

View From The Chair

NatSCA is over one year old now and following the very successful and well attended conference in Dublin in April this year there is now a new 'full term' committee ready to take things forward. The first committee was elected in Manchester for a period of one year to get NatSCA up and running and lay the foundations for the group to develop. Most, but not all, of this initial committee stood again for full terms, but we said goodbye to some of the first committee and some new members were elected.

I would like to take this opportunity to thank Howard Mendel, Gabriella Mackinnon, Susan Cooke and Robert Entwistle for their work over NatSCA's first year and welcome Susan Ryder from the Natural History Museum and Graham Whalley from Nottingham City Museums and Galleries.

As the investment in the Regional Hubs begins to have an impact and following the launch of the 'Manifesto for Museums, the need has never been greater for NatSCA to champion the contribution of the natural sciences to museums and wider society. This year will be an important one in establishing the group and raising our profile within the museums sector and with wider groups with mutual aims and concerns.

If we are to be an effective voice for natural sciences we need as large and active a membership as possible. All NatSCA members can help increase our numbers by encouraging new members. An active membership is also a healthy one. To this end a full list of committee members and some brief CV's are included in this edition of NatSCA news. If you have any questions, concerns or issues you would like raising, please contact any of the committee members. We look forward to hearing from you.

- Nick Gordon

Contributions for Issue 4, December 2004

All articles, letters, news, adverts and other items for inclusion for the next issue of the NatSCA Newsletter should be sent to the address below by November 1st:

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Letters

Response to Jane Mee

Jane Mee's letter in issue 1 of NatSCA news raises some very valid points about NatSCA's constitution and also about the role of the group generally. Firstly the constitution. As we are a registered charity the constitution follows a fairly strict template provided by the Charity Commission. Much of the wording is mandatory and the aims and objectives, while admittedly being perhaps rather dry and uninspiring, are couched very much in legal terms to enable us to be eligible for charitable status. This document sets the boundaries within which we can operate as a charity. They are very broad boundaries and there is little we are unable to achieve within them.

I whole-heartedly agree with Jane's second point about raising the profile of natural sciences and widening access. This is exactly what we have been considering over the last year since the formation of NatSCA. One of the main objectives of NatSCA, in my view, was to form a new type of organisation specifically geared towards promoting the idea and reality of access for all, in the physical, intellectual, social and cultural meanings of the word. We need to identify and seek to remove all barriers to access to museum natural sciences and to all aspects of collections activities. Only by widening our audience and user base, becoming more socially inclusive and outward looking will we secure a secure future for the natural sciences. The Yorkshire Dinosaur Coast project is an excellent example and we have been considering how NatSCA can develop major national projects, especially as we are now a charitable body and able to apply for many different grants, the Heritage Lottery Fund being one.

To this end a more vigorous series of aims and objectives have been developed and the changes and new approach will become more apparent. As we move out our transitional year the challenge now is to raise the profile of natural science collections, develop high profile projects

and stop being viewed as the Cinderella of the museums world.

*Nick Gordon,
Managing Curator,
New Walk Museum
Leicester City Museums Service*

Latest on Iowa

On March 8th, there was a Court Hearing to consider a series of Motions placed before the Court. First, the Court considered our Motion for Temporary Injunction against the University of Iowa and Iowa State University to stop them from taking any actions to remove the collections from the University of Iowa Herbarium until our lawsuit can be heard. Second, the Court considered the University of Iowa's Motion to Dismiss the entire litigation and its Motion to Dissolve the Temporary Restraining Order. Following the hearing, on March 15, Plaintiffs submitted a Supplemental Brief that addressed issues of statutory history and the nature of the rules applicable to deaccessioning collections of the University of Iowa Museum of Natural History. The University of Iowa filed a Motion to Strike the Brief and prohibit its submission. On March 30th, the judge ruled that the Supplemental Brief will be allowed into evidence and has given the defendants until April 11th to file a response. We do not know when the Judge will make his final decision, but we do not expect it to be filed until after he has had an opportunity to review any documents submitted by the University of Iowa on or before April 11.

If you would like a copy of the lawsuit and/or the supplemental brief, I am happy to provide these as e-mail attachments.

*Diana Horton
Curator
University of Iowa Herbarium*

Papers Given at the
2004 Conference at
National Museum of Ireland

“Natural History Is Cultural History”
26-28 April 2004

Introduction & Welcome to National Museum

Raghnall O Floinn, Head of Collections, National Museum of Ireland

I would like to extend a warm welcome to you all to the National Museum of Ireland’s Museum of Decorative Art & History at Collins Barracks. This is, I understand, only the second meeting of this group and we are delighted that you have chosen Dublin as the venue for 2004 and we are glad to act as one of the conference hosts.

Yesterday, you will have visited the Natural History Museum as well as our stores at Beggars Bush, Trinity College’s Geological Museum, Herbarium, Conservation Studio and Zoological Museum. From these purpose-built Victorian museums you move today to one of the most recent of the National Museum of Ireland’s sites at Collins Barracks. Opened in September 1997 as the Museum of Decorative Arts & History, the site was the first purpose-built permanent barracks on these islands, built between 1704 and 1710 and was originally known as the Dublin or Royal Barracks. (The complex was later named after the first Commander in Chief of the Irish Free State, Michael Collins.)

Effectively the site is today the Museum’s headquarters where the Administration, Services, Registration and Conservation departments are housed in addition to the Art & Industrial Division.

The complex now houses the Museum’s collections of Decorative Arts with definitive displays of Irish silver, furniture costume and coinage as well as themed galleries and temporary exhibition spaces. A new Military History gallery is to open in late 2005 and a temporary exhibition gallery is currently being developed in what was formerly the barracks’ Riding School. A new central block is planned to house main services and facilities and three galleries devoted to Irish History, Ethnography and Earth Science. This is shortly to be submitted to the planning authorities. Eventually, the Museum has plans to centralise all reserve collections (apart from those in the Museum of Country Life, located at Turlough Park House, Co. Mayo) on site.

The buildings at Collins Barracks pose challenges of access both of a physical and an intellectual nature and these are some of the themes being explored in your conference proceedings: the relevance of natural history collections; the relationship between national and regional museums; the need to develop new audiences and to improve access to collections as well as policy issues such as the place of human remains in public collections. These are questions which exercise all museums and which this institution is currently dealing with. On the question of improving access to collections, for example, we have arranged for guided tours of our newly-opened reserve collections of period furniture here at Collins barracks. Later this year, a new Visible Storage gallery is to open which will put on public access some 10,000 objects from the reserve decorative arts collections.

I would like to thank a number of people for the work they have put in to organising this conference, in particular Mr Nigel Monaghan, Keeper of Natural History and the many guides who have taken you behind the scenes at the various venues.

I hope that delegates get an opportunity to view the displays and facilities here in Collins Barracks and that your deliberations over the next few days both here and at the National Botanic Gardens will be of benefit to those of you visiting Dublin for the first time, to our natural science colleagues from sister institutions in Ireland and to our own Museum staff.

Conservation Education for Reflective Practice & Public Advocacy

Eve Graves, Principal Lecturer in Museology, Conservation Department, Camberwell College of Art

If I am asked what I do for a living I say that I work in conservation education. I have often had the response 'Oh, conservation, trees and stuff, how nice!' I used to patiently explain that I was involved in the preservation of cultural material, to begin with mostly prints, drawings and books. But the more I have become immersed in the discipline the more I have come to feel that the conservation of the natural world is continuous with that of the cultural world and that conservation of the natural environment is, in many important ways, conservation of the cultural environment. It is hardly surprising, then, that I see natural history collections, and their conservation, as a vital part of this spectrum. I would like my students to think of themselves as part of a community of professionals involved in looking after the world, in all its aspects, natural and artificial, for future generations. Conservators, of course, however enlightened and skilled, cannot do this alone. They need the co-operation of the global community. The world needs advocates for conservation. This means that we need the conservators of the future to really care and to be good communicators, to really understand the values embedded in material, natural or artificial, and to want it to endure. At a time of frightening world events and threatened resources there is a pressing need for all of us to understand our world and ourselves.

From these ideas came my research questions - How can the new generations of conservators of all types of material be educated to become reflective practitioners with a genuine desire to engage with the public? How can we help our students to be sensitive to intangible values and to understand how these values may be embedded in material things? How do we involve students in learning that is deep, flexible and lifelong?

I will briefly explain the context that gave me the opportunity to try to find answers to these questions.

Some years ago I was asked to take over the theoretical aspects of three conservation degree programmes. Previously the students on these programmes had attended art history lectures with all the other students in the college. These were seen by most of them as *add-ons*, and not, in many cases, particularly relevant to their major studies. Having the opportunity to rethink the entire approach I decided to experiment with letting the students design their own curriculum by encouraging them to reflect on the richness and contemporary relevance of the subject they were studying. In other words instead of telling them 'Here's the lecture programme - these are the issues that you need to know about' I wanted them to discover for themselves what they needed to research and discuss. As potentially the decision makers of the future they needed to understand their broader role within society, how their discipline had developed and how it was continuing to evolve. I wanted them to understand the multi-disciplinary nature of conservation and to encourage them to take a co-operative approach with other professionals and with the public. A major part of this was to encourage them to reflect on how cultural material of various kinds acquires meaning and value. For most importantly as I have suggested, I wanted them to think about values and the ways in which they are embedded in different aspects of people's lives. There is no time here to go into the detail of this but I will briefly give the outline of the procedure.

The starting point for study is the idea of the exhibited collection, loosely understood to encompass a wide range of material from art gallery or historic house to archeological site or botanical garden. Students are introduced to a range of institutions and meet professionals working in different areas (conservation, curation, education, information, administration, management, exhibition design and so on) so that they start with an idea about how professionals work together to look after, exhibit and interpret collections. They are asked to keep a Reflective Journal about the development of their understanding of their discipline. In order to provide a starting point and focus, they are asked to choose an exhibited item or small group of items and interpret the chosen material for the rest of the group by reflecting on the reasons for the collection and exhibition of the material and by examining any issues raised. They do this in their Journals and then use

their ideas to make an oral presentation, which introduces a group discussion. The issues raised may be directly related to conservation or curatorial practices and are generally linked with many other aspects of contemporary life.

Participants are specifically encouraged to scan newspapers, listen to news and arts programmes on radio and television (as well as researching the scholarly literature) so that they keep aware of media and public views. This has often led to extensive discussion and has proved an excellent way of bringing home to students how real and relevant to contemporary life their subject is.

Because so often students become aware of the challenge at the heart of museums, the twin responsibilities of access and care, many of them are prompted to look into government policies on the use of museums. Aspiring, as most of them are to work as conservators in the future they quickly become aware of funding issues, educational possibilities, management priorities and so forth. So right from the beginning they begin to appreciate some of the practical, real-life issues that impinge on their subject of study.

One rewarding by-product of this approach has come from the fact that conservation at Camberwell attracts a very multi-cultural student body and this has led to wonderful opportunities for sharing experience. Students often choose to work on material from their home cultures, so that we all learn from the presentations and journal sharing. With students from China, Korea, Japan and so on, the possibilities of improving understanding are obvious. We also invariably have quite a few Greek students and recently the discussions of the Parthenon marbles have become even more pressing!

Every year sees a wide range of projects triggered by the brief to choose what they consider culturally important material. Among the postgraduates I have had: ethical issues arising from the exhibition of a Native North American War Bonnet: different approaches (Eastern & Western) to the conservation of Tibetan Thangkhas: ethical issues raised by the display of human body parts in the form of holy relics: the use of digitisation projects to disseminate information about collections, controversies caused by the decisions making process about Seahenge in Norfolk: the loss of cultural heritage occasioned by the destruction of the house & studio of Armando Reveron in the Venezuelan floods in 1999: issues arising from the categorization of material produced as part of art therapy programmes: ideas around the preservation of meaning in war damaged material and so on.

In the last few years I have increasingly found that students are inspired by various items or experiences to be found in Museums of Natural History to explore ideas of considerable cultural significance. As a result of a recent visit to London's Natural History Museum, three students, two Chinese and one Japanese, were led to reflect in interesting ways on cultural differences in the approach to presenting science to the public.

Before the visit I had asked the group (first year undergraduates – Chinese, Japanese, Korean, Swedish, French, Irish, Portuguese, English etc) to think about their prior experiences of Natural History. This resulted in some cases in lengthy reflective writing in the journals about what the term meant and even those for whom English was the first language were stimulated to think about the word 'history' in that context. As always the different perceptions of the experience of visiting the museum added to everyone's learning and reinforced ideas about the ways in which meaning is created. One detail that struck me was in an account by a Japanese student who commented that the authenticity of the Earthquake Simulation was undermined, not by the nature of the special effects but by a recreated supermarket that 'looked old fashioned' and by an upside down shop sign which she said was written in 'not exact Japanese'. It was a useful insight into the need for an eye for detail in exhibition design.

Museum text is often the focus for student comment, and this was certainly true in student writings about natural history displays of different types and eras. Several students have mused on how the manner of writing as well as the type of information conveyed, or the interpretation provided, can make the visitor feel included or excluded. There seems to be a dominant view that where a display, particularly of mounted specimens, is retained in its 19th century format for instance, there should be text that comments on the history of natural history collecting and display.

I have often myself used items that might be found in a natural history collections to encourage students to think about the ways in which things acquire meaning and the ways in which exhibition curation can be used to tell different stories. A piece of dendritic pyrolusite, for instance, with its beautiful branching fern-like markings, could feature in a geological display of the varieties of manganese and have a particular set

of meanings for a museum visitor curious about rock formations. But this item has another range of meanings. For instance to the monks of St Katherine's monastery at the foot of Mount Sinai it is testimony to Moses' vision on the summit when he was given the Tablets of the Law. According to the monastery's holy tradition the blinding light that accompanied God's appearance, in effect, photographed the foliage onto the rocks. For generations of pilgrims therefore the rock has acquired spiritual significance. It might also feature in exhibitions about the early history of medicine, as many pilgrims believed that it had healing properties. This suggests ways in which values are assigned to things. Returning briefly to the idea of the cultural value of place (as featured in the student discussion of Seahenge in Norfolk), arguments over the possibility of building a cable car to take visitors to the summit of Mount Sinai have led to a powerful clash of interests and values between the Egyptian government, local populations, the monks and those concerned with the idea of pilgrimage.



A rock from Mont Sinai - focus a discussion on meanings and values

To pursue the idea of meaning and spiritual value for a moment, botanical specimens have also led to interesting discussions. For instance in discussing Herbaria and their conservation, the idea of plant material found in unrelated books and the ethics of cleaning in such contexts emerged. This led on to a consideration of private collecting practices with a long history – in particular the collection of pressed flowers. The faded rose between the pages of a journal, the dried daisy chain in a child's scrapbook, can stir memory in powerful ways. Conservators help to look after memories.

I possess a little book bought in a junk shop that has within its pages a tiny envelope containing pressed flower specimens. A note handwritten in the book states that these were collected on a visit to the Holy Land in the 1940s. They had meaning perhaps as botanical specimens but also I suspect as holy souvenirs. Reflecting on the multiple meanings of such items has inspired students to return to displays of specimens and to think about collecting practices, past and present. It has also led on to discussions of medieval herbals and from there to the ideas of types of natural history representation, voyages of discovery, art and science, natural history photography and so on. One undergraduate student at least has now decided that she wants to specialize in the conservation of botanical drawings.

Giving students a free reign in their choice of museum collections to explore for their projects has been particularly productive for some. An MA student, Zoë for instance, chose to focus on the Natural History Museum in London where she became intrigued by the vast collections of wet specimens, particularly those items collected in earlier centuries. She went on a tour of the Darwin Centre, to see the Spirit Collection, and her excitement at the Darwin material led her to pursue a research project about notions of value in relation to such items, how these have changed over time and where their cultural value now lies. As a paper conservator she appreciated the issues arising with labels of great historical as well as scientific value. Zoë also started working in the Natural History Museum and has recently participated in the continuing project to assess, database and conserve Sir Hans Sloane's collection of Vegetables and Vegetable Substances* (Miller 2004). She is currently working on part of an Apothecary's Herbarium for her major conservation project for the Masters degree. Zoë is an embodiment of the conference theme.

I have had many examples in the last few years of students who have been drawn to issues around museum possession of human remains. I will only briefly mention a few of these. A South African student, Erica, chose to focus on the debate around repatriation requests for the remains of Saartjie Baartman in the Musée de l'Homme in Paris. Just after the conclusion of her project the remains were finally returned. Soon after this the *Bodyworlds* exhibition raised huge interest and controversy among the students and led several of them to explore ideas around the use of human remains for scientific study and education. Students are encouraged to follow and if they wish participate in public debates in the media as part of the process of reinforcing a view of their discipline as a central part of contemporary life. Lindow man in the British Museum usually generates at least one project a year, as do various exhibited Egyptian mummies. The shrunken head that was part of the British Museum's *Medicine Man* exhibition also excited a great deal of interest, particularly as it was used to introduce ideas about different perceptions of such things and some of the ethical issues that displays of such material raise. The publication of the Human Remains Report late last year has become a major talking point and has led several students to return to elaborate on earlier comments in their journals.

I now want to describe the ways in which two postgraduate conservation students (neither of whom are cur-

rently specialising in natural history conservation) have been inspired by their experiences with natural history collections to explore in various directions in search of meaning. Some of the paths taken have been surprising and may result in different careers to those intended. As a result of the discoveries they have made in response to natural history items they have gained a richer understanding of the role of collections for cultural understanding and of the importance of their own discipline for keeping these possibilities alive.

These two students took as their starting point mounted specimens in public collections. Harry, was mesmerized by a Victorian case of Hummingbirds at the Natural History Museum in London, and what, having read the museum text, he interpreted as embarrassment on the part of the museum at its possession of such material. What he did next very much endorses the title of this conference 'Natural History is Cultural History'. He set out to discover the source of this perceived embarrassment by investigating the earlier cultural context of the mounted birds.

Harry examined the evolution of natural history displays in relation to developments in taxonomy in the late 18th/early 19th centuries. He looked into the social context of popular amateur interest in 'Natural Theology', and he went on to consider ethical and political issues raised by contemporary display of such material. Along the way he looked into the technical aspects of preservation of specimens (which may have health and safety implications for hands-on conservators and curators).

Harry's investigation also happened to coincide with the auction of Mr. Walter Potter's Museum of Curiosities. Discussing some of these tableaux led to mixed reactions from humour to horror. This prompted further discussion of changing approaches to natural, or in this case, unnatural, history. Anthropomorphism and its role in art and literatures were also touched on.

Harry, currently studying paper conservation, is keeping an open mind about his area of specialism and this has been motivated at least in part by the rich cultural/historical context of natural history collecting.

Thinking about issues arising from looking after natural history collections, the sheer scale of the amounts of material collected, students have been led to reflect on the nature of conservation in this area – ideas about preserving whole collections rather than generally a hands-on approach to individual items.



Postgraduate students at Camberwell discussing a prepared tiger skin

Another postgraduate, Kate, wanted to explore the significance of her paternal grandfather's Game Diary, which was kept while he was serving in the British army in India in the 1930s. In this book were photographs of animals he had shot. She linked this with her interest in the Powell-Cotton Museum in Kent where the idea of the exhibited natural history specimen as trophy cannot be avoided. When discussing these possibilities she revealed that her family also still possessed a tiger skin though it had spent the last fifteen years rolled up in an attic. Both of these items had value for her as part of personal family history. This provided her with a starting point for exploring the link between the book and the skin and what value such things might still have in a public context. In the public rooms of Quex House, the home of the Powell-Cotton family there is a tiger skin, presented in a similar manner to Kate's family heirloom.

As part of their research into cultural/natural objects of all sorts students are encouraged to examine a variety of different types of text that link in some way to their 'object', and to consider what lies behind the different approaches.

How do you begin to read about a privately owned tiger skin? The starting point was found in the other family heirloom, the Game Diary. So Kate began with her childhood memories of a scary skin spread-eagled on the wall in the hallway of her grandparents' home, and of her grandfather's tales of heroically ridding terrified villages of a man-eating tiger. The Game Book soon cast another light on all this by revealing another narrative and another set of attitudes and assumptions. These led her in several directions. One was an exploration of colonial history and attitudes. In researching the historical context she consulted writing on folklore, histories of colonial India, books on the natural history of wildlife, the significance of the tiger hunt and technical works on skinning and taxidermy.

Having taken advice on possible Health and Safety implications she brought the skin into the college for discussion. Incidentally, health and safety issues, clearly of great importance in themselves, have also led

to several wide-ranging discussions. Earlier treatments for insect infestation and so on have rendered many items problematic to handle. Discussion of past museum methods for preserving such material has led on to consideration of health and safety issues arising from requests for the repatriation of ethnographic materials.

This tiger skin excited a great deal of interest, not just from conservation students. The reactions were very mixed and this time included disgust and acute distress. However the discussions that ensued highlighted the value of the exhibition of controversial material for raising awareness and stimulating debate. Apart from all the political issues that were raised there was considerable discussion of the psychology of competitive trophy collecting, the emergence of concern over the survival of wildlife leading to the Wildlife (Protection) Act of 1972 and continuing problems caused by poaching in some areas of the world.

A final link established the rich possibilities of this type of multidisciplinary study. As a paper conservator Kate was at the time working on some mid 19th century prints. Several of these were by Cruikshank and featured the Great Exhibition (Hyde Park 1851). One of these showed the Indian pavilion and another the *Dispersion of the Works of All Nations after the Great Exhibition of 1851*. Suddenly these prints, previously unrelated items worked on for improving the conservation decision-making process and hand skills, took on real cultural significance. In finding out about the ideas and values associated with the tiger skin, Kate had also enriched her cultural understanding of the works on paper. The detail of the tiger flying off at the top left edge of the print perhaps refers to the fashion for taxidermy at the time. Another print was found to link with Harry's project on mounted specimens and the Victorian fashion for anthropomorphic scenes.



Tiger detail from a print by Cruikshank
- *Dispersion of the Works of All Nations after the Great Exhibition of 1851*

Before concluding I should also just mention another enormous value of publicly exhibited mounted specimens. These have a long history of being inspirational models for artists. Working as I do in an art college and having many connections with practicing artists I am constantly reminded of the importance of natural history collections for creative inspiration. During the tour of the Darwin centre at NHM our guide told my new first year students how all manner of creative people had been inspired by material in the collection.

An elderly painter friend of mine laments the possibility that virtual displays may eventually completely replace the magnificent mounted specimens that he has spent a lifetime drawing in one collection or another. For my part I am delighted to see that some institutions still lend items to schools and colleges for artistic study. I recently saw a Hippopotamus skull safely back on display that a few weeks earlier had taken centre stage in a drawing studio. (My own house also has skeletons in the cupboard) Most of us have had the experience of trying to avoid tripping over children with their clipboards and coloured pencils drawing dinosaurs or tigers. Currently the Powell-Cotton Museum is exhibiting, among their permanent collections, the results of an art project with a local school. Huge papier-mâché apes and tigers inhabit the museum, colourful testimony to just one of the many possibilities for inspiration and learning provided by natural history displays.

With this account I have sought to give some flavour of the ways in which I am seeking to generate in my students a deep and lifelong involvement with conservation and a desire to share its values with a wider public. I hope I have also given sufficient examples from the rich range of ideas generated specifically by natural history collections to suggest their value not just for science but also for inspiring real involvement with ideas of cultural meaning and value.

Open Display & Handling Collections—A Conservation Conundrum

Simon Moore, Conservator of Natural Sciences, Hampshire County Council

Abstract

In these days of conditional grant-aiding and forward-looking display modules, the 'Do not touch' signage system has become rather redundant. Many curators and conservators are faced with the prospect that more of their collections are becoming part of interactive and tactile displays and conservators are facing an increasing workload of repairing fragile biological items that have been handled rather severely or have been eaten by pests who regard open displays as a natural banquet! Although this means even more work for conservation staff, the concept of looking without barriers and being able to touch, so far outweighs the increased workload.

Hampshire County Council Museums Service's newest museum, *Milestones*, was opened by the Duke of Edinburgh on the 1st of December 2000 to great acclaim. It houses the Service's significant collection of old vehicles and farm machinery, some of which has been dragged from hedgerows and restored back to a state of former glory, even working! Some of these are used in special events; other and more seasonal events are aimed at children. At *Milestones* there are shops and streets and mock-ups of relevant Hampshire factories dating back to the 1820s and where re-enactors, in period costume, will regale and inform visitors about 'The Old days'. In and around these displays are an important dressing to give a touch of realism, comprising many resin-based trees and other plants, dried insects and freeze-dried and mounted animal specimens from flies to birds, rats to cats and, inevitably a urinating dog which is, of course, the children's favourite!

These displayed specimens comprise non-accessioned material, collected from roads, cat kills, natural deaths and patio door collisions. They can mostly be touched by visitors although many are perched on chimneys and beyond the grasp of human hands. Those that are within reach are frequently stroked, patted and even a cat has been sat upon!! Wheelchairs used to shear off the aforementioned cat's left ear with some regularity and, after many repeat repairs, the cat has now been moved off the ground. The gypsy encampment is a regular haunt for pro-active displays and talks but also attracts older children whose teenage sense of humour inevitably requires some vandalism of the gypsy's game larder (a pigeon and rabbit). Amateur plucking, skinning and beheading regularly takes place – the heads ending up in the cooking pot! None of these problems are really serious; damage can usually be repaired, weighing conservation time against the cost of acquiring a replacement. However, last November (2003), a worrying comment from museum staff about the swift specimens, mounted on a house wall, confirmed my worst fears that there was a severe outbreak of clothes moth.

Open displays of biological and textile material are always on borrowed time where insect pests are concerned and those that are positioned high up (on chimneys) are usually safe from carpet beetles, since they are fairly clumsy flyers, moreover their larvae tend to prefer feeding on skin and will just prune feathers away. Clothes moth is much more serious as a pest since it is a more skilled flyer and an infestation can spread quickly among rooftop specimens; their larvae are, moreover, less particular and will ingest any protein, including feathers leaving a frass-bedecked mannequin and some feather shafts! Fumigating the large display area of *Milestones* would be impractical and inconvenient and replacing the specimens too soon would only provide a further feast for the pests. The only sure factor for removing these pests is by gradually lowering the Relative Humidity. The fine and cold weather of February and March, combined with the Museum's atmospheric regulation system has brought the RH down to 41%, resulting in a gradual decline in the clothes moth population and without affecting any of the displayed woodwork. A more recent visit showed that a pair of starlings had been attacked, rather one had been severely stripped and the other left intact. I have frequently found this to be the case – a severe infestation will, affect some specimens but others are temporarily ignored.

Early spring is always a bad time for insect pest ingress and I will be keeping a close watch on the situation at *Milestones* so that some of the damaged material can eventually be replaced. As always, we will be on borrowed time before the next pest outbreak occurs and once again we shall have to find some funding for more taxidermy and contact our road kill and cat kill specimen harvesters.

SEARCH for Science

SEARCH is situated as a separate unit at Gosport Museum, itself now faced with the prospect of becoming a Discovery Centre. SEARCH was started in 1994 as a part of the Museums Service Educational strategy to bring both social history and natural sciences closer to school parties. The idea has been most successful and despite some fairly recent media pooh-pooing about the non PC attitude towards taxidermy specimens, SEARCH has been able to prove substantially, that children, in particular are not appalled by the idea of 'touching a wild animal that was once alive' but are fascinated by being able to touch, for example, the sharpness of hedgehog spines or, by contrast, a Barn Owl and see for themselves how its ultra soft feathers enable silent flight.

Special occasions enable children to learn even more about natural sciences by becoming like the animals themselves, helping to dispel many misconceptions about animals in particular. Older children are normally careful enough not to damage specimens but those with special needs have to be watched both carefully and tactfully. The tactile approach inevitably means that some specimens become damaged and the bullfinch (and its partner) are regular casualties being so fragile. Many younger children have not yet learned about delicate touching but staff are careful to look out for a likely tail or wing pull or a head wrench and step in to inform about gentler handling before damage occurs.

Repairs

Repeated repairs cause a gradual breaking down of surrounding and supporting tissues. Japanese tissues, especially those in the 10-15 gsm range and made from *Gampi*, are ideal since they form a strong yet discreet bridge between adhesive and protein substrates. Although they have not been used for natural sciences conservation in the longer term, their thinness combined with strength and pH neutrality, combined with providing a reversible repair, augurs very well for the future.

Conclusion

The information that visitors and children can gather, therefore, far outweighs the problem of damage and provides me with plenty of work plus the challenge of increasingly difficult repairs that require much thought and even research. I hope that we can all benefit from the possibility of further refining our technical skills and knowledge.

Re-Source: The work of Renaissance and collaboration, within and beyond regional hubs

David Crowther, Project Director for Renaissance in the Regions,

Renaissance in the Regions is the national development strategy for regional museums across England. Led by MLA, but driven by the needs of audiences and the commitment of its many stakeholders, this national programme is beginning to transform England's regional museums, and peoples' expectations for what they can achieve - given the resources.

A new network of Regional Museum Hubs is bringing together key museums in common cause, creating centres of excellence through lasting partnerships that will make a difference for everyone. But Renaissance is about more than Hubs alone. They are a crucial part of a framework of mutual support that includes Regional Agencies, National Museums, Designated Collections, key university, specialist and other museums, bringing together assets, expertise, knowledge, talent and audiences as never before. By increasing museums' capacity to care for and release their wealth of knowledge, evidence and ideas in ways that engage and inspire, they and their audiences are opening up new opportunities for learning and discovery.

Why Renaissance?

Whilst it is early days for Renaissance, it's important to recall just why and how it is that a domain traditionally undervalued and under-resourced despite its latent potential has started to find its voice and be heard.

It is just over two and a half years ago - October 2001 - since *Renaissance in the Regions - A New Vision for England's Museums* was published. Following extensive research and consultation across the museums community, its arrival was widely acclaimed, not least for the lucid way it spelled out what could be done to unlock the enormous potential of museums across the country to inspire and engage people, and change

their lives for the better.

Decades of underfunding had left museums weak in infrastructure, capacity, and leadership, and piecemeal initiatives were not the answer. Regional museums could deliver results in key government policy areas like education, learning, community development, and economic regeneration. But they needed an integrated, holistic and long term solution to do so.

The Renaissance report made a compelling case for targeted government investment into key museums working in partnership as Regional Museum Hubs to create centres of excellence for the benefit of audiences and museums across the regions. Alongside them, Regional Agencies, National Museums, Designated Collections and others would each play their part in an integrated framework that would create a national asset, nationally supported. Great services of regional and national importance would no longer rely upon local or specialist funding alone. In return for new investment, they would work in new ways.

In October 2002 the Department for Culture, Media and Sport (DCMS) allocated £70m to start the process of building the Renaissance framework across England over the period up to March 2006. The Department for Education and Skills (DfES) offered a further £2.2m. In the light of different regional needs and circumstances, over forty key museums services across England formed themselves into nine Regional Museum Hubs, supported by the emergent new Regional Agencies responsible for the strategic development of museums, libraries and archives in each of the nine English regions.

Renaissance today

Since April 2003 the nine Regional Hubs have progressed in one of two ways. Six have used seedcorn and limited developmental funding to consult, research, plan and pilot new services, building their capacity to fully implement and develop transformed services from April 2006, subject to the funding being available. For the other three Regional Hubs - the South West, the North East and the West Midlands - major Renaissance investment is already transforming how they work with schools, how they engage new audiences (particularly those from deprived or harder-to-reach communities) how they manage their collections, how they develop new talent, and how they forge new partnerships and funding opportunities. These three 'Phase One' regions are showing how Renaissance can deliver results, and are preparing the way for the other six regions to follow.

Regional Agencies have been working to ensure the wider needs and priorities of the region are reflected in the work of Hubs and others involved in Renaissance planning and delivery. They are providing vital advisory, funding, and other services to museums large and small, not least through their management of the Museum Development Fund, designed to ensure that smaller museums have access to the advice and information they need to develop and, in time, play their part in the delivery of a shared Renaissance vision for their region.

Renaissance today is all about capacity building for the future, and building the integrated, sustainable framework of museums and related organisations that will ensure excellence is ultimately achieved across eight priority areas:

- Developing a comprehensive service to schools
- Reaching a wider community
- Redisplay of permanent collections
- Enhancing the care, management and conservation of collections
- Improving access to knowledge and information
- Developing the workforce
- Reaching and exceeding existing standards
- Operating effectively and efficiently to deliver high quality services

Designated Collections are a key element of the Renaissance framework, representing as they do assets of national importance. The recent round of Designation Challenge Fund awards, worth £3.8m (taking the total DCF allocation 2002 - 06 to £10m) has focussed on initiatives for both collections care and enhanced access. Across the natural sciences, examples of projects supported include improved collections care and interpretation in Cambridge at the Sedgwick, in Tyne and Wear at the Hancock and Sunderland museums, as well as cross-disciplinary projects at the Manchester Museum, Norfolk Museums, and York Museums Trust. As this short list shows, a significant fraction of Designated Collections are housed in University

Museums where, through partnership and networking, the potential is there to contribute to scholarship, research and learning across the museums domain.

Early results

Whilst the Renaissance framework is far from complete, and only three Hubs out of nine are able to bring major transformational activity to bear, the early results are very encouraging as the following points show.

Schools are using museums more:

- The very first term of Renaissance funding (autumn term 2003) has seen a 28% increase in school children visiting museums in Phase One Hubs.
- There has already been a 52% increase in the number of children engaged in outreach activities run by the Hub museums.
- 45% of the teachers visiting those Phase One Hubs are doing so for the first time
- 73% of the teachers believe that their pupils are learning new subject specific facts thanks to their museum visit, and 94% of teachers attending a museum activity see it directly linking to the National Curriculum.
- Museums in the Phase One Hubs have been particularly effective in working with schools located in areas of high levels of deprivation. Nearly 30% of school visits were from schools located in wards which have been classified as being amongst the 10% most deprived wards in England, and 46% of the visits were made by schools located in wards which fell into the 20% most deprived wards in England.

Access to and care of collections has improved:

- Phase One Hubs have seen a 166% increase in the number of loan venues, showing wider distribution of collections through the regions' museums and more people getting access to them.
- New visitors are being drawn into Phase One Hub museums. The Discovery Centre, in Newcastle for example, saw a 70% rise in visitors over August last year as a result of Renaissance funding.
- Some £6,972,276 will be spent by Phase One Hubs on the display, care and management of collections during 2004/06.
- During 2004/06, 311 new fte posts will be established in Hubs, and of those some 118 are directly related to caring for and managing collections.

Museums are contributing to regeneration and renewal:

- In the West Midlands (a Phase One Hub) nearly 80 new jobs will be created by 2006, including outreach workers in communities, curators managing and interpreting collections, and education officers unlocking the potential for schools to use them.
- The South West Hub (also Phase One) has received a stage one Heritage Lottery Fund pass to develop a flagship city museum (£10m allocated) with a Development Grant of £853,000.

Museums are beginning to build their capacity:

- Positive Action Traineeships are getting people from ethnic minorities into museum jobs - 'broadening the minds of other colleagues' and allowing museums 'to take risks they wouldn't take normally' according to two participants.
- MLA has so far committed over £450,000 (£456,550) to this critical area of work This is paying for 10 minority-ethnic trainees to spend 2 years gaining a museum studies qualification and work place training in Hubs and for a further 6 minority-ethnic individuals to take a museum studies course with a short period of work experience in a Hub.
- Links are being strengthened between National Museums and regional museums, leading to a range of partnership projects supporting exhibitions, education and outreach work.

Renaissance: the future

Clearly, what is being achieved in three regions must be extended across all nine. This, of course, requires significant additional government funding, and we stand now at a crucial moment - through the government spending review, we are asking, through DCMS, for the Treasury to double their funding for Renaissance in the Regions - from £30m pa in 2005-06 to £60m pa by 2007-08, together with an additional £5m pa from other sources.

This will equalise investment levels across all nine hubs, building centres of excellence in each English region, strengthening development services for smaller museums, and enhancing the role of Designated

Collections as national assets worthy of national access alongside other elements of the framework - whether through partnerships with Hubs, National Museums and others, through the sharing and uniting of expertise via subject specialist networks, or the management of a growing bank of knowledge available through a national collections advisory service.

In return, we believe we can deliver substantial, measurable benefits based upon the kind of progress achieved so far. For people - those who visit, or work with museums - we believe this will mean, by 2008:

- 14000 community groups engaged (0.3m people) often from the most disadvantaged and hard-to-reach communities
- 25000 schools engaged (1.5m pupils)
- 1400 Registered Museums supported by Museum Development Officers benefiting 58m users
- 30000 volunteers involved
- 500 local community development programmes engaging 150,000
- 17000 -strong workforce with its eyes on a stimulating future

Through a properly resourced, integrated framework of institutions and interests working together we can see a genuine collaboration that does justice to the potential natural and cultural wealth of museums, for audiences across England, summarised in a nutshell as follows:

- Nine Regional Hubs – providing regional excellence
- Regional Agencies – leading regional strategy
- National Museums – bringing world class resources
- Designated Collections – developing national assets
- Subject Specialist Networks – uniting expertise
- National Collections Advisory Service –sharing knowledge
- Museum Development Officers – tailoring all the above to local need

As part of MLA's five-year vision for museums, libraries and archives - Investing In Knowledge - Renaissance will play a crucial role in collaboration across the sector, connecting people to knowledge, learning, inspiration and creativity, whatever the source. The collaborative spirit of Renaissance is infectious. Closer partnership between the whole museums domain - from the mightiest National museums to the humblest independent community museum - is also emerging with the publication in March of 'Manifesto for Museums' a campaign document to show how additional Renaissance funding must sit alongside new money for the National Museums - if they are to be able to fully work with Renaissance partners as they would wish. Collaboration is proving productive - museums are indeed finding their voice. The Renaissance is coming.

The future of Natural Science in the context of a large regional museum

Jayne Arthur, Head of Curatorial Services, Birmingham Museums & Art Gallery

BM&AG is the largest local authority museum service in England with an operating budget of £7.2million. There are 6 sites (Birmingham Museum & Art Gallery, Aston Hall, Blakesley Hall, Soho House, Museum of the Jewellery Quarter and Sarehole Mill), 1 scheduled ancient monument (Weoley Castle), the Museum Collections Centre (a £4.1m capital project to develop improved access to stored collections) and 2 offsite stores. BM&AG is the lead partner of the West Midlands Hub Partnership (with Ironbridge Gorge Museum Trust, the Potteries Museum Stoke on Trent, Wolverhampton Art Gallery and Museums and Coventry Museum Service). Through Renaissance in the Regions the WM Hub has received £10.25 million over 3 years to March 2006 to develop and improve our services.

Natural Sciences Collections at BM&AG

The development of a natural history collection bore fruit in 1910 after much lobbying of the City Council by individuals and interested groups. At this point the scheme for a natural history museum was officially adopted by the City Council. W H Edwards was appointed Assistant Keeper and was responsible for the displays of three galleries at the Museum & Art Gallery including the Chase bird collection and numerous specimens of zoology, entomology and herbaria. The collections were to be a stimulus to the visitor on the diversity of natural life on earth. In the 1930s proposals for the development of Centenary Square included

both a natural history museum and a planetarium. However World War 2 put paid to any further investment in the square and the scheme was never completed.

The collections developed quickly with major donations:

- Robert Chase collection - Robert Chase (1852-1927), a Birmingham manufacturer of brushes, was three times president of the Birmingham Natural History and Philosophical Society. His collection of British birds, eggs, nests and nestlings with original documentation includes over 300 cased specimens
- The Auden collection of mounted birds includes 30 specimens of the Hastings rarities
- The Kenrick collection of foreign butterflies and moths, especially from Papua New Guinea.
- The South collection of macro-lepidoptera contains 17,000 British specimens with collecting details.
- The H Overton collection includes some of the earliest examples of the freshwater mussel *Pseudanodonta* found in Britain.
- Notable collections of gemstones are those of William Bragge, Bernard Senior and A. S. Wainwright.
- Of historic importance and significance is the collection of around 2,000 minerals formed in the 18th century by Matthew Boulton
- The collection contains a comprehensive range of specimens illustrating the geology of the West Midlands

Developing Thinktank

We now jump to the end of the 20th century. During the early 1990s there were several plans to redevelop the natural sciences displays at BM&AG which had last been redeveloped in the 1960s. At the same time a bid was being put together by Birmingham City Council, the University of Central England and regeneration partners to the Millennium Commission for a major building to mark the millennium. Millennium Point was a £110million capital development and included the Discovery Centre, Technology Innovation Centre, Imax Cinema and a Hub with shops and offices. Discovery Centre – which became Thinktank – was to include collections of science and technology (then displayed at the Museum of Science & Industry) and also a gallery on how we integrate with the world around us using the natural sciences collections. Thinktank was set up as an independent charitable trust receiving an annual grant from Birmingham City Council with BM&AG collections on loan through a comprehensive Loan Agreement. The new museum opened to the public in September 2001. As Thinktank developed as the focus for the science collections so BM&AG refocused the displays at the Museum & Art Gallery on the art and history collections. This gradually reduced the natural sciences galleries on the 3rd floor until the last display was removed in 2003.

Natural Sciences collections at risk

While Thinktank provided a new gallery for the natural science collections the secondment of natural history curators from 1998 to work on the project meant that access to the collections and further research and curation on collections not part of the loan to Thinktank were severely limited. As Head of Curatorial Services with responsibility for all BM&AGs collections I was concerned about this situation and in 2001 I proposed setting up an Advisory Panel for Natural History. The panel was to have representatives from the Geology Curators' Group, the Biology Curators' Group and the Natural History Museum as well as local organisations such as the Birmingham Nature Centre.

The role and responsibility of the panel was agreed at the first meeting – to:

- Recommend a way forward for the Natural History collections at Birmingham Museums & Art Gallery
- Provide a sounding board and overview of the plans for storage, management and access to the collections
- Provide advocacy for and promotion of a vision for the collections
- Input into review of collecting policies for collections
- Advise on partnerships for the natural history collections

The Panel meets twice a year and receives updates on the collections, the loan collection at Thinktank, and discusses key issues for the collections – for example the review of BM&AG Collecting Policy 2003-2008 or the Condition Survey undertaken in August 2002.

Membership of the Panel:

Roger Lincoln, now Clare Valentine - Natural History Museum
 Dr Paul Smith – Lapworth Museum of Geology (GCG)
 Nick Gordon – Leicester Museums Service (BCG)

John Nettle – Nature Centre Manager
 Professor Ted Taylor – University of Birmingham
 Peter Shirley – Regional Director West Midlands, The Wildlife Trusts

A future for the natural sciences collections

Discussions with the University of Birmingham in 2002 led to a proposal for partnership to bring together the biological collections from the University Herbarium, Lapworth Museum of Geology and the School of Biosciences with those of BM&AG to develop the Birmingham Museum of Natural History. The aim of the museum would be:

- To provide secure and appropriate storage for natural history collections to ensure their long term preservation
- To implement a programme of assessment and conservation
- To implement a programme of documentation
- To create access to the natural history collections for students, researchers and the general public
- To implement a programme of education and outreach for natural history collections
- To promote a partnership between the University of Birmingham and BM&AG
- To provide opportunities to present academic research to the general public

The proposed natural history museum complements the displays at Thinktank. These together with the Lapworth Museum of Geology, the City and University Botanic Gardens and the Nature Centre would enable the development of a regional centre of excellence for the natural sciences in Birmingham that would be significant and unrivalled outside London.

The partnership agreement was accepted in principal by both the University and Birmingham City Council in 2002 and a “shadow board” created for the project. The project leaders are Paul Smith and myself.

Condition Survey and Collection Care Action Plan September 2002

During 2002/3 we put together a bid to Heritage Lottery Fund. Part of the preparation for the bid included a Condition Survey for the BM&AG natural sciences collection. This was undertaken by the Natural Sciences Conservation Group and co-ordinated by Kate Andrew.

Key findings were:

Storage

- Lack of investment in stocks of appropriate packing and labelling materials and storage boxes has led to inefficient use of space and put specimens at risk.

Housekeeping

- There is no evidence of recent cleaning and rubbish removal in any of the stores

Handling and Use

- Assessors were not in a position to judge provisions for handling and use except where they had direct personal experience of working with BM&AG collections.

Environmental monitoring and control

- Natural History stores are currently not environmentally monitored, pest monitoring is not in place.
- Spot checks indicated no immediate cause for concern, in particular there is little evidence of pest infestation or pyrite decay.

Conservation

- Although most collections were dirty, very few actively deteriorating or infested specimens were located. Long term conservation needs of all the collections are largely preventative.

Heritage Lottery Fund bid

A bid for £900k was made in May 2003 to the Heritage Lottery Fund to support a three-year programme of collection care and management, relocation of collections from BM&AG to the University, and development of learning resources relating to bio-diversity and bio-sustainability. Following discussion with HLF case officers the bid was withdrawn and a project planning grant application for £50k made in October 2003 to develop:

- Audience development plan
- Access plan
- Condition survey of the University natural science collections

BM&AG and the University would develop a Business Plan following the project planning process and resubmit the full bid in 2004.

Issues for natural sciences collections in the West Midlands

While continuing to work on the partnership with the University of Birmingham, Renaissance in the Regions partnership brought a strategic view to museum issues for the West Midlands, and in my case looking at regional strategies for collections. With this in mind the Natural Sciences Collection Group for the West Midlands was inaugurated in February 2003. The group brings together all those responsible for caring for and interpreting natural science collections in the region – both subject experts and collection managers.

Key issues for the natural sciences collections in the West Midlands:

- Resourcing documentation programmes and slow rate of progress
- Difficulty of increasing access to natural sciences collections – lack of space and resources for display
- Reduction in natural sciences specialists across the region (many museums had reduced staffing in last 5 years)
- Pressures on storage space particularly for “orphan” collections and inadequate storage
- Dearth of conservation specialists for natural sciences and taxidermists
- Need to look at collecting policies. Where does collecting now happen and how are these collections preserved in the long term? Need to have a regional overview of collecting.

Opportunities

- Growth of biodiversity and environmental agenda and how this could be tied into local biodiversity action plans and geology plans (LBAPs, LGAPs, Local Agenda 21)
- Growth of interest in the history of the study of natural sciences and its impact on society
- Renaissance in the Regions potential for funding (especially education in short term)
- Collection transfers (including rescuing of “orphan” collections) and appropriate re-location
- Funding opportunities for cataloguing (e.g. BSBI funds for herbaria, NHM for high level collection cataloguing)

Conclusion

There is still some way to go for the natural sciences collections at BM&AG. The future is very dependent on the Heritage Lottery supporting the project planning grant and ultimately the main bid. However the key achievements for the last few years are:

- The Natural History Advisory Board who continue to provide support, ideas and expertise
- The developing partnership with the University of Birmingham to bring together a regional resource for the natural sciences by joining our collections
- The Natural Sciences Collections Group providing local advocacy, networking and information sharing within West Midlands museums

I continue to be the sole contact for the natural sciences at BM&AG, answering 50 plus enquiries on the collections a year and responding to the continuing public comments on the lack of natural science displays at BM&AG.

Plant Cultures: botanical collections and the celebration of British Asian heritage

Julia Steele, Collections Manager, Economic Botany Collection Royal Botanic Gardens, Kew

Did you know that henna can be used in traditional medicine to treat headaches? Or did you know that Britain is the world's largest consumer of tea, drinking 70 billion cups a year? However, while world tea consumption is now increasing by 1% a year, production is exceeding this with an annual growth rate of 2%.

Henna (*Lawsonia inermis*) and tea (*Camellia sinensis*) are two of the twenty-five plants featured in *Plant Cultures*, an innovative partnership project funded by Culture Online and led by the Royal Botanic Gardens, Kew. Culture Online is a DCMS funded initiative which aims to enable more people to engage in culture in a variety of new ways www.cultureonline.gov.uk. *Plant Cultures* aims to do this through combining community-outreach programmes, an Internet resource and physical trails around botanic gardens and museums. It will give families, South Asian communities, lifelong learners and schoolchildren a unique insight

into the cultural and economic importance of plants from South Asia (India, Pakistan & Bangladesh). *Plant Cultures* aims to increase access to digital as well as to 'real' resources; museum and garden collections remain central throughout the project.



Model of cotton cleaner from Bengal. Donated by India Museum

South Asia is an ideal focus for the project because it is the source of so many plants central to British life such as tea, cotton and spices. There are also long-standing links in trade and government with South Asia, and large and diverse communities resident in Britain. Asian plants are an obvious resource for conveying the complex, multicultural histories of the plants and the communities in which they are used, to the widest possible audience. Asians are known to be under represented both as users of cultural resources and of the Internet. Engaging and relevant material is essential for encouraging new users to the Internet and visitors to cultural institutions.

Plant Cultures is a new and different type of project for Kew. While Kew does have experience in outreach work, partnerships with museums, and producing popular information about plants, these have not before been combined or approached in a project of this scale.

The three phases of the project are linked, but each has a distinct user experience. The outreach element of the project is integral to working with the project's target audience. Outreach sessions will look at current and past roles of plants in South Asian culture, covering the major regions and religions represented by the communities in England. Personal perspectives, in the form of written, spoken and videoed stories, will be collected and made available on the website. The focused outreach programme will be co-ordinated by an Outreach Officer based at Kew, and run by partners: Museum of London; Leicester City Museums, National Museums Liverpool, and Spice! in Bradford. An important element of the outreach work will handling sessions with the plants themselves. Groups will also have the opportunity of visiting Kew, here they will see the Living Collection in the gardens and glasshouses and be given behind the scenes tours of the Economic Botany Collection. The outreach programme will also promote the project and arrange a series of community activities in the last phase, including participation in local events and festivals targeted at Asian communities in the catchment areas of the four partner Museums. Stories about the use of the plants will be the main outcome of the outreach work, and will also be elicited through the website. The story library on the site will be a fascinating resource recording all uses of the plants gathered during the project, in many cases revealing unusual and previously undocumented uses which might otherwise be lost.

The website is the main outcome of *Plant Cultures* and is due for launch in November 2004. Content will be rich and include: information on 25 key plant species and 11 subject themes; stories about uses of the plants; activities; images; and formal educational material. Material is of intergenerational interest relating to everyday life and recent history.

Images on the website will illustrate plants in South Asian community life and culture from medieval times to the current day. They include: botanical art from the Library at Kew; Indian miniatures, paintings and manuscripts from the Wellcome Library for the History and Understanding of Medicine; similar material from the British Library's Oriental & India Office Collections; and prints and photographs from all three partners, illustrating different perspectives of British involvement in South Asia and recording the changing roles of plants in daily life and international trade. There will also be photographs of museum objects from Kew's Economic Botany Collection and the Victoria & Albert Museum's India and South East Asia Collections, highlighting the impact of plants on material culture.

At least 1500 images will be included altogether, many previously unpublished. In the case of the Economic Botany Collection at Kew it will allow public access to images of objects currently held in storage. The entire Collection numbers over 77,000 items, representing plants and their uses from around the world and ranging from archaeological specimens to the present-day. Objects include wet and dry plant parts, as well as artefacts made from plants and even models of them being used. The whole collection is botanically named and ordered according to its classification. While there is a permanent display of the Collection in the Plants+People exhibition at Museum No.1, the majority is housed in storage. *Plant Cultures* will enable the South Asian part of this collection to be digitised and made available to the public via the website.

Visitors to the website will be encouraged to extend their interest by planning a visit to a plant trail at a lo-

cal museum or botanic garden to see the 'real' collections. A variety of trails will be developed around existing resources, including garden-based trails at Kew and elsewhere, and museum or citywide trails in London, Leicester, Liverpool and other locations. Project materials, assistance from outreach officers, and seed money will be available to assist botanical gardens, museums and other organisations in setting up activities and trails. This will enable content generated by the project to reach as broad an audience as possible in a practical and cost effective way. Other ideas for users to extend their interest of these plants include an 'I Spy' guide to fruit and vegetables at Asian Markets, and instructions for growing the plants at home.

To date - April 2004 - the project is still in its early stages. The outreach work is due to start within the next six weeks and specifications for the website are being finalised. The project is due for completion in March 2005, although the life of the website and trails will extend well beyond this. Evaluation will be specific to individual phases of the project and include: extent of involvement with target audiences, user questionnaires, analysis of web statistics, and numbers of users of the website and trails. Overall the project is being assessed by Culture Online for its 'value for money'; the number of people reached through the project against the price spent per head. It is accepted that some parts of the project, such as the outreach work, are more costly than others. Long-term outcomes are also anticipated, such as a stimulation of interest in botany as it relates to day to day life; an increased use of cultural resources (including botanic gardens) by South Asian communities; and the development of lasting links among museums, botanic, gardens and community groups.

Visitor perceptions of human remains and their wider relevance to natural history

*Hugh Kilmister, Museum Administrator, Petrie Museum of Egyptian Archaeology,
University College London*

Firstly then, the idea that led to the undertaking of this research was an interest in finding out what visitors thought of the displays of ancient Egyptian human remains that are found in many United Kingdom museums. However I realise that this paper may not seem directly relevant to professionals working in Natural History collections, I have been made aware though that some Natural History collections do contain human remains. In addition the research involved in this paper deals with the ethics of display and what it is acceptable to present to the public and this ultimately affects us all.

The museum profession in Britain then has for the past decade taken on board the issues of the retention and display of human remains and recently this led to the creation of a working party charged with looking generally at these issues, and of course that report was published last Autumn with additions. (Post the working party report some collections have now started the task of auditing their collections for human remains). However what all of this previous research and the submissions to the working party have overlooked is how museum visitors, a main stakeholder, react to such displays – do they have an issue with human remains being displayed, do they think it is ethical or morally repugnant?

Since the retention and display of human remains can be viewed as such a contentious issue, by certain groups, it can be helpful to apply the following division – human remains that have cultural descendants ie. Native American and Aboriginal remains amongst others and the less contentious group of remains that have no living cultural descendants ie. ancient Egyptian.

Working in the field of Egyptology it was natural for me to investigate this less contentious group with museum visitors. However the conclusions I reached might be a useful starting point when working on collections that display and store the more contentious remains as well as those collections that have had complaints about their primate displays for example and are considering future re-display.

This research was also prompted by what seemed to be a contradiction happening in London in 2002, namely 840,000 of the public visiting Gunther Von Hagens' *BodyWorlds* exhibition of 32 plastinated "human" bodies on the one hand, whilst at the same time the working party on human remains was collecting evidence on how best we could deal with the problem of having human remains as part of our collections. Therefore I was interested to see if the museum profession was becoming unduly sensitive over the issues surrounding human remains by using their own audience as an indicator. Would the public agree that it was inappropriate for museums to still continue to hold these remains or did they wholeheartedly approve

of their display?

This then was the context to the survey work that I carried out in three United Kingdom museums. Each museum was chosen for a variety of reasons. Firstly the British Museum was chosen because of the quantity of both its audiences and the human remains on display. The Manchester Museum, in the North of England is important because of the scientific work that is undertaken on its ancient Egyptian human remains and the Petrie Museum of Egyptian Archaeology, University College London, where I work, was chosen as it is a University Museum with a specialist collection with more 'specialist' audiences.

In establishing a choice of ten survey questions it was crucial to elicit a range of views from respondents. It was useful to establish what the public thought human remains actually were. Most importantly as a justification for displaying remains it was felt necessary to establish whether people had learnt more from viewing them in the three collections and if so what exactly had they learnt. A further qualitative, ethical question was to find out whether modern (that is less than one hundred years old) human remains would cause people a problem. This was felt to be a good test of whether people's views towards ancient and modern remains were contradictory. As each respondent was being asked questions that are in one way or another related to death or dead bodies, then it was interesting to establish what people thought would happen to themselves after death. Of all the ten questions, question five was the most important. Respondents were asked to choose the view offered that best summed up their thoughts about human remains on display. Four very distinct categories were offered that gave respondents the choice of allowing the museum to do what 'they saw fit' with the remains, to the statement that it was not appropriate for museums to hold human remains. For each of the choices the respondents were encouraged to discuss what they had chosen. The final four questions were quantitative and demographic establishing sex, age religion and educational level of respondents. The responses to these questions would be useful for establishing patterns of responses to certain questions. The respondents were chosen randomly in each museum and in order to have data that would present significant and worthwhile findings one hundred respondents were interviewed in each of the three participating institutions. After the responses had been collected the social sciences statistical package SPSS was chosen to analyse the raw data.

Results

Whilst the results for each museum were considered individually, for this talk only the cumulative results over the three collections will be considered.

Question one asked respondents what they thought human remains were. Bodies, body parts, bones and a combination answer of skin, bones and mummies was chosen by 280 respondents. Significantly despite these museums having mummies or mummy parts on display respondents rarely thought of mummies directly when defining human remains.

For question two 80% of respondents felt that they had learnt more about the ancient Egyptians from viewing the human remains in these collections. Knowledge gained included knowing more about burial techniques, funerary practices in ancient Egypt, personal grooming of individuals and the size and stature of the bodies. As is highlighted in the results of other questions the public seemed more comfortable to view human remains if there is deemed to be an educational value and for these respondents there was this link and by viewing the remains they believed they were deriving a benefit.

Question three asked respondents whether their thoughts would be different if they were viewing modern remains, that were less than one hundred years old. Well over half (54.7%) would be sensitive to viewing modern remains, whilst 45.3% would not have a problem. Many respondents felt it would be disrespectful to view modern human remains and that the bodies would be too close in time to us today, with potential living relatives. Also significantly many respondents could see no historical reason for a display of this nature. For many respondents they were happy viewing ancient human remains because they are so far removed from our own time and a large proportion said that there was an educational reason for viewing them. Some comments included displaying modern remains would be 'distasteful' and they were concerned that living relatives would be distressed by this sort of exhibition. Using the overall result of this question then we can draw the inference that some respondents are potentially contradictory in their views regarding human remains.

Question four asked respondents what they thought would happen to them after death. Almost half of all respondents (49%) believed that death was not the end. They believed that the soul or spirit continues in

some 'other place'. Many respondents (29%) believed that the body rots and is only a vessel that gets 'left behind'. Significantly, after studying the responses most young people (in the 16 – 34 age category) had a real problem with this question. In the 16 – 24 age bracket, few of them, perhaps unsurprisingly, had even considered the question and for some it proved traumatic to even consider the concept.

For question five a very high proportion of respondents (248 respondents – 82.5%) believed that these three museums should be allowed to display their human remains in 'whatever way they see fit'. These respondents were positive about these displays, but many did make the proviso that any displays had to be educational and done with respect. A number of respondents in all three collections claimed that they 'trusted' the museums to be responsible in their displays. Some 42 respondents (14.2%) thought that 'more respect should be shown' to the remains and 9 respondents thought that a separate 'burial area' would be more appropriate. Only 7 respondents (2.3%) thought that the remains should be kept in storage and not displayed and just 3 respondents (1% or one in each museum), thought it is inappropriate for these United Kingdom museums to have these remains and they would like them buried either in the UK or returned to Egypt. Therefore there is overwhelming support, based on this data, for the retention of these remains (99%) with only a 1% disapproval rating.

Questions 7, 8, 9 and 10 were all demographic questions and here it was interesting to try to establish whether a person's age, sex, religion or educational background could predict their responses to question 5.

Question 7 showed a significant difference between males and females completing the survey. There was a 62% female response as opposed to a 38% male response. Based on personal observation and the opinions of other museum professionals this ratio mirrors female/male attendance generally in UK museums, other than military museums that seem to attract significantly more men. Also more women seemed willing to answer the survey in each of the three museums, with quite a number of men, especially single male visitors refusing to complete it. In addition there were a large number of families accompanied by female adults visiting these museums as it was the school summer holidays. Therefore there are a number of factors that help to explain these figures.

Question 8 showed a consistent spread in terms of age ranges. Over all the three museums there was a significant bulk of respondents in the 16 – 54 age ranges (257 respondents - 82.3%).

Question 9 dealt with the religious affinity of respondents. Christians accounted for 58% of all visitors questioned, whilst Atheists were the second largest grouping at 24.7%. This gives a total of 82.7% and meant that the other world religions did not feature heavily enough – 4.7% were Jewish, 3% were Muslim and just 1% Hindu. It would have been useful to compare the top four religions to see if they had differing views on the issue of life after death and the ethics of displaying human remains. However due to the small number of respondents of these three faiths such comparisons were not viable and would not have been significant. Possibly work with focus groups in the future, with respondents from a variety of faiths would be a useful exercise.

Question 10 dealt with the education level of respondents. Almost half of all respondents (142 – 47.3%) left school at 18+, which presupposes that they went straight onto further education with 73 respondents (24.3%) leaving at 18. Generally then the respondents were reasonably well-educated with 231 respondents (77.0%) going onto undertake some form of further education either at 18+ or later in life.

Generally then most respondents supported the idea of the three museums displaying their ancient Egyptian human remains in 'whatever way they see fit' (82.5%). Most also felt that they had learnt something from viewing them (80%).

Conclusion

In conclusion using some of the issues raised by the survey it is useful to look to the future. Obviously when looking at the ethics of displaying human remains visitors are only one interested group. However they are undoubtedly the largest and most important of all museum stakeholders. Though the display of ancient Egyptian remains is not as contentious as the display of Aboriginal or Native American remains, and the public is generally positive about their display, we do perhaps need to look to the future re-display of these remains. This has been made more timely by the fact that contentious remains have been removed from display, but those remains that are unlikely to be repatriated have been left in-situ creating somewhat of a double standard. Many survey respondents viewed the remains merely as "vessels", these displays then

have been reduced to the level of mere objects that provide knowledge to subsequent generations. In addition to the 14.2%, another 3% of respondents responded by feeling that the present displays lack dignity.

A possible, more appropriate re-display could mean a separate museum area. One which might be darkened with a more subdued atmosphere, where people were given the choice to view the remains or not. This of course might attract a certain ghoulish interest in trying to present a more appropriate display. This is the way the Royal Mummies are displayed in the Egyptian Museum in Cairo, where no photography or talking is allowed. This public control might encourage more respectful viewing.

It is of course difficult to right past colonial wrongs of acquisition. There is now little chance of these remains being returned to Egypt and there have been no claims to this effect, though there have been requests to repatriate cultural objects. However it is not just that these remains have been isolated from their original funerary context (as indeed most have), but that none of these collections reflect on the reasons why they have them in the first place. The story of their acquisition and the colonial trade in antiquities has a place in their future re-display. Visitors can then make a more informed decision about whether it is right for museums to have these human remains as well as other ancient Egyptian objects.

As well as visitors and focus groups, curators, scientists, Egyptologists, educators and museum staff should all play a part in re-defining an appropriate final resting place. Significantly it was the warding staff at both the British Museum and the Manchester Museum who felt most uncomfortable with the idea of the remains being in a museum. This can partly be explained by these staff seeing them on a regular basis and so forming a more personal connection with them. As they more than any other group of people are most aware of the final resting place aspect of these displays.

Many visitors stated verbally to me that they “trusted” the museum to be professional in how it displayed its collections. However this trust is perhaps not justified when we do not present the complete picture and these human remains are all treated merely as objects surrounded by other objects. Over the past decade a number of groups from ICOM down have presented guidelines for museums holding human remains (<http://www.icom.museum/ethics.html#6>). Many of these have been developed to deal with the issues related to the possible repatriation of human remains, but some like the Museum Ethnographers Group guidelines deal directly with the care of human remains (<http://www.museumethnographersgroup.org.uk/HumanRemainsguidelines.html>). There are no explicit guidelines relating to collections that hold remains without cultural descendants and together with the parties mentioned before it is perhaps time to draw up a series of guidelines that deal directly with these collections. The Human Remains Working Party recommendations have started this process and this discussion needs to continue to give all museums guidance on how best to deal with their human remains collections

The results of this survey then are the basis of further research that needs to be undertaken with visitors, focus groups and other stakeholders in trying to establish a more ethical display of these remains. The statistics might point to a public support for a display, however there is a small minority that do not support this idea and significantly it is a ‘minority’ that is currently dominating repatriation claims for human remains with cultural descendants. Therefore it is important in trying to decide the future of these particular human remains to address all public views, not just the majority. In addition, though, the results of the survey highlight the fact that re-display is not a necessity and most visitor views towards these remains are ambivalent and somewhat contradictory, 14.2% of visitors wanted a more respectful display and museums do at least owe this truth to this particular set of human remains.

Target audiences and agendas

Liba Taub, Director Whipple Museum of the History of Science, University of Cambridge

I was very pleased to attend the NatSCA conference in Dublin, and to have the opportunity to talk about a subject which concerns everyone working in museums: how the desire to attract target audiences influences our institutional agendas. Rather than try to reproduce the talk I gave, here I would like simply to reiterate my 'take-home' message: to thine own selves be true. As specialists working with scientific collections, we must be true to subjects, our collections and, particularly, to those audiences who crave access to our collec-

tions and areas of expertise.

Jo Hatton invited me to speak to NatSCA having read an article by Deborah Mulhearn on university museums in the October 2003 *Museums Journal*, for which I was interviewed. (I am Director and Curator of the Whipple Museum of the History of Science, one of the Designated collections at the University of Cambridge, and active within the university collections community.) Many of our institutions rely on public money and, increasingly, we must report data on our performance indicators and our 'target audiences'. It was the question of 'target audiences' that Deborah Mulhearn raised when she contacted me.

As director of a university museum with an internationally known collection of scientific instruments, I must consider which are the appropriate and realistic target audiences for my institution. To some extent I believe that this will be determined by the subject matter of my collection. At the Whipple, we have over 6000 visitors a year. Forty per cent of these visitors are young men, which is a very unusual figure nationally. Normally, young men don't go to museums. At one point, a major funding body suggested that we needed to bring in more women as visitors. Then we thought: wait a minute—no one else brings in these numbers of young men; let's just be happy about it and carry on. I told Deborah: 'We have to be true to ourselves and get on with what we do best'.

I received my doctorate in History of Science and went into museum work because I was interested in the material culture of the history of science; as an historian of science trained in intellectual history and classics, I was particularly interested in incorporating the evidence embodied in scientific instruments as part of our historical understanding of the sciences. My training as an historian of science is key to my role as Whipple Curator; I am a subject matter specialist.

I understand that the Natural Sciences Collections Association was formed through the merger of two groups, the Biology Curators Group and the Natural Sciences Conservation Group. Like me, you are all specialists who were attracted to your area because of the subject matter itself. There is something in scientific collections that draws all of us, sufficiently so that we have dedicated our careers to collecting, looking after and interpreting scientific material. The theme of this year's annual conference is 'Natural History is Cultural History'; I was impressed that the organisers apparently did not feel the need to add the emphatic word 'too' at the end of the title, because I am certain that I am not alone in sometimes wondering to what extent science counts as 'culture'. Part of my sensitivity to the question as to whether or not science is regarded as part of broader culture may be due to my being an historian of science, but I believe that many scientists also must experience a sense of frustration sometimes that painting, music, and ballet count as culture but the creativity involved in scientific (and mathematical) work sometimes seems to be overlooked.

All of us responsible for scientific collections, whether they are natural history collections or scientific artefacts and instruments, have been told, repeatedly, that science is meant to be 'FUN', and that this is an important message we are meant to be conveying through our exhibitions, outreach activities and other programs. And, of course, scientific collections are meant to offer learning experiences as well, in a way which may be somewhat different to other sorts of collections. As one of my colleagues, Jim Bennett, the Keeper of the Museum of the History of Science at Oxford has said (and here I paraphrase): When visitors go to an art museum, no one expects them to come out painting, yet when people (particularly children) visit a museum devoted to a scientific subject, they are then expected to come out doing experiments.

Currently, as we are all aware, the 'educational' function of museums is emphasised. The value of museums for school-age children is often cited, and many attempts are made to coordinate students' museum experiences with the national curriculum. Some children's museum education programmes are remarkably effective; the National Gallery's well-coordinated efforts relating to Hans Holbein's portrait of *The Ambassadors* is a fine example; the exhibition highlighted, incidentally, the role of scientific instruments. But children are not the only target of those promoting the educational role of museums; 'life-long learning' and continuing (or adult) education are also emphasised. This latter focus may be due to growing recognition of the economic and political power of the 'ageing population', as life-expectancy increases. An interest in promoting tourism may also be at work. For it seems, increasingly, museums are not meant to be simply pedagogical experiences, they must also provide recreation, entertainment and income generation.

Increasingly, there is a sense that museums are an important force in today's world, serving society in a number of ways. The recently published *A Manifesto for Museums*, (endorsed by the Directors of National Museums, the Chairmen of MLA (Museums, Libraries and Archives Council) and the Association of Inde-

pendent Museums, the Convenors of the Group for Large Local Authority Museums, the President of the Museums Association, and the Chief Executives of the Regional Agencies) emphasises the importance of museums for learning, helping the economy, promoting tourism, contributing to urban regeneration, catalysing creativity, working as an agent for social change, promoting intercultural understanding, acting as civic and community spaces, and as centres of research and innovation. This is certainly an impressive list of contributions to society, but one of the defining features of a museum appears to be absent: the care, preservation, display and interpretation of collections. Many of us, as professionals who are responsible for collections, would see this as a key and unique contribution which museums make to society.

Sometimes there seems to be a tendency to presume that all museums are simply museums, without differentiating what the different roles and functions of individual museums may be within their own contexts and their own communities. But, the nature of collections held within museums do vary and often, quite rightly, define the character of the museum. Natural history collections contribute to the definition of the museum which houses them. There are, certainly, questions as to what motivates visitors to go to particular museums. Sometimes it seems as if the government and funding bodies make certain assumptions regarding the importance of 'good day out' or 'free admission'. However, it is not clear government and funding bodies have done enough visitor research to understand what does motivate visitors.

Two researchers at London Metropolitan University working on the motivations of museum visitors, Niall Caldwell and John Coshall, have been concerned with 'getting into' the minds of visitors. Their studies indicate that visitors are not that motivated by cafes, and, perhaps surprisingly for the government, they don't seem to be put off by admission charges. Their studies suggest that visitors are motivated by what is 'interesting'. But what Caldwell and Coshall have not been able to determine, yet, is what visitors do find interesting.

As the director of a museum with a rather specialist scientific collection, a history of science collection, I know that many of the visitors to the Whipple Museum of the History of Science are coming because they are interested in seeing objects related to the history of science. Similarly, I would be surprised if most visitors to natural history museums did not find the collections 'interesting'. When I looked at a number of UK museums websites, it seemed as if target audiences were being defined by socio-economic categories (e.g., adult, children, disabled people, families, unemployed), rather than by 'what they find interesting', that is, the subject matter or type of collections handled by the museum. For example, the Science Museum in London specifies the following under 'target audiences' for the 3D IMAX theatre: families and school groups; ABC1s as well as groups C2, D and E. (This information is available on their website: www.sciencemuseum.org.uk/corporate_commercial/sponsorship/ground.asp.) It is possible that potential visitors may not recognise instantly whether they are part of the intended target audience, and may not know whether or not the Science Museum will be 'interesting' to them. It might also be the case that the Science Museum reckons that anyone visiting their site has self-selected with an interest in science. Perhaps surprisingly, a major public museum in the U.S., the Philadelphia Museum of Art, on its website www.philamuseum.org/education/vast.shtml) defines its target audiences specifically by subject matter Interest: 'Recommended for [those] who would like to become more comfortable looking at and talking about art, and also for teachers who wish to explore the ways in which art and the Museum's collections can enrich their classroom studies'. Here, we find a specific mention of subject matter and of collections.

The findings of Caldwell and Coshall indicate that museum visitors are motivated to visit museums which they find interesting. Undoubtedly, many of our visitors come to our museums because they find scientific material interesting. If people are interested in natural history, they will visit museums which display and interpret natural history collections and we, as museum professionals, dedicated to our own subject specialisms, are carrying out roles which no one else in our society can or will do. We have a responsibility to our target audiences, particularly those that 'target' our collections and our subject areas. In seeking to serve our target audiences, we should recognise that many of our visitors and users rely on us for access to and information about our collections, and we must respond strive to respond to their needs.

I began with a simple message: to thine own selves be true. In fact, I have a slightly more complicated message: as professionals committed to working with scientific collections, we must be true to our collections and to those visitors and users who desire and require access to our collections and our subjects. For those who are drawn to the natural world, seeing natural history collections will always be an interesting and exciting experience—and we must facilitate and celebrate the social and cultural importance of that experience.

Further information

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Evolution & public display: an historical perspective

*Dr Joe Cain, Senior lecturer in history & philosophy of biology, University College London
& President of The Society for the History of Natural History*

Ernst Mayr celebrated his 100th birthday in July, still going strong. His long career began as a collections specialist (Cain 2002). His big break came in 1929 when he arrived in New York to start a contract with the American Museum of Natural History (AMNH), sorting newly acquired materials from the South Seas. Mayr quickly proved himself. By the end of WW2 he was blossoming into one of the most influential biologists in the twentieth century. Most people forget Mayr's roots in the curatorial community (Bock 1994). Likewise, almost no one remembers his role in exhibit design at the AMNH. The most important example was his work completing the 1948 exhibit "The Biology of Birds" (Lanyon 1963; Mayr 1948). The full story is one for another place. Suffice it to say Mayr cared passionately about the science of ornithology. He used this opportunity to outline an intellectual programme, steering his colleagues towards a future in which the study of general biological processes became a noble goal.

Mayr's work on "The Biology of Birds" is fascinating for another reason, and this other dimension is the focus of the present essay. The content of Mayr's exhibit contrasts sharply with most of the previous exhibits at the AMNH. It also was part of a general trend among natural history exhibits over the twentieth century. That trend continues today, influencing the criteria we use for judging an exhibit's success. It's easy to appreciate why this trend took place. But I think we've gone too far. This trend pushes us away from moral obligations we have both as experts and as citizens.

Mayr and exhibits at the American Museum

Historians love to discuss exhibits at the AMNH, especially those fabulous habitat groups from the start of the twentieth century. It's easy to tie the AMNH's early exhibits programme to a series of cultural and political agendas driven by the museum's trustees (Rainger 1991). These men were philanthropists and social reformers also behind the creation of public parks, compulsory education, planned recreation, public libraries, and so on. Their educational programmes trained working class kids for specific roles in Edwardian culture and for life in the modern, science-based industrial city. Exhibits at the AMNH were part of this training. Some delivered messages directly, such as hygiene and nutrition. Others were more subtle, reinforcing messages about manifest destiny, family structure, race, social hierarchy, citizenship, and so on. It's easy to take this kind of analysis too far, but the point of considerable historical work is clear: the public galleries did more than innocently present natural history.

On one hand, "The Biology of Birds" fits nicely into this long tradition. One feature was a synoptic display, presenting bird diversity at the family or sub-family level and introducing basic anatomical themes. This fit into an educational programme and nicely complemented displays elsewhere in the building. Symbolic objects also had a place. There was a hornbill pair and their nest (complete with the original tree in which it was embedded) tied to a strong message about parental responsibility. Likewise, a set of panels considered relations between "birds and man," celebrating the value of birds as food and illustrating birds as cultural symbols. However, these parts of the exhibit are easily separated from those created by Mayr. Where he controlled the design, science took a front seat. He developed diagrammatic panels to illustrate basic biological concepts: migration, geographic variation, evolution, ecology, plumage, courtship displays, the physics of flight, etc. These are striking for their complete absence of practical and moral messages. Mayr's

intent was to teach principles illustrated by ornithological examples. He did this for two reasons. Mayr's emphasis on science in "The Biology of Birds" connected him to shifts in ornithology away from the specimens themselves. He was part of a group who complained the field had lost the forest for the trees: obsessed with anatomical detail and litigious with nomenclature to the detriment of fundamental problems (e.g., Hickey 1943; VanTyne and Berger 1959). "We must impress on general biologists," Mayr wrote a colleague in 1948, "that taxonomic work is not merely a clerk's job but real, genuine biology..." Mayr took full advantage of opportunities offered by the "The Biology of Birds" project to demonstrate an alternative vision, leading by example. In essence, his diagrammatic panels were arguments for the relevance of collections for top biological problems of the day. Extracting information from collections, he demonstrated, was easy. Mayr expressed the same advocacy in the early pages of *Systematics and the Origin of Species* (Cain 2002; Mayr 1942).

Mayr's focus on science also was a kind of active exclusion. It's a commentary on the range of questions he thought appropriate for a scientist's or a curator's professional interest. Stick to the facts, he argued, contrasting his contributions with the moralising and manipulation elsewhere on display in the museum. His silence speaks volumes and was typical of his life-long approach to such matters. Mayr consistently steered clear of the kind of political activism undertaken by close friends and colleagues (such as Theodosius Dobzhansky and Robert Cushman Murphy). It also is consistent with endless anecdotes told about Mayr and by Mayr himself. He's noticeably apolitical, avoiding public campaigning for (or against) the big ideas of his time: eugenics, national socialism, war, Lysenko, anti-communism, segregation, the arms race, Vietnam, and so on. Mayr certainly has views. He simply prefers to keep them in the private sphere. I don't mean to single out Mayr. In fact, he fits nicely into a wider frame. Historians have noted shifting boundaries for evolutionary biology as the twentieth century continued (Ruse 1996). List which topics count as legitimate topics for discussion and a pattern emerges. At the start of the century, "evolution" included pattern, process, and mechanism to be sure. It also included cosmic evolution, progress, the great chain of being, spiritual evolution and the origins of soul, racial hierarchy, eugenics, and so on. It's in Mayr's generation, the 1930s and 40s, that the latter themes are jettisoned from professional discourse. They don't disappear entirely; instead, they simply shift to pub talk and popular lectures – not the stuff of peer-reviewed journals, monographs, and exhibitions.

Mayr's emphasis on the science and his exclusion of other things matches a pattern observed in innumerable natural history museums over the past fifty years (e.g., British Museum 1964; De Beer 1958). Indeed, the underlying principles of factual emphasis and objectivity have become bedrock ideas in the training of museum apprentices. Cultural, political, and personal bias is aggressively excluded, and a multi-layered vetting processes enforces this standard. Overarching theories sometimes give a basic architecture to exhibits, but preferably objects are left to speak for themselves.

losing the plot?

For some topics in the realm of natural history, we've taken this exclusion too far. Evolution is the most obvious example. Facts and low-level interpretations create an insulating barrier that nicely shields us from conflict. Objects do the speaking for us, and we stay comfortably away from trouble. The problem is that this excludes us from relevance. On this practice, we're guided by Darwin's example. When writing the *Origin of Species* Darwin purposely steered clear of questions about human origins. He knew this question would dominate public interest regarding evolution. He knew it also was the crucial question for scientists. But he deliberately chose to exclude himself, suggest only "Light will be thrown on the origin of man and his history." (Darwin 1859: 488) He left others to sort that one out.

Many policy questions today can benefit from the advice of evolutionary biologists. Some of the most obvious centre on narrow technical points. Jones (Jones) provides many examples. For instance, in the American beef industry breeding practices are such that one bull sires 10,000 offspring and 10,000 bulls sire none. Do we appreciate the consequences for genomic and organismic diversity? Other issues are easy to find: overuse of antibiotics, intensive and monoculture farming, gene insertions across species, introduced species, and so on. I don't understand why collection experts so often position themselves to be excluded from such discussions. These narrow issues have potential to completely reshape the diversity of life on Earth. How can we simply sit by?

At the other end of the spectrum, think of the endless challenges of creationists, reinvented today as "intelligent designers." They're not going to disappear. They have genuine questions about nature (at least the honest ones do). We do no one favours leaving this subject to mere opinion or, worse, leaving it to incompetents and exploiters. Real expertise is needed here now more than ever. Fundamentalist Christianity.

Fundamentalist Islam. Fundamentalist politicians. Well organised, smart, and determined. Experts have a moral responsibility to lead, to lend their expertise. Remember, expertise involves more than content. The palaeontologist, George Gaylord Simpson, once said that a good scientist should be able to be “scientific” about almost anything. No one knows better how to ask questions and to do so in ways that succumb to rigorous, empirical analysis. No one knows better how to resolve disputes through tests, to unravel, to expose bias, to measure confidence, to build flexible rules that will last three hundred years and a dozen changes in convention. Museums can do a fabulous job imparting the methods and values of science. Stressing methods won’t save us from honest creationists and intelligent designers. But the incompetents and exploiters won’t stand a chance.

conclusion

The boundaries defining professional domains are fluid. In ecology and environmentalism, for instance, boundaries have shifted quite a lot since the 1960s. It wasn’t always perfectly acceptable for ecologists to assert a role in public policy. It’s hard to imagine policy today without ecologists at its centre. Compare this with the shifting roles of systematists in public policy regarding biodiversity. This shifting is a process of ebb and flow.

In the case of evolution, we’ve shifted too far in the direction of exclusion — too far away from important, controversial subjects — too far away from the questions others are answering without us. That’s a waste of expertise. It’s an abdication of responsibility.

It’s time we shift back those boundaries. If you take anything away from this paper, take away that suggestion. Think about how you define the boundaries of your own expertise and how those boundaries might exclude you from the most important discussions of our time.

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Victorian Natural History Galleries in the 21st Century - Keeping a Victorian Gallery Alive Nigel Monaghan, Keeper of Natural History, National Museum of Ireland

Abstract

The Natural History Museum in Dublin is a Victorian cabinet style museum. It is close to original condition and is seen by many as a national treasure, a ‘museum of a museum’. This also brings challenges in preserving its 19th century ambience while addressing significant challenges in the museum environment.

Historical Background

In 1856 the Royal Dublin Society (RDS) erected a museum building adjacent to their 18th century mansion,

Leinster House (O’Riordan 1983). Then on the edge of an expanding city it is now in Dublin city centre. The use of adjacent buildings has also changed over the last century and a half, with the RDS moving to another part of the city, with Leinster House now the centre of the Irish parliament since 1922 (Monaghan 2000). The interior of the building has changed little in over a century (Gould 1994), more from benign neglect than deliberate intent. There was little funding for museum development in the emerging “Free State” following independence from Britain in 1922. Improvements to the building began in the mid 1980s with the establishment of a national lottery, followed by a significant improvement in the national economy. The building was rewired and redecorated in the 1980s and is now undergoing a number of environmental improvements to protect collections. Galleries devoted to geology were demolished in 1962 (Monaghan 1992) and the Botany collections were transferred to the National Botanic Gardens in 1970. The current museum is dedicated to zoology, earth science galleries are planned for the museum headquarters campus at Collins Barracks, Dublin

The Galleries

The current public galleries occupy four floors in a simple rectilinear layout with 10,000 specimens on display, out of a collection of approximately two million. The ground floor has Irish animals of all major groups, including impressive giant deer (*Megaloceros giganteus*) from Pleistocene lake deposits that underlie many Irish peat bogs (Monaghan 1995). The first floor is dominated by mammals with good representation of common species, but including rare items such as a thylacine (*Thylacinus cynocephalus*, there are four in the collection). Above the first floor are two balcony levels, the lower devoted to vertebrates, the upper to invertebrates, including the famous collection of glass models by Blaschka of Dresden (Walshe and Monaghan 2003).

Building Environment

While our Victorian forebears constructed a purpose-built museum with many good points, there are several problems with the current structure. Some are issues of original design, other are related to maintenance and work practices. The roof is in the form of an inverted V with the lower section clad in slate and the upper section glazed throughout. Below the roof space is a horizontal glazed diffuser layer. The issues arising from the roof include leaks (running repairs in 2003 minimised these), dust fallout, heat gain and excessive light. Significant repairs and renovation of the roof are required to address some of these problems.

The main issue currently being advanced is control over excessive light levels. After a century on exhibition most mammals have a universal tan and cream colour, whether giraffe, zebra or panda. A survey by consultant Mark Sutton Vane has assisted the museum in developing a strategy for light control in all areas of the building. The intention is to filter or screen all natural light and upgrade artificial lighting to provide even illumination at low levels.

Changes to the heating system are also being explored to attempt to even out fluctuations in temperature. This has caused significant damage to mounted mammals outside cases, with cracking of hide and snapping of old stitching. Specimens are being restored by the taxidermy firm Jac Bouten en Zoon BV, of Venlo, Netherlands. Major building works are planned which may include lagging of the roof and installation of air handling, which seems the only full solution to this problem.

The unsealed nature of the building is contributing to pest infestation. It is a single, undivided airspace with windows and a front door that provide the only fresh air and are often left open. A new porch and air handling units should provide a considerable improvement. Floors are constructed from open planking, with underfloor heating and cast iron gratings. Display cases have ventilation holes and are not sealed. These provide dark corners for insects to evade cleaning regimes and to get free access to specimens. A programme of pest monitoring using sticky traps, some with pheromone bait, has been introduced along with increased vigilance in stores. The museum has a valuable insect collection in storage in the building adjoining the gallery space (O’Connor 1997).

Conclusions

The issues facing the safety of collections in this building are significant. Some may be addressed easily within existing resources, others will require considerable financial outlay. An extension to the building in order to provide access for people with disabilities and improved fire exits is planned. It will be the aim of curatorial and conservation staff to persuade the architects of the need to include some additional budget for building conservation works to extend the life of the building and its invaluable contents.

Acknowledgements

I am indebted to Rolly Read (Head of Conservation, National Museum of Ireland) and Chris Collins (Palaeontology Conservation Unit, Natural History Museum, London) for advice on the buildings issues over several years. Museum lighting consultant Mark Sutton Vane (Sutton Vane Associates, London) has produced a detailed study of lighting issues, which is directing current work. Many NatSCA members also provided valuable advice and encouragement during the Dublin conference in April 2004.

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Werkgroep Behoud Natuurhistorische Collecties: working on group preservation of natural history collections

Oskar Brandenburg, Collections Manager, Leiden Museum of Anatomy & Babke Aarts, Assistant Project Co-ordinator, Academic Heritage Foundation

The Dutch working group was originally set up in the early nineties. It's main achievement has been the development of a widely-used handbook. This handbook contains both theory and practical solutions for the preservation of natural history collections. It also gives information about best used materials and suppliers. This handbook was easy to update because of the ringband format. However after a couple of active years the working group fizzled out and the handbook has not been updated ever since.

In June 2003 a couple of enthusiastic conservators decided to resurrect the working group. An inquiry was sent out to all known Dutch collection managers working with natural history collections. Our primary aim was to investigate the enthusiasm about the working group amongst collection managers. Secondly, this inquiry was meant to set the new goals of the working group. The main subject of the inquiry was to ascertain how collection managers gained their knowledge about preservation and if their knowledge is in danger of being lost. We also investigated if they experience serious knowledge gaps.

During the first national meeting of the working group the results of this inquiry were presented. Kate Andrew was invited to speak about the recent history of natural history collections conservation in the United Kingdom. Together with a lecture of the coordinator of ICOM-CC's Working Group on Natural History Collections, Dries van Dam, this presentation was a real stimulant to get the people enthusiastic about the new working group. After a fertile discussion-forum, the goals of the working group were set out.

The working group has set itself 3 main tasks, namely

- to inform,
- to organize,
- to stimulate

The working group will *inform* conservators about publications, meetings and new techniques concerning the conservation of natural history collections.

To achieve this, the working group will *organize* workshops, an update of the handbook and meetings. It's role as a knowledge base will hopefully be attained by the development of a website later on this year. In the meantime, a two-monthly newsletter is being distributed by email.

Creating motivation amongst conservators is important to guarantee durability of the working group's activities. We don't want it to fizzle out again. Therefore, conservators are strongly involved in the activities of the working group by taking part in various specialist sub-working groups

We think that cooperation with similar associations abroad will serve mutual interests. Having close contacts with people working with similar collections and dealing with the same problems will only make daily work easier. For that reason, we would like to keep in touch with our English and Irish colleagues. If you have any news (i.e. conferences, publications) that could be of interest for your Dutch colleagues, do not hesitate to inform us. We will distribute this through our newsletter and upcoming meetings. If you would like to receive an English copy of our newsletter, which could in turn be interesting for you, please send us an email. We will also inform you about our future activities in the next NatSCA-newsletters.

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Summary of the tour of the Natural History Museum building – Sylviane Vaucheret / Brian Harding

The Natural History Museum Building

From the northern-side windows of the current museum's building, on Merrion Street, it is possible to see Leinster House. Bought in 1815 this building used to be the museum's building and the headquarters of the Royal Dublin Society (RDS). The current Natural History Museum building was purposed-built by the RDS to house the expanding zoological and geological collections, previously exhibited and stored in Leinster house. The foundation stone was laid by Lord Carlisle, lieutenant general Governor of Ireland and president of the RDS on the 7th March 1856, the work being completed in less than eighteen months (which would be impressive in Dublin today). The new Building was formally inaugurated on 31st August 1857 by the attendance of Lord Carlisle at a lecture delivered by Dr. Livingstone on his "African discoveries" on the occasion of the second meeting in Dublin of the British Association for the Advancement of Sciences.

All recent staff regard the period between the museum's opening and Irish independence in 1922 with envy: a sort of golden age for the Natural History Museum when staff were housed together with the collection in a relatively comfortable space.

A cultural building in the political heart of the Irish state

In 1922, the new independent Irish state needed to house its new parliament and Leinster House appeared to fulfil all the requirements - The building previously used by the national assembly and still nowadays known as Parliament House near Temple Bar was bought by Bank of Ireland to house its head-quarters, a very confusing arrangement for new-comers in Dublin! Following the loss of Leinster House the museum staff had to move into the public galleries which were closed to the public for a couple of years as a consequence. From this date on the Museum has suffered from the pressure of being an enclave in what is now the Irish government core. Besides having the Parliament complex on the north and west side, the Taoiseach (Irish Prime Minister) complex was also added on the south side. As a result more space was lost in this location, although arguably we benefit from the highest level of security a Natural History Museum has ever had. The loss of storage space for the collection was partially made up by the allocation of other buildings, of which not all were particularly adequate.

Our current off-site storage building, in Beggars Bush, Ballsbridge, although not perfect is an improvement in this regard. It is an old, solid, stone-built military barracks and provides a lot of space in relatively good environmental conditions.

Inside the Natural History Museum

The interior of the Natural History Museum is divided into two main sections, the ground floor and the first floor with lower and upper galleries. The ground floor is referred to as the Irish Room containing zoological collections from Ireland (but no snakes of course). This includes a large collection of mounted bird specimens found in all counties around the island of Ireland, a small but encompassing selection of Irish mam-

mals, a large collection of fish and marine creatures along with a good representative selection of Irish entomology.

The first floor is referred to as the Animals of the World section and contains an extensive collection of large mammals from all around the world in taxonomic grouping as much as is possible. The first gallery is laid out in a lineage of evolution from hemichordates to the birds with the majority of this floor being dominated by the birds from all around the world. The second gallery displays a collection of invertebrates, which was laid out in the early 20th century and has changed very little since then in content or display.

On entering the museum, one is welcomed by three impressive skeletons of the Giant Irish Deer *Megaloceros giganteus*, which went extinct about 10,600 years ago. Many of these skeletons have been found in Ireland and the Natural History Museum in Dublin has the largest collection in the world of such bones. This collection has benefited from the exploitation of peatland areas in Ireland for the past 250 years with bone material being discovered in the search for turf. The famous palaeontologist Stephen Jay Gould measured all of the antlers for a scientific paper in 1971 and his visit later inspired him to write an essay on the joys of visiting a Victorian-style cabinet museum. (*Cabinet Museums: Alive, Alive, O!* printed in *Dinosaur in a Haystack* 1991).

The staff (and we would like to think the people of Dublin) are proud and very fortunate to have a museum like this in our city. As there are very few museums of this style left in the world, it is a place that the people of Dublin know very well. It is a place where grandparents take grandchildren to visit knowing that the exhibits have not changed all that much perhaps even since they were young. This sense of consistency has led to continued interest in the museum with generally an increase in visitor numbers annually. The people of Dublin often affectionately refer to the Natural History Museum as the “Dead Zoo”.

A Victorian Style Museum as a Window to the Modern World

The Natural History Museum is today one of the only places in Dublin outside of the classroom whereby children and adults learn and find out about current happenings with regard to wildlife and the environment in Ireland. The recent reintroduction of the Golden Eagle into Glenbeigh National Park, Donegal is often covered on tours to highlight the fact that there are groups of people working on important environmental issues in the country. This usually contrasts quite well against the accidental introduction of the American Mink or the Zebra Mussel into Ireland which are also exhibited in the museum. Visitors often learn more about our native animals in Ireland whilst often quashing myths at the same time e.g. all badgers have TB or the earwigs favourite breeding area is the human ear. In this sense the museum is very relevant to the public in Dublin.

Like in all museums, signage is a definite issue with labels written in a style much more attuned to the Victorian era. Making these labels more appealing to the modern visitor yet holding on the authenticity of the museum’s general feel is difficult but it is hoped that a compromise can be found between curatorial and education staff on such issues.

One of the key attributes of having “a museum of a museum” is in maintaining some of the exhibits in very much their original appearance even though information panels or the mounted specimen itself may be incorrect. Such an example can be found on the first floor of the museum with a display of “the anthropoid apes” in a case that has not been opened since 1911 when the entrance to the museum was changed and a wall was built behind the cabinet blocking entry. The Orang-Utan on display is nothing like the real thing and probably indicates that the taxidermist had never encountered a beast like it before with his imagination being stretched to the limit. This specimen however is by no means a negative and should be celebrated in the context of the museum that surrounds it.

By the time that a person has visited the last case on the top floor, you have passed by about 10,000 animal specimens, which in truth is only a tiny proportion of the national collection, which is estimated to contain roughly 2 million specimens.

A very restricted but historically-charged behind-the-scenes

As a result of the museum’s history the “behind the scenes” in the main building is very much restricted to office spaces (4 offices for the 5 members of staff), library (1 room, over-flowing into all the offices) and the housing of the most fragile parts of the collection: the Blashka models (in the main office) and the insects collections (1 room). The vast majority of the collection is housed in the off-site storage building in

Beggars Bush.

The only part of the zoological collection still housed in the Museum's building is the entomological collection. This holds an estimated 1 million pinned insects along with a few cupboards of spirit materials and microscopic slides. Like the rest of the collection it holds a very high number of foreign specimens and specimens of historical value but in recent years the focus has been principally on Irish species. The insect collection was indeed very much part of the museum's collection from its very origin, with the acquisition in 1792 of the collection put together by Nathanael Leske from Germany (also called the Leskean collection). This collection was bought mainly for its minerals and geological specimens but also contained dry shells, other zoological, entomological and botanical specimens. However, this is a very important part of the entomology collection not only for its historical value, but also because Gmelin worked on it prior to its transfer to Dublin and described from it many new species. Thus the Natural History Museum inherited many type specimens.

A second very important historical step for the entomology collection was the presentation, in 1882, by the board of Trinity College Dublin of A.H. Haliday's entomological collection, which incidentally included many Diptera collected by Charles Darwin during his voyage on the Beagle. Unfortunately, whereas it is a very nice historical legacy, the scientific value of these specimens got somewhat lessened by the fact that Darwin sent them first to a Coleopterist who set up to prepare them as he would have his usual specimens: by boiling them to relax them before mounting. The Diptera being more delicate than Coleoptera suffered quite badly from the process. To this was added a number of years of neglect of the entomological collections of the museum. Our current entomologist was the first appointed by the independent Irish state in 1975 inheriting a collection that had not received professional care since the early 1930's.

The general state of the collection was very cramped, resulting in some damage to the specimens – sometimes several insects were pinned on the same pin, above one-another. This was added to the usual problems encountered in entomological collections: pest infestations, verdigris and out-dated Latin names. The entomologist set to curate the whole collection, starting with Irish material. About 90% of the core collection is done by now (180 cabinets) but a great number of individual collections, not incorporated into the core of the collection could still be in need of curation. These are currently kept in their original wooden boxes and the present plan is to seal each box in a plastic enclosure. The hope is that in time they will then be incorporated with the rest of the collection into the wooden cabinets.

The Blaschka models are another very important feature of our collection. They consist of biological glass-models of remarkably accurate craftsmanship. Leopold Blaschka and his son Rudolph were from a traditional glass-craftsmen family, allegedly from Venice. They started doing biological, scientific models in the 1860s. The 500 or so models held in Dublin are exclusively zoological models and were bought between 1878 and 1886. They represent examples of the earliest work of the Blaschkas. Although many other institutions hold such models, the collection in the Natural History Museum in Dublin is the biggest in Europe and the biggest collection of zoological models in the world –the biggest collection is held in Harvard and consists of botanical models, made at the very end of the Blaschka career. Another noticeable fact is that of the 500 models about 350 are on display in the gallery, fulfilling their original goal of providing a way of showing the public invertebrates, such as colourful anemones, that are usually difficult to preserve in a manner that respect their original appearance in their natural habitat.

Conclusion

Like many other natural history museums around Europe the museum in Dublin was built at the end of the 19th century but is probably unique in the fact that has kept to this day its Victorian style.

The staff of the Natural History Museum in Dublin endeavour to try and maintain this cabinet style whilst still ensuring that the museum plays a role in education and science in a 21st century Ireland.

We hope that NatSCA members who had the chance to visit Dublin during the last conference enjoyed their visit and we would be delighted to hear feedback on all aspects of what they've seen. We also hope that those who couldn't come will find the time to visit us in Dublin in the future.

Annual General Meeting: Minutes

**Audio Visual Theatre, National Museum of Ireland,
Collins Barracks, Dublin
Tuesday April 27th, 2004**

1. Introduction and consideration of agenda

2. Apologies for absence.

Apologies were received from Jenny Bryant, Bob Entwistle, Gabriela MacKinnon and Clare Stringer.

3. Minutes of NatSCA IGM.

The minutes of the NatSCA IGM held on Monday April 7th, 2003, in Manchester, as published in *NatSCA News 1*, were signed as correct by the Chair.

4. Matters arising from minutes.

There were no matter arising.

5. Chairs report (Nick Gordon)

Nick Gordon outlined the work of committee over the past year. He underlined that NatSCA is not just an amalgamation of BCG and NSCG, fulfilling the roles of both but is also a new organisation with new approaches, ideas and ways of working. Much debate has occurred as to where we as a group, should direct our energies. Subjects for further discussion include supporting loan natural science curators, conservators and collections managers; developing links with regional agendas, notably Regional Hubs and raising our profile in the greater museum community by becoming involved with national museum debates. The future presents many new challenges at the local, regional, national and international levels and we need to demonstrate our Museums' wider benefits to society by reaching out and socially including new audiences but we must not forget our core raison d'être for caring for our collections. We must strive to ensure that we NatSCA are the professional association that proacts to new agendas and challenges and champions and dictates our cause with those who would marginalise us and impose inappropriate solutions and agendas on us!

NatSCA has achieved charitable status with sterling work done by Howard Mendel.

NatSCA organised a successful and oversubscribed day meeting 'Managing Insect Collections' with talks and demonstrations held at the Natural History Museum, London in January. We hope to plan more special interest day seminars on 'conservation use of Japanese tissues', an 'advanced ornithological curation/conservation workshop' to be held at Tring and 'label conservation' in the Botany Dept, NHM. Please tell us what you wish us to cater for the memberships training needs.

Nick thanked the work done by Committee during the year and especially the outgoing committee members: Bob Entwistle (NCCR), Howard Mendel (Charitable Constitution development), Sue Cooke and Gabriella MacKinnon.

Nigel Monaghan and his Dublin Museums' colleagues, all the speakers and sponsors and Jo Hatton were congratulated for a full and varied, three-day program of informative talks and in-depth museum tours.

6. Secretary's Report (Paul Brown).

Attendance NatSCA committee 2003-2004

	7.v.03	2.vii.03	8.ix.03	3.xi.03	12.i.04	8.iii.04	26.iv.04
Nick Gordon	4	4	4	4	4	4	4
Kate Andrew	4	4	4		4	4	4
Paul Brown	4	4	4	4	4	4	4
Sue Cooke	4	4		4			
Bob Entwistle							
Jo Hatton	4	4	4	4	4	4	4
Gabriela MacKinnon	4		4				
Howard Mendel	4		4				
Simon Moore	4	4	4		4	4	4
Vicki Noble	4	4		4		4	4
Maggie Reilly	4		4			4	4
Douglas Russell		4		4	4	4	
Steve Thompson	4	4	4	4	4	4	4
<i>Donna Young</i>		4	4		4		4

7. Membership Secretary's report (Maggie Reilly).

2003

We started our membership year in April 2003 after the merger of BCG and NSCG at the joint annual conference in Manchester. Members for NatSCA were recruited from the former memberships of BCG and NSCG – there were 337 names in the BCG member list and 110 in the NSCG database with some overlap. The two lists were merged into one Access database and once corrected for common members, errors and assorted other glitches, a potential membership database of around 380 people emerged. At the end of January 2004, the total NatSCA membership numbered 239.

Of the 239, there are by membership category:

174 personal members
 56 institutional members
 9 complementary mailings.

By geography:

207 UK members
 14 EU members
 13 USA and Canada
 5 Rest of World

Approximately 140 former BCG/NSCG members did not join NatSCA. Around 30 of are the subject of ongoing query either directly or via subscription agencies. There have been a number of difficulties in clarifying those in the latter category. A letter is to be sent out to the remaining 110 people to check if they want to join or to resign from the Group. Non-respondents or those who indicate they no longer wish to be members of NatSCA will be deleted from the database.

2004 Renewal of subscriptions

Renewal notices were sent out to all paid-up 2003 members at the end of January. To April 2004,

154 members had renewed subscriptions. This figure includes the complementary mailings. A membership profile survey questionnaire, designed by Steve Thompson, was sent out with this year's subs reminder and there has been an excellent return rate. We thank members for their co-operation. We have reviewed the complementary mailings, deleted some, added others and decided on a total of 12 such mailings.

For members in USA

In order to make it easier for USA members to join up or stay as members, an arrangement has been made with our ex-pat colleagues Chris Norris and Jane Pickering. Chris and Jane have agreed to accept dollar payments on our behalf and then pay us back via their UK bank account. We will trial this for a year and see how it works. Existing US members have been informed of this arrangement.

Gift Aid

We gave notice to members that we are going to look into the mechanics of using the Gift Aid scheme to reclaim tax on subscriptions, with a view to implementing this in 2005. For members this is likely to be as simple as ticking an extra box on next year's renewal form.

8. Treasurer's report (Kate Andrew).

Accounts for the year 17.4.03 to 3.02.04

Opening balance	Detail	Sub Total	Totals	Balance
		£0		
Income				
Membership income				
160 UK personal memberships @ £15.00	£2400.00			
48 Institutional memberships @ £30.00	£1410.00			
4 Euro memberships, total 80 Euros	£ 54.99			
4 Dollar memberships, total \$98.00	£ 57.98			
Membership sub total		£3952.97		
Transfers from precursor bodies				
NSCG funds, 18 th August & 20 th August	£8283.68			
BCG funds, 22 nd September	£9970.00			
Transfer sub total		£18,253.68		
Bank interest c/a	£ 1.26			
Bank Interest 14 day notice d/a	£ 69.50			
Business money manager d/a	£ 5.96			
Interest sub total		£ 88.71		
Conference income				
Insect collections management meeting				
16 members @ £25, 2 non-members @ £40	£ 480.00		£ 480.00	
Total Income			£22,775.36	
Expenditure				
Newsletter postage	£ 356.68			
Web domain name	£ 48.57			
Logo design	£ 230.00			
Bank charge	£ 19.00			
NCCR & data protection fees	£ 135.00			
Conference costs	£ 72.16			

Committee expenses	£ 260.92	
Total Expenditure		<u>£ 1122.33</u>
Total income less expenditure at 31.01.04		<u>£21,656.45</u>
 Bank Balance at 3.02.2004		
C/a 91645722	£ 1785.32	
Business money manager d/a 41653636, opened 21.08.03		£ 1505.96
14 Day Notice d/a no. 41645749, opened 18.08.03, closed 03.02.04		£18365.17
Total combined cash balance at bank		<u>£21,656.45</u>

A petty cash system is not in operation. Monies banked and cheques cashed before the end of January are listed here. The following sundry debtors and creditors are in the pipeline.

Income

2003 memberships banked after the end of financial year

4 personal memberships	£ 60.00	
2 institutional memberships	£ 90.00	
Re-imbursed bank charge	£ 19.00	
4 further insect meeting fees due	£ 100.00	
Remaining balance in NSCG account	£ 130.40	
Remaining balance in BCG account	£5472.04	
Sale of back issues of The Biology Curator	£ 80.50	
Total		£5951.94

Expenditure

Committee expenses	£ 3.42	
Newsletter printing	£1413.82	
Insect meeting costs	£ 529.44	
Total		£1946.68

Taking these into account, the total expenditure for 2003/04 was £3069.01 with the surprise of income over expenditure for 2003/04 of £1852.07 after the transferred funds are taken out of the equation. Only one newsletter was produced within the accounting period and no annual conference, so in future, costs are likely to exceed expenditure even with meetings breaking even. Given the deposit account balance and our charitable status, newsletter production can be subsidised for the next two years, but with costs running at £5,300 per year, we will need to consider increasing subscriptions to cover this expense in the longer term.

Savings account

Until the NSCG funds were transferred, we operated only a current account. Due to confusion between transfers at two different branches, two deposit accounts were opened by the bank, the 14 day notice account had the higher balance but was found to be a discontinued product with a lower rate of interest than the Business Money Manager account. On the 3rd February, the deposit balances were merged into a single Business Money Manager account.

Instructions were issued in early April to close the NSCG account. £5000 of the remaining BCG funds was transferred on 23rd April and once two recently paid in cheques have been cleared, the account will be closed and the remaining balance transferred to NatSCA.

Accounts checked and approved by Velson Horie.

9. Proposal to accept the accounts

Acceptance of the accounts was proposed by Nigel Monaghan and seconded by Steve Thompson.

10. Editor's Report (Vicki Noble)

Vicki Noble reported on her year of designing and editing the first two issues of *NatSCA News* and was congratulated for her hard work by AGM. Vicki asked the membership for reviewers for museological books, for adverts and information on conferences and courses and for members to write letters and papers, for publishing in future issues of *NatSCA News*.

Vicki reported that we have a website www.natsca.org, which is presently under construction.

11. Conservation (& NCCR) Report (Simon Moore)

Simon Mentioned that he is still looking for conservators that require a cheap insurance cover as he has still not found enough interested parties to make the cover feasible.

The National Council of Conservators and Restorers continue to move toward a successful convergence to form one professional body, which is planned to occur in September 2004. Simon stressed that NatSCA cannot be a voting member on the new body but that we can represent our views as an associate body and via our UKIC accredited conservator NatSCA members who will be represented on the NatSCA Conservation committee.

12. Elections to the Committee

In compliance with the Natural Sciences Collections Association constitution, as adopted on 7th April 2003 at the Inaugural General Meeting of NatSCA, and at the direction of that IGM, the election for Honorary Officers (Chair, Secretary and Treasurer) and ordinary committee members took place.

Honorary Officers

At the annual general meeting of the Charity the members shall elect from amongst themselves, a chairman, a secretary and a treasurer, who shall hold office for a period of 3 years from the conclusion of that meeting and shall be eligible for immediate re-election.

Executive Committee

The Executive Committee shall consist of not less than 9 members nor more than 20 members being:

- (a) the 3 honorary officers specified in the preceding clause;*
- (b) not less than 6 and not more than 12 members elected at the annual general meeting who shall hold office from the conclusion of that meeting; (5 co-opted members are also allowed).*

Ordinary members of the Executive Committee shall serve for 2 years and retire from office at the end of the second annual general meeting after the date on which they were elected to office, but are immediately eligible for re-election.

The following names were supplied to the Secretary before the date of closure for nominees (ie by 30th March 2004) as directed in NatSCA News 2.

	<i>Nominee</i>	<i>Proposed by</i>	<i>Seconded by</i>
<u>Chair:</u>	Nick Gordon	Steve Garland	Lindsay Loughtman
<u>Secretary:</u>	Paul Brown	Oliver Crimmen	Miranda Low
<u>Treasurer:</u>	Kate Andrew	Steve Thompson	Maggie Reilly
1.[Editor]:	Vicki Noble	Jenny Bryant	Simon Moore
2.[Membership]:	Maggie Reilly	Camille Nichol	Geoff Hancock
3. Ordinary members:	Jo Hatton	Gillie Newman	Helen Chatterjee
4.	Suzanne Lewis	Howard Mendel	Simon Moore
5.	Simon Moore	Dr Christopher J. Palmer	Colin A. Taylor
6.	Douglas Russell	James Maclaine	Emma Sherlock
7.	Clare Stringer	Paul Brown	Jan Beccaloni
8.	Steve Thompson	Adrian Norris	Paul Brown
9.	<i>Donna Young</i>	<i>Wendy Atkinson</i>	<i>Leander Wolstenholm</i>
10.	Graham Walley	Oliver Crimmen	Kathie Way

As there is no competition for Committee posts, AGM accepts and elects the nominees as listed above en block. Proposed by:- Douglas Russell and Seconded by:- Sankury Pye.

13. Election of Independent Inspector of Accounts

Velson Horie was accepted as our Independent Inspector of Accounts. NatSCA turnover is not large enough to demand the requirement for Auditors to audit NatSCA accounts.

14. AOB.

Sue Lewis (now Sue Ryder) reported to AGM that SPNHC are holding their annual conference at the Natural History Museum in London and that NatSCA can combine with them for our AGM conference along with GCG and ICOM. The subject is 'Realising Standards' and is planned for 12th to 18th June 2005. Further information will be published in NatSCA News. Both Sue and Paul Brown are on the SPNHC conference committee and are representing NatSCA and Giles Miller representing GCG.

Steve Thompson reported that he is organising a study trip to Prague (Czech Republic) Thursday, 30th September - Sunday, 3rd October, 2004. This to coincide with the annual Prague entomological faire. Watch out for further adverts soon.

Steve Thompson also mentioned that he is hosting a visit of Japanese Museum people from the Natural Science Museum, Tokyo led by Maki Shimizu in early January 2005 for one week. They wish to look at how we do science in museums in our country and this will be a chance for NatSCA to increase our influence and raise our profile internationally. He is looking for venues and volunteers for their visit.

Dries Van Dam reported that ICOM Conservation Committee are organising an interdisciplinary meeting in September 2005 to discuss fluid collections web based databases.

Kathie Way asked about liability of the NatSCA charity trustees. Committee is, at present, seeking a suitable insurance policy, which will cover this and other insurance for NatSCA.

Close of Meeting at 4.40 pm

Dublin AGM: A personal view **- Steve Thompson: Scunthorpe Museum**

Well, wasn't it a great meeting! At least, that's how I felt about it. An excellent programme and a conference superbly run by Jo and Nigel and his team in Dublin. There were one or two things that I was a bit bothered about before the meeting, because I wanted our first AGM to be a great success. The first was, how many people would turn up. If only a few people had ended up going it would have been a big setback, but in the event, with over a hundred people there, it was as big a draw as we have managed yet. Another item was the annual dinner. Now this may seem like a minor issue, but actually, people remember these things, either for better or for worse. Following the Manchester meal, there was talk of not having an annual dinner at all. Fortunately, it went very well, and contributed to the overall success of the conference.

Having spoken to one or two other people, it also seems that we haven't yet managed to get the balance right between the conservation and curatorial sides of our group, and this was raised at the most recent committee meeting. Which is to say, we are aware of this, and we will continue to strive to represent the interests of conservation in the manner that we undertook to as part of the founding of NatSCA.

Of course, it was in Dublin, and I'm sure everybody had a good time out of the conference as well as in. However, what really made it for me was the content of the programme, and sadly, you can't always say that about these things. For me personally, it was particularly interesting, as I took away a number of things that have been influencing the way in which I, and possibly the rest of our team in North Lincolnshire, are looking to develop the service here. But I hope that everyone will have listened and taken away lessons from the things the speakers had to say.

Three talks in particular stood out for me, the first being Joe Cain's, and the message he had for us right at the end of his talk. That is to say, are we giving an unreasonable view of natural sciences to the people who visit our museums? When we go to school we are told "this is the way it is, learn it". As undergraduates, we discover "this is the way it probably is, but, well, we're not really all that sure". If you go on to do post-graduate work, it's a case of "well we don't know, it's your job to go and find out". In museums, we tend to adopt the first attitude, spending more time on storytelling and less on encouraging exploration. I think we should be encouraging people to ask more questions about the world around them, and get away from the idea that we know all the answers.

The second talk was that of Eve Graves, and again there were questions being asked about our broadly closed approach to how we use our collections in trying to interpret the natural world. Her students have been taking objects and interpreting them, but coming at it from the other end. In other words, we usually use objects to illustrate points we are trying to make. But if you start by simply asking questions about objects, you find that there is a great deal more to say. Our world is not split neatly into different topics, so that, for example, a fossil or an animal bone may have geological, biological, archaeological, religious, technological, decorative and symbolic significance, but we tend to pick up on just one aspect at any one time and ignore the others. Wouldn't it be so much more interesting, even exciting, to show more of these aspects or, dare I say it, encourage our users to discover them for themselves.

The third talk that made me sit up was Peter Davis's talk on eco-museums. The understanding I took away from that was that an eco-museum, in so far as it has been defined at all, is where a community takes on directly the role of preserving and making accessible the heritage of their own area, and does so in a holistic fashion, cutting across the traditional museum disciplines, in a way that seems to me to reflect more the way life really works. As Peter pointed out, we do not have any eco-museums in this country, but that does not mean that we don't do the things they do. Indeed, we do, but we tend to do them all in their own little compartments and, by the way, in so doing, split our users into little interest groups. As I sat there, it occurred to me that this was very much the kind of way I had been visualising the way I thought my own home institution should be going, although I have still been thinking in terms of natural sciences. My thoughts were to be getting more people directly involved, working much in the local communities, and drawing in the archaeology and social history aspects. But I am now looking at the idea, with my colleagues, of a more holistic approach across all our disciplines, and developing a service that is more not simply community focused but community driven. Of course, we all know how hard that is to achieve.

None of this is new, I know, and we have covered this ground in past events and museums studies students are fed it on their courses. But there is a difference between knowing these things intellectually and seeing them as a practical starting point for improving museum services. I left the conference with my head fairly buzzing.

Of course, I could be completely wrong, or it may be that this approach will work better in a dispersed community like North Lincolnshire than in a predominantly urban environment, we shall have to wait and see. But I do know that museums throughout the country are suffering a decline in usage, and this adds to the already great pressures we face in our jobs. I felt that the things coming out in the conference offered ways of making ourselves more relevant or attractive to people “out there”, and that perhaps the title, “Natural History is Cultural History”, had a more practical significance than I had realised going in.

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The Reverend Philip Pearsall Carpenter (1819-1877)
Locating His Legacy In North Of England Museums
- R A Baker: School of Biology, University of Leeds

Two present day memorials in Warrington commemorate and summarise the life of Philip Carpenter. A drinking fountain dedicated to his work in the town stands in Bank Park and reads, "In memory of Philip Pearsall Carpenter - Born Bristol November 4 1819 - died Montreal Canada May 24 1877"; and a memorial tablet in Cairo Street Unitarian Chapel, Warrington, includes the words, "A student of nature, a servant of God, and a lover of mankind". He was minister of this Unitarian congregation for sixteen years (1846 to 1861) and spent his life both in the service of God and of shells becoming one of the most important figures in nineteenth century Conchology. Carpenter was also a founder of the Warrington Co-operative Society and a pioneer in public health. Family faith meant that he was brought up and trained as a Unitarian but in later life in Canada, he converted to Anglicanism. His father was Lant Carpenter, an important Unitarian minister, and his brother William Benjamin became a significant scientist and university administrator; his sister Mary achieved fame for work to help destitute children.

Apart from his expertise in Conchology, Carpenter was also knowledgeable about fish, fossils and minerals and was a respected part time curator, a post he held at the Warrington Museum. In 1848, two years after Carpenter arrived in the town, one of the earliest local authority museums and the first rate-supported public library in the country were opened in temporary accommodation in Warrington. In 1855, the foundation stone was laid for the present building, which was opened in 1857 as a combined library and museum, and it was in this building that Carpenter spent much of his time. Carpenter was always on the look out for material for this museum. He collected and later donated, a large amount of both molluscan and non molluscan material to the museum; the latter today includes about 300 geology specimens (fossils and minerals) and 12 ethnographic objects (Rolf Zeegers pers. comm. 2002). Carpenter's donations, mainly of shells, books and fossils were in the 1850' and 1860's, some after he had emigrated to Canada and the last apparently was of Crustacea in 1867. Indeed, from the 'Donor cards' held at the museum, it appears that several members of his family donated material between the 1840's and 1850's, including his sisters, Mary and Susan and brothers William and Russell. These items included books, shells, echinoderms, corals, minerals, fossils, Rhizopoda, maps, pamphlets and newspaper cuttings (Colin Taylor pers. comm 2003).

Carpenter began taking an interest in shells when he was a teenager in Bristol and was further helped and encouraged by J.E.Gray, then Keeper of Zoology at the British Museum. As a naturalist, his name will always be associated with shells and in particular with the Mazatlan collection. In the early 1850's, Philip Carpenter purchased a very large collection of shells from the west coast of Mexico, the famous Mazatlan shells. They were collected between 1848-1850 by a Belgian, Frederick Reigen, and went on sale after the collector's death. The collection was purchased by Carpenter in Liverpool from a well known natural history dealer named George Hulse and up to that point (with the exception of Hugh Cuming's material) it was the greatest collection of shells ever taken to Europe (Palmer, 1958).

Having purchased the shells, Carpenter devoted an enormous amount of time and energy to this collection and published a large volume of work based on these molluscs. Living in a small industrial town, without easy access to major libraries and museums, Carpenter began to study this enormous collection and had to rely heavily on the help of other workers. However, he was never afraid to ask for assistance, as the letter (Figure 1) shows. Later, several sets were donated or sold to museums in Britain and North America.

Carpenter travelled to North America for the first time in 1860 and subsequently parts of the collection were deposited in several museums there, notably those at the Albany Museum, State of New York and the Redpath Museum, McGill University, Montreal (Baker and Bayliss, 2003). In North America, Carpenter is recognised as a major figure in nineteenth century Conchology where much work has been published on him and on the Mazatlan shells (Baker and Bayliss, 2004, Palmer, 1951 and 1958). He emigrated to Canada in 1865 and died in Montreal.

Mazatlan shells in U.K. Museums

The main Mazatlan shell collection in Britain is held at the Natural History Museum in London. Carpenter presented this 'set' to the museum in 1857 and prepared a catalogue (Carpenter, 1857) which was published in the same year. "692 species were enumerated or described of which 215 were new. The total number of specimens in the collection amounts to about 8800... and as a geographical series are of considerable importance" (Smith, 1906). Carpenter had unique ways of mounting specimens. In the case of small specimens the shells were often stuck to small strips of card attached to cork stoppers and protected inside specimen tubes (Figure 2). Some of his specimens were mounted on a glass plinth, and labelled on the glass using white paint or ink.

In the north of England, Mazatlan material can be found in museums at Bolton, Liverpool, Newcastle, Scarborough and Warrington. No doubt other museums in Britain also house Mazatlan shells.

Bolton

Hancock (1976) wrote a description of the zoological collections of note at the Bolton Museum, which included the Mazatlan shells, recording "another duplicate series". This series was purchased from Carpenter in 1854 but was not catalogued until relatively recently. There are about 150 species and 799 shell specimens from Mazatlan. Two species have been marked as possible syntypes, *Cyrena olivacea* and *Fissurella alba* (pers.comm. Kathryn Berry, 2003). Hancock, referring to the collection, wrote, "It is highly likely that many of them will prove to be type material as over 222 species were described by Carpenter". Carpenter also produced a report in 1861 on Dawes' collection of minerals and fossils in the Bolton Museum.

Liverpool

Although shells labelled Mazatlan are present in the collections their origin is unclear (Ian Wallace, pers.comm, 2002). However, according to the British Association report for the meeting in Liverpool in 1854 (British Association for the Advancement of Science, 1855), Carpenter stated that a wholesale naturalist and dealer, Mr George Hulse, presented "a series of Mazatlan shells to the Free Museum" (in Liverpool). Dean (1936) also cites this.

Newcastle

Carpenter donated 160 molluscs to the Hancock Museum in May 1855 (Davis and Brewer, 1986). No further information is available.

Scarborough

The molluscan collection at Wood End Museum, Scarborough was rearranged and recatalogued by Adrian Norris in 1969/70. This is an important collection of about 34000 specimens, worldwide and includes Mazatlan material. Amongst this William Bean (1787-1866) collection there is "a large collection of specimens from Mazatlan on the west coast of Mexico. This is part of a very famous collection held at the British Museum" (Massey, 1978). Since the shells were acquired, many of the cabinets have been merged and "many labels lost or misplaced" (Hartley et al, 1987). Laura Turner (pers.comm), 2003 located 87 specimens of Mazatlan shells in the museum and there are probably many more, but none of them appear to be in their original boxes, although the very small specimens are mounted on card. Carpenter acknowledged Bean's assistance with the Caecidae in his preparation of the catalogue of Mazatlan molluscs (Carpenter, 1857).

Warrington

Hancock and Pettitt (1981) recorded marine molluscs from Mazatlan (donated or purchased c. 1860) at the Warrington museum. At the present time, the shell collection (apart from the small amount on display, which includes some large specimens) consists of three cupboards with eighteen drawers in each, and gives interesting clues to the Carpenter period. Although the molluscan collections are now all combined into one, there is material labelled Mazatlan, for example *Cardium elatum* Sow (4247a). Other material has a Smithsonian Institution label, such as *Fissurella aspera* Esch (3534a) and *Fissurella volcano* Rve (3531a). Some material (including species of *Paludina* and *Navicella*) is labelled "named by the late H. Cuming Esq. for the Smithsonian Institution". It is known that Carpenter worked on Smithsonian shells in Warrington after his first visit to North America. Dean (1936) states that Carpenter and the Smithsonian Institution presented shells that included two series from the collections of Charles Baker Adams collected from Panama and the British West Indies. Carpenter also obtained other collections (cited in Dean, 1936) of American and Canadian shells for the Warrington museum, the latter via Professor William Hincks of the University of To-

The King’s Library Project
- Brendan Moore: British Museum

Last year the British Museum celebrated the 250th anniversary of its founding by Act of Parliament as the world’s first national museum. The nucleus of its collection was the great assemblage of 80,000 objects formed in the *wunderkammer* tradition by Sir Hans Sloane and offered to the nation at his death for the relatively modest price of £20,000. It must be remembered that apart from archaeological, ethnographic and fine art collections familiar to modern day visitors, the early British Museum also included vast numbers of books, manuscripts, natural history specimens and portrait paintings - collections that would later be transferred to the specialist institutions which sprang from the Museum in the form of the Natural History Museum, the British Library and the National Portrait Gallery. The young British Museum was thus truly universal in its diversity, seeking to represent all the material world through its collections and forming an encyclopaedia of human knowledge. The culminating event of the 2003 anniversary was the re-opening of the newly restored King’s Library and with it a new exhibition *Enlightenment: Discovering the World in the Eighteenth Century*. This new permanent display explores the changing approaches to understanding the world that began to emerge from the late seventeenth century onwards - the period of intellectual ferment we know as the Enlightenment of which the British Museum itself is a product.

The King’s Library, constructed between 1823-1827, is the earliest completed room in the present British Museum building and is regarded as the finest Greek Revival interior in London, indeed one of the finest in Europe. It was designed by Sir Robert Smirke to house the extraordinary collection of books formed by King George III and gifted to the Museum by his son George IV in 1823. The books of the royal library, perhaps the greatest formed in the second half of the eighteenth century, were moved to the British Library’s new St Pancras building in 1998 leaving behind a grand library space divested of purpose. So the challenge for the British Museum was firstly to restore Smirke’s great room, returning it to something close to its original state, and secondly to create a new role for it by way of an exhibition that would be respectful of and pertinent to its architecture. Furthermore, to ensure a safe and stable environment suitable for the display of a vast and materially diverse range of objects it would be necessary to introduce potentially intrusive modern services into this grade 1 listed space. To achieve this in a manner that would not impinge upon the early nineteenth century character of the room would prove to be a major design challenge.



"Trade and Discovery" section at North end of Enlightenment gallery.

The exhibition

From the outset of the project, curatorial opinion leaned in favour of a new permanent exhibition that would explore the institution’s genesis and early development. Importantly, it was decided that the display should embrace all parts of the Museum’s collections – a necessarily ambitious plan given the 10,000 sq ft capacity of the room. But more than a narrow focus on the Museum’s own history, the resulting exhibition attempts to describe and explain the cultural, aesthetic and intellectual climate of the Enlightenment as experienced in Britain between 1680, when Sloane commenced his collecting activities, and 1827, the year Smirke completed work on the King’s Library. It was necessary to harness and direct the expertise of a vast number of internal and external staff to support the project: curators, conservators, architects and engineers, designers and technicians, fund raisers, educators, multi media experts, accountants and administrators, press and media consultants – the list is endless. Furthermore, the project required close collaboration with the many national and regional museums and learned institutions who generously lent important objects and specimens to the exhibition. To manage all this activity a core team of four staff was formed to work full time on the project for a period of three years.

Work in earnest commenced in the early months of 2001. While the construction and exhibition design team, lead by Sat Jandu and Caroline Ingham respectively, were formulating and refining their ideas for the restoration and refitting of the room, the curatorial team, lead by Dr Kim Sloan of the Department of Prints and Drawings, began the daunting task of gathering together over 4,000 objects and forming them into an intellectually coherent and visually exciting display. Seven themes were to be investigated in the exhibition: The Natural World, The Birth of Archaeology, Art and Civilisation, Classifying the World, Ancient

Scripts, Religion and Ritual and Trade and Discovery. Pragmatically, this number allowed the architectural divisions created by Smirke within the room to be exploited. By focusing on the Enlightenment the exhibition draws attention to an historical period in which many of the ideas and principles that have driven the modern world were formed. Despite its importance, the eighteenth century has remained a neglected and undervalued area of study in this country; the new display aims to redress this imbalance.

The elucidation of the themes and ideas under discussion in the exhibition required curators to research, and in some cases rescue from obscurity, many of the objects that were entering the Museum in its formative period. Information appertaining to contemporary interpretation (or misinterpretation as was the case sometimes), provenance and the context of acquisition, the mode of classification and original method of display - all could provide fresh insight into the manner in which eighteenth century collectors, antiquaries and learned men and women understood the world and mankind's place in it. Such information could also help trace the development of scholarly practice through the 'long eighteenth century' as specialist studies such as archaeology, ethnography, geology, palaeontology, philology and classical art history began to evolve and progress.

Thousands of objects started to emerge from basement store rooms all over the Museum and to understand how they could be displayed to best effect it was necessary to mock-up all 24 island cases and 110 wall cases that would feature in the exhibition. This process would prove to be a considerable logistical, intellectual and aesthetic challenge, and to facilitate it the selected objects were gathered together in a centrally located storage area. A pragmatic approach was taken in respect of conservation and wherever possible objects were chosen that would require minimal intervention. However, very major work was required in some instances as large sculptures and oversize vases required months of laser cleaning and reconstruction. Additionally, an extraordinary list of objects needed to be examined and, when necessary, treated: vast numbers of wooden and bronze gods from Egypt and India, Greek vases, Etruscan armour, hundreds of ceramics from all parts of the globe, Babylonian brick inscriptions, delicate Japanese water colours, significant ethnographic objects collected by Captain Cook, rare English Mediaeval alabasters and much more.

Apart from the British Museum's own collections the exhibition also features a very large number of loan objects that further illuminate the ideas and concepts under discussion. To maintain the historic function of the room and to signify to audiences the importance of books during the Enlightenment as means of disseminating information 16,000 volumes from the historic House of Commons Library are now displayed on the shelves that formerly housed the royal library. The House of Commons Library, formed in the nineteenth century but largely comprising of eighteenth century publications, contains many works relating to the themes explored in the exhibition. Indeed, a number of books are displayed, pages open, in some of cases. The Science Museum, National Maritime Museum, Victoria and Albert Museum, British Library, Royal Collection Trust and a number of learned societies have also contributed generously to the exhibition.

Collaboration with the Natural History Museum

Over 450 mineral, fossil, animal, shell and plant specimens have been lent to the exhibition by the Natural History Museum whose staff have been active collaborators in the project. Led by Lorraine Cornish of the Palaeontology Conservation Unit, the curators, conservators, librarians and technical staff at the British Museum's sister institution set about the task of researching their own early collections and conserving and preparing specimens for exhibition with the same degree of enthusiasm as their Bloomsbury based colleagues. 'Natural curiosities' formed the heart of Sir Hans Sloane's own collection and in the four cases of the Natural World section are displayed some of the animal, vegetable and mineral substances of his *material medica*: all specimens that had a practical application in his work as a physician. Here we find ground Egyptian mummies' fingers, used to treat 'contusions', different seed, root and bark samples, nephrite for the cure of kidney disease and amethyst to combat the effects of drunkenness. The dazzling display of natural history specimens, sitting alongside what Sloane referred to as his 'artificial curiosities' (that's to say man made objects), recreates for visitors something of the experience of Montague House, the original British Museum, and explains how people were trying to make sense of the world by gathering together such a universal collection of artifacts.

The exhibition examines the Enlightenment from a novel perspective, the objects themselves being the starting point for the discussion of ideas and concepts. Fossils collected by William 'Strata' Smith, a stone-age handaxe unearthed with the remains of an elephant, one of Mary Anning's ichthyosaur specimens – such artefacts are used to illustrate how a literal interpretation of the Creation story given in the Book of Genesis would eventually be challenged and a new scientific explanations developed. Exotic plant and ani-

mal specimens brought back from distant parts of the globe reveal how a desire to explain the diversity of life was fuelled. Artefacts collected by Captain Cook in the Americas and Pacific region testify to encounters with previously unknown societies; they explain how increased competition between European powers for new trade routes added to the development of ethnography, social anthropology and a new understanding of the world.

The statues displayed in the room are mainly Roman copies of ancient Greek works and were part of the influx of ancient marbles into the Museum's collection during the second half of the eighteenth century and early years of the nineteenth. Many of these sculptures had been purchased from connoisseurs such as Charles Townley who had acquired them while on the Grand Tour and built up an important collection which he displayed in his own house museum. Nearly all the sculptures had been heavily restored, with missing limbs and heads being added, in a manner that made their display in the Museum's main galleries inappropriate in the modern age. Only with this new exhibition could they be satisfactorily exhibited and appreciated in the context of Enlightenment sensibility. In addition, portrait busts of significant Enlightenment collectors and patrons of the Museum cast their gaze over the room from gleaming new scagliola and porphyry pedestals.

Restoration and environmental control

Prior to the design stage extensive environmental monitoring of the room was carried out revealing erratic ambient conditions. The room had previously had very little by way of environmental control and temperature had fluctuated wildly according to season so a sophisticated new air cooling system has been installed in a basement below the room, its duct work lying in the existing floor void to deliver tempered air through the new Smirke-styled floor grills. The target temperature is now 22°C and the relative humidity target is 55%±10%. Automatic blinds have been fitted to the window embrasures and VU filtering film added. Off-gassing is controlled by the use of active charcoal in trays - again, especially designed to discreetly merge into the background of the cases. All of these systems have been incorporated into the space in as unobtrusive a manner as possible. Additionally the historic display cases, introduced into the room in the mid nineteenth century, have been fully refurbished and humidity control installed. Of the two types of cases used in the exhibition, the larger 'atlas' cases (so named as they originally housed George III's topographical collection) have had new vitrines added - a clever adaptation that allows the display of larger objects. Happily, the room had suffered no major alterations during its life time. Two exceptions were the introduction of a grand door on the west side of the tribune, mimicking those to the north and the south, some decades after its completion, and the restoration work carried out to an area north east of the tribune following bomb damage during the war. Although the fabric of the room was generally in a good state of preservation, the décor, internal fittings and furniture were all in great need of repair. Extensive cleaning would also be necessary to wash away 170 years of London grime and restore the lustre of a space described by J. Mordaunt Crook as 'one of the noblest rooms in London'.

The end result is memorable. Smirke's great coffered ceiling has been repaired and cleaned inch by inch, its highly ornate plaster work now stands out in crisp relief. Under the guidance of a historic paints expert the original stone paint scheme, lit by primrose yellow roundels, has been reinstated and later Victorian gilding removed. The oak and mahogany boards of the floor have also been extensively repaired and strengthened to carry the load of the many sculptures now displayed in the room. Elsewhere, the granite, marble and alabaster stone work has been made to gleam, as has the scagliola panelling that sheaves the lower and upper walls. All the joinery is now repaired and polished, and a wash of picture gallery red now enhances the backs of the wall presses setting off the objects they contain. The brass balustrade hand rail that runs the length of the gallery was dismantled in order that it be repaired and polished. Painstaking as this work was, the introduction of new services - necessary for a modern gallery environment - into the historic fabric of the room proved to be a greater design challenge still. A unique electronic locking system, designed with the assistance of the Museum's own locksmiths, has been fitted into the wall presses. 200 km of fibre optic lighting has also been threaded through the backs of the cases to subtly lift the display bringing a warm glow to display (the lamps providing the light source are remote from the cases providing zero heat build up). A soft lighting scheme has also been integrated into the window recesses to subtly light the ceiling and pick out the sculptures and busts displayed below. The guiding principle of the restoration process has been to intrude as little as possible upon the room's late Enlightenment character; the degree to which this has been achieved can be measured by the fact that, upon initial inspection at least, the visitor will find very little evidence of twenty first century at all.

Reactions and evaluation

Public and media reaction to the both the exhibition and the restoration of the room have been very positive thus far, indeed, beyond what might have been expected: Simon Jenkins in the *Times* described the room as ‘a sensation’ and Jonathan Jones in *The Guardian* called it ‘unprecedented’. But the project does not end here. The room is very much a working space requiring day-to-day maintenance, educational activities and evening events need to be managed, study days and conferences organised. A handling-object collection has been formed and daily sessions, run by the volunteers of the Museum’s Friends organisation, allow visitors to handle many of the types of objects on display, and daily tours and talks by both curators and trained volunteers also take place as well as regular special educational events. But there are improvements that we would like to make, especially concerning the provision of more detailed information about the objects on display, and a full evaluation of the gallery will be undertaken over the summer that will include a survey of the reactions of both visitors and peers, and changes made where necessary. But in refurbishing the King’s Library and installing the new exhibition one key objective has been achieved, as was noted by Giles Worsley in *The Telegraph*: ‘One of London’s great rooms has been restored and given life back at the heart of British Museum’.

Design aspects of Enlightenment exhibition in the restored King’s Library **- Hanna Payne: Assistant Designer of The Enlightenment Gallery**

This was a very different project to the ones we normally work on for the Museum as the main exhibit is the room itself. The showcases which line the walls were originally glazed bookshelves made to house George III’s Library and to suit their new use for displaying objects as well as books they have had to be completely restored. A fibre-optic lighting system has also been fitted. The floorcases are all original to the room and have also been restored. Additionally a number of new facsimile cases, built to the same specification as the originals, have also been especially built.

It was a great pleasure to work with beautiful materials such as oak and walnut for the cases and marble for the plinths. All the materials used in the design of the exhibition had to be thoroughly researched to make sure they were appropriate to the early nineteenth century. We called in experts in historical interiors to advise us on details such as the type of paint we should use and the appropriate fabrics. Everything had to be authentic, even down to the way objects were displayed and mounted. The standard material used in the Museum for the construction of object mounts has traditionally been inert Perspex but in this instance only powder coated brass mounts have been used, again to maintain the early nineteenth century feel of the display.

Sourcing these materials was challenging as all the fabrics and paints had to be tested to conform with the standards set by our conservation department. Normally we would avoid using materials like silk in a showcase as it often fails Oddy testing, the standard requirement for all in-case materials, but after much searching we found some silk that would be suitable with the objects and work with the overall design.

The majority of the objects on display have come from the reserve collections. They were often very dusty from being held in storage for so long, especially the large stone sculptures. A team of conservators worked over a two year period on the task of cleaning them up - it was amazing to see the details that had been hidden.



View of gallery looking south, bust of Sir Joseph Banks to right.

The Rediscovery of two Lost 19th Century Fern Books by Moore and Wallich

- C.R. Fraser-Jenkins, e-mail: chrisopteris@yahoo.co.uk

A recent programme of taxonomic research on pteridophytes undertaken by the author at the Botany Dept., Natural History Museum, London, under the Museum's special funds Research Curatorship Bursary scheme, has coincidentally resulted in the rediscovery of two unpublished works of major importance to pteridology in Asia. Both are by the most important botanical authorities of the day working on ferns, and their discovery is of much value to help clarify concepts and details that were often subsequently confused over the next century and a half.

The first is Thomas Moore's unpublished hand-written copy continuing on from his uncompleted *Index Filicum* (1857-1862), this contained letters A-G, stopping half way through *Goniophlebium*. The unpublished part contains letters G-Z, in a near perfect state of preservation. This has been located by Mrs. K. Pickard, the archivist at the Royal Botanic Gardens, Kew, at the request of the present author, following mention of its existence by Underwood (1905), who wrote "The MSS. of the remainder is preserved at Kew". In that paper Underwood went on to say, "Many have asked, Why should this not be published now? There are many reasons, and among them either one of two should decide the question in the negative. (1) Over three thousand species of ferns have been published since Moore's publication ceased. It would therefore contain less than half of the known species of ferns and so would be notoriously incomplete. (2) In Moore's time the idea of type localities had not become so all-important in the matter of systematic study of ferns as it has at the present time. No index can be regarded adequate for modern use that does not give, in addition to its citation, the type locality, i.e., the source from which the species was first described." However the main value of this manuscript at present is quite different from what it was in 1905, before the advent of Christensen's *Index Filicum* (1905-1906), when Underwood was writing and a comprehensive index was needed. He evidently did not realise the unique value of the painstaking accuracy in identification carried out by Moore, who had first-hand, authentic knowledge of most of the taxa listed. He was able to draw on authentic material of authors such as Don, Presl, Kunze, Mettenius, Fée and others whose names may have often been confused or specimens lost in modern times. Because of this his opinion is today of great value in helping to identify or confirm the identification of many names previously beset with uncertainty. Its incompleteness and frequent lack of mention of the type locality is hardly of so much importance now that Christensen's Index fulfils that need (though the less informative modern supplements to it unfortunately fail to identify names). In contrast to Underwood's claim that many botanists were aware of it, it has to be said that no other pteridologists, at least since the start of the 20th Century, seem to have known of the existence of this work, of which the author has never come across any other mention in the literature. Today the decision not to publish it seems as inappropriate as it must have been in Moore's day and given the excessive rarity of the published part it would present a useful opportunity to republish the whole work in one. The only other *Index Filicum* from that time was a small and incomprehensive work by Kunze (1850), an index of cultivated ferns from Berlin and other German botanical gardens as they were before their destruction in the two World Wars.

Moore [1821-1887] was the distinguished pteridologist and Curator of the Chelsea Physic Garden, London, from 1848-1887 (Desmond 1994, Laird 1988) and was in touch with nearly all of the contemporary pteridologists of his day. The publication of the exhaustively detailed first part of his Index was discontinued following the retirement of the editor, William Pamplin, from the publishers, Williams & Norgate, but Moore had also prepared the rest of the Index to await publication. This large bound, hand-written volume (and its published first part) contains reference to all of the names of David Don. Most, but not quite all of which were carefully identified by Moore as a result of his near contemporary knowledge of them, as of most of the species published in the early 19th century. Don [1799-1841] was the author of *Prodromus Florae Nepalensis* (1825), that contains many early fern names that have subsequently been much confused and are now often dubious and the source of considerable error and open-ended nomenclature. Moore evidently did not ignore them, unlike several of Don's contemporaries, who were upset by his work. The continuation of the Index is thereby potentially able to clarify one of the last major lacunae in Asian fern nomenclature, currently under study by the present author (Fraser-Jenkins, in prep.), which has been a perpetual source of unsolved nomenclatural error. Moore's Index is actually a

considerably more detailed work than the subsequent *magnum opus* of widespread present-day use, Carl Christensen's (1905-1906) *Index Filicum* and its modern supplements to date. It contains far more and more accurate detail of early 19th century and late 18th century works, than that does and also includes invalid and infraspecific names, but it has only been of limited use so far due to its being only a fragmentary work. The unexpected rediscovery of this work after a gap of 150 years is of major importance to pteridological research. It is hoped that it may be digitally reproduced if funds can be found, and subsequently made available in print, as Moore would doubtless have wished, as a continuation of his unfinished Index.

The second discovery is perhaps even more spectacular. The present author was kindly permitted preliminary access to two archival cupboards in the library of the Central National Herbarium at the Botanical Garden, Sibhpur, Calcutta, in July 2003. (While in the process of shipping his own botanical library from Wales to Kathmandu, as a follow-up visit on his return from his research programme in London). It turns out that unknown to any botanists, either modern or historical, Nathaniel Wallich actually wrote a complete account of his ferns under the names he had listed in his *Numerical List of Dried Specimens of Plants in the East India Company's Museum* (1828-1831). Wallich [1786-1854] was the famous Director of the Botanical Gardens, Calcutta, for the East India Company, from 1814-1846 (first as acting Director), who carried out the major early study of Indian botany, following on from William Roxburgh [1751-1815], with whom he worked. Among other places, he visited Burma (Myanmar), India (especially Bengal and N.E. Assam), Malaya and Nepal (the latter from 1820-1821) and sent many now well known collectors from Calcutta to numerous other areas. Although he produced what is probably one of the most superb botanical works ever produced, his *Plantae Asiaticae Rariores* (1829-1832), the great bulk of his far reaching botanical discoveries were never fully prepared by him. They were merely named and listed in his List, or Catalogue, where they are almost all invalid *nomina nuda*. Many later authors subsequently published and validated his species, but considerable confusion resulted due to the names quite often being taken in different senses by these and subsequent authors. This applies especially in pteridophytes and thus the discovery of Wallich's detailed work on ferns is of much importance in allowing us to know definitively what he himself actually meant by and thought about his species, with his original descriptions, localities and comments. It is a finely bound volume in a good state of preservation, though not as robust as Moore's unpublished book, due to conditions of storage and the difficult local climate. It contains in clear handwriting, ready for publication, detailed descriptions in Latin of all his species of ferns, together with details in English of exactly where and through whom they were obtained and how they relate to other species. Opening the wrapped packet labelled "Manuscript 49" revealed the totally unexpected existence of this volume, *Felices*, by Wallich, much to the present author's excitement and almost shock - so much so that he could hardly believe what he was seeing! It has the reference "WAL-M Acc. no. B-13014" and was most probably written in about the mid 1830s. On this visit the author was only able to make a brief perusal of it, immediately recognising the names and the context of many of Wallich's comments. It is hoped that he may be able to list the species and copy some of the important comments at a later stage. It is also much to be hoped that the eventual publication of the volume may be initiated by the Botanical Survey of India. Thus it is not yet known to the author whether Wallich made further comments on the species Don published from his collections, or, hopefully, made mention of some of Don's names, despite his annoyance with Don's work, in the synonymy he gives; but it is obvious that this work is highly relevant to an understanding of not only his own, but also Don's species.

The author was also able to locate there another wrapped packet containing a bound volume "Dr. Wallich's correspondence index 1794-1832" [these dates are as written on the cover, but the contents are from 1817-1832]. This lists all his inward and outward correspondence by date, with the names and usually a brief comment on the subject of the letter. Its state of preservation is fairly robust. A few of the actual packets of his letters ("Dr. Wallich's correspondence 1832-1833" in packet 18, and 1833-1834 in packet 19) are also housed in the same cupboard, but the remaining volumes from 1817-1833 and 1834-1846, with other packets, are apparently in the library of the office of the Botanical Survey of India, Brabourne Road, Calcutta, and have not been seen by the author. The letters themselves are bound in volumes and wrapped in thick, brown paper packages (to which we owe their survival) and are relatively easily legible to him. They contain many detailed accounts of Wallich's journeys and discoveries and include correspondence from the major British-Indian and international botanical etc. figures of his day, and are themselves of major interest and botanical importance. They have never been drawn on by any workers apart from Gage

& Burkill's (1916) study of his correspondence from Dr. William Jack, who reached the Nepal *terai* and lower foothills in 1815 as an army doctor to the British force during the Gorkha War, and sent a few collections to Wallich. These now in a seriously fragile state, urgently need digital photographing and conservation by experts before this unique insight into early Indian botany is lost forever. Wallich's letters and papers were returned to Calcutta as a gift from the Linnean Society in 1887 (see van Steenis-Kruseman & van Steenis (1950: 557), drawing from earlier sources at Kew). However it unfortunately resulted in their effective loss to botany for over 150 years and in the fact that their very survival is now extremely tenuous. Most workers are apparently unaware of their existence, as well as unable to decipher the old writing, nor is there any plan for their recording, conservation and publication, which should clearly be undertaken as a programme of first priority.

The Index, which itself has an index by name at the end, shows that the letters include all the remarkably abundant correspondence, written from 1817-1824, to and from Colonel the Hon. Edward Gardner [1784-v.1824]. He was a younger son of the 1st Baron Gardner of Uttoxeter, and was stationed in Nepal as the first permanent British Resident (an early equivalent of today's Ambassador), following the Treaty of Sugauli in 1815, between the British and Nepalese. Capt. Knox had been an earlier Resident, when Buchanan went there in 1802-3, but was obliged to retire in 1803, when Jung Bahadur Rana came to power in Kathmandu and could not trust British intentions in Nepal. Gardner preceded the great diplomat, zoologist, scholar of Buddhism, orientalist and antiquarian, Brian Houghton Hodgson [c. 1800-1894], who was Assistant Resident at Kathmandu from 1820, and then Resident from 1833-1846, whom he had initially trained in the rôle. Gardner soon became an accomplished amateur botanist-collector himself, recording his many new discoveries and details of excursions, routes etc., with considerable interest, as can be seen in these letters, and sending the collections down to Wallich in Calcutta between 1817 and 1819, when they became part of the Wallichian herbarium. Wallich's letters also include correspondence on Feb. 15th and 22nd. 1819 from Francis de Silva at Kathmandu, described there as "collector in Nepal", who was a Goan Indo-Portuguese assistant-botanist and collector at the Garden in Calcutta (he was later sent to collect by boat at Pundoa, Sylhet, N.E. Bangladesh), his father having been a collector for Roxburgh. Wallich had sent him from Calcutta with another collector, Bharat Singh, to collect plants in Nepal in 1817 (see Desmond 1992: 132). However, Gardner and the staff he employed, including particularly his Assistant Resident, Robert Stuart [d. 1820] evidently made the main collections in Nepal. Between 25 Sept. 1817, when Wallich's correspondence with Gardner began, and 7 Feb. 1824, when it ended (and he began to correspond with Brian Hodgson instead, as from 30 March 1824), the Index records some 135 items of correspondence with the "Hon'able E. Gardner", and from 1 April 1819 to 20 Jan. 1820, some 39 with "R. Stuart Esqre", from the "Katmandoo Residency, Nipal", both of whom wrote to him with lists and details of plants they had collected. Robert Stuart died of fever, presumably malarial, he had caught in lower Nepal, and Wallich sadly recorded the "last letter I ever had from him!" from Camp Bechiaco in the Nepal *terai*, on 8 Feb. 1820. He added the details of the inscription over his grave at the Residency, near Kathmandu, as follows "Robert Stuart, third son of Sir John Stuart Bart. of Allenbank in N. Britain [by which term they tended to refer to Scotland at that time], died 14th. March 1820". It appears from the letters that some ill feeling may have occurred at the time between Wallich and Gardner over Stuart's death, which occurred while he was on his way to meet Wallich on his arrival in Nepal.

The author has also received details of some of Wallich's letters to Sir W.J. Hooker at Kew from the Director's correspondence, Kew, vol. 52, kindly sent to him by Professor D.J. Arnold, of Imperial College, London. These and others are also cross-referenced in the Index to Wallich's correspondence at Sibpur. Thus in his letters to Hooker of 2 Sept. 1818 and 13 Oct. 1818, Wallich mentions having sent over 1,000 species from Gardner's collections, including ferns and mosses, to Hooker, and praises Gardner's "matchless" specimens. He also informed Hooker in the second letter that Gardner had recently been on an expedition to the snowy mountains of the Himalaya and sent more "invaluable treasures", while not having pretensions to be a botanist himself. A further letter from Gardner in the Wallich correspondence Index at Calcutta, of 15 Sept. 1818 may shed some light on this as it is logged as being "with list of places from Katmandoo to Gossainthan [just south of the Langtang Valley], and remarks on the route". It is unfortunate that when Wallich returned to London in 1828 with the much larger bulk of the later collections he had not already sent out, he was rather ignored. These earliest, unnumbered plants were not the ones included in Wallich's List and were not referred to by the numbers in the List. Although he named some species after him and praised his collections (for example *Coelogyne gardneriana* Wall. and *Hedychium*

gardnerianum Wall., in Wallich's *Plantae Asiaticae Rariores* 1: 33, t. 38; 2: 31 (1830, 1831) and mention by Hooker, *Musci Exoticae* 2: t. 146 (1820)) Gardner's name became submerged under Wallich's in subsequent work by many authors, including Don, who did not credit the collections to him. In some ways he is today the "lost botanist" of Nepal and most histories of botanical collection in the Indian subcontinent and Nepal jump from Buchanan to Wallich's visit with no mention of Gardner's important collecting work in between. It would be more accurate if future lists of collectors gave equal place to the collections of Gardner & Stuart between those of Buchanan and Wallich.

Yet, perhaps accidentally, Gardner's visit and collection in Nepal may actually be of more taxonomic importance for Nepal and India today than Wallich's visit there was, due to the intervention of Don (at the instigation of Lambert), whose work pre-empted much of Wallich's later work. It was in fact Gardner and Stuart's early Nepalese collections (and not Wallich's numbered material from his List) that became the material worked on by Don for his *Prodromus*. Wallich had sent a full set of them to Aylmer Bourke Lambert [1761-1842], a remarkable private botanist, for whom Don was librarian at his Museum in London. Don was the first author to describe many of the most distinctive and obvious species from Nepal and the specimens he quoted under the name of Wallich were entirely from Gardner and Stuart (and some from de Silva & Singh's collections). These are now preserved in the BM, labelled as *Wallich* [herbarium] without numbers, but with the years 1817, 1818, or 1819, and often with notes on their native names (? in the Newari language, of central Nepal) and uses. Some further sets also found their way via other purchasers of Lambert's herbarium material to CGE, OXF, P, FI and perhaps other herbaria.

Don's other cited material was that of Dr. Francis Buchanan [1762-1829] (later Hamilton, on succeeding to Leny Castle, near Callander, Scotland, in 1820). He was superintendent at Calcutta between Roxburgh and Wallich, from 1814-1815, who was the first to collect in Nepal, from 1802-1803 (see especially Prain 1905, van Schendel 1992, Allen 2002: 8-21 etc.). Buchanan's (1819) *An Account of the Kingdom of Nepal* is a finely detailed description of his journey to Nepal and a classic historical account of the country. His material (a second set - the other being sent to Sir J.E. Smith at the Linnean Society) was also sent to Lambert and is now at BM, following their sale in 1842, on Lambert's death. Lambert had initiated Don's work mainly in order to catalogue the Buchanan collections, as well as the remaining Nepalese collections in his herbarium. It was perhaps mostly as a result of the independence of Lambert's private work and set up that Don's *Prodromus* cut across Wallich's slower ongoing work so unfortunately. As a result Don was severely criticised by Wallich, Lindley and others (even Buchanan himself having some misgivings, see Desmond 1992: 132), and his species tended to be ignored by the established botanists of the day, who could hardly criticise the great scientific patron, Lambert, himself. But Don certainly cannot be imagined to have had such intentions and indeed soon went on to become an honoured and established figure in the botanical world revolving around mid 19th Century London.

Along with the letters etc. at Calcutta were a number of other interesting packets containing manuscripts and books, such as Wallich's *Synopsis Plantarum (Roxburgh, Colebroke, Wallich)*; Griffith's *Icones Plantarum Asiaticarum* (1851) and treatise on Plant Galls; Horsefield's *Plantae Javanicae Rariores* (1838); Roxburgh's *Plants of the Coast of Coromandel* etc.

The unexpected discovery of these missing works opens up substantial new sources for our understanding of the pteridological nomenclature of the first half of the 19th Century, and, in particular for Asian pteridology, as well as Asian botanical history. In many years of research, the present author has not come across such major new sources of important information in this field. However their discovery and the condition the letters are in, in particular, also raise various worrying concerns. The first concern is whether they can be recorded clearly, perhaps by means of digital photography, before they deteriorate any further. Due to their fragile state, the author did not wish to handle the letters (except the more robust Index) more than a very minute amount, and it is hoped that they may not be handled again except by conservation experts and for the purpose of a programme of digital photography. Their recording is to be considered a matter of near emergency, as it is much to be doubted whether they will remain in fit state for such work for any longer than another decade, or possibly two. The books, by contrast, are strong enough to be handled more frequently, as with other archive material, but again need to be recorded as soon as possible. The second concern is whether any programme could be initiated to ensure they could be typed and published within a reasonably short time frame. The informational content is obviously not merely an institutional or even national treasure, though the original documents may be considered so. It is a clear duty to science

that the information is published and made available internationally as soon as possible, and it is therefore desirable that co-operation, international or otherwise, is accepted for the purpose of disseminating this cosmopolitan heritage. It would be a seriously blameworthy tragedy if any of these documents is merely sat on and hoarded for whatever reasons now that they have come to light. It is much to be desired that the institutions concerned will rise to the challenge and do their best to set up the required funding and expertise to make them widely available to botanists and historians through recording and publication.

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Mary Ida Roper & Her Herbarium

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Introduction

In 2003 a project was undertaken to research and catalogue the herbarium of an eminent 20th century botanist, Miss Ida Roper. Ida Mary Roper was born in Bristol and spent the majority of her life in the city, but for various reasons she bequeathed her collection to the University of Leeds shortly before her death in 1935. Funded by the Arts & Humanities Research Board for one year, the aim of the project was to improve access to the collection and make it available to a wider audience. This has been achieved by improving the physical and mental retrieval of specimens through databasing, digitisation, research of the collection and collector and the creation of a website. The collection was examined in a broader context than botany alone to help people realise its potential as a resource for a wide range of disciplines. The following article will outline the history of the collection and its creator, and will describe how the project was conducted and how it progressed, concluding with some thoughts on what has been learnt and what the future holds.

Ida and her herbarium

Ida Mary Roper was born in August 1865 to John, a wholesale druggist, and Lucy Roper at Westbury in Bristol. The couple already had one son, Harold, and Mrs Roper had two sons from a previous marriage, Ernest and Frank Samson. In 1879 Ida started at Clifton High School. The family moved several times when Ida was young and the various home addresses suggest they were an upper middle class family, employing in 1881 a house servant and four men in the family business.

I am not sure when or why Ida's interest in botany started to develop but I think it probably stemmed from her father's occupation as a chemist, especially as her brothers seemed to share the interest but had less time to pursue it. It is difficult to know whether Ida was taught Natural History at school. One of the reasons it was so popular with children was because it was not a subject on the school curriculum until the end of the 19th/beginning of the 20th century. However, science, including botany, was generally taught at girls' schools because Classics was still seen as the male reserve. According to a handwritten document about Ida, found folded in the pages of a copy of *'The Flora of Bristol'* (J.W. White, 1912) originally owned by a contemporary Bristol botanist, Ida finished her education in Germany. Although this was not definitely the case, it is certainly possible and an interesting idea as Germany was considered the centre for botanical study during this period and knowledge of the language was accepted as a useful tool.



Ida on a Botanical Ramble, July 15th 1933

At some stage in the late 19th century Frank Samson, one of Ida's half-brothers, became her guardian and set up home for them both. According to the handwritten document, Frank was of great assistance in collecting specimens and conducting research and was 'an active supporter of all that his sister undertook'. Also it describes how they 'both possessed a thoroughly business sense of organisation, allied to caution. They would never state a fact (and did not mind admitting that they could not answer a question) unless they could verify their statements by facts and they would take any amount of trouble to do this'. Frank's name appears on sheets in the herbarium.

In 1929 Frank Samson died. Sometime in the early 1930s Miss Roper moved to be looked after by a Rev. Cratchley. Ida died on June 8th 1935 having been ill for a while. Her funeral was held at St. Aldhelm's church, Bedminster and her body was interred in the family grave at Arno's Vale cemetery. The reputation of Ida amongst natural historians, archaeological enthusiasts and in the city of Bristol is evident by the list of mourners at her funeral. For example representatives from Bristol City Museum, the British Bryological Society, the Bristol Naturalists' Society and the British Microscopical Society attended.

Miss Roper's career as a botanist seemed to begin in the early 20th century, as attitudes towards women started to change. In 1908 she had her first paper 'The Blossoming of the Trees', published by the Bristol Naturalists Society. The following year Ida became a fellow of the Linnaean Society, only four years after they first admitted women. For the first years of the 20th century Ida was also very busy helping James Walter White compile a 'Flora of Bristol', published in 1912, which I think raised her profile and put her in

contact with many individuals and societies. In the Preface, White acknowledges Miss Roper for her ‘trustworthy & energetic help’ and ‘for fieldwork’ and ‘assistance in literary research and in revision and correction of the press’. In 1913, Ida became the first female President of the Bristol Naturalists Society. She recognised it as a great honour and a fantastic position to hold, not just for herself but for all women. In the 1901 census Ida was recorded as ‘Living on own means’ and she was therefore able to put all her energy into her ‘hobbies’ and was very committed to the voluntary positions she held. Miss Roper worked tirelessly for the Bristol Naturalists Society and held the positions of Editor, Secretary, Librarian and Sub-librarian over a period of 30 years. The BNS was not the only society with which Ida was associated. She was actively involved with the South-Western Naturalists Union, the British Bryological Society and the British Association for the Advancement of Science, acting as Local Honorary Secretary in 1930 when the meeting was held in Bristol. Ida also put on a display of wild flowers in the city museum every week for 12 years, from 1911 to 1923. These displays were reported to have been very popular with the general public, particularly during the Great War.

Ida’s other interests included archaeology, and more specifically monumental effigies. In 1931 she had a book “Effigies of Gloucestershire” published and she was the first woman to be elected to the Council of the Bristol and Gloucestershire Archaeological Society. Ida also produced pamphlets and guidebooks and embroidered wall hangings and alter frontals for St. George’s Church Brandon Hill, Bristol.



Viola odorata L. var. *praecox* Greg. Specimen collected by IMR at Tickenham Hill on 12th January 1915. Typical herbarium sheet from the collection and demonstrates style of photograph for digitisation

Miss Roper began her herbarium in 1893 and continued to add to it until a year or so before her death in 1935. Specimens at the University of Leeds and other institutions indicate that the main period of collecting was c.1900 - 1930. Most of the British Plant Families are represented in the herbarium. There is a large number of Genera from the Orchidaceae and Violaceae Families, the latter reported to be an area of particular interest to Ida. Another noteworthy feature is the specimen of *Nitella mucronata* discovered growing in a pond in Wickwar, West Gloucestershire by Miss Roper in 1917. The discovery was significant as it was the most western recording of that species in England and was described by Groves and Bullock-Webster as a distinct variety, which they named *gracillima* (*Journal of Botany*, November 1917, Vol. 55). Ida travelled extensively in this country, and occasionally abroad, often on various club and society excursions and added to her collection. However, she collected most actively close to home in Gloucestershire and North Somerset (vice counties 6 and 34). Many of the specimens in the herbarium were obtained through exchange. Ida was an active member of The Botanical Exchange Club of the British Isles and the Watson Botanical Exchange Club. Specimens collected by Ida are present in public collections all over Britain, for example the National Museum of Wales alone has over 300.

A feature that makes Ida’s collection particularly delightful and unusual is the presence of associated material. Many sheets have letters, articles, coloured diagrams of flowers, postcards, photographs and lengths of embroidery thread or pieces of textile attached. In addition, there are many other loose items and the University was lucky enough to receive her collection of botanical books. The bequest included many county floras, her personal and heavily annotated copy of White’s ‘Flora of Bristol’ and exercise books she used to record details about her herbarium. The items form an integral part of the collection. The books are held in the School of Biology and the University Library.

Miss Roper arranged her herbarium according to ‘The London Catalogue of British Plants’ (Tenth Edition, and later, the Eleventh Edition). W.H. Burrell, Honorary Curator of the University of Leeds Herbarium in 1935, rearranged it according to the ‘The British Plant List, 2nd edition’ by Druce published in 1928 and this is how the collection remains. Various Honorary Curators of the herbarium, particularly Mr Burrell, added material to the collection and these are now considered part of the Ida Roper herbarium.

Ida started to arrange the bequest of her herbarium several years before her death, in the early 1930s. The bequest of J.W. White’s herbarium to the University of Bristol in 1932 left them short on space and in no great need of another British herbarium so Ida approached Professor Priestley at Leeds, a friend and colleague for over 30 years. Professor J.H. Priestley knew Ida from his time at University College Bristol, both as an undergraduate and later as head of the Botany Department (1905-1911). Professor Priestley accepted the bequest with open arms realising its value to the university and local botanists. The herbarium

remained for over sixty years where it was first delivered on June 15th 1935. Over the years the collections have received varying levels of care, ending up rather neglected by the 1990s lining the walls of the tea-room in the Baines Wing. In 1997 all of the biological collections moved to the new School of Biology building and the Honorary Curator, Dr J. Edmonds, took the opportunity to compile an inventory of all the botanical collections and freeze specimens that had an active insect infestation.

The Project

The project was conceived by Debbie Snow, University Collections Officer, and Jenny Edmonds, Honorary Curator of the Herbarium, in 2002. In January 2003 I was appointed as Documentation Officer to undertake the project. The basic ideas of the project are set out below, as written by D. Snow for the A.H.R.B. Application Form, 2002.

Aims of the project:

1. To computerise the existing inventory of the Ida Roper herbarium with the addition of common names
2. To fully catalogue at least 40% of the collection (4000 specimens)
3. To scan images of 10% of the collection (1000 specimens)
4. To input all the above data into the database system 'The Museum System'
5. To research biographical and contextual data on Ida Roper and the collection
6. To create a web site associated with the project for the delivery of this catalogue data and background information.

Broad objectives of the project:

1. To pilot the use of the database 'The Museum System' with natural history collections, as part of a long-term aim of cataloguing the majority of the University's museum collections on this system
2. To improve access to the Ida Roper Herbarium, both physically (improved retrieval of specimens) and virtually (on-line retrieval of collections data)
3. To increase use of the herbarium for teaching, research and by the general public.

This project will greatly improve access to this important resource. Awareness of the existence of the resource will increase and those who wish to consult the physical specimens will be able to identify more specifically what they wish to see before their visit. Physical retrieval of specimens on a wide variety of criteria (genera, common name, date etc.) will be facilitated and this will reduce handling of delicate materials and ease and speed of consultation. Not only will data be available to the specialist the incorporation of common names and provision of themed tours through the collection will greatly improve access to the non-specialist. The intellectual accessibility of herbaria will therefore become more apparent to the general public. The resource will therefore become accessible for research and teaching across several disciplines (both in the sciences and arts and humanities) in a way which is difficult at present.

Officially the project has now finished and below is a summary of what was actually achieved during the year.

Aims of the project:

1. The handwritten inventory was entered onto an 'Excel' spreadsheet early on in the project. Common Names have been added either at specific or generic level.
2. The following Families have been fully catalogued: Characeae, Orchidaceae, Violaceae, Aristolochiaceae, Berberidaceae, Caprifoliaceae, Celastraceae, Commelinaceae, Elaeagnaceae, Ilicaceae, Lemnaceae, Nymphaeaceae, Resedaceae, Rutaceae, Tamaricaceae, Thymelaeaceae; 1255 records. A record can be more than one specimen as long as collection data is the same and as some sheets hold multiple records, less than 1255 sheets have been catalogued in detail (but probably more than 1255 specimens)! It is not really possible to know how many sheets or specimens are contained within the collection. The figure of 10,000 was taken from an article written by the curator of the University of Leeds herbarium shortly after the bequest of the collection. It is therefore impossible to know what proportion of the collection has been fully catalogued.
3. It was decided that the most suitable method for digitising the collection was to use a digital camera. 478 images have been created which equates to approximately that number of records because some of the images are of loose material associated with the specimens. There are images for all the Characeae and Violaceae specimens and additional material.

4. Due to technical difficulties with computer servers it was agreed in August 2003 to use a different database to 'The Museum System'. An Access database was created for the project and all the text and images have been inputted.
5. Research has been carried out on Ida and her contemporaries, and to a slightly lesser extent, the collection. A study trip was made to Bristol and research was carried out over the Internet and at the University of Leeds Library and Special Collections.
6. The first web site went on-line in April 2003 with a limited amount of information and the basic inventory. The web site received a major overhaul in Spring 2004, with the addition of the searchable database. Unfortunately it is unlikely the web site will be regularly updated as there are not members of staff available. It may occasionally received attention from volunteers.

Were the objectives of the project met?

For reasons "outside of our control", 'The Museum System' database was not used for the project and therefore could not act as a pilot study for the rest of the University. Without a doubt, the project has achieved it's second objective. It is now infinitely quicker and simpler to find specimens both for people associated with the collection and interested outsiders. The herbarium is available 'virtually' on the Internet, along with everything that is known about the collector and collection, all over the world at any time. Use of the herbarium has not really increased as yet. Roper specimens were studied as a part of the Yorkshire Naturalists' Society's History Section AGM in January 2004 and the collection is becoming more widely known of. As a result of the project, several articles have or are to be published, a talk was given at a Centre for Heritage Research seminar and a small display has been put on in the University's zoology museum. There are also plans to produce a booklet on Ida, the herbarium and the project.

What has been learnt?

Having an 'Access' database built specifically for the project has been very successful because we had a lot of input into how it would look and function. We were able to specify what fields to include and what form they should take and how the database can be searched. It is impossible to know whether the purpose-built database is better than a generic system would have been but it certainly fulfilled our needs. Inputting the data obviously became quicker over time as I established field definitions clearly in my mind. The digital camera worked well for the digitisation aspect. As the camera is of a high specification it can be set up to take very accurate images that require little manipulation on the computer thus saving time. Once the camera and lights are set up, taking the images is a quick process. Buying the largest affordable Memory Card is a good idea to reduce the frequency of removing it from the camera and downloading the images. The construction of the web site proved very time-consuming; however once it is complete it will not really become dated or irrelevant. Again we had a lot of input into how the database search facility would appear on the web which was very important to guide the IT man constructing it. Research into Ida Roper has been fascinating and successful at building up a picture of the collector although there are some aspects where I have been unable to reach a conclusion. The problem with research is to know when to stop!

The future

Until August 2004 work will continue on aspects of the project for one day a week. After August 2004 it is unlikely the collection will have regular attention. If more funding were secured in the future it would probably be for a project with a different focus. However, the achievements of the project are irreversible. A major step forward has been made to improve both the physical and mental accessibility of the collection. The project has renewed interest in the herbarium and much has been learnt. The knowledge and experience gained as a result of the project, particularly in relation to databasing and digitisation, can be applied to many collections in the University.



Miss Roper and fellow naturalist at the summit of Snowdon, 25th August 1931

Potter’s Museum Of Curiosities:
A Personal Recollection Of A Recently Dispersed Collection
- Simon Moore

My family moved from Tunbridge Wells (my place of birth) in 1959 to the Sussex Downs near Worthing. My interest in natural history having been piqued some years before, I was most interested to visit a small museum at (fairly nearby) Bramber which displayed, among other strange natural phenomena, a two-headed lamb! My Father duly took me along but after about an hour (I was totally absorbed) sneaked off for a pint while I continued perusing the amazing taxidermy tableaux – The Death & Burial of Cock Robin, The Kitten’s Wedding, The Rabbit’s Schoolroom &c &c, to say nothing of the more unusual material like the lamb. Although I had a natural empathy with the living world, I didn’t consider for a moment the fact that all these young animals had probably been killed to adorn these dioramas and it wasn’t until a middle aged woman came in and went out again, loudly complaining that the place ‘gave her the shudders’ that I even considered the ethical view at all! Besides, they had all met their ends about 100 years ago and even their glassy stares failed to upset me in the least! Potter’s Museum has always both shocked and fascinated people.



That 2-headed lamb...

My parents again moved in 1968 to East Preston further west along the Sussex coast and a few years later, the Potter collection moved to nearby Arundel after a brief spell at Brighton. I visited several more times and, being more mature, was able to appreciate the other ethnographic objects on display. Once again I could hear comments either vilifying or praising the taxidermy tableaux.

Eventually the collection moved out of my life to Jamaica Inn in Cornwall and I never saw it again. I heard that it had doubled in size with various additions from certain other collections. On the 23rd and 24th of September 2003, it was sold by Bonhams to various buyers. The star lot which reached £20K (hammer price) was, of course, Potter’s first and best-known tableau of Cock Robin. My personal favourite was the rabbit’s schoolroom, making £13K and the two-headed lamb £2.6K. A great shame that the collection was split up, especially after it was rumoured that a certain Mr Hirst had offered £2M for the entire collection – a most generous offer since I suspect that the total cheque from Bonhams was much less.



...and the bunny’s schoolroom!

Transport of Dangerous Goods in Museums **- Suzanne Ryder: The Natural History Museum, London**

International rules governing the transport of dangerous goods are constantly changing and becoming more stringent. The regulations apply to movement of specimens and products used within museums. I was alerted to this at a SPNHC (Society for the Preservation of Natural History Collections) meeting in Canada, 2002, and again in U.S.A., 2003. This subject is being taken very seriously in many museums worldwide as a result of fines, and in one case, the threat of imprisonment. Although this issue is particularly relevant to science departments, the implications are much wider.

One other area for clarification is where a specimen doesn't fall into the "dangerous goods" category but may contravene security regulations e.g. entomological pins do not pose a "dangerous goods" risk but they are considered a security risk during transportation. Parcel Force state on their website the materials they will not transport and a lot of the things museums send out regularly are on that list.

There are several gaps in our arrangements for transporting specimens to and from museums: scientific loans, exhibition loans, fieldwork collecting, hand carrying material. However, working through the legislation to find out what is relevant to museums is near impossible. After a preliminary discussion with an external Dangerous Goods Safety Advisor it became apparent that there is a real need to pursue this issue. It seems that it is not only institutions that would be liable, but also the individuals carrying or shipping the specimens or other items.

In response to this problem, The Natural History Museum, London set up an internal Transport of Dangerous Goods Working Group to investigate the implications and provide recommendations to the Museums' management. Representatives from relevant departments provided lists of what they perceived to be dangerous goods. This proved difficult, as the definition of dangerous goods was not clear from the literature available. We were unable to decide which materials constituted dangerous goods, we were unsure whether we really did have a problem with this issue or not, added to which the legislation is extremely complex and varies between countries and with the means of transport (air, road, rail or sea). It was not an easy issue to resolve without professional expertise. We therefore felt it necessary to seek professional advice on the various issues, and invited three specialist firms to discuss what assistance they might offer the NHM with regard to the Transport of Dangerous Goods.

After listening to the presentations and asking many questions, the working group found that our needs as a museum were as follows:

- An assessment of all NHM sites to identify dangerous goods and advise how we might change working practises to avoid dangerous goods transportation where possible.
- Staff training.
- A dangerous goods carrier for the whole Museum.
- Ongoing advice of a Dangerous Goods Safety Advisor to inform us of changing legislation.

If we do need to use a dangerous goods carrier, it is important to be aware of the cost implications. It is also necessary to ensure that material is returned to us from other institutes in the same way, so this should be reflected in our Collections Management Policy and Procedures, and this needs to be communicated to all museums receiving dangerous goods loans and packages and an agreed procedure established.

This is a serious issue facing museums and one that we cannot ignore. It is my recommendation to all museums to seek advice from a Dangerous Goods Safety Advisor. The requirements of each museum are different, and legislation seems to change frequently. A Dangerous Goods Safety Advisor may be able to save a museum money by suggesting changes to working practices, rather than sending everything out by a dangerous goods courier which is expensive.

Background information for this article was derived from an NHM working group Report on "The Transporting of Dangerous Goods" produced by Suzanne Ryder, Clare Valentine Jan Beccaloni, Bob Oldfield, Alison Paul, and Andy Warlow, March 2004.

The Linnaean Tercentenary - Jenny Edmonds, School of Biology, University of Leeds

The year 2007 will commemorate the tercentenary of the birth of Linnaeus. The Linnean Society of London, founded in 1788, purchased the collections of Carl Linnaeus from the widow of its first President, James Edward Smith who had purchased them from Linnaeus' widow in 1784. These collections are now housed in the Society's rooms in Burlington House, Piccadilly. The Society is currently planning various activities to celebrate 300th anniversary of Linnaeus' birth; these include:

- ◆ **Digitisation of the Society's Major Collections;** this will include all the Linnaean collections (including the butterflies, moths, beetles, fish, shells and plants), the Linnaean letters, the Linnean Library catalogue, the Smith Herbarium and the completed Linnaean Plant Name Typification Project. These will then be available on our website and freely available to both the public and the scientific community.
- ◆ **Scientific Meetings** covering a variety of topics relevant to the importance of Linnaeus' work in the past, present and future. These will involve an international conference hopefully at the Natural History Museum, London and the Royal Botanic Gardens, Kew, as well as smaller meetings, involving various other biological learned societies in the Burlington House rooms. In addition, we hope to hold an Evening Discourse and a series of lectures suitable for various age groups in association with the Royal Institution in London and a joint meeting with the Royal Society.
- ◆ **Excursions:** the possibility of an Anglo-Swedish excursion retracing part of Linnaeus' journey through Gotland, is currently being investigated, together with a second excursion touring the Linnaean Landscapes in Sweden organised by the Friends of Hammarby.
- ◆ **Exhibitions with selected museums, botanic gardens and zoos** being invited to mount exhibitions to mark the tercentenary as appropriate to their particular biological collections and visitors. These will cover the major regions of the British Isles, as well as Australia and the United States, and will all be linked through our Society website. British institutions who have so far agreed to participate in this venture include Cambridge University Herbarium, Botanic Garden and Museum of Zoology; Chester Zoo; Edinburgh Botanic Garden; Royal Botanic Gardens, Kew; the London Zoo; Manchester Museum; National Botanic Garden of Wales; the National Museums Liverpool; the NHM Linnaeus Link Project; Oxford University Herbaria, Museum of Natural History and Botanic Garden; the RHS Lindley Library and Ulster Museum. In Australia, the Western Australian herbarium at Perth, and the Sydney Botanic Garden will both be participating, as hopefully will Missouri Botanical Garden, the New York Botanic Garden, Chicago Botanic Garden and the Smithsonian Institution (Museum of Natural History) in the US.
- ◆ **Promotional features** will include distributing a computer-generated laminated poster of the more important aspects of the Society's collections to regional museums and universities; investigating the possibility of media programmes; an educational virtual tour of some of the more important and informative collections held by the Linnean Society; a Linnaean Garden at the Chelsea Flower Show and possibly also at Tatton Park; and related events at the RBG, Kew, during 2007.
- ◆ **Memorabilia** such as commemorative stamps, a Wedgwood Medallion of Linnaeus, a Linnaean medal, limited edition botanical and zoological prints, commemorative china, and popular and scientific publications are all being considered.
- ◆ **Social events** envisaged include a commemorative dinner at a suitable biological venue in London, a summer reception and/or picnic, and receptions at both the Linnean Society and the Swedish Residence to which British and Swedish royalty and various Swedish Embassy staff will be invited.

We are in contact with the Linnean Societies of Bordeaux, Lyons, Provence, New York, New South Wales and Sweden, the Swedish Embassy and the Swedish community in the UK to ensure that we are able to share the celebrations of this momentous event.

NB. If any Natural History Institution not mentioned above would like to mount a display or exhibition in 2007, please let me know. We propose to provide a laminated poster as a 'nucleus' for any such display around which relevant material held by the different institutions can be focused. In addition any comments or offers of help on any of the proposals listed above would be greatly welcomed.

New Ma At The NHM **- Melissa Gunter**

The conservation of Natural History Collections is a new and developing field. In the last 20 years, the increasing awareness of the limited life of these collections has drawn a great deal of attention to the care of natural history specimens. Environmental monitoring, pest management and the ethics surrounding restoration are all important topics that are now constantly considered in storage and display in the museum environment. It only makes sense, as these issues will continue to grow with the collections, that formal training at a graduate level should be offered in the conservation of these collections.

My name is Melissa Gunter and I am currently pursuing a Masters degree in the Conservation of Natural History Collections with the Royal College of Art (RCA) on the joint RCA/Victoria & Albert Museum Conservation Programme. I graduated from the University of Texas at Austin in 2001 with a BA in Geological Sciences and soon realized that I would need an advanced degree to work in a museum. Fortunately, around the time I decided to commit to an MA, the RCA/V&A programme was offering a degree in conservation working directly with the Natural History Museum (NHM) in London. I began my studies in September 2003 and hope to finish my degree in July 2005. This is the first time this course has been offered at the RCA and is currently the only MA programme of its kind in the world.

The design of the RCA/V&A conservation program allows students 2 days a week for lectures, seminars and other elements of the taught curriculum and 3 days a week for practice-based studio/laboratory work in a capacity somewhere between student and a member of staff (for more information on this course, see Lindsay, this issue). Students are taught conservation science and encouraged to discuss ethics while also learning about conservation on a wide variety of materials during the two-day lecture periods. Laboratory time is spent in the student's designated studio working on projects assigned by their supervisor. Unlike other MA students on the RCA/V&A course, who have one supervisor, I am supervised by many of the Museum's staff, as well as having Chris Collins, Head of the Palaeontology Conservation Unit, as my nominal supervisor. I have worked in six different areas during my laboratory time including Botany, Mineralogy, Entomology, Zoology, Palaeontology, and Library & Information Services (LIS). As with all things that are new, the direction of this program is still being developed, but the results of this project so far have yielded positive feedback from curators and museum staff. My experiences have been wonderful with opportunities to see and work with amazing materials and staff and I am often told that when I finish, I will be the only one who knows the whole of the museum!

My work on the collections at the NHM involves the completion of small projects that are pre-selected for me with my consent. These projects, although specific to the department in which I am working, may cover a variety of topics that I can relate to other departments as well. For example, when I worked with the paper conservator in LIS and the Botany curator, my job involved the conservation of a Hans Sloane bound book of botany specimens. Not only did I learn the practical work of cleaning and repairing paper, but I also learned how to work with and around delicate specimens and how to approach a situation involving a variety of factors to be considered before starting the actual work. My next project involves the creation of a survey and the development of a manual illustrating a variety of problems found in the zoological collections. Again, this project offers a valuable tool that can be used in all of the departments and an opportunity to practice developing the system myself.

I hope to use all of my experiences while working at the NHM to build a solid understanding of conservation in natural history collections and to use this information to develop new ideas and techniques for museums. Although each department works with individual specimens, I have found that they do often share common materials and a widespread need to maintain their collections. I hope the introduction of this degree will encourage others to study the conservation of natural history collections and emphasize the importance of maintaining these collections for future generations.

CONVERGENCE – A FACTSHEET

- Carole Milner, Chair NCCR

National Council for Conservation-Restoration (NCCR)

The National Council for Conservation-Restoration is made up of 12 bodies, together representing approximately 4000 individual members. More information on NCCR, its member bodies and Convergence can be found on NCCR's website at www.nccr.org.uk.

March 2002: a new shared purpose

In March 2002, the member bodies agreed unanimously “to explore the possibility of dissolving all existing structures and creating a new single body representing the whole of the conservation profession”. It was agreed that, above all sectoral or factional interests, the ultimate rationale for doing this must be *the good of the cultural heritage*, also that:

- the new body will be a wholly new body, not a re-vamped version of NCCR, UKIC or any other pre-existing body;
- it will be inclusive, seeking to unite both the conservation profession and the wider community of conservation-related managers, technicians, volunteers, craftspeople, scientists etc;
- it will seek to be independent, forward-looking, flexible and cost-effective, providing efficient services to its members and to the public and promoting conservation at all levels;

Convergence process

The process of moving towards a single unified body has been called *convergence*. Since March 2002, NCCR has met regularly to pursue this aim and to undertake other activities aiming to draw its members closer together and build on previous achievements such as the PACR (accreditation) scheme and the Conservation Register. The member organisations have been supported by activists, external advisers and independent consultants. Resources have come from individuals' own time, NCCR membership fees and additional voluntary contributions from several of the member organisations. External funding has been received from English Heritage (EH) and the Anna Plowden Trust. Councils, committees, members and stakeholders have been informed and consulted; websites have carried information; articles, features and correspondence, both for and against convergence, have appeared regularly in the professional journals and newsletters and in other publications such as the Museums Journal and the National Preservation Office Journal.

Convergence status of individual NCCR organisations

In terms of their involvement with convergence, NCCR member organisations fall into the following groups:

- The Vanguard group: the five organisations (UKIC, IPC, SSCR, CCF, PhMCG) that declared themselves willing to make convergence a priority and to lead the moves towards a new single body. Together, these five constitute over two-thirds of NCCR's total individual membership.
- Ireland: two groups, IPCRA and ICHAWI, cover both Northern Ireland and the Republic of Ireland. They therefore cannot formally converge but support convergence and want to remain closely involved with the process.
- The “Hybrids”: three of the groups (SoA, BHI and NatSCA) are organisations with mixed memberships and a majority of non-conservation professionals. As such, convergence has never been directly applicable to them. However, in view of our overlapping membership and shared interests, special reciprocal arrangements are currently being explored. It is likely that many of their conservation members will belong to both organisations.
- Trade Associations: two organisations, BAFRA and BAPCR, could have joined the Vanguard group but so far have opted, as organisations, not to do so. Many of their individual members already belong to Vanguard bodies.
- The Institute of Conservation Science has been invited to join NCCR, to participate in meetings and to join the Vanguard group. A vote to join the NCCR convergence process is imminent.

The Convergence Consultation and Feedback

In September 2003 *BlueSpark Consulting*, in the person of Mike Caudrey, was appointed through competition to put together formal proposals for a new structure, in consultation with the member organisations. In

January 2004, 4250 free printed copies of the Consultation Document and Feedback Questionnaire were circulated by NCCR organisations to their individual members, with the exception of BAFRA, NatSCA and the Irish organisations who opted not to do so.

Over 445 questionnaires were returned, representing 619 individual members (not including in this count overseas and institutional members). 175 people sent in additional comments and 6 collective responses were received. In comparative terms, this represents overall a very healthy 19% response rate. The number of respondents with multiple memberships came to 180. These people are currently paying between two and six separate membership fees.

86% of respondents agreed with all the recommendations made. Significantly, 85% said they were prepared to pay the membership fees proposed, so putting the Business Plan onto a more solid footing. A number of considered questions and real concerns were raised. These provide the grit to form the pearl and are being actively addressed. A comprehensive Feedback report and 3-page summary was posted on NCCR and other members' websites in May 2004.

Regional and national agendas

Alongside other work on convergence, 11 roadshows, organised by Caroline Saye and Susan Bradshaw, have taken place at venues across the UK and Ireland, encouraging debate and informing conservation professionals and other stakeholders about progress on accreditation, the Conservation Register and convergence. In parallel with this, information has been gathered on the major changes and initiatives currently taking place in each nation and region and impacting on conservation and conservation policies there. These papers form profiles to be used in supporting regional and national conservation networks and their involvement with relevant partners and agencies.

Inclusivity

A consultation has been carried out by Dr. Stan Lester to explore the needs of the wider conservation community of volunteers, assistants, technicians, managers, scientists and advisers in terms of their recognition and status within the new conservation body. The conclusions from this study are being integrated into the planning for the new organisation.

Current activity

- The final version of the Business Plan is nearing completion and indicates a financially robust organisation, with adequate reserve levels and operating surpluses.
- More detailed work has been done on issues to do with the financial and operational autonomy of the specialist and other groups, the continuation of much valued publications, events and core services. This discussion is now being opened up very broadly to a mixed group of individual members who have come forward from across NCCR.
- Plans are being made for a Membership Forum for the new Institute. This will ensure that information and learning can be shared and that members' voices are heard effectively at all levels throughout the new organisation.
- A short Prospectus for the new body is being prepared, describing in straightforward terms what the new organisation will mean in practice from an individual member's point-of-view: what will change, what will not, how things will work. This will be published and disseminated in advance of the votes and in order to inform them.
- Discussions are underway to work out the new body's future relationship with the "Hybrids" and the Irish groups, as well as with external sister organisations such as the Museums Association.
- Work is nearing completion on the specifications for the new membership database and website. These will provide both an interactive means of communication for all members across the world and a source of workforce information and statistics to underpin research and development. This work is being carried out by Dr. Stan Lester, with support from EH, BlueSpark Consulting and Susan Hughes and advice from a range of stakeholders.
- It has been agreed that the new organisation will need a start-up phase of 12-24 months. This will provide the necessary transition period for the new systems and structures to be tested, evaluated, amended and strengthened.

Setting up the new organisation

Steps are being taken to ensure that the new organisation can be set up as a registered charity (a charitable

company limited by guarantee) and that NCCR can be wound down, as agreed at its 2004 AGM.

Name

On the basis of the Feedback, and in deference to both our charitable aims and our membership, we have agreed provisionally that the new body should be called simply **The Institute of Conservation**, with a strapline that highlights the inclusive nature of the organisation.

Voting for the new organisation

The Vanguard members will all hold their votes in the same week: 27th September 2004 PhMCG; 28th UKIC, 29th SSCR, 30th IPC, 1st October CCF.

A strong majority vote will give the new Institute the endorsement, support and critical mass necessary for it to become the efficient, effective organisation we all wish it to be.

Note:

The whole Convergence document, of which this is a précis, is available to anyone who is interested in seeing it.

- VN - ed.

CONSERVATION NEWS
Notices, Adverts & Meetings

Courses:

New Undergraduate Course at the University of Newcastle

The university of Newcastle, Australia is very proud and excited to announce a new and unique undergraduate program: Bachelor of Illustration (Natural History)

Currently the University of Newcastle offers the only courses in Wildlife Illustration in Australia. Students study a comprehensive variety of subject matter, and divide their time between studio and field studies. This program includes traditional hands-on illustration techniques such as drawing, watercolour and airbrush as well as the application of digital media and photography.

Natural history Illustration has been designed as a bridge between art and science. It contains both conceptual and commercial applications, visually documenting the natural world. There is a wide range of electives available within and outside the Faculty of Science and IT so that students can choose an individual pathway.

The University of Newcastle enjoys hosting a large number of international students wishing to experience Australia’s unique environment and diverse culture. The University offers students the perfect combination of lifestyle and learning and is highly regarded as one of the leading research universities in Australia.

For more details contact:
 Christine Sanders
 Senior Lecturer—Natural History Illustration
 The University of Newcastle
 Email: Christine.Sanders@newcastle.edu.au

Meetings:

ICOM General Conference 2004 (2-8 October 2004), Seoul
“Museums and Intangible Heritage”

The conference theme, “Museums and Intangible Heritage”, will be treated from many different points of view, both in plenary sessions and in International Committee debate. Museologists across the world have so far paid great attention to collecting, preserving, researching, exhibiting and exchanging tangible objects, cultural and natural alike. This establishes museums as places of research, community development, heritage interpretation and public education.

However, culture manifests itself not only in tangible forms but also through intangible ones. These are transmitted from generation to generation by means of language, music, theatre, attitudes, gestures, practices, customs and a whole range of other forms of mediation. Intangible heritage includes voices, values, traditions, languages, oral history, folk life, creativity, adaptability and indeed all that is distinctive of a people. This distinctiveness is popularly perceived through cuisine, clothing, forms of shelter, traditional skills and technologies, religious ceremonies, manners, customs, performing arts, story-telling and so forth.

Registration Fees

Delegate US \$380, Accompanying Person US \$170

The registration fee includes all the sessions and cultural programmes (excluding excursions and pre- and post-Conference tours)

Information and Contact :

www.icom2004.org

Email office@icomkorea.org

Yun Shun Susie Chung, PhD

Southwestern USA Contact Representative

ICOM Korea Organizing Committee 2004

Email: yun-shun.chung@ttu.edu

You can also contact the Korean Tourist Information Center to request for maps, brochures, and pamphlets on Korea: kntotic@mail.knto.or.kr

Calls for papers:

ICOM-CC 14th Triennial Meeting
The Hague, The Netherlands, September 10-16, 2005

In preparation for the upcoming ICOM-CC 14th Triennial Meeting, ICOM-CC is now calling for papers and posters. We shall continue to publish the Preprints in the usual two-volume format of approximately 150 papers and on CD.

The objective of the Triennial Meeting is to present an overview of the current state of conservation research and practice through reports by ICOM-CC Working Groups. Special attention will be given to problems and progress in conservation in the region hosting the meeting. The papers and posters will be selected based on quality, originality, importance and relevance.

The abstracts will be reviewed according to the following criteria:

- Relevance to the Working Group's aim and triennial program
- Increasing Knowledge Base of Specialization
- Usefulness for the field
- Relevance to the Plenary Session Theme "Our Cultural Past - Your Future"
- Demonstrating Collaboration between Disciplines

Full papers must reach the Working Group Coordinators by November 8, 2004.

Final selection of the papers will be made by the Editorial Committee based on the rankings of the Coordinators and Peer Review Committee in March 2005 and authors will be notified immediately afterward. Submission of a full paper does not guarantee acceptance. In the event of space limitations, ICOM members are given priority in the final selection of papers of equal quality.

Museum & Society: An Independent Journal

The editors invite contributions from academics, practitioners and others whose research interests touch the museum or are connected with museum related topics. Both new and established researchers are welcome. Areas of interest include:

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|---|-----------------------------------|
| • Museums in society | • Access provision and practice |
| • Museum practice, funding and management | • Museums and education |
| • Conservation | • Politics and display |
| • Collecting and collections | • Heritage studies |
| • Museums, identity and difference | • History of museums/collections |
| • Museums and social inclusion | • Government policy and museums |
| • Audience research | • Reviews of temporary exhibition |

museum and society is an interdisciplinary e-journal which is devoted to the study of museums. It caters for museum practitioners, university researchers and for others whose professional work leads them to engage with the subject of the museum. The journal which is owned by Leicester University makes contemporary museum research freely available on-line. Since launch in 2003 we have grown to nearly 600 subscribers and we expect further expansion in 2004. We assign copyright to our authors.

For further information on matters to do with submission please e-mail Gordon Fyfe at
g.j.fyfe@appsoc.keele.ac.uk

Calls for nominations:

Call for Nominations – SPNHC

The Election Committee of the Society for the Preservation of Natural History Collections announces that nominations for the 2005 election will be received by the Chair from now until 31 October 2004.

Members participating in this election will be selecting two Members-at-Large to take office in June 2005. The Members-at-Large serve three year terms on Council and will work closely with both other Council members and the Committee Chairs to continue the implementation of “Five Year Goals and Objectives”. The two Members-At-Large whose terms end this year can also be nominated to serve an additional term.

I encourage all Active and Honorary members to think about their colleagues who are active in SPNHC and propose them for nomination. Our society depends on both the dedication of our Council members and the involvement of our membership in choosing people who will serve the Society.

To submit a nomination or for more information on the election process please contact the committee chair, Richard K. Rabeler, via:
email: rabeler@umich.edu

General:

SYNTHESYS - The World's Largest Network of Natural History Institutions

A consortium of Europe’s most prestigious natural history institutions, including museums and botanical gardens, has joined together to form SYNTHESYS - the world’s largest natural history network.

The project, led by the Natural History Museum, will bring together an immense resource for scientific research, consisting of collections, institute facilities and expertise, together with integrated information about the natural world.

20 institutions in 11 European countries will create a unique resource of zoological, botanical, entomological, geological and palaeontological specimens.

The successful project bid has been awarded £8.6 million (13 million euro) from the Infrastructure Programme of the Sixth Framework Programme. The project competed for funding against 58 project proposals to become one of only 14 successful bids. £6.3 million (9.5 million euro) of the overall bid will provide fully funded visits to the 20 institutions for researchers from all the European Union’s Member and Associate States.

For further information on the project visit www.SYNTHESYS.info