Natural Sciences
Conservation Group

Newsletter

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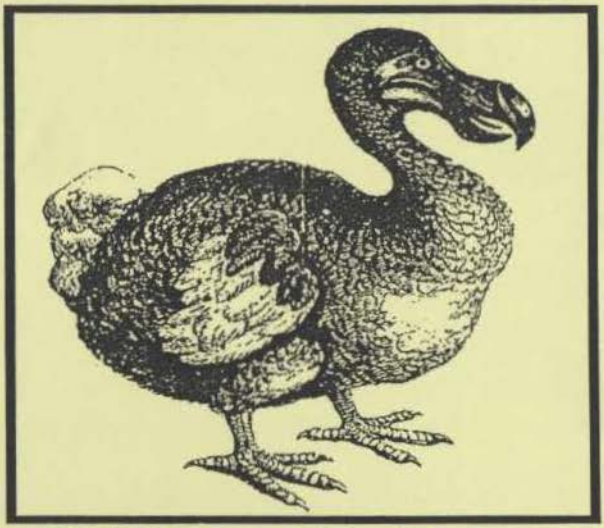
NATURAL SCIENCES CONSERVATION GROUP



Insert: The Ten Agents of Deterioration 8. Pollution

The Society

The Natural Sciences Conservation Group promotes: research and exchange of ideas; advances in technical and ethical standards; the public profile of the conservation and preservation of natural science collections and objects; training; and publications.

Membership

The Group is keen to open its membership to all those involved in the care and conservation of natural science objects and encourages their active participation.

Annual Subscription

Students (UK only)	£8.00
UK personal	£10.00
Overseas personal	£12.00
Institution	£25.00

Newsletter

The Newsletter is a forum for articles, views and opinions on the care, conservation and curation of natural history and associated material. The Newsletter is produced three times per annum (January, May and September) and is free to all members.

Advertisements

1/4 page	£15.00
1/2 page	£25.00
Full page	£50.00

Instructions for Authors

Material should be type-written and double-spaced in A4 format and if possible accompanied by a text file or Word document on disk (Dos-formatted). The pages should be numbered and the position of any tables and/or figures should be indicated on the hard copy. The names of animal and plant species should be underlined and the authority name given in full for the first time used, thereafter they may be omitted. All references should be given in full. Articles and other items for inclusion should be submitted to the Editor at least three weeks before the publication date.

Opinions expressed in the Newsletter are not necessarily those shared by the NSCG Committee, the Editor or the membership at large.

Editorial

Better late than never…

Or so they say. However, that's not the way I would like this Newsletter to be. Unfortunately, due to lack of articles, I have had to delay the publication until now, although the weather outside does feel like January. I know that with an ever increasing workload, competition for items with other society journals/newsletters and the "*I haven't the time*" syndrome, our request for articles for the NSCG has so far gone unrequited. The simple fact is this: if we do not receive material we cannot produce a newsletter, so once again I place out the begging bowl and ask "*spare some articles please*".

The Government has announced that in April 2000 a new body, provisionally called the Museums, Libraries and Archives Council (MLAC), will assume responsibility for providing a service to museums, thus replacing the Museum and Galleries Commission. What this means for Museums is uncertain, but if funding becomes centralised within this structure, we may well find ourselves fighting libraries for our share of the pot, which with the current emphasis on public access may add to the under-funding of collections.

I hope you find the contents of this Newsletter of interest; we have managed to put together part eight of *The Ten Agents of Deterioration*. I would like to thank those members who have contributed to both the pollution insert and the Newsletter and Oxford University Museum of Natural History for providing the facilities that have made this Newsletter possible. Finally, thanks to Juliet Hay and Dorothy Newman for their invaluable help.

The next issue is due out in May, so please send any items, articles, book reviews and product news to me as soon as possible. I cannot produce the newsletter without your help.

Best regards,

Darren

Views from the Chair

Dear members,

It is AGM and conference time again although a little earlier than usual this year. We are having our conference with the BCG and GCG as a special millennium event on the 3rd and 4th April in Scarborough. Each group has been allotted time for up to six speakers and I'm happy to say that the NSCG had more possible speakers than time available. We have put together a good and varied selection of talks with a conservation bias, which are to be spread throughout the two days.

Trips have also been arranged for the last day. Personally I'm off to see Kate Andrew's plesiosaurs at Whitby, she also informs me that there is a good fish and chip shop in the town. (A sort of view it, then eat it situation).

Our AGM will take place on the Tuesday before we leave for our trips. I fully intend to keep our AGM as short and to the point as possible but we do need your presence and hopefully your participation. It's nice to know there is someone out there who appreciates what the committee has been doing over the past ten months.

The post of secretary and two ordinary committee members posts will be become vacant at the AGM. Any of the members who feel that they would like to serve on the committee should please give their names to Paul Brown together with a nominator and seconder as soon as possible. If not we will have to twist peoples arms and make them stay on for another "tour of duty". Whilst it is pleasant to feel one's indispensability, new blood and new ideas are important to the group.

On another note, I would appeal again to the membership for articles for the newsletter. Darren and his editorial team have been frantically trying to put together this newsletter with very little copy. Please remember that although we are only a small group we have a worldwide membership both personal and institutional. We are the only group in the UK and Europe that exclusively promotes the conservation of natural sciences. An article in the NSCG newsletter will reach just as many people as one in

any other journal.

In the past, we have had articles of a high quality, and have been complimented especially for our 10 agents series. We are all anxious that this will continue. I will end with the hope that I will meet as many of you as possible in Scarborough in April, and I hope you will be attending the conference dinner.

Regards to you all.

Bob Entwistle

Access to Collections

Scarborough April 3rd-4th 2000. Joint BCG, NSCG, GCG Conference
Promenade Lounge, Scarborough Spa Complex, South Bay, Scarborough

'Social inclusion' is one of the governments new buzzwords and with the advent of Best Value, museums must show their commitment to providing access for all. This two day conference will look at how we afford access to collections, to the scientific community, the public and other users. It will consider the issues raised by how we enable access, examples of good practice, how museums can break down barriers and are reaching beyond their walls.

Contact: Nick Gordon New Walk Museum, New Walk, Leicester, LE1 7EA
Tel: 0116 255 4100 E-Mail: gordn001@leicester.gov.uk

The WWW

Darren J. Mann, Hope Entomology Collections, Oxford University Museum of Natural History, Parks Road Oxford, OX1 3PW

Collections Managers on Line
http://biology.unm.edu/~herb/about/cmo.htm

This is a searchable database of world collections managers with addresses (including e-mail) and their specialisation.

Cornucopia
http://www.cornucopia.org.uk/home.html

Discovering UK Collections is a new project from the Museums and Galleries Commission. It will give a complete picture of the wealth of UK museum collections through a comprehensive database available on this website.

This pilot website provides information on the 50 museums in England with Designated collections. Designation celebrates pre-eminent museum collections outside the National Museums and now covers a wide-ranging group of outstanding collections in museums throughout England. The importance of Designated collections has been recognised by Government with a £15m Challenge Fund over the next three years.

FENSCORE: The Federation for Natural Sciences Collections Research
http://fenscore.man.ac.uk/

The Federation for Natural Sciences Collections Research is an *ad hoc* body set up in 1980 to co-ordinate the activities of regional groups of curators in the UK who then were beginning to survey natural science collections [Botany, Geology, Zoology] in their areas. After nearly two decades a great deal of information has been gathered and published, and this Website has been set up to provide both a searchable national database of collection information, and to provide current and archive information about collections research in the British Isles.

Geological Curators Group
http://www.man.ac.uk/Geology/geocurgrp/gcghome.html

Includes links to museums with geological collections, information on the society, and a calendar of relevant events.

The Museums Association
http://www.museumsassociation.org/

A resource for people working in museums, including lists of suppliers in a searchable database format.

The Museum Professional
http://www.sirius.com/~robinson/musprof.html

This site was designed as a navigation tool for museum professionals and anyone interested in museums. It was created by Harold Robinson at the John F. Kennedy University Department of Museum Studies in Orinda, California, as part of a master's project on museums and the Internet. This home page is a basic starting point for the many listings and resources available online in the area of museums

NHCOLL-L.
http://www.peabody.yale.edu/other/nhcoll/

The Natural History Collections List server, or NHCOLL-L, is a general purpose electronic forum for those with an interest in the care, management, computerization, conservation and use of natural history collections. NHCOLL-L is co-sponsored by the Association for Systematic Collections (ASC) and the Society for the Preservation of Natural History Collections (SPNHC). The NHCOLL-L FAQ Sheet contains comprehensive information not covered on this web page.

The University of New Mexico Herbarium Links Page
http://biology.unm.edu/~herb/herblink.htm#Section3

The Internet Directory for Botany maintains a list of herbaria, botanical museums and natural history museums listed by country or just those in the USA in alphabetic order.

Directories of Collection Managers, Herbaria and Plant Taxonomists. Herbaria Online, is a searchable database.

Book Announcement

Nurturing Conservators: The Early Careers Paths of Conservation Graduates

N. Jagger & J. Aston

Report 362, January 2000, 1-85184-291-8, pp. xii+72 £17.50

The increasing levels of self employment amongst conservators is changing the skills and attributes required for professional development. Internships provided an important head-start for conservators' careers, with the acquisition of valuable hands-on experience as well as a range of useful contacts and the imprimatur of the host institution. Despite relatively low wages and great career uncertainty there is a striking commitment amongst these graduates to conserving the nation's heritage. This report presents the results of a comprehensive study undertaken for the Museums & Galleries Commission.

The report may be purchased from Grantham Book Services Ltd, Isaac Newton Way, Alma Park Industrial Estate, Grantham NG31 9SD. Tel. 01476 541080, Fax 01476 541061.

Website: http://www.employment-studies.co.uk/pubs/362.html

Anoxic Environments, Oxygen Scavengers and Barrier Films

29th – 30th November 1999 at the Museum of Welsh Life.

Julian Carter, National Museum and Galleries of Wales, Cathays Park, Cardiff, CF1 3NP

This two-day conference was hosted by the National Museum and Galleries of Wales in co-operation with the Geological Conservation Unit Cambridge, the British Library and Conservation by Design. The conference explored the developing field of using inert atmospheres to aid in pest control and artefact conservation, with talks covering both theory and practise.

The conference was given a good start by Dr Ian Fallis (Cardiff University) who gave an excellent talk covering the chemical principles of oxidation. David Howell (Textile Conservation Scientist) further illustrated the effects of oxidation and light on textile pigments, and David Pinniger (Consultant Entomologist) spoke about the potential uses of anoxia in insect control. The conference then went on to explore some of the practical elements in setting up anoxic systems such as nitrogen generators; oxygen scavengers; types of barrier film available; and the types of oxygen analysers that are available.

On the second day of the conference talks and demonstrations were held by a number of companies and museum conservators on projects using anoxic atmospheres. This included the use of the Rentokil Bubble, the anoxic/heat system of Thermo Lignum and the Archipress system marketed by Conservation by Design. Conservator based projects included storing pyritised fossils, colour photographs and papyrus scroll fragments. In addition, a talk on the use of inert atmospheres in fire control was presented by Alan Elder (ADT Fire and Safety) who covered the use of a developed gas called Inergen to replace the Halon based fire systems.

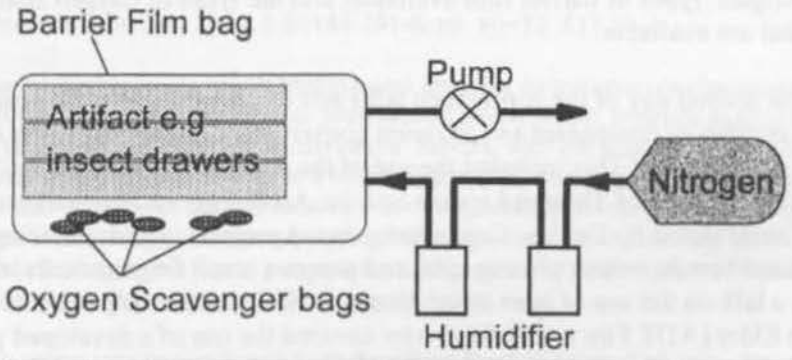
Dr Brian Davies (Consultant Chemist) gave one of the last talks of the conference. This was an excellent presentation that covered the role of

Carotene's and similar compounds in plants, which are used to control reactive species of oxygen produced from photosynthetic reactions. Brian then went on to illustrate how medieval illuminators used such plant extracts to stabilise certain pigments.

The conference was well attended, with over 100 delegates and speakers from throughout the UK, Europe and even as far as Japan! Overall, a very worthwhile conference that was of great value to those who attended.

Following the conference, a demonstration was given by Chris Collins of the Geological Conservation Unit, Cambridge on how to set up and use a barrier film bubble for creating an anoxic atmosphere. Figure 1 shows the principles of the set-up, which can be used to form atmospheres with an oxygen content as low as 0.2% for 30 days. This set-up offers a practical system for use in museums. In Sweden a portable system has been put together for use by multiple museums, a set-up which the Area Museum Councils in the UK should perhaps consider repeating.

Figure 1. Anoxic Environment Set-up



Basic Procedure;

1. Remove excess air with pump.
2. Flush atmosphere in bag with nitrogen to begin removal of oxygen.
3. Add oxygen scavenger to reduce oxygen levels to below 1%.

The use of anoxic environments for pest control and artefact storage certainly has great potential in the museum world, although there are still disadvantages in the cost of setting up and maintaining the environments and the treatment time required. There are also further long-term concerns over the effects of the environments on some materials such as pigments and the stability of the barrier films for long-term storage. However, such concerns are being researched, and as the use of anoxic environments has input from commercial companies such as Rentokil and Mitsubishi Gas Chemical, there is the prospect of continued development of the materials used in the process of anoxic environments.

Two conservation problems

Simon J. Moore, Conservator of Natural Sciences, Hampshire County Council Museums Service, Chilcomb House, Chilcomb Lane, Winchester, Hampshire S023 8RD.

At the 1999, NSCG Conference in Leicester two conservation problems were highlighted for which no one had any answer. The first came out during a tour around the collections where I was shown a mounted stoat in its ermine coat that had gradually yellowed. I have also noticed that fixing a freshly dead or freezer specimen in formalin has an even more dramatic effect - within 24 hours all the white fur has turned a bright buttercup yellow, which change appears to be irreversible.

Does anyone have any idea why and how this (presumed) chemical change occurs? and can it be reversed?

The second problem was put forward by Jenny Bryant at the Conservation Surgery and which had just been written up by New Zealand Museum researchers Nelson & Falshaw, 1999. Certain carageenophyte marine algae, some of which had been in herbaria for over 100 years, suddenly started to deteriorate dramatically and irreversibly. The polysaccharides in the thalli

started to break down into (presumably) carbon caused by the hydrolysis of sulphate half-ester groups producing minute quantities of sulphuric acid. The problem was noted at the Natural History Museum in 1998, where it was assumed to have been catalysed by humidity, following the humid summers of 1996 and 1997. Even in the mid 1980's a curator in Berkeley, Calafornia noticed that specimens had suddenly deteriorated so severely that the herbarium paper had been eaten away! Although the New Zealand authors have put forward a likely chemical equation showing the sulphate hydrolysis, preventive and remedial measures are still an unknown quantity! No common link to these deteriorated specimens has yet been established; some were only collected about 30 years ago and would have been mounted on different herbarium paper with different adhesive. The condition has affected only a random handful of specimens within each collection.

Once again does anyone have any ideas about this problem and how it can be prevented, bearing in mind that large quantities of carageenophyte specimens cannot, in practical terms, be regularly monitored or stored in expensive and tailor-made herbarium cabinets? Damaged specimens have been photocopied to record the extent of the damage. The carbonised areas have then been cut away, hopefully to prevent the condition from spreading (J. Bryant, *pers. com.*).

Please contact Jenny Bryant at the Natural History Museum (02079425004 or jem@nhm.ac.uk) with any ideas or to monitor further developments.

Reference

Nelson W. A. & Falshaw, R. 1999 Irreversible deterioration of some carageenophytes *(Rhodophyta)* in herbaria. *Taxon* **48**(2): 325-329

A New Museum Pest in Britain

Darren J. Mann, Hope Entomology Collections, Oxford University Museum of Natural History, Parks Road Oxford, OX1 3PW

A recent paper by Mark Shaw (1999) of the National Museum of Scotland (NMS) reports of a new pest of natural history collections: *Trogoderma angustum* (Solier, 1849) (Coleoptera: Dermestidae). This beetle, originally from the Americas has spread across Europe, and was first noted in Britain in the mid 1980s' in the Royal Botanic Garden of Edinburgh herbaria. In the collection of NMS the beetle has been found in glazed cases of mounted birds and primates where, in the former it only caused slight visible damage, feeding upon skin beneath the feathers. As with other members of the genus *Trogoderma*, of which there are four in Britain, *T. angustum* is polyphagous, being able to feed on material of both animal and plant origin.

As this species has only recently been added to the British list of insects, it is not included in any readily available identification guides. In the Handbook by Peacock (1993: 25-26) on the Dermestidae, problems will arise in the key to genera of the subfamily Megatominae due to *T. angustum* having an elongate body and weakly developed antennal cavities, however, the figures in Shaw (*l.c.*) enable this distinctive dermestid to be identified. The larvae are similar to *Reesa vespula* (Milliron, 1939) and therefore care should be taken if no adults are available for identification.

References

Peacock, E.R. 1993. Adults and larvae of hide, larder and carpet beetles and their relatives (Coleoptera: Dermestidae) and of derodontid beetles (Coleoptera: Derodontidae). *Handbooks for the Identification of British Insects* **5**(3): 1-144

Shaw, M.R. 1999. *Trogoderma angustum* (Solier, 1849) (Coleoptera: Dermestidae), a museum and herbarium pest new to Britain. *Entomologist's Gazette* **50**: 99-102

Insect Pests in Museums NHM External Course

A review of the two day course at the Natural History Museum 14th-15th March 2000 taught by David Pinniger, Consultant Entomologist

Darren J. Mann, Hope Entomology Collections, Oxford University Museum of Natural History, Parks Road Oxford, OX1 3PW

Most people who work in museums will have heard of David Pinniger, his name being synonymous with museum pest control, so it was with high expectations that I attended the two day course at the Natural History Museum. The course was well structured, the speaker was clear and precise and the slides presented were relevant and of good quality, there was also a strong practical orientation. The course included sessions on:

- Pests and Damage
- Insect Identification (inc. practical session)
- Pest Environments
- Pest Monitoring and Control Options
- Pest Monitoring: Results
- Practical observation session
- Health and Safety, Risk Assessments, COSHH

As an entomologist, I found the first day sessions on pest life histories and identification a little basic, and with a few strange omissions. In particular, some pest species were not mentioned, e.g. the recent outbreak of the new pest beetle in Scotland (this issue) and some of the available literature not mentioned either. However, other members of the group I spoke to found this level pitched perfectly as they had little or no experience of identification. The pest identification was brought to a close with a small practical exercise. With samples of insects placed out we set about to try and name a dozen or so pests, with our notes and experts at close hand (3 in all), this proved a successful and very useful exercise .

The pest monitoring session gave us an idea of the type of traps available and where to place them, this was helped with real-life examples and results. The pest management and control options went into detail of the ways and means of getting rid of pest problems. The use of Integrated Pest management was advocated and explained concisely. This was a real delight as the chemical barrage we are able to use is disappearing fast, and

The Ten Agents of Deterioration

An issue guide to the risks facing museum collections

8. Pollution

NATURAL SCIENCES CONSERVATION GROUP

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with health and safety issues of some chemicals coming under scrutiny the sooner we can find, learn, and use alternatives the better. The section on Health and Safety was the least satisfying part of the course, this could have been improved with more time and some handouts. The course finished with a practical observation session in the NHM stores and galleries and a discussion on the problems we found and the possible solutions.

Overall a very good course for beginners, although those with a few more years experience may find the course a little basic, it acted as a good refresher. However, I thought that more was needed in terms of course literature and handouts, with more in-depth details.

Further Reading

Child, R E & Pinniger, D B 1994 Insect trapping in museums and historic houses. nc 15th International Conference, Preventative Conservation, practice, theory and research. Ottawa, Canada 1994.

Florlan, M L E 1997 Heritage Eaters - Insects and Fungi in Heritage Collections. lames and James, London 164p.

Pearson, C. 1993. Building out pests, AICCM Bulletin 191&2

Pinniger, D. B. 1994. *Insect pests in Museums* [3rd ed.] Archetype Press, London.

Pinniger, D. B. & Child, R. E. 1996. Insecticides: optimising their performance and targeting their use in museums. 3rd International Conference on Biodeterioration of Cultural Property, Bangkok, Thailand 1995.

Pinniger, D. B., Blyth V. & Kingsley, H. 1998. Insect trapping: the key to pest management. Proc 3rd Nordic symposium on insect control in museums. PREMAL and ICOM, Stockholm 1998.

Rossol, M. & Jessup, W. C. 1996 No magic bullets: safe and ethical pest management strategies. Museum management and curatorship 15 (2).

Rust, M. K. Daniel, V., Druzik, J. R. & Preusser, F. D. 1996. The feasibility of using modified atmospheres to control insect pests in museums. Restaurator 17 1).

Selwitz, C. & Maekawa, S 1998. Inert gases in the control of museum insect pests. Research in Conservation. The Getty Conservation Institute. 107pp

Strang, T. J. K. 1996. The effect of thermal methods of pest control on museum collections. 3rd International Conference on Biodeterioration of Cultural Property, Bangkok, Thailand 1995.

Zycherman, L. A. & Schrock, J. R. 1988. *A guide to museum pest control.* Washington DC USA.

Caring for Natural History Collections

A review of a SEMS training course taught by Simon Moore, Conservator/Natural Sciences, Hampshire County Council Museums Service in December 1998.

Sarah Kenyon, Natural Sciences Curatorial Officer' Saffron Walden Museum, Museum Street, Saffron Walden, Essex

The course was attended by fifteen delegates from museums and museum services in the south-eastern region. Prior to the course the delegates were asked to submit a questionnaire, detailing the type of natural history specimens in their collections and the three most important questions that they would like to ask about caring for a natural history collection. This information helped to focus the content of the course to the needs of the delegates. We were also asked to bring along specimens from our museums' that were in need of conservation work.

The programme for the day consisted of five sessions. There was a good balance between group work, taught sessions and the chance to gain practical experience of conserving specimens.

1. Group work - identification of specimens with conservation problems.
2. Slide presentation - agents of deterioration, their effects, possible remedies.

3.- 4. Practical Sessions 1 and 2, held before and after lunch.

5. Question and answer session.

Problem Identification

The group assessed a range of specimens. We identified their problems, and discussed conservation solutions and any related health and safety issues. The specimens included:

1. Bird mount: covered in a white powder (arsenic salts), with oily feet and beak, insect damage, ruffled feathers, a broken neck and paint damage.

2. Bird mount: with protruding wires, split skin, bent head and neck, glue on its feathers and a broken foot.

3. Air-dried piranha: with a broken mount, damage to its teeth and tail fins, cracked paint and varnish and sunken eyes.

Agents of Deterioration

The damage to specimens resulting from poor handling, light, unsuitable relative humidity and temperature and pest attack were illustrated with slides. We discussed how to tackle the problems of dry and cracked specimens, damp, pin rot, Bynes disease, pyrite decay, pest damage, cleaning fur and feathers, degreasing bones and the rehydration of fluid preserved specimens.

Practical Sessions

The group viewed objects that had been brought in from our respective museums and discussed their problems and conservation needs. Using the two bird specimens provided by Simon Moore we had a chance to practice cleaning the birds' feathers, feet and beaks; straightening the specimens, removing protruding wires, treating dry areas with almond oil and re-attaching broken parts with reversible glue.

Question and Answer

The day ended with an 'Open Surgery' question and answer session where Simon Moore gave advice about tackling various conservation issues in our museums, based on the questions we had submitted.

I found the course to be very enjoyable and useful. There was a good mix between the different types of sessions during the day. The delegates questions about the care and conservation of natural history collections were addressed. We were also given notes to take away for future reference. The practical sessions helped us to gain experience of basic conservation techniques, which I have since had the confidence to use with the natural history collection at Saffron Walden Museum. The day could only have been improved by the provision of more specimens for the group to get their hands on !

For more information contact Simon Moore, Hampshire County Council Museums Service, 01962 846337.

New product to replace Drione®

Drione®, the desiccant dust used as a pest control method in many museums is no longer available in the UK. However, a similar product K.I.O.® System is now available, unlike Drione®, this product does not contain any pesticide and so can be considered more safe in Health and Safety terms .The same company also sells postage stamp size dichlorvos strips.

Cost: KIO System, £34.80 for 12 7oz bottles from

Industrial Pesticides, 7-29, Brasenose Road, Liverpool, L20 8HL
Tel 0151 933 7292.

Courses and Meetings

GCG Seminar:

Major developments in museum interpretation – the Museum of Scotland and Dynamic Earth

10th-11th May 2000 Edinburgh

"Among the recently opened, or soon to be opened, large-scale exhibition centres and museum developments in Britain are the long awaited Museum of Scotland and Dynamic Earth in Edinburgh. The Beginnings Gallery of the Museum of Scotland provides an opportunity to study geological and biological interpretation in a new museum, while Dynamic Earth, funded by the Millennium Commission, Lothian, and Edinburgh Enterprise Ltd, among others, offers a high-tech but specimen-free visitor attraction. This visit will provide GCG members with a valuable insight into the interpretative methods employed by these two state of the art attractions and their sisters elsewhere, and some of the implications for the future of our profession. The meeting allows plenty of time to examine both Edinburgh attractions, including the Museum of Scotland as a whole."

Meeting fee: £5.80 to cover coffee on the first day and discounted admission to Dynamic Earth, payable on arrival.

Contact: Dr Michael Taylor, Curator of Vertebrate Palaeontology, Department of Geology and Zoology, National Museums of Scotland, Chambers Street, Edinburgh EH1 1JF

Museum and Galleries Month 2000

1st May- 4th June 2000

http://www.may2000.org.uk/

Museums and Galleries Month 2000 is the biggest celebration of its' kind in the world and is taking shape with some 1,500 museums and galleries expected to take part. The website has been designed to inform both museums and galleries planning events and activities and visitors looking forward to the event.

This special month combines Museums Week (previously also held in May) and Gallery Week (held in July) for this special millennium celebration. The Campaign for Museums and Engage are working together on Museums and Galleries Month and will announce in March what they plan to do in 2001.

Museum Association AGM

The MA's annual conference is one of the largest gatherings of museum people in Europe. The 106th Annual Conference and Trade Exhibition will be held on Jersey, 16th-19th October 2000.

The conference will be based at the Hotel de France and the many exciting and innovative venues run by the award winning Jersey Museums Service will feature strongly throughout the conference period.

The MA also holds a trade exhibition where you can find out about the latest in museum-related products and services including interactive technology, design, graphics, publishing and merchandise. The trade fair is free to visitors and there are substantial discounts for corporate members of the MA who wish to exhibit.

For more information contact Sue Robinson Conference Manager 020 7250 1836, Museum Association, 42 Clerkenwell Close, London, EC1R

Nature's Treasurehouses?

The Natural History Museum, 4th-8th April, 2000

http:/ /www.nhm.ac.uk/museum/tempexhib/conference/sessionslmain.html

The Natural History Museum is hosting an international conference, *Nature's Treasurehouses?*, from 4-7 April 2000. It will explore natural history's cultural and scientific place in society: present, and future. The participants will be those who play important parts in one or more of the five main areas of the conference; education, economics, science priorities, media and the arts.

The approach is forward looking; it is not only to ensure a proper awareness and recognition of institutions' current and potential roles, but it is also to explore how their contribution to major issues can be enhanced. The format will be one of presentation and discussion, through high-level international invited speakers and subsequent open debate.

If you would like any further information, please send an email containing your name and address to:- conference@nhm.ac.uk

Alternatively you can contact us by post at:

Nature's Treasurehouses?,
Science Directorate,
The Natural History Museum,
Cromwell Road,
London, SW7 5BD

Telephone: +44(0) 207 942 5816
Fax: +44(0) 207 942 5841

SPNHC 2000: Maritime Natural History

Halifax, Nova Scotia, Canada

July 10 - 14, 2000

The Nova Scotia Museum of Natural History and the Geological Survey of Canada (Atlantic) are pleased to host the 15th Annual Meeting of the Society for the Preservation of Natural History Collections.

The theme of this meeting is "Maritime Natural History" and what better place to explore this than historic Halifax on Canada's Atlantic coast? Halifax has as many things to do as there are grains of sand. An epicentre of entertainment, it's a fusion of old history and eclectic lifestyle. Stroll Victorian tree-lined streets. Have tea with the Mayor. Steep yourself in culture. Savour the ocean's offerings. Set your watch to the noon gun. Revel in the salty breezes. Sail the bay.....

Registration received before May 15, 2000 will cost $135 for SPNHC members and $150 for non-members. Registration received after May 15, 2000 will cost $165 for members and $180 for non-members. Student Registration is available for $75 before May 15, and $90 after May 15. Please note that all costs listed are in Canadian dollars in the Call for Papers and the Registration Form. Details of costs for various events are listed in full on the Registration form.

Further details can be obtained from the Website: http://nature.ednet.ns.ca/nature/SPNHC2000/

Book Review

Managing the Modern Herbarium

Kate Andrew, Ludlow Museum, Old Street, Ludlow, Shropshire, SY8 1NW

This new publication from SPNHC has proved rather difficult to get hold of in the UK, as the order form does not offer a credit card facility and overseas payments have to be in US dollars. However, the news from Ann Pinzl is that the company handling orders can now take MasterCard or Visa orders in US dollars. The $6.50 shipping charge is surface mail; so if you want the book to arrive quickly, double this to $13 for airmail. If you want to order the book by credit card, I suggest you attach a note to the order form with card number, expiry date and name as it appears on the card.

My copy arrived recently, and first glance indicates that it is based on the papers and discussion from the Herbarium workshop at the SPNHC meeting in Toronto in 1996. The meeting was excellent, so I look forward to a thorough read of the book.

The book is a thick paperback, reasonably priced at $29.95. Available from Elton-Wolf Publishing, #212-1656v Duranleau Street, Granville Island, Vancouver, BC Canada V6H 3S4

Conservation Focus

Pilgrim Trust to Sponsor the Conservation Awards

The Pilgrim Trust are the sponsors of the 1999 Conservation Awards. The Trust has granted £60,000 over three years, £10,000 in the first year and £25,000 in the second and the third. Now in their sixth year, the Conservation Awards are a collaborative venture between the Museums & Galleries Commission (MGC), English Heritage and the National Preservation Office, based at and supported by the British Library. The MGC, English Heritage Commissioner, and Chairman of the Judging Panel, Loyd Grossman, commented: "The Conservation Awards are essential in raising the profile of the vital work done in conservation and recognising and rewarding talent. We are all extremely grateful to the Pilgrim Trust. Thanks to their generosity in supporting the Award Scheme, we are able to offer this year's winners £10,000 worth of prize money."

The Awards aim to focus public attention on the importance of conservation and on the skills and expertise of conservation professionals in the UK and Ireland. This year there are two categories. The Award for Conservation recognises excellence in completed conservation or restoration projects. The winning project will receive £5,000. The Student Conservator of the Year Award seeks to highlight the achievements of students and the high standards of conservation training courses. The winning student will receive £2,500 and the same amount will be awarded to their training institution. The Award ceremony will take place at the British Library on Tuesday 28th March 2000.

Laura Drysdale, MGC Head of Advisory Services, said: "Conservation makes a significant contribution to the cultural economy, enabling access to collections now and for future generations and we are delighted that we have received a total of 33 applications for these Awards, twenty-six for the Award for Conservation and seven for the Student Conservator of the Year Award. The applications are varied and include museum, library and archive projects. They are all of a very high standard and judging will be a difficult task."

Report: BCG study trip to Museum Naturalis, Leiden, Netherlands

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On Friday 29th October 1999, thirty-five curators, conservators and museum managers visted the National Museum of Natural History in Leiden to view the new museum building, exhibitions and collection storage facilities. The new Museum, known as *Naturalis* to the public, is situated on the outskirts of Leiden and is a short walk from the main railway station. The Museum is housed in a converted historic hospital and is connected to the impressive 60 metre high purpose built collections storage tower by means of a glass sided bridge. This spans the width of the waterway encircling the Museum; after all, we wouldn't be in Holland if we weren't next to a canal!

On arrival we were warmly welcomed and given a brief introductory talk by the Associate Director, Dr Jan Krikken, who outlined details of the new developments along with his colleagues experiences. The building work took 2½ years to complete, the collections being moved during 1997-98. New exhibitions, focusing on current global nature conservation issues such as biodiversity and ecosystems were also developed during this time.

The Museum holds zoological and geological collections numbering 15 million specimens in 6 million registered lots, with 1-2 million of these databased. Departments are divided into those of Zoology and Geology, with subdivisions of Vertebrates, Entomology, Invertebrates, and Palaeontology, Mineralogy/Petrology respectively. The Botany Department and herbarium is housed in another building.

Each department has a head, curators and technicians and overall there are about 60 permanent staff, this includes; 24 research curators and 30 collection technicians. In addition, they are host to 30 research associates, honorary collaborators, students and project staff. The Museum publishes four regular scientific journals, newsletters and books. The public galleries are visited by 300,000 visitors each year and between 400-500 scientific visitors to the collections. The annual budget for the Museum currently stands at 26 million Dutch Guilders (£7 million). Research, as in most national museum institutions is high on the agenda. Current research emphasis is placed upon conservation of the fauna and geology of the

Netherlands, Europe and globally. Collection management policies are based around the research programmes, internal collection evaluation, societal requirements and logistic and quality criteria.

Dr Krikken seemed generally pleased with the new building. Of his personal assessment criteria, including manoeuvring space, specimen location (dot score), collection security, calamity risk, temp/RH, chemical/dust impact, air-tightness, specimen handling and working environment, had all improved considerably after the move. However, the architecture of the building did not come without criticism. In the tower, some store room floors were not level, causing problems in setting down new cabinets, and there was insufficient access for bringing in large objects such as cetacean skeletons.

The rest of the morning was taken up with guided tours of the public exhibition areas courtesy of four members of the collections team, after which we were free to explore the museum galleries for ourselves. The two most exciting exhibitions, 'Fossils Parade' and 'Nature's Theatre' were visually stunning, very 'now' in design and appearance. Lots of glass and spotlighting (think Paris and New York darling), though somewhat lacking in general interpretation, sometimes only a Latin name was used, but what it did have in abundance were real specimens, and lots of them! Frogs and jellyfish and other animals, plants and fungi preserved in fluid, ferns and flowering plants mounted not on herbarium sheets, but sandwiched between glass so that you could see both sides. The two exhibition floors were connected via a colossal family tree, spanning 3.8 billion years. This could be lit up and used to link extinct forms to their modern counterparts on the floor above. As difficult to explain as it was to follow when you were there.

The Nature information centre, a staffed study room containing books, drawers of insects and mounted animals native to the Netherlands was a cross between a discovery centre and a more traditional library. This provided a relaxed space where visitors could identify local wildlife or simply search for information on a particular plant or animal. The Museum shop was a haven for both children and adults alike, along with the ubiquitous model dinosaurs pencils and rubbers, a myriad of textbooks and identification guides were available to purchase, something we often find lacking in our typical UK Museum gift shop. For the young at heart, the Children's activity centre proved to be one of the most fun areas in the museum. Here, the audience could learn about the various diets of different animals. Visitors were able to insert replica food items into the mouth of large toy creatures, which would then be accepted or rejected (spat out!) depending on the accuracy of the choice.

After our generous sit down lunch we commenced the most eagerly anticipated part of our visit, the tour of the collections in the new custom built storage tower. Led by the collection curators, four groups were given guided tours of, either Zoology, Geology or Botany with a switch over half way through the afternoon. Like the rest of the Museum the collections storage facilities in the tower were of a high standard. Each floor of the tower contained environmentally controlled collection storage areas, each with its own air filtration system to cut down on the effects of pollution and dust. These were vast rooms kitted out with static Dexion™ racking on open shelves, which contained new metal cabinets and much of the original storage furniture brought over from the old site.

Security and safety in the new building was a priority. The engine room in the basement contained an argon gas fire protection safety system for all the fluid collection rooms, and all electronic switches were placed on the outside of the stores to reduce the opportunity for sparks to initiate an explosion. Access for visitors in and out of the collection storage rooms was also carefully restricted, with persons being in effect locked in and let out only under the supervision of a curator.

Seven designated rooms housed the Museums fluid preserved collections. Prior to the move, all of the wet collections were fumigated, as many had previously suffered fungal attack. They were fogged with formalin vapour and cleaned with alcohol. No incidence of its return had been observed since the move, a testament to the effectiveness of exacting temperature and humidity control in these rooms. Curators also reported no incidence of pest attack since moving to the new building, presumably due to their diligence in spraying with insecticide four times a year, and twice over the rest of the building! The majority of the vertebrate collections, such as mounted mammals and birds were also cleaned and conserved before the move (this must have been a monumental task).

Adjacent to the collection storage areas, spacious offices and preparation rooms were provided for research, curatorial and conservation requirements, although most of the staff still complained about lack of space. Most of us were left drooling over the thought of even sharing such facilities in which to work.

Our visit to *Naturalis* was excellent, we received a most warm reception from our Dutch colleagues, and would like to thank them for their most generous hospitality. Much valuable exchange of knowledge and experience took place, and many alliances and connections were made. Thank you Leiden, for hosting a most stimulating visit.

N.S.C.G. Committee Members

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