



The Biology Curator



The Publication of the Biology Curator's Group

ISSUE 6

JULY 1996

Diary Dates

Second World Congress on the Preservation of Natural History Collections.

August 20-24, Cambridge.

Contact: Chris Collins, Geological Conservation Unit,
Dept of Earth Sciences, University of Cambridge,
Madingley Road, Cambridge. CB3 0EZ. Tel: 01223
62522, Fax: 0123 333450.

Systematics and Biological Collections.

27-30 August, Ulster Museum.

Contact: Ulster Museum, Botanic Gardens, Belfast BT9
5AB.

BCG Visit to new NHM Wandsworth Store.

12 noon, Tuesday 10th September 1996.

Contact: Kathie Way, Natural History Museum, Cromwell
Road, London. SW7 5BD.

BCG Session at MA Conference.

9.15-10.45, Thursday 3rd October.

Contact: Mike Palmer, Liverpool Museum, William
Brown St, Liverpool. L3 8EN.

History of Natural History in the South-west.

Sat-Sun 5-6 October, Torquay Museum.

Joint meeting of the Society for the History of Natural History and the Torquay Natural History Society.

Contact: Mike Bishop, Torquay Museum, 529
Babbacombe Road, Torquay TQ1 1HG.

GCG AGM - Geological Models.

27 November 1996, Manchester Museum.

Contact: John Nudds, Manchester Museum, Oxford Road,
Manchester, M13 9PL.

BCG Entomology Meeting

February 1997, Bristol.

Contact: Ray Barnett, Bristol Museum, Queens Road,
Bristol BS8 1RL.

BCG AGM

April 1997, Cardiff.

A joint meeting with Natural Sciences Conservation Group.

Contact: Julian Carter, Dept Zoology, National Museum
of Wales, Cathways Park, Cardiff. CF1 3NP.

Celebration of bicentennaries of Charles Lyell and James Hutton.

30 Jul-3 Aug, 5-9 Aug 1997, London & Edinburgh.

Contact: Lyell-Hutton Conference Office, Geological
Society, Burlington House, London. W1V 0JU.

Welcome . . .

Welcome to the new-look Biology Curator. We hope you like it but if not tell us, we would like to hear from you. Not just articles but also letters, views, news, photographs and cartoons, job changes, light-hearted looks at 'The Job' or just anything!

Copy dates and address to send your contributions to can be found on the back page.

Our thanks go to all those who have contributed to this issue allowing us to get it out on time - we hope!

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Deadline: All items for next publication to reach Editors by 8 September 1996.

Newcastle AGM — 30 April 1996

1. Apologies were received from Helen Burchmore, Mike Graham, Mike Taylor, Paul Harding.
2. The minutes of the last meeting were accepted as an accurate account of that meeting.
3. There were no matters arising.
4. The chairman's report was read by the secretary.

Chairman's report:

It is with mixed emotions, (mainly relief, euphoria and a profound sense of relief), that I retire as chairman of BCG and hand over to Mr. Pickering's wife. I have enjoyed my association with committee over my eight years as member, secretary and chairman, and look forward to being a drone again.

This was another busy year for committee, with several successful meetings, notably Bolton and Liverpool. Both were of a practical nature, with demonstrations as well as talks.

The work of the editorial cell continues with a slightly re-jigged, (for which read completely changed), editorial team comprising Patricia Francis and Kathryn Berry at Bolton Museum, with Steve Garland as office junior.

With the current economic climate and severe budget cuts, we have been particularly concerned with collections at risk. Letters are sent to directors and chief executives, with mixed results. If they are completely ignored we continue to badger them with phone calls and follow up letters. The major problem is that we don't get to hear about the problems sufficiently early.

Some review of the committee's cell structure and operation and certain problems identified. For example there has been no mechanism for reporting back to committee, the committee has not been pro-active in assigning tasks to the cells and general communication to and from the cells has been poor. We hope that this year these problems will be successfully dealt with, and that we can look forward to new campaigns, more excellent meetings and a closer relationship with other groups.

I would finally like to close by passing on my best wishes to Jane, who will be an excellent chairman, being conscientious, diplomatic, gets things done and doesn't stand for any nonsense. I believe the committee is in safe hands for the future.

Regards,
Mike Graham,
Chairman.

5. Secretary's report:

This year has been a slightly fraught for BCG committee. With ever increasing workloads for everybody, trying to make sure that the work of the committee is done to a satisfactory standard has becomes yet more difficult. It has been noted that The Biological Curator has been appearing rather late over the course of the year, and steps are in hand to deal with this. However the group has managed to maintain its good record of well attended meetings. Last years AGM took place during what turned out to be a most

successful international conference. September saw us celebrate the BCG's 20th year, with an enjoyable meeting in Bolton, the scene of the groups foundation. November recorded a good turnout for what was by all accounts an excellent trip to Belgium. And in February we held another successful workshop meeting, on botany for non-botanists. The committee feel that three meetings a year, of these three types is a good way of addressing the various needs of the group, though if anybody has any bright ideas we will always be glad to hear about them.

The committee held three meetings in 1995/96, with an emphasis being placed on sorting out the problems with the journal and getting the cell structure of the committee working to its full potential. We hope that 1996/97 will see considerable improvement in both these areas. In the meantime we have continued to cover the usual issues. One of the areas we have been keen to pick up on are those collections at risk. 1995/96 saw us looking at Doncaster, Lincoln, Passmore Edwards, Kendal, Dundee, University College - London, and Bristol, of which the dismal situation at the Passmore Edwards, gave us the greatest cause for concern, and which is still not satisfactorily resolved. The situation at Bristol is looking worrying, and has prompted us to look towards the action described in Mike's report with regard to a higher profile policy on collections at risk. Please let your committee know of any similar problems that you are aware of. Recent editions of the Museums Journal indicate that the situation is going to look considerably in the near future. The earlier we become aware of problems the more effective any action we take is likely to be.

On the brighter side we can now say that we have a new editorial team in place, based on the team at Bolton. Please make their job easier by generating material for the Journal. Items to go to Patricia or Kathryn at Bolton Museum, full address on back page.

Please remember that while the committee is here to serve the needs of the membership, they can only do that if the needs are being made known. Thank you.

Steve Thompson
Secretary.

6. Treasurer's report was read by the secretary.

Treasurer's report:

This year has seen BCG's bank balance continue to rise steadily. Particularly encouraging is the way in which our larger meetings and trips have started to show a profit, enabling us to subsidise smaller meetings and attendance at other relevant meetings.

I hope the membership will agree that the move of our account to the Midland's Small Treasurer account has been beneficial, as evidenced by the respectable sum in interest accrued over the year, especially as compared with the five pounds obtained with the Royal Bank of Scotland! Towards the end of the year I intend to send out standing order forms to members and hope that as many as possible will take advantage of this facility. Increasing numbers of institutions are now paying by BACS, which works fine when the information about the payee actually reaches the statement. However, in every case this year I have had to phone the bank to find out where the money came from.

I feel that the level of postal expenses this year are unacceptably high. This has been caused mainly by late publication dates of The Biological Curator, creating a need for flyers to be sent out separately. A recent bill for postage of the AGM notices came to over eighty pounds.

We have gained more members than we lost this year and the sum raised from subscriptions forms the largest part of our revenue. The number of institutional memberships has remained unchanged for some time, (though some have come and others have gone in that time), and perhaps all members could check to see whether their institutions could take out a subscription.

Kathie Way.

BCG treasurer.

7. The editing team being under review at the time, this report was not read, but the new team will introduce themselves in the next journal.

8. Elections of new members was held under any other business, due to that agenda item being accidentally left off the agenda. Mike Graham stood down as Chairperson but remains on committee. Jane Pickering was duly elected as Chairperson. Three members stood down, they being Mike Taylor, Bill Pettitt and Rosina Down. Three new members were elected, they being David Carter, Natural History Museum, Julian Carter, National Museum of Wales and Maggie Reilly, Hunterian Museum.

9. The 1997 AGM will be held in Cardiff, as part of a joint meeting with Natural Sciences Conservation Group, on a date in April yet to be decided.

BCG COMMITTEE: Address List

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BCG Committee Report

Although the group has been organising meetings very successfully over the last couple of years, other things have not been running as well as we would have liked. In particular, the production of the journal has not been what was promised, and the cells have not been operating as they should. The last committee meeting gives me hope that these problems are well on the way to being sorted out. A full agenda was nevertheless dealt with comfortably within the afternoon. The appointment of Helen Burchmore to the role of minutes secretary resulted in considerably more comprehensive minutes than I am usually able to take. (I am not able to take minutes and speak to the meeting at the same time, and, as is well known, my brain seizes up if my gob is not operating). The result was the longest list of action points produced in the last three years. While this might not be such good news for those that have to deal with them, it does at least indicate that we are getting on with things.

The principle focus of the meeting was to direct some of the cells into specific tasks. Collections at Risk is to produce an action pack / plan for institutions or curators who feel that their collections may be endangered. We are hoping to present the results or at least bring this work to the attention of the wider community at the MA conference this year. Nick Goff has produced a series of activities which he will undertake for the documentation cell this year, and the editorial team will be seeking to get *The Biology Curator* off to a fresh start, and over the next few issues, evolve it into the journal we have always hoped for. The future of the conservation cell is waiting to see how the new Natural Sciences Conservation Group develops, but the cell leader, Nick Gordon, being on their committee, is in a good position to respond in the most appropriate way. The orphan collections project, which was given a days airing at the 1994 MA conference, has not died but has been progressed behind the scenes over the last few months, and members of both BCG and GCG committees will be getting together in June to take this forward.

In accordance with the principle that we should be helping the less well supported members of our group to be able to get to the most important meetings, we have been able to give substantial subsidies to five people to go to the Cambridge SPNHC meeting, as proposed in the last issue of TBC. Another half dozen or so issues were discussed under the heading of cell activities, including several opportunities to work more closely with related groups, so as to improve communication within the natural sciences community, and makes its activities more effective.

Another important part of all our committee meetings is, of course, the meetings programme. This included another European trip this November, a somewhat lower budget trip, (Cambridge could make this year expensive), re-visiting the museums in Paris to see what changes have taken place as a result of the exciting plans of five years ago. The Cambridge meeting should, of course, be in everybody's diaries. The next beginners specialist meeting, following on in the tradition of the spirit collections, bones and botany meetings, will be on entomology, possibly in Bristol at the beginning of next year. Next year's AGM is to be held in Cardiff in

April, jointly with NSCG. We are also intending to have a slot at both the 1996 and 1997 MA conferences. Finally we are hoping to set up a number of what we have chosen to call Stage 2 meetings, which could be viewed as follow ups to the beginners meetings, for a small number of people at a more specialised level to take place during the summer when it is difficult to organise larger meetings. Watch TBC for further details.

The any other business heading brought up relatively little material, for a change, though the issue of BCG's involvement in the Leicester museum studies course was included. There does appear still to be a need and a desire for BCG to have some form of direct input into the Natural History section of this course, and we are intending to offer an evening session this year as we did last year.

As you can hopefully see, we are busy bunch of bods, and more signs of this activity should become visible over the next year. One interesting comment from a new committee member was that they hadn't realised how much went on behind the scenes, as it were. Which is nice to hear, but perhaps not the best reflection on our communication with the group as a whole.

We always want communication in the other direction as well though. If you have any bright ideas, requests, criticisms or even compliments, please get in touch with myself or one of the other committee members, and better still contribute your thoughts as an item or a paper to TBC. The editors are always after more material. They are also keen to have photographs to put in the journal. (That's for those of us who can't really follow those funny little squiggles that come between the pictures). Anything from comic asides to deep and meaningful academic papers are welcome, (especially the former). We are also looking for feedback on the activities of the committee. We don't have any monopoly on ideas and need to hear yours. In particular, bear in mind the collections at risk activities, orphan collections, ideas for forthcoming meetings, offers of venues, help with cells and ideas for next year's MA conference. We await the flood of replies.

All the best,

Steve the sec.

EDITORS REPORT

Due to the personal circumstances of the Coordinating Editor, BCG members received two issues of the *Biology Curator*, a total of 56 A4 pages of closely printed text plus an index. This is no small achievement for a group that has no full time officers and I would wish particularly to thank those members (and non-members) who sent in their news and contributions as well as those members of committee who chased up those promised contributions that had not appeared as the deadlines approached.

The change to the *Biology Curator* continues to be a great success judging by the comments received by the editor although I would like to stress that filling a minimum of 20 pages per issue is a high target and will depend very much on members willingness to contribute articles. What about the shortcomings? Well, more photographs and drawings

should be included if at all possible but again, this depends on members sending them in.

Finally, I have enjoyed the last four year's (and it don't seem a day too much!) editorial duties very much thanks to those of you who helped to make the editors life easy (comparatively!). Particular thanks must go to Bill Pettitt who has edited the more academic papers on behalf of the Group since the days of the *Journal of Biological Curation* and Kathie Way who completed the often thankless but essential task of producing an index to the last volumes of *BCG Newsletter*. Northern Whig, our printers in Belfast, have also greatly contributed to easing the production of each issue with an efficient and, above all, friendly service - thanks George.

So, the very best of luck to the new editorial team at Bolton and to all of you real workers out there so long and thanks for all the fish!

Mike Taylor, Perth Museum and Art Gallery, Scotland

DOCUMENTATION CELL REPORT

I am pleased to be taking on the role of "nucleus" of the Documentation Cell. Documentation is something that all curators, regardless of their subject speciality, have to be aware of; some even do it. Many aspects are universal, but some are unique to the life sciences. There are a number of initiatives underway that are looking at the specific documentation needs of different types of collections. My aim is to ensure that BCG, and therefore its membership, can contribute to and benefit from these initiatives, and take on other projects of value to natural science curators.

Over the next year the Documentation Cell will look at three projects:

- defining the core information that is needed to describe and manage natural sciences collections
- clarification of conditions on entry forms specific to natural science material, particularly in respect of existing legislation
- developing guidelines on the documentation of natural sciences collections for MGC Registration.

It is important that the end results are relevant and usable. So it is essential that as many people as possible contribute to the process. All volunteers to help with the Documentation Cell are welcome. The work will not be arduous: it may involve as little as a few phone calls. Please contact me, if you would like to help.

The results of the cell's work will be published in *The Biology Curator*, when there is something to say, and reported at next year's AGM.

Thank you.

Nick Goff

A Natural Sciences Touring Exhibitions Network:

A discussion document.

This proposal began as an idea based on a number of factors. A number of institutions already design exhibitions for touring, but they tend to suffer from the problem that they are too big and/or too expensive for places such as Scunthorpe Museum, with the severely limited budgets and temporary exhibition space. Our need is for exhibitions that have immediate appeal (and should therefore be quite glossily presented), cost only a few hundred pounds at most, and take up no more than 100 square metres. These requirements would seem to be mutually contradictory, and it must be remembered that many small museums are able to take only exhibitions that are effectively free and occupy only a few square metres.

Although there is a touring exhibitions group, I see no reason why a network dedicated to natural history should not be feasible, indeed desirable, given that there is a conspicuous lack of small travelling natural history exhibitions. It may be easier to run such a group independently rather than as part of a wider touring exhibitions group.

The suggestion is that a group of around a dozen museums, from all over the country, preferably at least one from each region would contribute both a representative and money, say between £100 and £500, to such a network, generating several thousand pounds for the project. This could then be used to generate further funding. The groups purpose would be solely to generate one travelling exhibition each year, on a topic to be decided by the committee, to tour five or six museums per year for two to three years, or as seems most appropriate. Features of design would include immediate and marketable appeal, ease of transport and ability to scale the exhibition up or down to fit venues of varying sizes. Two useful suggestions have been made in the course of informal discussions about this idea. Firstly, after design, the 2-D parts of the exhibition be produced by the group, with the 3-D material, such as mounted specimens, be taken from the host museums collections or borrowed from a nearby service. This would make it much easier to transport, as well as promoting the use of more collections and cooperation among neighbouring services. The second idea is that both a small and a larger version of the exhibitions be produced, allowing it to travel more quickly and be more adaptable to different display areas.

It is suggested that the museums within the network take it in turns to act as the coordinating centre for the design, production and use of an exhibition. This will spread the workload, and also the benefits, both locally and nationally, of being seen to be an active participant in the scheme.

Another suggestion is that to keep costs down, the group could consider the use of college design departments in creating exhibitions, something recently done successfully at Scunthorpe. Such departments would jump at the chance of significant projects such as this for post-A level students, whose output is regularly of an very high standard. Furthermore, contacts with such institutions can be very

useful, again especially to smaller museums, both in terms of the direct benefits to the museum and the marketability of collaboration with outside organisations. With experience for designers trying to get started in their careers being very difficult to get, museums could also be seen to be promoting careers outside of their own profession, as well as, of course, promoting the cause of museum design and a greater range of exhibitions.

The use of Area Museums Council grants could be very useful. The question of which council would be approached needs to be addressed, but in the long term this could possibly be done in rotation, and according to which museum is acting as the coordinating centre. It might be expected that the AMC's would not be concerned with such matters as the design of the exhibitions or the running of the scheme, except insofar as it relates to the requirements for grant approval.

It is appreciated that there are many problems that would need to be overcome. How to get a satisfactory consensus over what is to be produced? How will the rota be decided? What about the institutions at the back of the queue? What kind of work will actually be required? Who will organise and run the scheme as a whole? These are not going to be easily answered. Any organisation that undertakes to set this up will need to be confident of continued support from participating institutions. It will not be a matter of paying out a certain amount of money and waiting for the exhibition to arrive.

This proposal has been written up for discussion purposes. If you are interested please contact Steve Thompson at Scunthorpe Museum, Oswald Road, Scunthorpe, DN15 7BD. 01724 843533.

IF YOU WANT TO KNOW MORE ABOUT THE NATURAL SCIENCE COLLECTIONS AT IPSWICH MUSEUM

Natural Science Collections in South East Britain Bateman, J., McKenna, G. and Timberlake, S., was published in 1993, the result of the long-running South East Collections Research Project. The register was produced initially as a computer database which would have restricted its sale to those with suitable computer facilities. The printed version consists of a catalogue and the database indices.

There are a number of problems which make this hard copy version difficult to use. The main catalogue is a list of collections ordered by collectors name. Highlighting the subject and locality would help readers pick out relevant entries. Many researchers would surely be more interested in a specific geographical area or a subject rather than a personal name?

The indices refer back to the main catalogue entries, again, making it time consuming to find information because entries are so scattered. This process is made even more difficult because there are no page numbers in the entire volume!

Little editing has been carried out on the indices and there are numerous duplications. On the first page of the geographical index, for example, University College London appears fifteen times. This index is hard to use, as again there are no divisions by subject, just a collection name without added information.

The confusing nature of the publication hides some more fundamental problems, missing entries and other errors. the Ogilvie collection of mounted British birds, one of the finest in the country is placed at Luton rather than at Ipswich Museum. The number of collections listed for Ipswich Museum is quite small. This does not reflect the size or range of the collections at Ipswich Museum, rather the collection details were not entered onto the database. Over twenty named geology collections do not appear in the register including the Bell and Canham collections containing Red Crag material and the Spencer collection of Pleistocene mammals. Examples of the many other collections missing from the register include the Morley collection of coleoptera, the Pierce and Singleton-Smith collections of lepidoptera, the Burton, Tuck and Packard collections of bird eggs and the Ransome collection of mounted birds.

At the time of the original research unit project (1981-85) data was processed at Manchester and entered on the database there. Record forms with details of Ipswich Museum collections were sent to Manchester during this period after which they were never heard of again. It was assumed that this early information was stored on the Manchester database and subsequently transferred to the current SECRU database held at the MDA. It was only after the data collection and processing stages of the latest SECRU survey that it was discovered that some Ipswich records had not been entered in to the Manchester and then the SECRU databases. Unfortunately, by the time the problem emerged, the SECRU register was already in production and it was too late to add the missing entries to the current edition. Ipswich Museum data in the register is therefore extremely incomplete. As these records contain numerous county collections, Suffolk is badly under-represented in the register.

If anyone is interested in the true extent of Suffolk collections or would like further information about the natural science collections held at Ipswich then please contact the Natural Sciences Section (tel 0473 213761).

David J. Lampard, Keeper of Natural Sciences, Ipswich Museum, High Street, Ipswich, IP1 3QH

[Many of the collections registers produced by the CRUs have deficiencies. In Scotland for example the important collections at Kelvingrove Museum, Glasgow are poorly represented. This is simply a fact of life and one tends to forget the appalling state of knowledge of our scientific heritage before the CRUs got to work and before Manchester Museum generously coordinated the processing of data. The technology now widely available should deal with the problems of access to data and indexing. The MDA now hold the 'National' copy of all CRU data and this is apparently very easy to update now that all the data is in the MODES format. A future issue of *Biology Curator* will contain a summary of the current state of the CRUs. - Ed M.T.]

The SPNHC Guidelines

Introduction

The SPNHC *Guidelines for the Care of Natural History Collections* were endorsed by the SPNHC Council in May 1994 and were published in *Collection Forum* 10(1): 32-40. They are reprinted, with permission, in full here.

The purpose of the SPNHC Guidelines is to advocate an institutional framework that advances professional standards of management and care of collections. The basis of the framework is **preventive** conservation and recognition of primary institutional responsibilities for use, management and care of specimens. The *raison d'être* for producing the Guidelines was the transformation of the management of collections given the high profile that museums enjoy, the frequency and diversity of collections use, and the sophistication of information technology and conservation research. SPNHC felt that it is vital to balance the wise use of collections with sound conservation practice and produced the Guidelines to help enable this. The Guidelines cover collections in the fields of anthropology, earth sciences and life sciences as well as associated library and archival materials.

Comparing the Guidelines with documents produced in the UK suggests they are probably akin to the MGC Registration documents and the Museums Association's *Codes of Practice*. The Guidelines, like these documents, are based on a broadly accepted philosophy of the responsibilities of caring for collections, both for the institution and the individual. This type of document is a compliment to the *Standards* documents produced by the MGC for Biological and Geological Collections (MGC, 1992 & 1993). The *Standards* represent a consensus of the current professional opinion of **best practice** and are practical documents with specific targets rather than policy statements. Both subject-specific documents (the Guidelines and the *Standards* documents) cover similar areas although some differences were noted. In particular the Guidelines do not have any mention of disposal policies (presumably an active decision) which are dealt with fully by all MGC documents. The SPNHC document does emphasize that the guidelines *must take into consideration the reality of large*

quantities of specimens. This consideration is hinted at but never really discussed in the *Standards* documents, and is a reality which natural history curators cannot ignore.

Jane Pickering

Museums & Galleries Commission (MGC) 1992.
Standards in the Museum Care of Biological Collections,
Museums & Galleries Commission, London, U.K. 55pp.

Museums & Galleries Commission (MGC) 1993.
Standard in the Museum Care of Geological Collections,
Museums & Galleries Commission, London, U.K. 57pp.

[Editors: If you have any comments please contact John Simmons E-mail jsimmons@KUHUB.CC.UKANS.EDU]

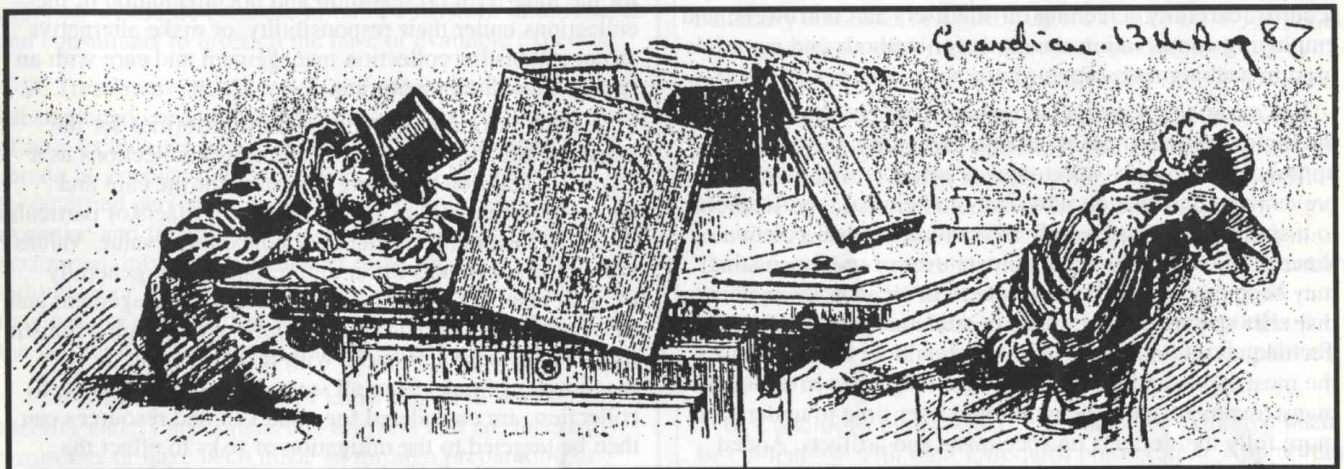
GUIDELINES FOR THE CARE OF NATURAL HISTORY COLLECTIONS

Society For The Preservation Of Natural History Collections (SPNHC)

I. Premise

A. Inherent value of specimens: Specimens in natural history collections are preserved to document presence in given localities at a given time, to validate past research, and to be available for research and other educational purposes. Specimens are collected as a sample of a region's natural and cultural environment (past and present), then are often prepared in some fashion so as to make them useful for research, exhibition, or educational purposes. Subsequent preparation, sampling, or destructive analysis may be necessary to fulfill the goals of research or legitimate educational uses. Research enhances the value of specimens.

B. Balance between use and preservation: Associated with the responsibility of ongoing research and educational use is the obligation of the institution to maximize the value of each specimen for future use. This applies not only to the data associated with each specimen, but also to the physical and chemical integrity of the specimen. Thus, it is critical that the demands placed on natural history specimens for current research and educational uses are balanced with the need for preservation of the specimens for future uses.



Victorian view: two ways of working at the museum. Mary Evans Picture Library

C. Caring for collections of specimens: Most natural history collections contain thousands, if not hundreds of thousands, of individual pieces that require care. An individual specimen may contain hundreds of related pieces. Thus guidelines for collection management and care must take into consideration the reality of large quantities of specimens and numerous pieces per specimen.

D. Inherent value of documentation and archival records: Evidence of the identification, condition, history, or scientific value of a specimen, artifact, or collection when recorded in a permanent manner enhances the value of the specimen. These records may actually have to substitute for the specimen or artifact should the specimens themselves deteriorate or be destroyed.

E. Context of the institutional mission and resources: An institution's program for managing and caring for collections exists within the context of the institution's mission and resources.

II. Objectives

A. Management and care of collections of natural history materials should be governed by respect for the scientific, historic, physical, cultural, and aesthetic integrity of the specimen or artifact and its associated data. Concern for its future should include protection against unnecessary damage, loss, or alteration that might affect its future research, educational, or exhibition potential.

B. Collection management and care should meet the highest professional standards; it must be compatible with and enhance access to collections for the intended scientific and educational uses of the specimens or artifacts.

C. All processes for collecting, preparing, and sampling, as well as the maintenance and curation of specimens or artifacts, should be analyzed relative to the goals of use and preservation to insure that techniques and materials are thoroughly documented, follow sound preservation practices, and fulfill the desired objectives for the specimen's intended use.

D. Every effort must be made to minimize the level of risk facing specimens and artifacts as a result of storage and use (e.g., by using appropriate storage units, providing adequate security, carefully screening on-site users and borrowers, and employing conservation standards for methods and materials used in packing and shipping).

E. Conservation and preservation treatment should meet the highest professional standards. Generally, the preferred approach for research specimens or artifacts will involve preventive conservation. Physical or chemical modifications to a specimen may adversely affect its analytical potential. Since it is not possible to anticipate uses of specimens that may become possible with advances in technology, methods that alter specimens as little as possible are preferred. Techniques and materials selected should be those that are the most stable and have the greatest longevity. In addition, many treatments must be monitored over time to understand more fully their effects on specimens and artifacts. Added materials should be removable whenever possible. Exceptions must be fully justified and documented.

F. Documentation should meet the highest professional standards and follow recommendations of relevant professional societies (e.g., Fitzgerald, 1988; Garrett, 1989). Media used for documentation should be preserved according to professional archival standards.

G. It is unethical to modify or to conceal the true nature of a specimen or artifact through restoration. The presence and extent of restoration should be detectable, although it need not be conspicuous. Methods and materials used must be fully documented.

H. Destructive sampling of specimens or artifacts must be justified by the quality and quantity of the information to be gained, evidence that the information is available only through the proposed sampling, and evidence that the investigator has the necessary expertise to extract that information. Procedures should be established to prevent unnecessary sampling. Sampling must be fully documented and approved in advance by individuals delegated with such authority (Cato, 1993).

III. Responsibilities for the institution

A. A museum has the ethical and legal responsibility to ensure that collections in its custody are protected, secure, unencumbered, cared for, and preserved" (American Association of Museums, 1992). Any institution holding collections of value to the scientific community has an obligation to endorse this code. To fulfill this responsibility, it is essential that institutions take steps to mitigate the use of scientifically unsound preparation and other treatment techniques, poor environmental conditions, and negligent handling in order to protect the physical and chemical integrity of specimens and artifacts for present and future needs. Guidelines for professional management and care should be applied not only to research collections, but also to education and exhibit collections. Institutions should implement systems that ensure preservation both of documentation and of specimens and artifacts.

B. Each institution should develop collections policies and procedures that provide a written framework for collection management, care, and use. It is essential that each institution also provide the resources (e.g., time, money, qualified personnel, appropriate space, and facilities) needed for the long-term preservation and documentation of the collections under their responsibility, or make alternative arrangements for collection management and care with an appropriate allied institution.

C. Each institution should establish priorities for the management and care of the institution's collections as a whole, in addition to setting priorities for the care and treatment of individual specimens and artifacts of particular research, historical, aesthetic, or educational value. Values of individual specimens differ and resources are generally limited, resulting in the need to prioritize management and care activities. This can be accomplished through a holistic risk management approach. With this approach, the magnitudes of risks from all sources, as they affect each collection, are considered together. Limited resources can then be targeted to the mitigation of risks to effect the greatest possible reduction in overall rate of damage to the institution's collections.

D. Collection care is an institutional responsibility that is shared by all staff. The governing authority retains the ultimate responsibility for collection care, but the director and staff must have sufficient authority and resources to implement appropriate measures. The assignment of direct individual authority and responsibility for various components of collection care is dependent on an institution's infrastructure, but these assignments must be clearly stated in the institution's collections policy and appropriate job descriptions. It is the institution's responsibility to provide sufficient resources to pursue actively continuing education opportunities for collection staff and adequate training for volunteers.

IV. Staff Responsibilities

A. Collection care is principally the responsibility of staff members (regardless of job titles) directly involved with specimens and artifacts: curators, collection managers, curatorial assistants, conservators, registrars, preparators, and technical assistants in these areas. Many collections care activities do not require professional conservators for implementation (Duckworth et al., 1993). Other departments (e.g., education and exhibit) are also responsible for the care of specimens and artifacts that are used for education or exhibition purposes. Preventive conservation is the responsibility of all staff including, for example, building and grounds, security, and those responsible for receptions and development functions.

B. Collection care personnel should have appropriate training to understand fully all aspects of collection work (e.g., legal, ethical, environmental conditions, management, security, health and safety), the limitations of their own expertise and authority, and the consequences of any decisions and/or actions they may take or recommend. Every effort must be made to consult with appropriate specialists to ensure that all aspects of management, preservation, and use are considered before authorization for actions is given.

C. There should be a cooperative dialogue among curators, collection managers, registrars, conservators, and collection users concerning all aspects of collection care. If only one individual is responsible for all collection care activities, every effort should be made to build a network of associates and consultants to broaden the base of available expertise.

D. Treatments should reflect the most recent, scientifically substantiated conservation information, and the development of new techniques based on sound scientific methodology should be encouraged. Treatments should be undertaken only by qualified personnel, within the limits of their area of expertise and facilities. Interventive treatments should be performed only with the consent of an objective, informed individual or individuals so authorized by the institution, and may require consultation with conservation experts outside the institution. Conflicts of interest must be avoided.

E. It is the responsibility of knowledgeable staff to identify clearly specimens and artifacts that are inherently hazardous or have been made so through preparation or fumigation practices. Staff should implement appropriate safety precautions.

F. Documentation is the responsibility of all individuals who use, prepare, manage, or care for specimens or artifacts. All techniques and materials used in collection management, care, and conservation must be fully documented. Training to develop expertise in the development and management of documentation and archival records promotes a better collection management and care system.

G. Curation is the responsibility of individuals with sufficient disciplinary expertise and knowledge of recent scientific literature to provide reliable identifications and information.

H. Collection management is the responsibility of individuals trained in museum philosophy, theory and practices, including those processes defined within these guidelines: collection, preparation, sampling, preventive conservation, maintenance, and documentation. Responsible staff should have training in a relevant disciplinary specialty but are not necessarily taxonomic or subject specialists. Training to develop expertise in the management of personnel, facilities, records and information systems promotes better collection management.

I. Conservation is the responsibility of trained conservators. Conservation and preservation personnel should have appropriate training and experience to undertake conservation and preservation procedures. Conservators should meet professional training requirements and should adhere to professional ethics and guidelines such as those defined by International Institute for Conservation-Canadian Group and Canadian Association of Professional Conservators (1989) and American Institute for Conservation (1993, draft).

J. All collection staff should keep abreast of the most recent literature and upgrade their skills in their areas of responsibility according to the highest professional standards for collection management and care.

V. Use of collections

A. Use of collections should be carried out in ways that are compatible with preservation objectives and concerns held by indigenous peoples, whenever possible. Certain specimens or artifacts may be considered too rare, fragile, culturally sensitive, or significant for exhibition or loan (e.g., type specimens, specimens of extinct species, historically significant specimens, or specimens in poor condition).

B. Research objectives may necessitate intervention or destructive sampling, but this should be allowed only when the potential for gaining knowledge by such means justifies sacrifice of the specimen or artifact, and when the knowledge will be shared with the scientific community. These procedures must be undertaken in a controlled manner with approval by an authorized, qualified individual or individuals. Original data, documentation, and records of specimens that have undergone destructive sampling should also be preserved.

C. Conditions under which specimens are exhibited must be compatible with their long-term preservation. Appropriate collection care staff must be active members of exhibit planning and production teams.

D. Educational programming that uses specimens and artifacts should convey to the general public the need for managing and caring for the items according to professional standards.

E. Some specimens and artifacts in natural history collections are inherently toxic or have been made hazardous through preparation or fumigation techniques. Specimens and artifacts should be used in a manner that protects the health and safety of staff, researchers, volunteers, and visitors.

VI. Definitions

A. Accessioning - formal process used to accept legally and to record a specimen or artifact as a collection item (Malaro, 1979); involves the creation of an immediate, brief and permanent record utilizing a control number or unique identifier for objects added to the collection from the same source at the same time, and for which the institution accepts custody, right, or title.

B. Archives - non-current records of an organization or institution preserved because of their continuing value.

C. Artifact (human) - a human-made item, often manufactured or created from naturally-occurring materials and made for use in a cultural context.

D. Cataloging - creation of a full record of information about a specimen or artifact, cross-referenced to other records and files; includes the process of identifying and documenting these objects in detail.

E. Collecting - the process of sampling the natural and cultural world using a variety of techniques that are dependent on (1) the organism or material being obtained and (2) the intended use for the sample or the research methods likely to be applied.

F. Collection - (1) a group of specimens or artifacts with like characteristics or a common base of association (e.g., geographic, donor, cultural); (2) an organizational unit within a larger institutional structure (e.g., a collection within a university biology department).

G. Collection Care - the responsibility and function of an institution with collections that involves developing and implementing policies and procedures to protect the long-term integrity of specimens and artifacts, as well as their associated data and documentation, for use in research, education and exhibits.

H. Collection Management - the responsibility and function of an institution that fosters the preservation,

accessibility, and utility of their collections and associated data. The management process involves responsibilities for recommending and implementing policy with respect to: specimen acquisition, collection growth, and deaccessioning; planning and establishing collection priorities; obtaining, allocating, and managing resources; and coordinating collection processes with the needs of curation, preservation, and specimen use. These responsibilities may be shared by collection managers, subject specialists, curators, and other institutional administrators.

I. Conservation - the application of science to the examination and treatment of museum objects and to the study of the environments in which they are placed (Duckworth et al. 1993). This involves activities such as preventive conservation, examination, documentation, treatment, research, and education (American Institute for Conservation, 1993 draft).

J. Curation - the process whereby specimens or artifacts are identified and organized according to discipline-specific recommendations using the most recently available scientific literature and expertise; a primary objective of this process is to verify or add to the existing documentation for these objects, and to add to knowledge.

K. Deaccession - the formal process used to remove a specimen permanently from the collection, with appropriate transfer of title (Malaro, 1979).

L. Deterioration - change in an object's physical or chemical state. "Damage, on the other hand, is the consequent loss of attributes or value: aesthetic, scientific, historic, symbolic, monetary, etc." (Michalski, 1992).

M. Documentation - supporting evidence, recorded in a permanent manner using a variety of media (paper, photographic, etc.), of the identification, condition, history, or scientific value of a specimen, artifact, or collection. This encompasses information that is inherent to the individual specimen and its associations in its natural environment as well as that which reflects processes and transactions affecting the specimen (e.g., accessioning, cataloging, loaning, sampling, analysis, treatment, etc.). Documentation is an integral aspect of the use, management, and preservation of a specimen, artifact, or collection.

N. Maintenance - routine actions that support the goals of preservation of and access to the collection such as monitoring, general housekeeping, providing appropriate storage and exhibition conditions, and organizing a collection.

O. Object - a material, tangible item of any kind; an inclusive, non-specific term for specimen, artifact, etc.

P. Preparation - the procedures used in the field or in the institution to enhance the utility of an organism, object, or inorganic material for a specified use. The resulting specimen may represent only a portion of the original organism or material or may be otherwise altered from its original state. Procedures should be compatible with intended uses and conservation objectives, and should be documented.

Q. Preservation - those aspects of conservation that involve preventive measures, such as maintenance procedures and correcting adverse environmental conditions;

HELP WANTED!

MA Conference 1997

As soon as the main Conference theme is known put your thinking caps on and come up with topics for the BCG contribution.

Any ideas welcome and the sooner the better to allow the committee to organise something special for 1997.

Suggestions to Steve Thompson please.

in natural science conservation, preservation also includes treatments carried out initially to prepare specimens.

R. Preventive conservation - actions taken to minimize or slow the rate of deterioration and to prevent damage to collections; includes activities such as risk assessment, development and implementation of guidelines for continuing use and care, appropriate environmental conditions for storage and exhibition, and proper procedures for handling, packing, transport and use. These responsibilities may be shared by collection managers, conservators, subject specialists, curators, and other institutional administrators.

S. Registration - (1) the process of assigning an immediate and permanent means of identifying a specimen or artifact for which the institution has permanently or temporarily assumed responsibility; one facet of documentation; (2) as an institutional function, includes the logical organization of documentation and maintaining access to that information.

T. Repository - a collection administered by a non-profit public or private institution, that adheres to professional standards for collection management and care (e.g., Alberta Museums Association, 1990; Lee et al., 1982; American Society of Mammalogists, 1974) to ensure that specimens acquired will be professionally maintained and remain accessible for future use.

U. Sampling - selecting a portion as a representative of the whole; in natural science collections, sampling refers more specifically to the process of removing a portion of a specimen or artifact for analysis. The analysis may be destructive to the sample.

V. Specimen - an organism, part of an organism, or naturally-occurring material that has been collected, that may or may not have undergone some preparation treatment. It may exist in its original state, in an altered form, or some combination of the two. A specimen may be comprised of one element or many related pieces. It may be composed of one physical or chemical component or represent a composite of materials.

W. Stabilization - treatment of an object or its environment in a manner intended to reduce the probability or rate of deterioration and probability of damage.

X. Treatment - actions taken, physically or chemically, to stabilize or make accessible a specimen or artifact; includes, for example, techniques such as preparation, cleaning, mending, supporting, pest eradication, and consolidation.

Y. Voucher - a specimen and its associated data that physically document the existence of that organism or object at a given place and time. This definition is more broadly based than that put forth by Lee et al. (1982) in recognition of the potential for specimens held in a collection for use as substantiating evidence.

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ACKNOWLEDGEMENTS

These guidelines were endorsed by the SPNHC Council, May 15, 1994, and reflect the result of input by numerous professionals over a three year period. It has been particularly gratifying that the review and comments have involved individuals from all of the professions associated with the use and care of natural history collections: collection managers, curators, conservators, administrators, research scientists, registrars, archivists, etc. This document is meant to serve as a tool for institutions and their staffs to continue to elevate the standards of managing and caring for natural history collections.

Thanks are extended to everyone who has read and commented on any of the numerous versions that led to the development of this product. The efforts of the following individuals are especially appreciated: B. Webb (Co-Chair), D. Duckworth, G. Fitzgerald, C. Hawks, J. Klein, C. Leckie, B. Moore, C. Patterson, C. Rose, J. Simmons, R. Waller, and S. Williams. Funding for reproduction and mailing of drafts for comments was provided by the Virginia Museum of Natural History. — Paisley S. Cato, Co-Chair, Sessional Committee on Common Philosophies and Objectives.

Paper, Glue and Print, a one-day conference at the Natural History Museum, London, 31st October, 1995

About 80 delegates gathered for this meeting at the Natural History Museum in South Kensington including 44 NHM staff and 14 from the Victoria and Albert Museum. The day was sponsored by Arjo-Wiggins, represented by Simon Stanyer, and was organised by Jenny Moore and Janet Margerison Knight. The morning session, chaired by Robert Huxley, comprised four talks.

The first speaker was Annemarie Wierda who is a freelance botany and paper conservator based in the Netherlands. She illustrated, with slides, the results of artificial ageing tests carried out on papers and glues with specific reference to PVA for adhering plant material. The accelerated ageing consisted of a twelve day exposure at 90°C and 50% relative humidity and was carried out at the Royal Library at the Hague. Twenty three papers and tapes were tested including many used at the NHM. Most papers survived well with slight browning in BM boards 3 and

HELP WANTED!

Specialist meetings wanted!

BCG wishes to maintain a programme of small meetings on quite specialised subjects. If anyone can offer such a meeting, please contact Steve Thompson with details. These could be based around a new storage system or a special sort of collection. It may only attract ten or twenty members, but should enable knowledge to be disseminated. If non-BCG meetings are being organised, the Editors will be happy to publicise them through *The Biology Curator*.

Mesdiox labels showing brown spots. Deterioration occurred with plastic envelopes probably due to the high temperature of the test. There was some variation between the "same" materials from different suppliers. Eighteen glues and three hotmelt glues were also tested using her own childhood herbarium specimens as test samples. Browning occurred with latexes, dextrin MC and cellulose Gripfix or carbohydrate glues both when used as an adhesive and on the surfaces of linen tapes. Latexes, seccotine and Cow Gum remained sticky long after application and so were not considered suitable for plant preservation. The Polyvinyl family of glues; PV Acetate, PV Alcohol and PV Acrylate, all performed equally well and were considered the best, although too liquid or too thick a mixture caused difficulties in application. Annemarie recommended that the pH of a glue or paper should always be neutral.

The effect of deep-freezing on herbarium specimens and old glues was also studied. She concluded that this can be used as a treatment against insect and fungal attack so long as the bound volumes or sheets are sealed within polyethylene bags to avoid further desiccation although condensation might be a problem. Also, freezing should be rapid to avoid expansion and contraction tearing.

She concluded by describing and discussing the conservation measures which she applied to the Boerhaave Herbarium volume at the Rijks Herbarium, Leiden. After initial photography, she used a minimalist approach by collecting loose fragments into small acid-free envelopes and dry-cleaning soot and dust deposits with gum powder, Wishab sponge and Staedler eraser. Holes and gaps were repaired with "Japanese paper" which was also used as flaps over delicate specimens. Loose plants were reattached with Japanese paper strips and Methylcellulose in 10% solution which was considered to cause minimal damp cockling of the paper.

Brian Pitkin of the NHM talked next of "From Keyboard to Specimen — labelling insects using computers" and covers much of what has been published in his paper in *The Biology Curator* 4: 24-27 (1995). Many curators now use computers to register and database specimens, and labels can be generated at the same time for the specimens. Brian described his multi-user registration and labelling programme for the Entomology Department (NHM) in *Paradox* for DOS.

The primary requirement for labels is that the print, paper and glue should be as permanent as possible. All this is possible using computers, but Brian recommended that a small number of specimens should continue to be labelled with traditional pen and permanent ink as an insurance against unforeseen deterioration. For similar reasons, glass microscope slides should be scribed with a diamond stulus in case the label comes unstuck and is lost. Brian quoted the favoured papers used within the NHM such as Wiggins Teaps 100% rag (WT HWS 550) and Goatskin Parchment paper and Byron Weston Paper Co.'s Resistall as all suitable for immersion in spirit and formalin. Dry specimens require acid-free archive quality paper such as Mellotex Smooth Ultra White by Tullis Russell. Brian discussed the problem of a tried and trusted paper that seemingly changed its characteristics for the worse. One must be aware that products such as ink or paper may be "improved" by manufacturers without notification! Mistakes can also be made within museums; and Brian related the story of a complaint to a manufacturer about a paper which had not deteriorated in quality but which turned out to be from a different source! Brian also described the ongoing search for suitable indelible and waterproof inks to be used in conjunction with laserjet, inkjet and dot matrix printers. Many inks used in computer printers are not water or spirit proof. Dotmatrix printers help to press the ink into the paper unlike some other systems where the print can life off the paper under certain conditions and float away.

"To Glue or not to Glue . . . ?" That was the . . . title of Donna Hughes' contribution, referring to the preparation of fresh herbarium specimens. As with many techniques used in preparation, collections care and preventive conservation, those who use them have often done so because of custom, sometimes without fully understanding why they use them. Gluing specimens reduces risk of handling damage, keeps the data attached, makes specimens suitable for postage and because Linnaeus said so as he didn't like paper strips. Methods which do not involve gluing specimens allow easier access to the underside, stop any damage when the specimen or the paper shrinks and permits removal of bits for DNA analysis. Also there is no tasty food in the form of starch-based glue for pests to get stuck into. Alternative attachment methods are strapping with gummed paper and gummed linen-backed paper strips, which must be positioned correctly to avoid the specimen shifting. Sewing is another, which (in her opinion) can damage the specimen and the mounting paper. Also she discussed enclosing specimens in card folders traditionally used for cryptogamic material, Mellinex and cellophane envelopes.

Application methods to dispense the correct amount of glue to a specimen were illustrated. PVA from a commercial nozzled container or from a syringe need to be expertly controlled. The glass sheet method used at the Royal Botanic Gardens, Edinburgh allows only the parts of the plant which will have contact with the paper to be covered with glue. Brush application requires the glue to have a low viscosity to avoid too much pressure on the specimen. She asked whether anyone had tried spraying glue onto specimens. She summarised that glues to use should be stable, flexible, reversible and long lasting.

Adrian Doyle talked about the use of PVA (Poly Vinyl Acetate) emulsion in the Palaeontology Lab at the NHM as consolidant, adhesive and filler to stabilise subfossil and fossil bone. He listed the properties required and suggested advantages of PVA products as stable, non-tacky, flexible with high plasticiser content, transparent, colourless, matt finish, small particle size so good penetration, negatively charged, and neutral pH. Methods of application such as brushing, injection, immersion and vacuum impregnation were discussed. He showed slides of the gravity drip impregnation apparatus used in the Palaeontology Laboratory to continually soak the bone with PVA emulsion, which acts by gravity. The PVA collects beneath to be recycled by pumping back to the top. This methodology is covered by his paper of 1987 in *The Geological Curator* 4(7): 463-465. PVA is also used as a base for powder paints for painting plaster replicas. Having discussed the value and uses of PVA Adrian concluded by describing some of the problems.

After lunch there were demonstrations by Jenny Smithers of the plant mounting methods used in the NHM Botany department, and Brian Pitkin demonstrated his registration and labelling computer programme. Megan Lyall brought some historical plant specimens from the Botany Department which were mounted on varied types of papers, often with unknown adhesives to demonstrate their variable condition. The final session comprised a "question time" led by the morning's speakers. Boris Pretzel of the Victoria and Albert Museum conservation unit contributed a number of comments to complement the list of requirements for ideal glues provided by Adrian Doyle. Simon Stanyer manned the trade display and handed out bags of goodies at the end of the day, including amongst the paper samples, a heat sensitive advertisement mug comparing the surfaces of the scalps of follicly challenged scientists (much like your reviewer!) with that of "Courier Super Wove". Rob Huxley closed the proceedings by thanking the speakers and Jenny Moore and Janet Margerison Knight who had so ably organised the day.

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Why do we need *Look Out For Mammals*?

We can only protect Britain's endangered mammals if we know where they are! The problem is, they tend to be nocturnal, elusive and can be very hard to spot.

What is *Look Out for Mammals* going to do?

To address the problems facing existing recorders LOFM will:

1. train people in how to survey, identify and record mammals
2. recruit new volunteers by running a national survey.

...and when?

LOFM development phase (October 1995-96) will include development of

- a simple mammal recording and mapping package
- training manuals on techniques and procedures as priorities, and also
- species surveys where mammal groups exist designed to recruit new surveyors.

LOFM training phase (October 1996-99) will:

- run mammal survey and identification workshops
- circulate the new LOFM recording package
- provide software and support to mammal recorders
- complete the UK mammal recorder network
- promote surveys of key British mammals using the newly acquired skills of volunteer mammal surveyors throughout the UK.

Do you have inside information?

The LOFM training phase still needs funding. If you know of, or, work for a company that might fund part of this project please let us know at The Mammal Society. We are looking for match funding from another source.

LOOK OUT FOR MAMMALS

PUTTING MAMMALS ON THE MAP!

A shocking statistic!

In 1995 the CCB (Coordinating Commission for Biological Recording) reported that 65% of the biological records held in the UK are for birds whereas mammals represent only 0.5%. Imagine how many motorways, business parks and housing estates must have been planned and built in the absence of information on local mammals. *Help us do something about this.*

What can you do?

1. Start recording mammals.

1. Contact your local mammal recorder (see Current Projects on British Mammals) or, if there isn't one, contact The Mammal Society about electing one.
2. Obtain a Mammal Recording Form (from the recorder or The Mammal Society)
3. To get the ball rolling; collect and send local mammal records to your county mammal recorder
4. Encourage her/him to produce a report and identify areas which need special attention. The LOFM Recording Package will be available to help with this (funding allowing) in October.

2. Form a mammal group

The job of a mammal recorder can be challenging. Why not form a local group to support her/him and promote local mammal conservation? Other members of the group could then

take charge of certain tasks such as organising events and recruiting new surveyors. Contact the Mammal Society office for a brand new (free) publication; *How to Form a Local Mammal Group*.

The LOFM Recording Package

Software has been selected and adapted to meet the particular needs of mammal recorders for organising and reporting on mammal records and to produce maps of species distributions in the county.

What the guinea pigs say:

Phil Richardson, Northants Mammal Recorder did a trial run on the LOFM package:

"I thought a megabyte was caused by *Canis lupus* until I used the LOFM package. Using the 'First-timers' guide I was soon putting records into the computer and printing out Northants distribution maps for my bats. The whole package is presented in a simple way, yet the results are professional - and can be integrated into national recording schemes, or with neighbouring counties. This has to be the way forward for mammal recording".



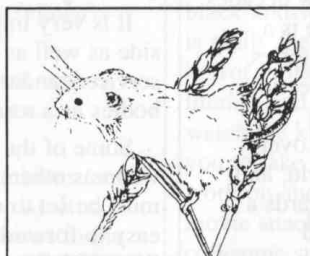
The final round of guinea pigs is already lined up; the Cambridge, Essex, York, Hampshire and Pembrokeshire mammal recorders, the Sussex Bat Group and The British Deer Society. These copies will be sent out in March.

Anti-virus software

LOFM software sent to mammal recorders from the Mammal Society office will be squeaky clean. Sophos, a leading Data Security company based in Abingdon, donated a copy of their anti-virus software 'SWEEP' to the Mammal Society.

SOPHOS
DATA SECURITY

TVMG and Surrey Mammal Groups and LOFM harvest mouse survey



Harvest Mouse by Frankie Woods

Surrey Mammal group inaugural meeting, 26th October 1995

Dr Pat Morris gave an enthusiastic welcome talk on how the group could run. Training events on general mammal recording and also on water voles have been organised in conjunction with LOFM. The Group hope to produce a quarterly newsletter and set up a contact list of experts in the county.

*Alison Tutt,
Surrey Mammal Group*

Give us your chips

Do you know of companies switching to Pentium computers with spare 386's and 486's? If you do and think they may be willing to donate spare computers to voluntary mammal recorders please let us know the company name and who to contact. Equally, if you are a county mammal recorder in need of hardware - get in touch.

Why?

Harvest mice have been recorded from only four sites in Thames Valley and Surrey since 1990. There are suspicions that this lack of records reflects the elusive nature of Britain's smallest rodent and that it may, in fact, exist in a number of sites - we just need to look for it! Once we know where the species exists we can, if necessary, focus efforts to improve habitat management of the site.

How?

It has been shown that harvest mice will make use of specially adapted tennis balls as feeding sites and for shelter. Tennis balls (donated by Dunlop / Slazenger) have been adapted by cutting out a small, harvest mouse-sized hole, inserting some Trill and attaching to a bamboo stake. These nests will be set out on the site in long grass or reeds in March and checked in August for harvest mouse signs such as nests and chewed seeds inside the balls.

Any other mammal groups interested in running a similar survey? Contact The Mammal Society for posters and recording forms.

Coming to the 1996 Mammal Society Conference?

Do you need another reason to attend the AGM instead of climbing into the bath before the conference dinner? Consider coming to hear an up to the minute report on the LOFM project, as well as having your say on the running of the Society.

Gaps in the mammal recording network

Mammal recorders can hold a key role in local mammal conservation and yet 9 English, 9 Scottish and 4 Welsh counties do not have one. The next phase of LOFM (from November 1996) will focus on improving the recorder network and providing the necessary resources and support. Contact the Mammal Society if you would like to apply to become a mammal recorder or register an interest in advance.

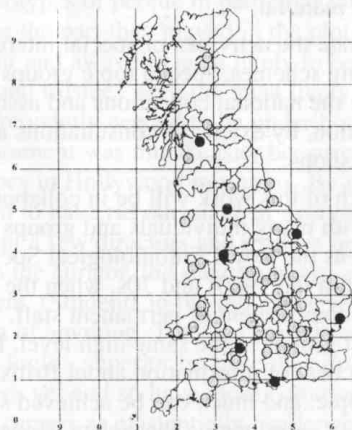


Figure 1 Distribution of county mammal recorders in Britain (darkly shaded dots show recorders that have sent The Mammal Society a county mammal atlas or report). Map produced using DMAP, written by A. Morton, which is included in the LOFM Recording Package.

Look Out for Mammals is a Mammal Society initiative funded by The People's Trust for Endangered Species, The Endangered British Mammals Fund and English Nature.


ENGLISH
NATURE


PEOPLE'S TRUST
FOR ENDANGERED SPECIES



The Mammal Society

15 Cloisters House, 8 Battersea Park Road, London SW8 4BG

BRITISH INSECT STUDIES AT THE NATURAL HISTORY MUSEUM, LONDON

The staff of the NHM Entomology Department have shown a long-standing interest in British insects, even though official work on the British fauna has endured varying degrees of encouragement over the past few decades. In view of recent widely expressed views that there is a global need for taxonomic databases, species inventories, identification guides and information on major collections, we now feel that this is the right time to coordinate systematic studies on British insects. Our fauna, of over 20,000 species, is one of the best known in the world, and this is an excellent opportunity to lead the way towards a taxonomic database of world species and associated literature.

The new programme of work in the Entomology Department will cover four main projects:

- to develop and maintain a national taxonomic database of British insects, which will contribute to the UK Biodiversity Action Plan. We will seek external funding for this project which will be developed after extensive consultation with many appropriate bodies, and will hopefully cover all the British Isles, not just the UK.
- to stimulate the production of new handbooks and other identification guides, in collaboration with other specialists, both amateur and professional, and to ensure a rapid and efficient method of publication for this literature.
- to further develop our own British collections to full taxonomic representation, including significant voucher material.
- to facilitate the activities of special interest groups (recording schemes, special topic groups etc) to improve the national collections and associated information, by extensive consultations and by setting up workshops.

Clearly much of this work will be in collaboration and consultation with many individuals and groups outside the museum, such as the Royal Entomological Society, JNCC, BRC etc. Even in the 1960s and 70s, when the department had its largest complement of permanent staff, we could not cover all insect groups to the same high level. It is clear that there is a great deal of information about British insects held by various people, and much can be achieved simply by rationalising and coordinating these data. However, the NHM Entomology Department is still the largest group of professional entomologists in Britain, and many of our staff will be involved in this new initiative to some extent, so we are well placed to undertake this central role in British insect studies, which will begin to produce tangible results within 2-3 years.

The Department's efforts are being led and coordinated by Dr Peter Barnard (tel. 0171-938 9457, fax 0171-938 8937, e-mail p.barnard@nhm.ac.uk).

Peter Barnard, The Natural History Museum, London

A Proposed Accreditation Standard for Environmental Records Centres (ERCs)

After discussions with several other curators, I thought that it would be useful to throw into the arena for discussion some proposals relating to Environmental Recording. These are based on practical experience, with a large dose of ideas from the MGC collections care guidelines.

It is very important to include standards on the service side as well as for the data management. Many of these service standards are already being set in publicly funded bodies as a result of customer care policies.

Some of the elements should be considered as mandatory, whereas others may only be aims for which plans and targets must be set to work towards. For example, it will be very easy to forward data to national schemes annually when a RECORDER to BRC linking method has been agreed!

Please respond to this article. It is essential that some form of accreditation is agreed in the near future. The museums who run active records centres have over 20 years of experience and their views are vital.

A final thought. Do we require a set of standards for smaller records centres or for individuals running schemes?

Respond to Steve Garland, Bolton Museum.

FULLY ACCREDITED CENTRES REQUIRE:—

(1) The ERC's governing body must draw up, adopt and publish a policy containing the following elements. It should be reviewed at least every five years:

- (i) A collecting policy (containing details of taxonomic and geographical coverage)
- (ii) The level of service provided (the services provided to enquirers, researchers etc)
- (iii) Access arrangements, charging policies, copyright and data use policies
- (iv) Resources (staff, training, premises and finances)
- (v) A policy for data transfer, security and accessibility if the ERC ceases to function
- (vi) Adoption of the Code of Conduct
- (vii) A fieldwork policy
- (viii) A quality control policy

(2) Enquiries and requests for information should normally be answered within 15 working days.

(3) Any bona fide enquirer must, under normal circumstances, be allowed access to the records (see also 8).

(4) Every effort must be made to harmonise the data collecting policy of an ERC with those of other ERCs collecting locally (and nationally?).

(5) A suitable study area should be available with access to equipment and facilities to read any data held on disk, fiche, paper etc.

(6) Data should be forwarded to national species recording schemes on an annual basis.

(7) Data should be forwarded to local species recording schemes on annual basis.

(8) Security Records identified as sensitive or confidential by donors must be treated as such. Access will not be given until approval has been obtained from the donor.

(9) Research and survey projects undertaken involving collecting should include in their design, deposition arrangements for voucher material with a museum or a recognised research institute, unless it is part of the ERC's policy to hold collections of their own.

(10) Back-ups of data holdings must be made regularly and kept in a separate building.

(11) The main database should be computerised with a planned policy to process backlogs of data within a reasonable time.

(12) Provision must be made for storage of archives (such as maps, record cards and other manuscript records). It should be the aim of an ERC to maintain all archives to the standard set out in BS5454 (British Standard recommendations for storage and exhibition of archival documents).

(13) An ERC must employ at least one appropriately qualified full-time biologist (or geologist) who has clear responsibility for environmental recording. Adequate premises, training and funding support must be provided (this could be someone with only partial responsibilities for environmental recording).

(14) Data must not be acquired by illegal means. It must have been acquired in compliance with all current species and habitat legislation. This includes the Wildlife and Countryside Act 1981 and subsequent reviews and updates, CITES and local, national and international species and habitat protection laws.

(15) The ERC must be registered to comply with the Data Protection Act, 1984.

(16) An ERC must provide data recording facilities for all taxonomic groups of plants, animals and fungi.

Steve Garland

Bolton Museum & Art Gallery

“THERE IS AN INEXORABLE CHRONOLOGY TO THESE DISASTERS” : MUSEUMS IN MYSTERY, SCIENCE FICTION AND HORROR MOVIES

Sally Y. Shelton, Director, Collections Care and Conservation, San Diego Natural History Museum

After the penetrating, intellectual discussion of murder in the museum (Shelton, 1996), which did for museums and mysteries what the Huns and Goths did for literacy, democracy and progressive urban planning, my colleagues and I turned our attention to catching glimpses of the museum community in films. This is harder work than you might think. In looking at mystery, science fiction and horror movies (or, to use the highly educated technical term, creepy

movies), which I did by mutual agreement (something to do with matching personality types to genres), you have to watch the whole movie and suppress the gag reflex. It's not all that different from what we normally do, anyway. In fact, suspense, speculation and horror are familiar to all of us who deal with annual budgets these days.

I concentrated in particular on mystery, sf and horror movies of the past fifty years, which means that my black-and-white vision is now highly overdeveloped (if that is really the term that I want to use). I consider colorisation a horror in itself. This gave me an opportunity to compare literary and film treatments of museums in suspense settings, watch the kind of movies that the video warehouses will pay you to take for a week (or, better yet, forever), and to begin work on another study suggested by a colleague: matching movie snacks to appropriate genres. For example, my colleague suggests, the atmosphere of vampire movies and their ilk is much enhanced by eating chocolate-covered cherries. I haven't taken this line much further, especially since I kept running into a number of giant-spider plots for which I have no snack suggestions at all. Nor am I interested in hearing any, though it has been mentioned that Raisinets are fly-like...

The title of this paper is “There Is An Inexorable Chronology To These Disasters”, a line uttered by the curator type in *The Beast From 20,000 Fathoms* that describes everything about this presentation nicely. This movie, by the way, takes the award for the most pompous dialogue ever contrived and sets the standard for several of the themes discussed below.

One way in which movie portrayals of museums differ from literary portrayals is in the staffing of a museum. In analysing this, we found that there were recurring and predictable stereotypes of people in particular job types, and that in turn made the part they played in the plot predictable. Curators were far and away the most likely to be murdered, while directors and trustees were the most likely to be murderers and frequently needed to be under house arrest. This year's assignment was much easier because there are very few job types in Hollywood museums. By going to the movies, we seem to have rid ourselves of everyone else altogether (except a few directors and trustees up to no good) and are left with the curator, the security guard and the occasional student. (Students in the movies never actually study very much of anything. They are there to advance the plot by superior logic - superior because they do not actually have their degrees yet and so have more common sense - or by starting new careers as existentially challenged individuals.) This all puts quite a strain on the curator, who now has to take on many responsibilities not in the original job description. The security guard is just there to get strangled, crushed, shot or gassed, which must tick off the union something fierce. The student is there to expose the curator, who usually has some vice that needs exposure. The student's chances of being killed or becoming a hero are roughly equal. That leaves the curator to manage the museum, the collection, the exhibits, the evil results of his nefarious research, and the reporters and police. No wonder these places never get cleaned up.

The typical museum person in a creepy movie is a curator, or at any rate a curatoroid, and can be classified as follows:

- This person is the authority for the museum. More often than not, there is no director, no supervisor, no supervisee, and no staff members other than the security guard, who will probably have to be replaced soon. It's not the worst job in the world, though, as there are seldom any visitors unless there is a doomed reception planned. (You'd think that, after the first time the giant spider wrecks a reception, you'd change tactics, or caterers....)

- This person is male. Until fairly recently, women in suspense/horror movies incorporating a museum-related setting were typically selected on the basis of their abilities to (a) shriek, (b) fall down while running, (c) prop up someone else's research, (d) wear clothes that are far too small.

- This does not mean that this curator is anyone that a woman or any other human being would want to be. The curator is hardly ever a good, well-socialized person contributing to the development and successful resolution of the plot. No. This person tends to be an older version of the geek from high-school chemistry class. The best he can possibly be in the eyes of Hollywood is comic relief, unless he is Harrison Ford, in which case he gets to be cute and unethical. As one colleague of mine found out from a group of schoolchildren, the only people who lived with dinosaurs are curators.

- This person is having a bad hair day. Almost canonical. If he is not having a bad hair day, he is Cary Grant and has wandered into this genre by mistake.

- This person is wearing at least one of the following:- a lab coat (for no good reason), tweeds, a really spectacularly bad tie, Buddy Holly glasses, or the dreaded safari outfit. As we found in examining literary mysteries, the safari suit is the omen of sure and imminent death. In the movies, the safari suit will kill you unless it is fetchingly ripped in several places to expose your charms to the audience, in which case you may well live. There is no such thing as a safari suit that stays intact on a live curator throughout the movie. Nor is there any real reason for wearing one except to identify someone as a Hollywood curator.

- "Curator" is a term used loosely here for a person found in very close proximity to exhibits, collections, or sites. His true role with regard to these is hardly ever made clear. He certainly tends to act as if he owns them, though this can't fairly be written off as fiction. If the collections are destroyed, he has a 50/50 chance of dying, too. Actual curation as we might understand it is rarely portrayed. Movie curation tends to consist of long, incestuous, loving caresses of objects; objects used as a sort of obsessive interior decoration scheme; and theft.

- This person's collection has no coherent collecting plan or priorities. It appears to have been developed by plundering estate sales, sheer random acquisition sparked by shorted-out synapses in the collecting lobe of the brain, or mono-maniacal greed on a scale last seen in the collapse of the silver market. It is all displayed together on open shelves. It is usually dusty. Dust, in fact, is one of the hallmarks of a Hollywood museum.

Another notable feature of museums in creepy movies is the almost universal inferior quality of their lighting systems. Light is almost nonexistent in these places. Even when the hero (sometimes the student, never the curator, occasionally the guard in the next-to-last act of his existence) tries to add light, the best he usually does is to cast more shadows. These museums have darkening systems. It's a conservator's dream come true. You can leave light-sensitive artifacts out in the open in these museums for centuries. This may account for the near-total lack of visitors to these museums (perhaps they are tired of caroming off walls and glass panels that they just can't see). It also neatly accounts for the fact that people can work in these places without ever noticing the giant cobwebs, glowing eyes too far off the floor, or lab equipment apparently salvaged from the last fire sale of the Atomic Energy Commission and just lying around making ticking noises.

Common themes in these movies include wax museums, living fossils or mummies, and giant anything. Wax museums, fossils and mummies parallel Victorian exhibition priorities, which seems to be the era to which Hollywood assigns all museums, philosophically speaking. Jack the Ripper was Victorian, too. Giants don't show up in force until film makers start worrying about radiation. As far as giant arthropods go, the more the square-cube law can be violated, the better.

People frequently tell me that the problem with natural history museums is that they are full of dead things. Come on, let's be honest. That's not an issue in the movies. The problem with these museums is that they are full of things that won't stay dead. You can't turn your back on wax figures (or any other kind of mannequin), butterfly collectors, mounted skeletons or anyone hired to take care of the tarantula collection in the basement. If anyone really wants to figure out how to reanimate non-living tissue, he should start at one of these museums. They seem to have the secret down cold; in fact, it is a real nuisance.

Wax museums, giant arthropods, and remnants of vanished life forms. Take these away and you don't find many museum-related features in the suspense/horror sections. Wax museums have been depicted from early times onward in the history of film making. There seems to be something perversely fascinating about a museum full of wax humanoids (and, always, one live evildoer). They're not often used as setting for farces or frolics, they are grim and deeply shadowed places.

Insects are disproportionately represented (or maybe it is proportional, considering their abundance). As in literary mysteries, I found that butterfly collectors are the most unbelievably evil individuals, unless they are helping Jodie Foster identify a death's-head moth. It's odd that insect collectors are viewed with such suspicion, because insects and other arthropods are almost universally represented as villainous influences. If you can't keep your unshielded radiation equipment separate from your insect collections, you have to expect some adverse consequences. Whether because of above-ground weapons testing in the South Pacific, long term radiation exposure tests in Nevada, or just a general cultural dread, the creepy movies of the '50s fused fear of radiation with fear of arthropods. This gave a

tremendous amount of exposure to the problems faced by all those researchers who created and then had to accept the consequences of giant spiders, ants, bees, mantids, and other creatures not noticeably better in the large economy size.

Dinosaurs are especially popular, especially as full-skeleton mount props that are absolutely inevitably knocked down, or as reanimated creatures with severe attitude problems.

Also suspect are works of art which are avant-garde, large, heavy, glowing or spiky (they are either potential murder weapons or the monster in its dormant phase, mistaken for postmodernist art by the illuminati at a reception), any body tissue from anything found in or near a polar icecap, anyone who is a dealer in anything, and the curator. If the curator is also a dealer, he is the villain and will be killed, lose his collection and die, or trade in something that opens portals to unpleasant supernatural regions.

No one seems to understand for a second why the museum or collection exists, and listening to the curator's explanation won't help a bit. If only one person in the film has an annoying voice, impenetrable foreign accent or derailed train of thought, that person will be the Hollywood curator. How many movie curators sound like Brainiac, William F. Buckley, or Rasputin? The curator does not tend to be a friendly sort. Even the innocuous ones assume that everyone shares their obsessions (and obsession seems to be about the only reason for collecting that Hollywood can grasp). The curator never explains his rationale in populist terms and has no interest in (and may have a positive aversion to) public knowledge and use of the collection.

A major recurring theme in these movies is what I call the *There Are Things Man Was Not Meant To Know* syndrome. The more intelligent the curator, the more intellectually abstruse his area of expertise, the more likely it is that he (or someone speaking about him, often in the past tense) will use some variant of this phrase, often breaking the fourth wall and speaking directly to the audience very solemnly, "There Are Things Man Was Not Meant To Know". Chances are, these people have just found out about at least one of these things the hard way, losing innocence, trust, a lab, a student in the lab, and/or a couple of suburbs. I find it fascinating that this essentially anti-intellectual, anti-research message (which is essentially the *Frankenstein* message) can be found up until the Second World War, drops off, picks up again except for physics and chemistry-related topics for a while after the war, then resurges in top form in the fifties and sixties. Biology is always not meant to be known, as are palaeontology and archaeology. Don't open the box. Don't work with anything dead for any amount of time, ever. Don't ever move your lips while reading the runes on the artifact. In fact, don't ever read anything in runes, a foreign language, or letters that glow in the dark. Don't even read them to yourself. Don't irradiate small invertebrates in the desert. Don't pry. Don't be solitary. Regular guys are better than curators and usually get the girl (screaming in her torn safari suit, if something else hasn't got her first), and it's all because they don't get into *Things Man Was Not Meant To Know*.

Another feature guaranteed to bode no good to anyone is the manuscript, archival collection, or codex. Old books are

never in the film for a casual reason. Old books in the archives or the Mysterious Temple Ruins under seven tons of marble or cement are there for very good reasons.

Documentary artifacts are not included in the film for their depth of historical information and importance to scholarship. No. If you find a manuscript, chances are that (a) it is so valuable that someone will shortly be killing you to get it (another example of death by greed), (b) it is a source of information so arcane, so powerful, that reincarnated or undead Aztecs, Vikings, Dynastic Egyptians or aliens will shortly be killing you to prevent you from revealing *Things Man Was Not Meant To Know*. It will crumble to bits or be burned in the last frame.

This brings up another common feature of museums in creepy movies: the most common plot resolution or catharsis is to destroy the subject. It's not enough to find out what is going on and to stop whoever is responsible. The wax museum is required (by a little-known clause in the Screenwriters Guild by-laws) to burn, with slow-motion footage of the humanoids turning into pools of wax [*Truth Is Stranger Than etc.*: This actually happened to the wax museum in Arlington, Texas, which did in fact burn down. Apparently, the fire in some of the rooms was hot enough to melt wax, but not enough to burn fabric, so that Elvis and Michael Jackson wound up as very well-dressed pools of wax].

If there is an exhibit, it will be trashed, something that happens so often that I wonder what the source of hostility really is. Dinosaur skeletal mounts are commonly reduced to Tinkertoy piles. If an object was taken from the dead, any kind of dead, they want it back...and will not stop at merely getting it back, but may do a little deconstruction of you as well. If you took it, you get to be dead, too. This applies to skeletons, mummies, pre-Columbian artifacts, and anything frozen. Never poke or irradiate anything to make sure that it is really dead. If you didn't take it, but worked with the person who did, arranging to give it back may involve the complete destruction of the site or building, which I think is ungrateful. Giant insects have to be killed by the military because the curator can't be trusted, or has been eaten. If an object was used as a murder weapon, it is never seen going back to its original place in the museum. What happens to them all? Is there a museum section in the police evidence room?

One science fiction author pointed out to me that, in *The Time Machine*, the museum is far more interesting than the war between the Morlocks and the Eloi because the museum is the one element that suggests a group with history, cohesion, and a sense of future. He also suggests that the dark side of museums in creepy movies turns on the freak show aspects of Barnum's museum and sideshows, and that the all-too-common destruction of exhibits or collections as part of the plot resolution is a symbolic attempt to erase the past.

Clearly, the creepy movies embody much of our cultural ambivalence about museums and collections, about the role of science and research, and about the ethos of saving the past for the future. Though in some ways these are the most speculative and least documentary of the movies we have discussed - I have yet to find a portal to hell in the basement,

objects labelled in glowing runes, undead and peevish fossils, or the like - in some ways the societal attitudes that haunt us come through most clearly here. There is a sense of distrust, a certainty that academic accomplishment needs to be put in its place, a conviction that scientists-cum-curators are doing strange things unknown to the public (things that must be exposed). And I really want to find a movie of suspense, speculation or horror in which the collection itself is not a sombre or horrifying element. There is never any perceived risk of doing too little research, opening too few doors, taking too few chances. There is, in short, little rationale for a museum at all except as a dimly-lit staging area for a continuing anti-intellectual diatribe.

It's the public's image of us that we see on the screen. If we don't like what we see, we need to educate the public more or to start writing our own movies with a museocentric point of view. Or both. Curators-cum-scriptwriters are urged to apply.

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Internet and World Wide Web Pages

An appeal for all surfing BCG members to send the editors any addresses of relevant pages of likely interest. We can publicise them through the Newsletter.

UK SYSTEMATICS FORUM

UK Systematics Forum

The UK Systematics Forum was set up in February 1994 to promote coordination and communication between the major UK collections-holding institutions. The Office of Science and Technology announced, in January, its intention to fund the Forum for a further 3 years.

The main aim of this new phase of funding will be to develop a national strategy for systematic biology research. This will be formulated by consulting the key players in the science:— the producers, user sectors and policy makers, to

produce a workable strategy with consensus from all parties concerned. Commitment to the strategy has already been expressed by the Directors of the UK's largest collections-holding institutions at a recent meeting at which the Government Chief Scientific Advisor, Professor Sir Robert May, welcomed the initiative and gave his support to the activities of the Forum.

Further information on the Forum's activities can be found on our Home Page at URL: <http://www.nhm.ac.uk/uksf>. It includes information on the *Directory of UK Systematics Expertise* as well as reports on meetings such as the *Specialist Collection Managers Groups*. The page will be regularly updated with reports on progress and acts as a contact point for anyone wishing to input to the group's activities.

Contact E Watson 0171 938 9522

Curators' Job-Share Register

Dear Colleague,

Job-Sharing has increasingly been recognised by employers as an efficient and effective way of working and hailed by many as the way of working for the future. The reality today, though, is rather different and as potential job-sharers we are still faced with having to find suitable job partners ourselves or often accept less favourable terms.

The Curator's Job-Share Register, open to all Curators in the UK, provides an essential first step; by putting potential job-sharers in touch with one another it should encourage and develop career progression when full-time employment is not an option.

The Register can be called upon at any time: whether you are looking for a long term job partner to share an existing full-time job, or a partner to suit a particular advertised job. The only thing it can't do is find the job itself.

The Register is run totally voluntarily, out of a commitment to provide potential job-sharers with a much needed service. An initial fee of £2.50 allows members to be notified by first-class post five times, after which a further fee is payable.

For an information sheet and subscription form please call Francesca Alden on 01582 467 220 (evenings only, please. Seven days a week between 19.30 and 21.30).

This register has the support of the Museums Association.

Enquiries: Francesca Alden

Tel: 01582 467 220 (evenings only, 19.30-21.30)

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