factor limiting access in the past, but this article quotes the cost of a self-sufficient solar-powered satellite communications system with a computer, available in the US for seven thousand dollars. This would enable you to operate remotely in almost any part of the world. In Britain the revolution is poised to take off as those awful cable companies are digging up roads and gardens laying fibre-optic cables. At first they offer cable TV; the ability to receive so many channels that you can never decide what to watch! However, they will soon be offering fibre-optic telephone services which will revolutionise computer communications across the UK. The costs of these links will soon be easily within the reach of all but the very smallest or remote museums.

This technology gives a user access

to data all over the world and the ability to send messages at rates far cheaper than conventional faxes or post. Have you got a small library budget? What if you could get on-line access to an identification guide for British fauna and flora? Not only that, but when a taxonomic revision took place, instead of waiting for the Ray Society or Royal Entomological Society to find funds to reprint the whole book; instantly it has been updated! This has major implications for publishers. For example, how many copies of all the natural sciences collections research publications would have been sold if the whole data-base were all available on Internet?? Much easier to update too!

All science fiction? At the meeting in the Netherlands we saw a CD-ROM identification guide to European birds that contains pictures of birds, eggs, maps of distribution, sonograms (seen at the same time as you hear their calls) and text. It costs under a hundred pounds! It did not seem to be anywhere near as detailed as the Birds of the Western Palearctic, but it makes you think. I have also just received a brochure for something called CABIKEY. This is a computer key system, so far available to identify adult beetles (I suspect to family, although amazingly it does not specify!) with keys to Mosquito genera, European thrips and termite genera planned. The CD-ROM of the National Gallery collections has sold 40,000 copies worldwide (priced at about £30). Now if these were all available on the Internet!!! Just where will it all end?

## 2 - Legal Restrictions On Collecting Fresh Material - USA

There are a number of articles in the same issue of the Newsletter concerning the implications for field collecting of the improvements in national and international wildlife law. The Lacey Act is the USA equivalent of the Wildlife & Countryside Act, but seems to be far more wide-reaching. Whether you like the idea of having to have a permit to collect anywhere or not it seems that every day brings this situation closer. The USA laws now clearly state that anything collected abroad must be collected with legal permits from the host country. If not, the collector is not only breaking the law in that country, but in the US too! Judging by the extensive correspondence on

this matter (on e-mail) which has been printed in this Newsletter, the subject is rather a hot one at present in the US. Implications for taxonomists collecting abroad are immense. We do not currently have a law in the UK that is as strict, although most Museums’ collecting policies have a statement that they will never knowingly acquire specimens collected illegally, no matter where the laws applied. Of course if you loaned specimens of doubtful legality to someone in the USA!?! I will stop before this gets too silly!

Steve Garland, *Natural History Section, Bolton Museum & Art Gallery*

## PUBLICATIONS

**Manual of Natural History Curatorship** - was published on 18 October 1994 and a review will be published in the next but one *Biology Curator*. Published by HMSO the book, which contain contributions from several well known members of BCG, is available at a discounted price of £40 (postage and packing free) to both individual and institutional members of the Museums Association. Contact Museums association, Book List Sales, 42 Clerkenwell Close, London, EC1R 0PA.

**The Systematic collections at Michigan State University** by A.C. Carmichael and J.H. Beaman - is an article in *The Association of Systematics Collections Newsletter* Vol 22(5) for October 1994. also reported in this issue is the approval by the state legislature of \$30.9 million for the construction of a new North Carolina State Museum of Natural Sciences. The new museum will offer visitors more than three times the current exhibition space, more than five times the current classroom space, a 250-seat auditorium, an enlarged Discovery Room, a Naturalist Centre and universal accessibility. The new facility will accommodate major travelling exhibits and house the state’s irreplaceable zoological collections.

**Guidelines for institutional Policies and Planning in Natural History Collections** - has also been produced by the ASC. This book reviews current (American) practice and suggests important elements to include in policy documents for institutions that house biological, anthropological and geological collections. Approx. 120pp. Price \$29 including overseas postage from ASC, 730 11th

St NW, Second Floor, Washington DC 20001.

### ENVIRONMENTAL MONITORING AT THE OXFORD UNIVERSITY MUSEUM

The Oxford University Museum has recently received grant-aid from the South East Museum Services to purchase a telemetric monitoring system. A survey of current environmental monitoring, control, and remedial conservation was carried out as a preliminary to forward planning for conservation. It revealed that while widespread monitoring and controls were already in place for light, insect and pollutant and mechanical damage, only limited monitoring and controls were set up for temperature and humidity.

The telemetric system comprises twelve detectors which send readings by radio to a central logger. The data is then downloaded to a computer where it can be plotted and analysed. With thirty six separate stores and a large display area, the Museum has given priority to those areas containing most vulnerable specimens such as certain historic collections and bone material. Off-site stores are monitored using traditional recording thermohygrographs and a number of small max/min electronic thermohygrometers supplement the whole system.

After the first year of monitoring the Museum should have the hard data necessary to establish control measures which will protect the most vulnerable collections..always assuming the system confirms the environmental 'hunches' of staff members!

Meanwhile the Museum would welcome visits from any curators, conservators etc. interested in seeing the telemetric monitoring system in action. Please contact Jane Pickering, Monica Price or Rennison Hall to arrange an

appointment, at the University Museum, Parks Road, Oxford. OX1 3PW. tel 01865 272950, fax 01865 272970.

[Perth Museum is currently operating both telemetric and wired in sensor systems, please contact the Editor if you would like to know more.]

### LETTERS

**Bear Appeal** - I have had a request through the Grimsby *Evening Telegraph* from a Norwegian called Arne Mjaland, who is trying to trace the whereabouts of a brown bear which was shot by Mr Karl Ljasland in 1910. The bear apparently killed many sheep and cows in the vicinity of Aserul in Norway and the body was purchased by an Englishman and shipped to Grimsby for conservation.

Does anyone know the possible whereabouts of this bear? It could now be in a museum or a stately home anywhere in the country, as Grimsby was probably just the port through which it entered Britain.

*Adrian Norris,  
Assistant Curator, Natural History  
Leeds City Museum  
Calverley Street, Leeds LS1 3AA*

**Live Animals in Museums - A Live Issue?** - Manchester Museum has for many years had an Aquarium/Vivarium showing large snakes, other reptiles, amphibia and fish.

We are now in the throes of an architectural and policy review, one aspect of which is the future for the live animal displays. One view is that we should build upon the undoubted popularity of the live displays and attempt to integrate them more with the planned new static displays. Another view is that 'Society' has

moved on and that live displays no longer have any place in museums.

Do any other members of the Group have views on this topic, or have you had experience of the same debate recently? If so, we would welcome a note from you to help inform our discussions; please send to Charles Pettitt, Manchester Museum, M13 9PL, email c.pettitt@man.ac.uk

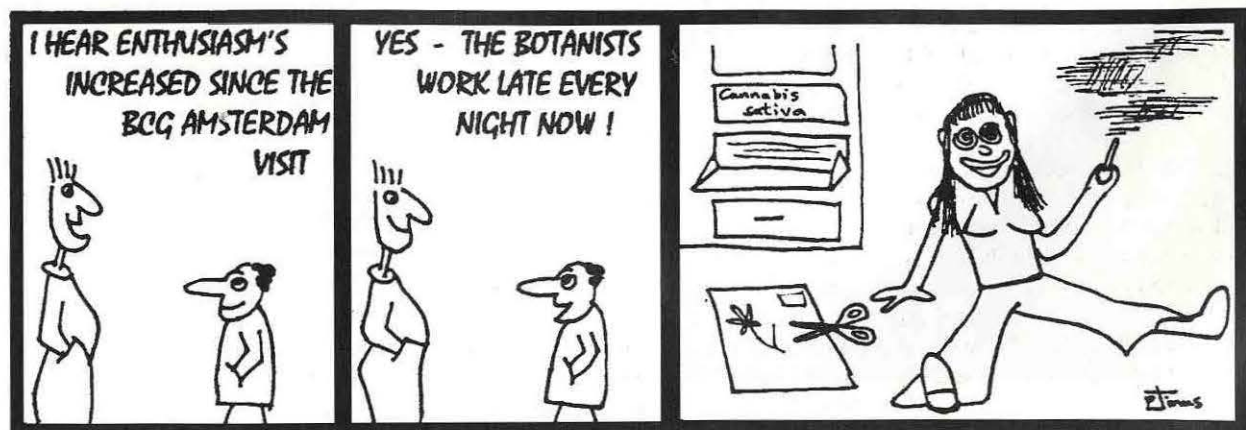
**A Zoological Gardens Museum?** - I am a member of the Bartlett Society, a small group of enthusiasts who have an interest in the history of zoological gardens and exotic animal husbandry. Many members have collections of material on the subject which, although containing items which individually are of low value, are of some significance as collections and would be very difficult to re-collect. The material has value to future researchers, not only of zoological garden history and animal records, but of social significance too.

There is no zoological gardens museum, and the few zoos that keep archival material are only concerned with their own collection. The Bartlett Society has no resources to house or maintain such a collection but there are many individuals (and probably organisations) that would be willing to donate all or part of their collections when they die, or before, if they knew that the material would be preserved for use by others.

Perhaps BCG members may have suggestions for a suitable repository for our collections, or for parts of them? The ideal would be the creation of a national Zoological Gardens Museum.

I would be pleased to provide further details if this would be of assistance.

*Mr John Adams, 61 Belmont Road  
Portsmouth, Southampton, SO17 2GD*



## AMSTERDAM ETC.

### BCG Visit to the Netherlands - the inside story

Steve Garland, Bolton Museum

Does your life hold no meaning any more? Is there a void - a gap - something basic missing from your very existence? - So you didn't go on the BCG trip to the Netherlands eh!! This proved to be the usual mixture of mind-blowing museum collection experiences and a good chance to catch up on all the gossip, and to destroy the professional characters of anyone unfortunate enough not to be on the trip or who popped out of the bar for a moment!!

The visits to the museums in Amsterdam and Leiden were superb. Some of the stores contained many fascinating and historic specimens. I discovered that the Chairman knows a Blue Whale's penis when he sees one, although I couldn't find any botanists who could identify the specimen in alcohol labelled 'Groote Taja' beyond "it's a plant". It was indeed a Taja of really great proportions!

Many of the stores were of familiar design, but there was nothing for sale in the bars or on the streets of Amsterdam that could exceed the high achieved when walking out into the Vertebrate store at Leiden! A floor made from oversized perforated-zinc, about four floors up, provided a memorable experience. While my brain was still reeling I think hallucinations must have begun as I seem to remember a cupboard opening and there being an elephant and two giraffes inside; then another that was full of Crowned Pigeons!! Wow man!!

I was in a small party who enjoyed the zoo so much that we got lost. What is 'turn left after the sloths' in Dutch? The animals here all looked in tip-top condition. The reason is probably that it is right next to the museum. A slightly ill animal always perks up miraculously when the taxidermist appears with a tape measure and bag of borax!

The evenings were our own, so we explored the delights of the city of Amsterdam. We tried many things; beer, pool, table football!! We even visited the Sex Museum (and the Erotic Museum - Ed), for purely professional reason, of course. The labels were easily



"In his minds eye he could see herds of Wildebeest roaming across the African plains" Osteological storage, Amsterdam.



Mounted bird storage, Leiden

understandable (at least I think there were labels!). There were lots of photographs, displayed using a variety of mounting techniques. There were also one or two exhibits of human dummies that I can't remember seeing in the latest Gems catalogue! The audiovisual exhibits were fairly eye catching. And all done in the best possible taste; well nearly. This should be an interesting one if they go for MGC Registration!

We also observed some interesting display techniques on the streets. I really must try lighting some of our exhibits with a red light and UV light combination, because this would seem to be popular with at least fifty percent of the public!?

The return ferry journey saw the Group dividing into cinema buffs and disco enthusiasts. However, this could only happen after the Committee had dutifully met in a quiet (quiet?- Ed) corner to make a few important decisions (floating voters!). The dancing went on into the night, while outside the ferry passed through flocks of migrating Redwings heading south and calling gently in the darkness.

Many thanks to all the people in the Netherlands who organised a marvellous range of visits and kept us fed and watered. Also thanks to Kathie Way for organising what was not just a study visit, but yet another chapter in the BCG history books!

### Report on Study Visit to Amsterdam Zoological Museum.

Thursday 3rd November 1994.

Charles Pettitt, Manchester Museum, The University of Manchester, M13 9PL

After some twenty hours on coach and ferry, we arrived at the Museum about 10.00am. After coffee, the Director, Dr. Wouter Los, welcomed us in the Museum Library under the watchful eye of a portrait of Carl Linnaeus. He gave us a general introduction to the Museum and the collections. The Zoological Museum, Amsterdam is part of the Research Institute of





Illustration depicting the "cuckholding" behaviour of blue tit females, who sometimes have one of their eggs fertilised by an older male.  
 [From the Catalogue of Temporary Exhibition entitled 'Fakes, frauds and deception' at the Amsterdam Zoological Museum.]



Illustration depicting underhand male behaviour among American Blue-gilled Sunfish. Small males wait at the edge of a nesting territory until another male induces the female to spawn, then the sneak male dashes in and ejects his sperm at high tempo. This happens so fast it can only be seen on a film when this is run back at slow speed.

[From the Catalogue of Temporary Exhibition entitled 'Fakes, frauds and deception' at the Amsterdam Zoological Museum.]

Systematics and Population Biology within Amsterdam University. The Institute is the coordinator of the Netherlands Research School Biodiversity.

Founded in 1938, the Museum has about 10 million specimens; its special strengths are SE Asian and South American/Caribbean fauna.

Florence Pieters, Curator of the Artis Library, then gave a lively talk on the conflict between use and conservation in an old library, taking as her example a wonderful folio of zoological drawings dating from *ca* 1720. A number of the plates from this work were on the tables for us to examine, held in loose archival mounts. Would that I had such works in my own Museum library.

Dr. Los then explained the (familiar) tale of how he has restructured the staffing in the Museum, with three 'ranks' of curatorial staff, A,B,C, related to the extent of their duties. The equivalence of these ranks seemed to be: A = Keeper, B = Collection Manager and C = Technician.

We then split into five parties to visit various sections of the Museum. I and a few others went with Dr. Moolenbeek to inspect the Mollusca section. The first surprise was the Section Library, which appeared to have

every malacological work one could think of - Reeve's *Conchologia Iconica*, Martini & Chemnitz, Buonanni etc. Such a refreshing difference of attitude to that prevailing at Manchester, where most such books get locked away down at the Rylands Library because they are "Colour Plate books" and much too precious to let grubby fingered keepers use them to help curate their collections.

The collections were a revelation - all well housed, curated, labelled, and vast! The Spirit Collection of Mollusca alone was several times larger than our entire spirit collections, and every jar was clean, well labelled internally, and there were very few jars in need of topping up. Types are segregated.

We were intrigued to discover several collections that we had lost sight of, such as Mary Saul's collection and Kuiper's *Pisidium* collection (probably the best in the world). I have persuaded Dr. Moolenbeek to write up the collections added since 1940 for the *Biology Curator* (there is an article in *Basteria* detailing those there in 1939). The documentation system is Museum-wide, but tailored to each section. The Museum is networked, but databases are held on departmental machines. In Mollusca, a volunteer (ex Naval officer) has typed in the entire classification of Vaught, which is now becoming the standard for arranging molluscan collections; previously Amsterdam was arranged by Thiele (1935). I was impressed with the label generation facilities of the documentation program.

After a light lunch, at which milk was the drink of choice (the Dutch being very proud of their dairy products), our 'team' moved on to look at the Exhibition Galleries. These are housed in the Amsterdam Zoo ("Artis"), and consist almost entirely of a large long-stay temporary exhibition; there is a small charge for public entrance. The current exhibition is on "Fakes, Frauds and Deceptions" - covering such things as mimicry etc. Some of the display headings, and the illustrations in the Guidebook (see figures) were eye-openers to say the least! The general impression is of a lot of space (three large rooms) with the exhibition struggling to fill it. However, when you discover the Exhibition section is only the Designer/Dogsbody (his definition), a taxidermist (whose very competent work we saw) and a technician, the result is most credible. At the end of the exhibition galleries one goes up some steps into a darkened area, wherein is the most remarkable Diorama I have seen. It is of the Dutch coast, and occupies the area of a medium-sized exhibition gallery! One sits on a bench and the view is so realistic it is hard to describe; the diorama contains only a dozen or so birds and mammals, but perhaps is even more effective for the restraint. It dates from *ca* 1927 and now has 'preservation' status!

To reach the exhibition one has to pass the aquarium, and this again was 'something else'. There were upwards of forty marine tanks, some of them large, and all the animals in them seemed in excellent health. Apart from a plethora of fish, including moray eels, there were



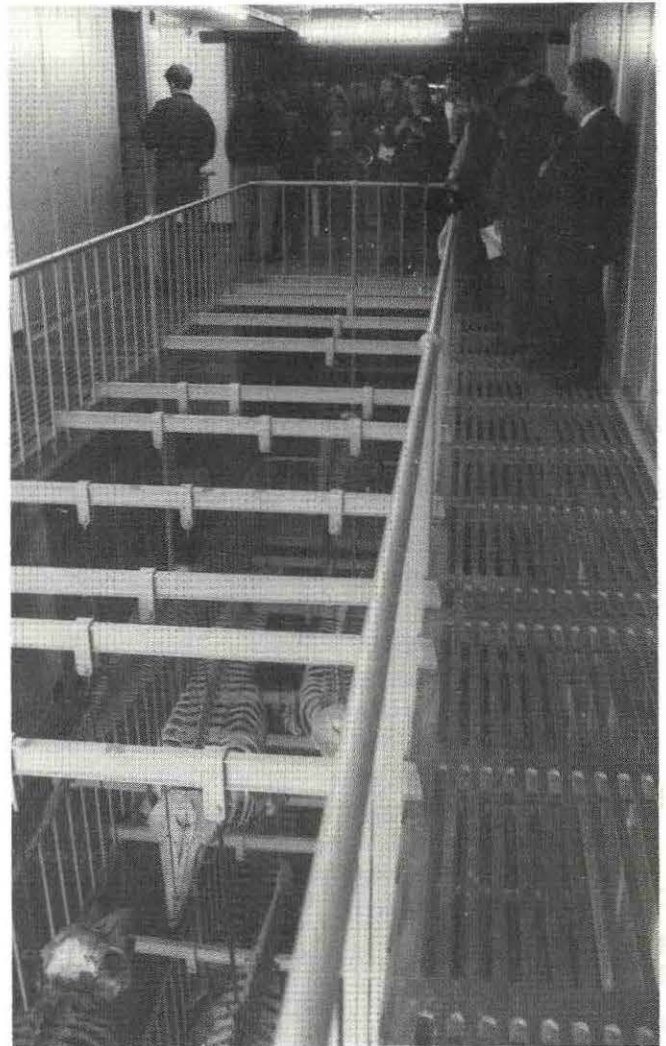
Sixteenth century herbaria, Leiden.

crustacea, molluscs (including a cypraeid and nudibranch), corals, and anemones in profusion. My favourite was a small octopus. Because of the wealth of visual experience in the aquarium we never made it to the zoo, so all I can say is they have antelopes, 'cos I saw them from the Library window in the morning.

At 1600 hrs we had a talk from Agnes Brokerhof, of the Central Research Laboratory for Objects of Art and Science, on "Conservation problems and how we cope in Holland". Her starting point was the Madrid Congress of 1992, from when it was felt that the time had come to focus attention on natural history collections. There is a Dutch group for the exchange of information on the conservation of dry NH collections, and a Working Party on wet collections is based in the Amsterdam Dept. of Pathology. At present still "determining priorities". Agnes has a project on storage materials, with a growing database of available materials and test results. She strongly emphasised the importance of good and bad microclimates within sealed containers. Much of this work applies to ethnographic objects also. At present the Rentokil bubble is the fumigation method of choice, but Agnes' team are trying to develop a nitrogen based system with a local (and cheaper) firm. Freezing seems effective for e.g. paper and organic materials. Leiden has done work on adapting commercial vacuum cleaners to cleaning taxidermy mounts. Her major point was that NH collections are now an 'issue', and that this represents an advance. At the reception afterwards I chatted to her and asked that the materials database be made available on the Internet, an idea she seemed receptive to, and promised to follow up.

Then Dr. Ronald Schliesh gave us a talk about the European Taxonomic Institute [ETI], a UNESCO related organisation. He started from the 'Biodiversity Crisis' and pointed out there is also a crisis in the supply of information to counter the biodiversity crisis. Information is needed about organisms and about their distribution. ETI is attempting to bridge this information gap. The goal is the World Biodiversity Database, on which presently 1.4 million organisms are described. However, one needs to know the name of an organism before accessing the database, and therefore ETI is developing also unique, non-specialist useable identification tools, especially using computers. For the biogeographic information a program called MAPIT is used, and a separate package LINNAEUS II is being distributed (free) to cooperating scientists, so that taxonomic information can be recorded in a consistent way for adding to the database. He also demonstrated ETI CD-Rom products, notably 'Birds of Europe' which combines pictures, text, calls (with sonograms) and flight patterns into a multimedia presentation; this currently contains some 420 species.

We were then treated to a wine and cheese reception, and had the chance to meet various other members of staff. Finally arrived at our (very comfortable - well done Kathie) hotel about 1800hrs for a welcome shower, then



*Vertebrate storage, Leiden.*

out for a meal amidst the fascinating sights of Old Amsterdam (over which I draw a veil, but upon which I am assured our Honourable Chairman is an authority, having lived in Holland for six months some years ago).

All in all a tiring but most illuminating visit.

### **Report on the study visit to Leiden**

Friday November 4th 1994

*Michael Taylor, Perth Museum and Art Gallery*

The second day of BCG's continental foray saw the coach retracing its route south for forty miles to the university town of Leiden to visit the National Museum of Natural History (NNM) and the Rijksherbarium.

Originally founded in 1820 as the 'Rijksmuseum van Natuurlijke Historie' the NNM had the explicit objectives of exploring the zoological and geological resources of overseas territories and providing an educational resource to the public and specifically to the University of Leiden. The first director was the famous C.J. Temminck and he inherited several older 'cabinets' to form the basis of his

museum. These were quickly augmented by much field collecting, particularly in the Far East, and the museum now houses some ten million specimens in five scientific departments. About 60 staff run the collections side of the museum out of a total staff of 140. Unusually, the museum does not have any displays at all at present. This year the museum will become an autonomous Foundation whilst retaining close links with the University.

There is much activity behind the scenes at the present time for, just as at Amsterdam, a new museum building is about to happen. At the moment the NNM is housed on six different sites including the former municipal orphanage and a plague hospital. The new building, which will be adjacent to the 17th century plague hospital, will bring all of the collections under one roof or, strictly speaking, into the same tower. For, in contrast to the underground store at the Museum d'Histoire Naturelle in Paris which we visited a few years ago, Leiden has opted for a 21 storey tower 20m x 20m, subdivided to give 44 compartments each of 200 sq metres. There will be no windows and no internal services - these have been confined to within the double insulating walls. The area will include display space and a 'Treasury' room containing specimens of 14 species of extinct birds and 11 species of extinct mammals which visitors can view through a screen of bullet-proof glass. A space has (theoretically) been incorporated to allow for a 10% expansion of the collections.

The need for the new building was one of the many highlighted by the 'Delta' project. This started life as a Dutch government audit office survey into the state of museums / archives / heritage. The report highlighted problems which are probably familiar to us all: poor accommodation, poor documentation, alarming storage conditions, poor environmental control, insect infestation and mildew (a particular problem of the Dutch climate). Approximately 1.5% of the nation's 51km of archives were already beyond salvage. 'Delta' is in effect a short, sharp shock or one-off injection of resources to enable museums to get on top of the problems and hopefully once there to stay on top of them. By the year 2000 £27 million will have been put into improving preventative conservation, £57 million into active conservation and £50 million into restoration. In order to determine priorities, collections have been categorised into categories A-D: category A collections contain material which is irreplaceable, invaluable, has a standardising function or a symbolic historical value; category B have a high attraction value, a high exhibition value, collection value or documentary value; category C contains 'others' while category D collections are deemed to have no value to a national museum. 22% of collections were classed as As, 44% Bs, 32% Cs and 4.5% Ds (Yes, I know that it doesn't add up!). Priority projects deal with the As and Bs. The registration backlog should be eliminated by 1997 and all conservation done by 2000 - then the cash stops.

Spectacular evidence of the effectiveness of Delta was visible during our tours of the stores. Using a modified vacuum cleaner with a fungal spore-proof filter, drastic improvements were being made to the condition of the 100,000 mounted birds in the collection at Leiden the colours of which, after cleaning, were truly stunning.

The storage areas were breathtaking in a different way if you were not too comfortable with heights. Four storeys of mesh floors could easily bring on an attack of vertigo to the unsuspecting visitor and if you dropped your pencil a long walk followed. These open floors were designed to allow good air circulation in a damp climate and they certainly seem to work. They also of course allow undesirable insect pests unlimited access but UV traps were much in evidence and regular fumigation had the problem under control.

After a substantial lunch kindly provided by our friends at Leiden, we walked a little way to the Rijksherbarium. Although founded in 1829 it is now combined with the Leiden Botanic Garden which was founded in 1590. The combined institution has 18 scientific staff and 15 PhD students. The herbarium is currently housed in the old university library but it too is shortly to move to a new location, this time converted from a modern office building. It has four areas of research activity: the plant biodiversity and historic biogeography of S.E.Asia; floristic changes in the Netherlands; cryptogamic botany and comparative morphology.

The collection's 4 million specimens are contained in 70,000 6 inch deep boxes on roller racks. There are two walk in deep freezing rooms which are used in rotation to enable the entire collection to be frozen to  $-30^{\circ}\text{C}$  every eighteen months. This has not eliminated insect pests but it has kept the problem well under control. 35,000 new specimens are added to the collection each year.

All pre 1800 specimens are house in a special room and the highlight of the day for me was to see a sixteenth century collection in the form of a *hortus siccus* in perfect condition and with its hand coloured title page positively glowing and unfaded.

My major impressions of the visit were to marvel at the treasures of these extensive collections and to realise, as we did in Paris, that many if not all of the problems in the collections are ones which we face here too. There is certainly more scope for the sharing of solutions to these problems - with limited resources we should not be reinventing the wheel.

I greatly enjoyed my visit though the flatness of the Dutch landscape is more than made up for by the number of stairs in its museums. If it is not saying the obvious once more, my best wishes go to our kind hosts in Leiden and I am sure that all BCG members will make them very welcome should they ever return our visit.

## THE NEW KINGSLEY NATURAL HISTORY GALLERY AT THE GROSVENOR MUSEUM, CHESTER

Steve Woolfall Keeper of Natural History Grosvenor Museum, Chester

### Introduction

The new Kingsley Natural History Gallery at the Grosvenor Museum, Chester was officially opened by Kelvin Boot, presenter of Radio 4's Natural History Programme on 28th November 1994. The opening was the end product of two years thought and worry and nine months blood and sweat. The gallery, however, has much deeper roots and is the pinnacle of a varied history for natural history in Chester. For those of you who do not know the story there follows a brief resume...

### History

The Grosvenor Museum was opened in 1886, founded on the collections of the Chester Natural Sciences Society. Between 1892 and 1914, under the curatorship of Robert and Alfred Newstead, the Museum developed into "a first class Museum of Practical Nature Study". In 1915, the collections were sold to Chester Corporation, although the Natural Science Society retained control and use of them. However, by 1939 the finances and activities of the Society had seriously declined and Chester Corporation had to take on responsibility for the Museum. The natural history library was removed to the City Library where it was left to decay and the collections fared little better. In 1942, 400 fossils were transferred to Liverpool Museum, while other parts of the collections were dispersed (no records remain) and the remainder left to deteriorate with no curation.

By 1946, the Museum's natural history was run down in favour of Roman archaeology. Three years later, the state of deterioration of the collections led to talk of a Natural History Assistant being appointed. However, this post was not filled until 1954 on short-term contract. In 1962, the post of Assistant was made permanent with a remit to create a new Natural History department. During the 1970's much of the Natural Science Society's library was returned to the Museum and progress continued on the collections and displays. In 1979, the post of Assistant was upgraded to Keeper, an indication of the importance attached to the department.

In 1981, the situation took another turn for the worse. The last Keeper left and in a report to the Amenities Committee, the Curator recommended that the collections be dispersed to other institutions, the post of Keeper not be refilled (for review in two years) and that a part-time Education Officer be appointed instead. These recommendations were approved, but over-ruled by the Personnel Committee and the post of Keeper was deleted.

In 1982, following urgent requests from the Museums Association, BCG and GCG, a survey of the natural history collections was undertaken, a report written and a meeting held at the Museum in October 1983 to discuss the future of natural history at Chester. The outcome of the meeting was that all material of known scientific and/or historic importance should be transferred to other museums on ten year loans. The remaining material suitable for educational use would be left at the Grosvenor Museum. Under the supervision of several part-time Natural History Assistants between 1984 and 1989 the major collections were transferred on long-term loan between 1984-86. With a new Department of Leisure Services in 1990, the full-time post of Keeper of Natural History was reinstated.

### Planning

I arrived at Chester in August 1991 to find a large empty room and a remit to open a new gallery. The old gallery had been completely demolished six months earlier in preparation for structural work throughout the building. It had been a leftover from the 1950's; dark and dusty, full of tired and depressed creatures in tired and depressed dioramas. It had left a bad impression of natural history throughout both the City and Council which was to prove the main hurdle we had to overcome.

The collections at Chester are primarily Victorian, collected by

members of the Natural Science Society, founded by Charles Kingsley in 1871. Many specimens are sadly without data but make excellent display and educational material. There are also the collections on long-term loan which could be brought back for display. Therefore, we had a good historical base to draw from and the celebration of Kingsley and the Victorian collectors was a story begging to be told. However, it was important to show Councillors that the collections were still relevant today, given the widespread and increasing interest in the environment. In trying to resurrect ten years of neglect it seemed sensible to encompass what was happening outside and plug the museum into the local environmental network. Finally, with interactive, hands-on now becoming the norm for modern museum displays and with the National Curriculum, Science breathing down our necks we produced our coup-de-gras. No longer a dark gallery with rows and rows of "dead, stuffed things" but a light, airy, fun-filled gallery with things to do.

Our four areas were defined:

1. Victorian story 2. Local wildlife groups and collections 3. Local/national environmental projects 4. Activity centre.

I was also keen to have fluid, evolving displays so that the gallery did not become static. Therefore, sections three and four have been designed to change on a regular basis (every 3 to 6 months).

### Finance

The next problem was the money! We costed the gallery at £45,000, relatively cheap but a figure that was within the then financial limitations. However, the uncertain local government financial climate suddenly left us trying to find all the money through sponsorship. Despite an attractive and informative booklet, the Duke of Westminster's foreword and a list of target companies our success was dismal. There was a great deal of interest but no money. However, we are very grateful to BICC Cables Ltd of Chester for their £500 donation with which we launched a public appeal. Promoted with facts on the new gallery, a designer's mock up and the obligatory model dinosaur we raised £200 in two months from visitor donations.

Fortunately we had several grant applications in the pipeline. The North West Museum Service (NWMS) generously gave us a grant of £5000 for the display cases. We had also applied through our Economic Development Unit for a grant of £25,000 from the European Regional Development Fund (Mersey Basin Campaign). The gallery had been part of a multi-project bid by Leisure as a whole but we became caught up in ERDF changes so that Chester became no longer eligible for Category II status. However, after a visit to the Museum by an ERDF representative we were awarded a consolation grant of £19,800 towards what they saw as a worthwhile project.

That left us £19,600 short of the total which the City Council decided to fund in order to provide the gallery. It was a nice New Year present for 1994.

### Operations

We do not have an in house designer so we asked Alan Robinson of NWMS to design the gallery. We settled on a gallery layout with Click display cases giving us maximum space for our money. We wanted to feature a mock-up of a Victorian naturalist's study and so decided on a square to tell the story from Kingsley to modern day databanks. I wanted a computer somewhere on the gallery and this seemed the logical place for it to go. After searching through the brochures I found the ideal system on the NOVUS Interactive stand at the Liverpool MA Conference trade fair. Discussions with David and Andrew Roland led to the highly popular "A Look at Cheshire Wildlife" interactive programme.

The mock-up Victorian naturalist's study was for two reasons: to break up the run of display cases and to display a lot of the old collections including Herbert Doble's original lepidoptera cabinet and part of the Natural Science Society library. For a special touch we used Zuber wallpaper ordered from France on one wall which

looks like an oak woodland. The study has no internal labels but a numbered system from 1 to 30 so that visitors have to use their brains at least once!

To help differentiate the sections of the gallery we colour coded the cases: dark green for Victorian, light grey for local, dark grey for projects. Our trip to Click in Milton Keynes was invaluable and I would recommend anyone to go and see the supplier first before buying.

The Victorian square was to be the static part of the gallery. Therefore, we asked NWMS to design and produce the labels, graphics and internal case layouts. Having worked before both with and without a designer, I wanted the professional input! We decided to do the remaining text, graphics and case layouts ourselves due to time and money restrictions. However, with these cases designed to change regularly, in house production was the easiest choice.

We wanted a case backing that would hide the wall and heating pipes but not detrude from the objects. Alan and I were set on hand-made paper by Maggie Holland and Carole Belfield of MAPs in Manchester. Unfortunately, a failed grant application to NW Arts left us having to use cheap wood chip paper from B&Q. Fortunately you don't notice the paper after a while. We will endeavour to raise the money for the hand-made paper.

Lighting was going to be an important part of the gallery. I was very keen on using fibre optics in the cases for both aesthetic and environmental reasons. Alan recommended Giles Barrett of Fibrelight. There are six systems in the gallery, each covering a row of cases. The lighting has been highly praised as it gives the gallery a cool look and feel. It certainly brings the specimens "to life" in a way no fluorescent light could do.

The gallery needed some major building work which our Technicians took to with a relish. Apart from the Victorian study we needed to build a new partition wall across the far third of the room. This became a stumbling block as it took much longer than we had anticipated and thus delayed completion.

We had originally planned to officially open the gallery at the end of June 1994. However, a combination of unforeseen hold ups, difficulty in booking a celebrity and me being off ill for a month put paid to that. However, the gallery did open in early July, minus the Activity Centre which wasn't finished. This was a useful exercise as it allowed the gallery to settle and gave us feedback from the public, in the light of which we made some minor changes before the official opening.

### Education

The gallery was designed and thought through in conjunction with our Education department. We were all keen to incorporate aspects of National Curriculum, Science despite it changing every other day! Therefore, several of the cases in the Victorian square were geared to particular topics: genetics/evolution, geological features, food chains and taxonomy. Due to the size of the Activity Centre, school parties will have to be split. Half of the group will study the gallery choosing from a selection of suggested activities. The other half will focus on one topic of their choice, supported by the Centre's resources. The groups will then rotate.

We ran a teachers' drop-in one Saturday morning to show them the gallery and push the Activity Centre as a major resource on their doorstep. We attracted the grand total of 5 teachers, but all were very positive and went away to spread the word. As yet, we have had no formal bookings for use of the Centre.

### Activity Centre

The Centre is a totally new concept for the Museum and is aimed at both schools and the general visitor. It is available for school bookings, 10.00 am - 12.00 pm, Tuesday - Friday. It will be open to the public 1.30 pm - 4.30 pm, Tuesday - Saturday, 2.00 pm - 5.00 pm on Sundays. The Centre will be manned by Museum staff and volunteers.

The Centre consists of various activities including feely boxes, touch table, microscopes and build a skeleton. The major attraction is the reserve invertebrate collections for public viewing; British lepidoptera and coleoptera, with small collections of other

invertebrate groups. They are working collections in their original cabinets, in their original state. Therefore, visitors will be able to see active rehousing into new cabinets as an example of museum work.

Plans for the future include public access to the re-housed geology collections, a TV/video unit and a computer with CD-ROM.

### Feedback

The public response to the gallery has been very encouraging. There is a visitors' comments book to give us some feedback and we are planning a visitor survey, to include a study of movement flow around the displays; there is a panel showing a recommended route but few people seem to use it.

I would like to thank everyone who has been involved with the project for all their help and support. It has been both frustrating and enjoyable but we now have a major new resource upon which we can build. The natural history stores can be re-developed and some of the collections on loan returned and displayed for the first time in over 50 years. Local wildlife groups are booking to visit the gallery and we have plans to develop a database for local wildlife records. Natural history is back in Chester!

### BOLTON MUSEUM OPENS NEW GALLERY - WILDLIFE ON YOUR DOORSTEP

*Steve Garland, Natural History Section, Bolton Museum & Art Gallery*

On August 17th 1994 a new local wildlife gallery at Bolton was opened by Roy Lancaster. It marked the end of nearly five years of work. The original concept was a low-key, extremely low-cost enterprise being built slowly on a revenue budget. In 1991 the Museum successfully applied for an Inner Urban Program Grant of £50 000 spread over three years. This enabled us to speed up a little. The final cost of the whole project eventually totalled about £70,000, excluding staff time.

### The Wildlife Study Centre

The theme is of local wildlife, but the idea was also to promote the use of the gallery and our collections in new ways. As we began planning, the 'flavour of the month' was Liverpool Museum's Natural History Centre. Unfortunately, in common with most museums, we could only dream of that sort of exhibit with a non-national budget to finance the project. What evolved was a whole new approach where the public and school groups get access to hundreds of specimens, a touch-screen computer and a close-up video camera without supervision. It does get regular visits from staff to keep materials topped up and to check on the equipment.

The Wildlife Study Centre has been fitted out using school bench-tops, cupboards and stools. Plastic (polythene) drawers were sourced from Yorkshire Purchasing's catalogue and a local plastics firm cut snug-fitting perspex lids. The drawers are all Plastozote lined to provide shock-resistance for the exhibits. Items have been accumulated over the last three years for this area and are generally of a robust nature and of low scientific and monetary value. A variety of techniques has been used to attach them to the Plastozote, depending on the types of object. The lids were originally riveted in place, but experience has now led us to use a hot-glue gun. It is relatively easy to remove the lids when repairs are needed although this is not something one wishes to do too often.

In addition there are a number of larger items on open display ranging from horns and antlers to pine cones and shells. A few are securely fastened, but many are not. The close-up video-camera is a simple home video unit with a close-up lens attached. The whole camera is enclosed in a specially built perspex cover and is positioned so that the auto-focus facility can cope with any of the objects in trays placed beneath it. The auto-focus was thoroughly tested to check that it still worked through two layers of perspex! The magnification levels are not as great as with other commercially available set-ups, but the costs are only a fraction.

The camera is connected to two televisions, one positioned to allow the user to see the picture from next to the camera; the other pointing away to be used with groups to show small objects to groups. Tiny objects such as insects can now be demonstrated to school groups, opening up a whole new area of the collections for potential educational use!

The Centre also has a touch-screen computer with information about our local wildlife. It has photographs of local sites, fauna and flora. You can even hear the sound of a fox or the wonderful call of the red grouse! This was produced by a company called Novus. We kept costs down by sourcing most of the photographs from staff and local naturalists. Not only is the computer popular, but the sounds of owls hooting and badgers grunting is guaranteed to attract visitors to the gallery.

Finally there is a continuous supply of scrap paper, worksheets and crayons for drawing and writing. This is the most popular pastime with children. A drawer of exhibits can provide hours of fun! Who needs computers???

### Local Information Centre

The Wildlife Study Centre provides one temporary display case and a large notice-board, also the Main Gallery contains an information board. These areas are used to publicise various aspects of the museum's work, work of local voluntary groups and general environmental topics. Here you can find details of every forthcoming natural history meeting in the area, contacts for all relevant local societies and leaflets on all aspects of the environment from pollution to country parks to tree preservation orders! This is also the place that we publicise wildlife surveys for our Biological Records Centre.

### The Main Gallery Displays.

The main gallery display is a mixture of detailed dioramas and smaller topical displays relating to environmental issues. We have attempted to maintain the highest quality of presentation throughout (finances permitting). There has been an enormous input from natural history staff and the museum's display technician.

The main displays are built over the carcasses of old brass cases. These were very shallow and awkward to access, due to heavy doors. They also had internal fluorescent lighting that required removal of exhibits when lamps required servicing. The new cases are all fibre-optic lit with eight 150 Watt units providing light for all the cases. The power units are sited on top of the cases, so servicing is easy. Light levels are maintained at between 50 to 100 lux in most areas and the fibre-optic light is cold with minimal Ultra Violet content.

The new cases were built by our display technician, Gary Webster, and provide much more display space, changing the area from one with cases lining the walls to a display area with bays. Taxidermy Technician Geoff Yates built all of the major dioramas and several smaller displays. Keepers Patricia Francis and Kathryn Berry built most of the others and researched and wrote most of the labels. Reading ages were carefully checked, and topics carefully linked with the ever-present, ever-changing National Curriculum where possible.

Labelling dioramas has always been a problem. Do we place numbers or names by everything and kill the whole effect? Maybe we should use outline drawings to match up the specimens. We decided against this because we felt that people did not identify the specimens, merely recognise the willow warbler because it is the one on the left with its wings open, as in the outline. We were fortunate to be able to work with Blackpool and The Fylde College who have a Scientific Illustration Course. Students performed work as part of their course, some on placement in the museum. The styles of the labels vary, but many are of exceptional quality. The originals are carefully stored; the displays using colour photocopies. Interestingly, the quality of colour photocopies is nowadays very good and they appear to be extremely resistant to fading. They can be produced directly from colour transparencies as well as from artwork. Our A2 copies cost around £18 each. We hope that people

now look at the colours and markings of the plants and animals to identify the exhibits; good luck to them with the warblers!

We attempted to use the best quality exhibits wherever possible. Many new displays in some quite famous large museums have been let down by (frankly) tatty animal specimens. The insect displays (wall mounted under large perspex covers) contain exhibits in mostly lifelike poses. Why is it that invertebrate displays are so often of set specimens straight out of the collection drawer. Would you use a study skin of a vole in a diorama? Plants are always a problem. The gallery uses a variety of techniques from detailed wax models to photographs, air-dried and freeze-dried specimens.

### Educational Use By Schools

As part of the project we developed an Education Pack. This was designed, researched and put together by Econsult, the trading arm of our local Lancashire Wildlife Trust, with copious input from Kathryn and Patricia. Chris Whitehead at the LWT was largely responsible for the content (as he was for the design of the original food-web game adapted as a floor-mounted version in the gallery). It is an impressive educational package that, due to sponsorship from Marks & Spencer and the Friends of Bolton Museum & Art Gallery we have been able to distribute free to all Bolton Schools. (If you would like a pack please send a cheque for £12.50 p+p incl. payable to 'Bolton Metro' ) The pack has fifty high quality worksheets printed onto card. Teachers can photocopy them for use on visits or in school before or after a visit. There is also a twenty page teachers' guide included with background information and booking details. The recent appointment of a part-time Natural History Education post has been especially welcome to exploit this fully.

A small selection of sheets are provided free in dispensers for the public to use. This is a popular feature of our service in Bolton. Last year the Museum distributed over 300,000 sheets on all subjects to the public and to visiting school groups. Copies are produced on a very large council copier and the cost is around £3500 per year! (We received over 150,000 visitors last year.)

The gallery has been designed with children in mind. Around the front of all the cases is a small step. This is narrow enough to be no problem to adults, but are high enough for children to see into the higher cases, thus eliminating the eternal problem. (The majority of museum displays are too high for kids). These same steps provide resting surfaces for worksheets on clipboards. They also provide impromptu seats for exhausted parents who have given-up trying to get their offspring to leave the Museum!!

The Wildlife Study Centre has been designed to hold half a school class. A number of additional exhibits and some other equipment are available from locked cupboards for use by teaching staff.

### Does It All Work ?

In a word, YES! Natural History Staff who visit the gallery to top up leaflets, worksheets, crayons and paper have been accosted on a number of occasions!! Members of the public can't resist thanking us! At autumn half-term the Wildlife Study Centre was so full that people were standing around waiting to get in!! A small donations box (a purely voluntary and very low-key afterthought) raises about £7 a week on average. Feedback from schools has only just begun, but seems good.

Oh!! I forgot to mention the ten foot house sparrow!!

### B. P. BEIRNE MICROSCOPE SLIDES OF ICHNEUMONIDAE AT THE NATURAL HISTORY MUSEUM, LONDON

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### Introduction

In connection with a project to study the phylogenetic relationships of the subfamilies and certain selected genera of

ichneumonids, the microscope slides of Bryan P. Beirne at the Natural History Museum, London (formerly the British Museum (Natural History) and referred to here as BMNH) were examined. In order to interpret the slides more fully and to increase their usefulness to future workers, efforts were made to collate information relevant to the slides, to locate the pinned specimens from which the slides were prepared and to verify the currently valid species names. A brief assessment of the condition of the slides and some recommendations for their curation are made.

#### Acquisition of the slides

The precise date of acquisition of the slides by the museum is unclear since there is no mention in the accession registers of the Department of Entomology, although they were probably transferred shortly after Beirne finished his work on diplazontines in 1941. The BMNH was a natural choice of repository, since many of the slides were made from pinned specimens in its collection. A. W. Stelfox, from whose pinned specimens a number of the slides were made, did not wish to retain those slides and had no objection to them being deposited at the BMNH (B. P. Beirne, pers. com.), although he retained the pinned specimens in his own collection. Some of the slides (diplazontine abdominal sclerites) have been incorporated into the main Hymenoptera slide collection at the BMNH, although the slides of skins of larval ichneumonids are still kept separate in three wooden slide boxes.

#### Historical background

Although he had not attended a formal entomology course as part of his first degree, Beirne took up the study of ichneumonid larval skins at the suggestion of A. M. Gwynn who was then working on African locusts (B. P. Beirne, pers. com.). The result was Beirne's thesis entitled "A consideration of the cephalic structures and spiracle of the final instar larvae of the Ichneumonidae" for which he was awarded a Ph.D. in 1940 (D. Hamill, Trinity College Library, Dublin, pers. com.), the beginning of a long career in entomological research including pest management and agricultural entomology (O'Riordan, 1985). At that time, Beirne was an assistant to Professor Bront. Gatenby in the Zoology Department of Trinity College. Professor Gatenby's main interest was in cytology (Grainger, 1960) and he showed little interest in Beirne's thesis although A. W. Stelfox of the National Museum, Dublin was more helpful. As the United Kingdom did not recognise the Irish Republic at the time, Beirne qualified as a colonial and was able to visit the BMNH with finance from an Overseas Fellowship of the Royal Commission for 1851. He made a number of visits for several weeks at a time, firstly to study larvae and then other aspects of ichneumonid taxonomy, including the diplazontine ichneumonids (B. P. Beirne, pers. com.). The culmination of this work was two major publications on the larval skins of ichneumonids (Beirne, 1941a) and the abdominal sclerites of diplazontines (Beirne, 1941b). J. F. Perkins (then at the BMNH) was sufficiently interested in Beirne's results to contribute a revised classification of Ichneumonidae to the paper on larval ichneumonids. This is significant as the only time that Perkins' classification was published.

#### The Microscope slides

The Beirne microscope slides may conveniently be divided into two groups, corresponding to the two major papers (it is not certain how many slides were originally prepared, the numbers given below are those currently in the BMNH): a) 231 slides of the final instar larval skins of Ichneumonidae. These are of importance as many were figured by Beirne (1941a), consulted by J. R. T. Short for a number of projects (see Short, 1978 for references) and also by D. B. Wahl (for example Wahl, 1986, 1988 & 1993). In addition, one of Beirne's slides bears the larval skin of a paratype of *Adelognathus granulatus* Perkins, 1943.

b) 48 slides of the genital and postgenital abdominal sclerites of diplazontine ichneumonids. These are of importance as they were figured by Beirne (1941b). Although Beirne only refers to the

sclerites of the male in the title of this paper there are also some slides of sclerites of females.

The two groups of slides are dealt with in more detail below:

#### 1. Slides of the final larval instar skins of Ichneumonidae.

For the preparation of his slides, Beirne extracted larval skins from the cocoons of reared ichneumonids in the collections of A. W. Stelfox, of which most is now in Washington and Dublin (Krombein, 1967; Beirne, 1985; O'Riordan & O'Connor, 1988), the BMNH, and A. M. Gwynn. The current location of Gwynn's collection is not known: It may be in a Scottish museum since Gwynn went to practice medicine in Aberdeen (B. P. Beirne, pers. com.), although it is not in the National Museum of Scotland, Edinburgh (M. R. Shaw, pers. com.) or the Zoology Museum of Aberdeen University (R. Ralph, pers. com.). After macerating the skins in potassium hydroxide solution and washing them in acetic acid, they were mounted in Faur's or Berlese's medium. Most were not stained although a few were stained with an unnamed orange stain. A list of slides and specimens was made. BMNH specimens from which larval skins were extracted had a small label with an ink, handwritten, code number in the form "BPB {number}" and the slides were given a corresponding code number in the form "BM {number}". The current state of cross referencing between slides and pinned specimens is poor because of the loss of the lists, the inadequate labelling and because of the separation of some of the pinned specimens from the slides.

The slides suffered some deterioration after being transferred to the BMNH in particular drying which has allowed the entry of air bubbles and slight oxidative discoloration of the mountant, a result of the slides not being ringed. Aqueous gum-chloral mounting media are no longer regarded as suitable for permanent mounts (Upton, 1993) and consequently current workers favour more stable mountants (Wahl, 1984; Noyes & Polaszek, 1988; Wahl, 1989). The damage may have been hastened circa 1955 due to storage in a cupboard through which a heating pipe passed (B. P. Beirne, pers. com.). There are also a small number with cracked coverslips. A few of the preparations were remounted in Canada balsam by J. R. T. Short in 1977. Some of the slides seem to be lost since there are specimens in the collection of the BMNH with labels which do not correspond with any of the slides.

A total of 59 pinned specimens from which larval skins were extracted were located in the main collection of the BMNH, from the names given on Beirne's slides and in his papers (current equivalents of the names used by Beirne were found by consulting the "Taxa" computer database (Yu, 1993)). Such specimens were often obvious from the neat way in which the ichneumonid cocoon had been slit in order to extract the exuvia. It is probable that more specimens exist elsewhere in the collection if they were redetermined, although owing to the small size of Beirne's labels they will be difficult to detect.

Since the original list of slides and specimens was lost (B. P. Beirne, pers. com.) new lists were drawn up summarising data on a) slides of larval skins and b) pinned specimens, located in the BMNH collection, from which larval skins were taken.

#### 2. Slides of the genital and postgenital abdominal sclerites of Diplazontinae.

For the preparation of his slides of diplazontine tergites, Beirne followed a similar procedure to that used for larval skins. The material used came mostly from the BMNH collection, but some may possibly have been from the collection of A. W. Stelfox, according to the introduction to Beirne's (1941b) paper, although the precise origin was not marked on the slides. BMNH specimens from which sclerites were removed had a label with the following data attached: "Genitalia on B{number} / B.P.Beirne, 1940" and the slides were given a corresponding numbered label in the form "Genitalia B{number} / {species name} / B.P.Beirne, 1940". A list of slides and specimens was made although this is now lost. The current state of cross referencing between slides and pinned specimens is poor because of the loss of the lists and the inadequate labelling.



The slides were mostly in good condition, although there were a few where the mountant had dried out and/or the coverslip was broken. Some of the slides seem to be lost since the code numbers indicate at least 51 slides, also there are some specimens in the collection labelled by Beirne for which no corresponding slides exist.

A total of 29 pinned specimens from which sclerites were removed were found in the main collection of the BMNH. It is possible that some specimens were overlooked since they may have been redetermined and placed elsewhere in the collection.

Since the original list of slides and specimens was lost (B. P. Beirne, pers. com.) new lists were drawn up summarising the data on a) the slides of sclerites and b) specimens located in the BMNH collection from which sclerites were taken.

### Curation

The following recommendations have been accepted by BMNH collections management in order to safeguard the slides from further deterioration and to maintain their usefulness:

#### In the short term:

a) Remount those preparations in immediate danger of deterioration, particularly: i) those where the coverslip is broken and there is the danger that the specimen will flake off and ii) those where the mountant has dried, allowing air to enter under the coverslip and there is the danger of the disruption of the specimen. It is recommended that a more stable, tried and tested medium such as Canada balsam should be used. Care will be taken to retain original slide labels where possible.

b) Where no deterioration is apparent, ensure that each slide is ringed with Canada balsam or Euparal to prevent drying of the mountant and entry of air bubbles.

c) Improve storage of and access to the slides by rehousing in a purpose built slide cabinet with suitable protective covers and divider labels. It would be most useful to future workers if the slides of larval skins were kept together as a body (the slides of diplazontine sclerites would stay together anyway under the present systematic arrangement of the BMNH Hymenoptera slide collections).

#### In the medium term:

d) Label all slides, with the current valid name of the species concerned.

e) Label pinned specimens (in BMNH collection) prominently.

f) Locate pinned specimens in other repositories (Stelfox and Gwynn material) and ensure they are adequately labelled and cross-referenced with their respective slides.

g) Investigate possibility of transfer of pinned specimens in other repositories to the BMNH so they are not separated from their slides.

h) Copy relevant lists and other appropriate documentation and place them both with the slides and also in the collection archive.

### Summary

Information on the Beirne microscope slides at the Natural History Museum, London is summarised, including slides of final instar larval skins and the abdominal sclerites of diplazontine ichneumonids. Many of the original specimens from which the slides were made were located and lists of slides and specimens have been drawn up. Brief notes were made on the conditions of the slides and some recommendations for their curation are made.

### Acknowledgements

Thanks are due especially to Professor Bryan Beirne, currently Professor Emeritus at Simon Fraser University, Burnaby, Canada and also to Paul Brown, Dr Mike Fitton, Deirdre Hamill, Dr James O'Connor, Dr Mark Shaw and Dr Robert Ralph. The work was supported by a Natural Environmental Research Council Grant (GR3/8060) to Dr Donald Quicke and Dr Mike Fitton.

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### PROCEDURE FOR COLLECTION RELOCATION

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### Introduction

These Guidelines arose out of the experience of the North West Collection Research Unit [NWCURU] over the last few years in relocating natural science material between institutions. It is hoped the Guidelines will prove useful to curators involved in arranging the relocation, or rationalisation, of collections, by helping both the disposing and the acquiring institutions to agree on all important aspects of the transfer in advance. The Guidelines should also inform the work of Collection Research Units [CRUs] around the country.

It is important to approach any such relocations in a positive manner, making it clear to all interested parties that the ultimate aim is to improve the curation, documentation and access to the collection.

### Principles to follow on transfer

The Museums Association Code of Conduct for Museum Curators, and the Museums Association Code of Practice for Museum Authorities should inform and guide the decisions and practice of any relocation of collections.

It is suggested the following principles are adopted:

1/ The collection should only be acquired by an institution...

\* When it fits their declared Collecting Policy

\* Which has permanent curatorial staff posts in the appropriate discipline(s)

\* Which has adequate backup for maintenance and conservation

\* Which has resources in storage of at least as good quality as the disposing institution

2/ The collections should be relocated to the nearest suitable institution that can receive them. If no such institution can be found locally or regionally, the collection should be offered nationally or even internationally *via* suitable professional journals. Only if after a reasonable time no willing recipient institution comes forward should the sale or destruction of the material be contemplated. In the event of eventual destruction, the material should be photographed, and all documentation, including specimen labels, should be preserved.

3/ Collections should be moved intact - the 'all or nothing' principle - to prevent the collection becoming fragmented, or having material separated from any extrinsic documentation, thus making future research more difficult. This principle also precludes 'cherry-picking' by other, usually major, institutions, leaving the disposing museum with assorted 'rubbish' so that by a 'trickle-down' effect the least useful material ends up in the smallest museums who are probably the least able to cope with it or to use it!

4/ If any collection has strong local associations with the disposing institution, then there should be a very strong presumption that the collection will not be relocated, but that a formal contract for suitable ongoing care will be arranged with a nearby institution with the correct natural science skills available.

5/ That full transfer of title documentation will be provided by the disposing institution once the collection has been moved. If the terms of the original gift of the collection are in any way restrictive it is best that legal advice is obtained.

6/ That expert conservation advice will be sought on any potential dangers to the material in moving it.

7/ That once the collection has been relocated, the information about the transfer will be submitted (usually *via* the local CRU) to the national FENSCORE database, and also will be published as appropriate by the Biology or the Geological Curators Group.

### Decisions needed once relocation proposed

The following points should be discussed between the donating and receiving institutions, and the agreements reached should then be incorporated into a written document. It is suggested that the agreement is shown to the local Area Museum Council [AMC] and/or CRU for comment and approval before being finally jointly submitted for formal acceptance by the governing bodies of all institutions involved. The only exception here would be in the case of true emergency action, eg. where the disposing institution can no longer protect the collection because of *force majeure*.

*Which collections are included?* These should be clearly and unambiguously described in the agreement, to avoid mix ups or arguments during the removal. When more than one acquiring institution is involved, it would be advisable for coloured tags/stickers to be attached to all cabinets and boxes, etc., to help ensure the material all ends up in the intended place. Extrinsic documentation, such as field notebooks, history files, manuscript and printed catalogues, *must* be kept with the collection to which it refers, and should be packed in colour coded containers.

*Who pays for what?* It is suggested that normally the acquiring institution(s) would be expected to pay for the packing, transport, and storage of the material, but it is hoped that such costs would be

eligible for grant-aid from the local Area Museums Service, and given a high priority for such aid.

*The timetable for the move.* The disposing institution should undertake to make the collections readily available as necessary, and also if possible arrange for local help with the packing and loading of the material. The acquiring institution(s) should undertake to adhere to the agreed timetable, and remove all the material by the agreed date.

*Settlement of disputes.* In the event of a dispute arising that cannot be resolved locally, it is suggested that the matter be referred for arbitration to an *ad hoc* independent body. Such a body could consist *ex officio* of the Chair of FENSCORE, the Chair of one nearby CRU (or their nominees), together with a senior BCG or GCG member from the region concerned and acceptable to both sides; it is of course vital that none of these people are directly or indirectly involved in the disputed relocation.

### After relocation.

It is the duty of the acquiring institution to curate, conserve and document relocated collections to the same standard as their other collections.

If subsequently an acquiring institution, for valid reasons, decides to pass on a part of a collection to another suitable institution, it is the responsibility of the giving institution to

\* fully document the material transferred, pass one copy to the new acquiring institution, and keep one copy permanently with the remainder of the collection,

\* inform the FENSCORE database of the move,

\* publish details of the fresh move *via* BCG or GCG.

### NOTES, BIOGRAPHIES AND OBITUARIES

*Adrian Norris, Assistant Curator Natural History, Leeds City Museums*

The present financial climate in museums, galleries and other similar institutions both national and local mitigates against even simple and basic forms of collection research. Most museums have, for example, collections for which the name of the donor and/or collector is known, but time has never been available to research and locate any further information.

Several museums and institutes are also known to have indexes of obituaries etc., often from limited runs of specialist journals, and there are even a few published catalogues relating to specific interest groups. Some of these indexes and catalogues are well known to some curators, but very often they are not known, or are not easily available.

Using modern technology, we could help each other in a form which would save both time and money, as well as assisting our work. To this end several of the natural historians within museums in Yorkshire and Humberside are getting together to produce a catalogue of published notes, biographies, bibliographies and obituaries found within, a limited number of locally available journals. The idea is that this information will be distributed free to any museum requiring it in the form of a floppy disk which can be read by any IBM compatible P.C.'s.

Several other people have shown interest in this project and it has been suggested that the service should be made available nationally. If the disks are to be of any value on a national basis, however, larger numbers of journals would have to be searched than are available locally. If other natural historians are interested in this project and are willing to assist by extracting information from card indexes, journals or any other sources I would be interested to hear from them. To obviate duplicated effort, I will publish periodic updated lists of the journals that have or are being covered.

It would be helpful if intending collaborators would adopt a standard syntax for their entries. This would allow the information to be merged later with other peoples work, and also would facilitate the conversion of text or word-processed files into a

database if desirable. It is suggested entries take the following form:-

Surname, Forename(s), (birthdate - deathdate)

Journal name Volume no. (Part no.): page numbers (Year of publication)

If more than one obituary is known for a person, then the second and subsequent entries may start with a ditto " sign to save repeating the collector details. A blank line should be left between entries; journal names need not be underlined or italicised at data entry time. See the List below for examples of this syntax in use.

At the present time, the project is still in its early stages, and the information extracted to date is limited. However, it has already proved its worth in the time saved whilst collating data on specific collectors for our donor files.

The data extracted is minimal, as can be seen from the examples listed below. Additional information could be added to the data entries if required. However, it was felt by most colleagues that extracting information about people's interests, places of birth and death etc., would be time-consuming and would not help greatly when trying to identify specific collectors.

#### **Journals searched to date**

*Bradford Scientific Journal*  
Complete to Vol. 3 No.8 (1912)

*Conchological Society Newsletter*  
Complete to No.128 (1994)

*Journal of Conchology*  
Complete to Vol. 34 No. 6 (1994)

*Journal of Molluscan Studies*, (formerly the *Proceedings of the Malacological Society of London*) Vol. 17-60 (2) (1994)

*Yorkshire Naturalists' Union Bulletin*  
Complete to No.22 (1994)

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Baldwin, J.W., (-12.06.1912)  
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J. Conch. 6: 58 (1889)

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## *Natural Science Curatorial Course*

19th-23rd June 1994

Department of Museum Studies, University of Leicester, in association with Leicestershire Museums, BCG and GCG.

Participants will discuss and take part in aspects of the curation of natural science collections including field collecting and recording, preparation, preservation, conservation and storage, identification, systematics and nomenclature, collecting policies and contemporary issues in natural science curatorship, historical research, and more.

Cost excluding meals and accommodation: £245.

For an application form and further details please write to the Department of Museum Studies at the above address or phone 0116 2523963.

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