Editor's note

This issue is largely devoted to collections and activities in Museums in North East England, and my thanks are due to friends and colleagues in the region for providing a mixture of provocative, factual and humorous articles within the set deadline.

Peter Davis.

Cover Illustration - Lino Cuts by David Esslemont, 209 Osborne Road, Newcastle upon Tyne.
CONTENT S

Notices 176
Requests for Information 177
Museums and Leisure C. Hill 178
Displays and Collections in a Leisure Age P. Morgan 181
The Drew Report - Comments by Biology Curators Group 186
Coral Collections from the Chagos Archipelago, Indian Ocean at Sunderland Museum. P. Davis & C. Sheppard 198
The work of Museums North Natural History Panel. H. Middleton 201
How to attract the Wombat - a tale of five days of discovery S. Turner 204
Computer controlled databank system at the Hancock Museum. S. Turner and P. Robson 209
A new bird display at the Hancock Museum. A.M. Tynan 212
Collection Survey in Canada. E.G. Hancock 214
The Alcan Blakemoor Farm Trail. J. Bainbridge 215
The role of the taxidermist. C. Stoate 219
A brief survey of the major natural history collections at the Dorman Museum, Middlesbrough. D. Cutts 220
The F.R. Woodward Collection of Freshwater bivalves. F. Woodward 225
Collections research in N.E. England. P. Davis 226
Institutions with natural sciences collections in Tyne and Wear - a brief history and list of major donors. P. Davis 232

Edited by Peter Davis. Produced by Tyne and Wear County Council.
FAUNAL REMAINS PROJECT - SOUTHAMPTON UNIVERSITY

Storage and preservation of animal bones from excavation - building up an archive of contemporary osteological material - computer documentation

Visit and Discussion: Thursday February 28th

Further details from: Stephen Flood, Secretary, Biology Curators Group, City Museum, Hatfield Road, St. Albans (Tel. 56679)

ELECTION OF COMMITTEE AND OFFICERS - 1980/81

Now is the time to be thinking about who should be running B.C.G. for the next period of office. When there is competition for a post we hold a postal ballot, so any nominations should be sent to me (approved by the nominee, and seconded) by February 4th. Not that members are exactly clamouring to take over the duties, nor am I advocating change for the sake of change, but you cannot expect the current committee to carry on some of the more time-consuming tasks indefinitely and an organisation like the B.C.G. does benefit from new ideas and approaches. So please think about who - and what - you want for B.C.G., and let us know!

Stephen Flood
St. Albans Museums
REQUESTS FOR INFORMATION

COLLECTIONS OF BIRD SKINS AND EGGS

John E. Pemberton is compiling a directory of collections of mounted specimens of birds, bird skins and eggs, for inclusion in the first edition of Birdwatcher's Year Book. Any museum with significant collections should contact Mr. Pemberton at Rostherne, Hall Close, Maids Moreton, Buckingham MK18 1RH.

WELSH PEREGRINE FALCONS AND THEIR EGGS

Graham Williams, Deputy Regional Officer at the Wales office of the RSPB is collecting data on the past distribution of the Peregrine Falcon in Wales as shown in the literature, unpublished notebooks and data from egg collections. Any museum with egg collections with Welshtaken Peregrine eggs, or with relevant field notebooks should contact Graham Williams, RSPB, 18 High Street, Newtown, Powys SY16 1AA. All information will be acknowledged and treated in strict confidence.

WATERFOWL GUTS WANTED

Recent research suggests that lead poisoning in waterfowl may be a problem in certain areas of Britain. However, there is no information on the extent or seriousness of the problem in the country as a whole. This is currently being investigated in a research project set up by RSPB, WAGBI and the Wildfowl Trust, whose main objective is to examine a large number of waterfowl guts from different parts of the country. Any museum willing to donate Waterfowl guts (including liver) from specimens are asked to contact Dr. Greg Mudge, Research Dept., The Wildfowl Trust, Slimbridge, Gloucestershire. Tel. Cambridge (Glos) 333 ext. 42.
The following papers were presented at the B.C.G. Specialist Session of the Museums Association Annual Conference, on July 11th 1979, at Portsmouth Polytechnic. The theme of Conference was 'museums in the leisure age' and session speakers were asked to discuss the problems of new displays and old collections.

The summary of the papers and subsequent discussion presented at Conference at their 'Hot News' session by Dr. John Gray of Bolton Museum was included in the September Newsletter.

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MUSEUMS AND LEISURE

'The working classes have but little time for study; their leisure hours are, and always must be, comparatively brief'

Thus General Pitt Rivers in a speech to the Society of Arts in 1891 when he expressed his views on the social importance and the role of the educational museum, a place where, in his words again, 'the visitors can instruct themselves'.

Earlier Pitt Rivers had presented 14,000 archaeological and ethnographic specimens to the University of Oxford stipulating only that they should always be displayed on the basis of evolutionary typology. Today we would balk at the idea of actually displaying 14,000 specimens yet Pitt Rivers was simply expressing the contemporary view of the role of a museum in educating the masses. While he was prepared to accept that artefacts evolve, Pitt Rivers was clearly unable to foresee the radical social changes of the 20th century; attitudes and ideas about the communications of knowledge were of necessity confined to 19th century horizons.

Now, as Roger Miles has already described the approach to exhibitions at the BM (NH), as well as the underlying philosophy, there is no need to go over the same ground again. I would like, in this brief paper, to extend some of his arguments in picking on certain aspects of the role of museums in an age of increased leisure. I would also like to say something about the respective functions of national and non-national museums in the context of displays and collections.

I suppose it is a sociological commonplace now to make the observation that we have more leisure than General Pitt Rivers could have dreamed of and that, moreover, increased leisure is seen by some as yet another
problem. Museum people certainly shouldn't see this as a problem. Surely it is going to be a challenge to reconsider our functions in the future. It will be a challenge for every museum whatever its size and resources. Let's consider the Natural History Museum. I imagine everyone here knows broadly what goes on behind the scenes. Firstly, about 80% of the Museum's financial resources are devoted to its work as a major national and international institution for taxonomic research. The total staff complement is nearly 800 of which 70 make up the Department of Public Services. This is the department concerned with all the 'public' aspects of the Museum, namely exhibitions, education and so on. The Department is responsible for the preparation of printed material supplementing the exhibitions and it also works closely with the Publications section of the Department of Central Services. Having said that it shouldn't be necessary to remind you that the five scientific departments of the museum are not remote from the public, leaving the Department of Public Services to deal with all those people who crowd in through the front door.

The five other departments deal with enquiries at all levels and are constantly receiving visitors from here and abroad. There is a further aspect that is not often appreciated. Museum specialists are often called upon to advise on the scientific content of TV programmes and exhibitions and in this sense Museum expertise and scientific authority can reach a TV audience of many millions - the 'invisible public' in Frank Greenaway's words.

There is a further point that should be emphasised as it touches upon the relationship between the scientific departments and the Department of Public Services. For each of the first three phases of our new exhibition programme a number of staff from the scientific departments were seconded for periods of up to 18 months to the Department of Public Services to work with the designers in developing exhibition themes.

To return to our visitors. Since the Hall of Human Biology opened two years ago a number of surveys have been conducted to find out who our visitors are, where they come from and what their expectations are. In particular we are also studying their reactions to the new exhibitions in order to find out how effective the various components of the displays are. We are also interested in the extent to which visitors make repeat visits. All this helps us in our thinking about the future and anyone who has visited the museum recently and struggled through the crowds will understand the reasons why we need to expand our visitor facilities on the South Kensington site. We are now awaiting the outcome of the recent public enquiry into the proposed development of the south east galleries.

As you know we have received bouquets and brickbats aimed largely at the first phase 'Human Biology' but if you look at the next two phases that have been completed you will appreciate, I hope, that 'Human
Biology' was an experiment in many senses. We are criticised for the absence of 'real' material but this absence was surely a consequence of the choice of the theme. On the other hand I think no-one could challenge the choice of 'Ecology' as an exhibition theme at the Natural History Museum, an exhibition that includes about 200 specimens. We are currently working on an exhibition dealing with man and his ancestors, a story that will depend very much on specimens and casts.

I would like briefly to say something about the objection that has been raised concerning taxonomic displays in a National museum. Now in an ideal world it would be very nice if we had the space for taxonomic displays in the public part of the museum, but separated from the thematic displays like those in the Musee des Arts et Traditions Populaires. Yet think for a moment of the space requirement for the display of all groups, for in my view it would have to be all or nothing. The collections of named organisms, the taxonomic base, the 'vocabulary' as it were of the natural sciences, it readily accessible to anyone who knocks on the door of the appropriate department. As Roger Miles has said, as far as interpretation for the layman is concerned, we are more interested today in the relationships between organisms. The new exhibitions thus seek to convey these relationships.

Even though we are undertaking large-scale thematic exhibitions we are also maintaining smaller galleries covering particular topics. Examples are the British Bird Pavilion, refurbished about five years ago, and a recently completed Gallery of Marine Invertebrates. Both of these are, in a sense legacies from the past, survivors of Owen's master-scheme for the division of the Museum's plan according to then current ideas of classification. Nevertheless even these galleries must be considered to have a finite life.

This, then, is what we are doing at South Kensington. We are able to embark on this programme because we have been provided with the resources and staff - scientists, designers, modelmakers, taxidermists and so on. Does our policy offer any guideline for smaller non-national museum with natural history collections? Can the latter ever be a scaled-down version of the national museum? How should the smaller museum divide its resources between the curatorial and display functions?

To those of you who are closer to the problems of the small museum my remarks will probably sound obvious or trite and should be taken simply as personal observations. I am also going to side-step the question of exotica represented in the collections of many small museums, whilst not, at the same time, ignoring the fact that such material can have a potent capacity to excite the curiosity of younger minds.

Museums are all different and may they always be so! Even though in broad terms we are all concerned with acquisition, documentation,
conservation and interpretation, the national museum, its scale of operations and international coverage, will always be a species distinct from all other museums. Our visitors come, literally, from everywhere. The strength of the small museum clearly lies in other directions: a sense of identification with a region or locality and, indeed, a local population. Even with minimal resources such museums should be able to portray a local ecology; it should be able to initiate all kinds of activities ranging from biological recording to Saturday morning clubs for children. I know much of this sort of thing is going on already.

Finally I would emphasise that obviously whatever the size of the museum the curatorial function must be the priority. Interpretation follows and here I would like to be mildly controversial. There is a tendency I think to equate natural history displays with taxidermy, and that there should be more taxidermists around. Yet, if you will forgive a mixed metaphor, birds and mammals are not the only pebbles on the beach. There are certainly not enough good taxidermists to satisfy demands so it seems to me that the small museum should logically make plenty of use of the services offered by the Area Services.

General Pitt Rivers, if he were around today would be very surprised at the many functions that museums have taken unto themselves, yet we may well have to take on even more functions to if we are to meet the need of more people with more time on their hands.

Chris Hill
Department of Public Services
British Museum (Natural History)

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DISPLAYS AND COLLECTIONS IN A LEISURE AGE

Any attempt to make today's talk relevant to the title of the conference must involve a brief analysis of the past, present (which I am assuming to be a leisure age) and the future. Only the recent past will be examined to relate the trends which have affected the work of curators to the attitudes and priorities they have had to adopt.

The 1920's and 30's appear to have been a fairly stagnant period in the development of the natural sciences in museums. The second world war, however, left a great deal of work, with the majority of effort after 1945 having gone into displays and the rehabilitation of museums in general. A new approach to display and the relationship of the museums with the general public developed culminating in the employment of "in-service" design teams in the larger museums or in the smaller museums the involvement of external specialist bodies. This new approach,
resulting in centralised training and new techniques, tended to eclipse into a more fundamental change i.e. the growth of "museology" as a science which has affected biologists - particularly zoologists, geologists and botanists in their academic training in recent years. This was a very great pity for the change in the 1960's and 70's from straight taxonomic training to ecology, community science and physiology brought many types of people into museums who would otherwise not have been there. These ecologists have had to deal with taxonomically orientated collections although training in Universities and Polytechnics in this field had declined over the last 15 years. However, I believe that this new intake of biologists has been beneficial for it has led to a greater awareness within museums of environmental conservation.

Another fundamental change also became apparent and that was the increasing propensity to employ graduates rather than "O" or "A" level candidates at every grade from Keeper to Museum Assistant. Consequently, in the early 1970's we find a large number of graduate ecologists within the museum profession which enabled the development of the much desired Biological Records Centres in liaison with the NCC and the Naturalists' Trusts and the subsequent biological recording or monitoring of the environment. This has led to the present situation where we have an increased number of biologists employed in museums who are ecologically rather than taxonomically trained and whose skills stand them well for displays on the environment and interpretation and in dealing with records and monitoring of the environment. These have had to go hand in hand with various new roles which have been continuously outlined in the BCG Newsletter.

In total we are now asking a biological curator to

1. Run a Biological Records Centre
2. Take an active part in administration
3. To produce display and the associated text
4. To be aware of other people's requirements from their collections
5. To maintain good links locally, nationally and internationally through extensive field work
6. To conduct basic historical research and documentation on the collections and finally to restore the collections in modern systems.

With this range of work required of an individual the amount of taxonomic work one could every be expected to undertake would be extremely limited. This is unlikely to change and necessitates a brief look at the structure of museums in this country.

The science side of a museum is considered by Central Government and other bodies to be subservient to the art side. The heterogeneity of museums in the biological sphere is reflected in the number of
staff and the range of activities that can be attempted. It is up to all concerned to find a means of co-ordinating the taxonomic work, the historical work, the records centre work and the display work through centralising the activities available in different areas.

The increasing involvement of ecologists and conservationists has meant that one has become far more aware of the value of past collections in interpreting the environment which has meant that we require even more collections to complete the picture. Although display is important our priority must be to complete the background work on collections and plan for the future development and acquisition of material. Nowadays, the majority of collections are collected by Universities and Polytechnics and those obtaining research grants, unlike previously when most were collected by museum personnel and large collectors dealing in small taxonomic areas. An examination of the holdings of Universities and Polytechnics gives rise to disquiet for one begins to realise how much information is missing and how much we could lose in the future. Collection orientated work must come first and display the spin-off. Taxidermists should have group practices thus rationalising equipment and centralising the expertise in different areas, thus reducing the amount of curatorial input, such as is happening in the British Museum (Natural History). We must direct ourselves to interpreting the environment rather than to producing large scale habitat groups. In so doing we will encourage the public to explore the environment themselves. One could also produce planned displays upon small topics to circulate the country, i.e. bats - their biology and ecology and the fact that some are endangered. It is impossible to ask a curator to design large displays continuously on an organised basis with proper display teams when there are other external bodies who could give an input other than museums, using museums as venues where material could be exhibited.

This would then allow museums to carry out what I see as their proper role i.e. the continued collection of two dimensional environmental information, but more importantly, the collection of three dimensional specimen material for use by researchers. Most museums now have a collection policy, the ethics involved in natural history being fairly well defined in laws. The EEC legislation will also impose other restrictions both on transfer and collection. However, material is being collected on a vast scale and it is this material which we have not been and are not equipped to deal with at the present moment which provides the future resources for museums in this country. Curation, storage and more importantly, documentation techniques will have to be adequately developed if we are to accept this material from Universities and other bodies. The planning and the scale of the programme must be implemented as soon as possible. If museums are to be depositories for this material in the future then there is no doubt that there must be a radical change of emphasis by the Museums Association and in the Government funding of museums. The way in which the finance is used is critical. Rather than being spent on purchase and display it must be channelled towards storage and documentation to avoid a build up of a backlog of work. I
would argue that museums in the biological sphere should no longer be seen as receivers of three dimensional material through purchase but as field collectors, actually collecting the material and data which could be useful for analysis and them help in conservation. I believe that it is crucial that museums should not be synonymised with the adage "Better dead than alive". We do wish to store dead material collected by Universities or any other body in support of research on the environment but this must go hand in hand with a knowledge by the museum of field work even to the extent of being able to commission its own. If only a small proportion of the finance available for the purchase of pictures and other objects was available to the biological sphere we could indeed plan storage, computerise quite easily and employ people to undertake the technical work. Museums have seen a growth of the social industrial field over the past few years due to the increased awareness of man's own heritage and relationship to the environment. They have exactly the same problem - it is not the purchase of material which is the problem but the conservation of the material which is more difficult in their case since they are dealing with large objects. We are not dealing with vast objects but we are dealing with vast numbers. If a collection of 20,000 insects in alcohol comes to a museum then it must be documented and conserved and any enquiries relating to the collection must be able to be answered quickly. This in the future will require a great change in the storage methods and staff. It is true to say that there is no museum in this country which at the moment has the capacity to store or collect any large amount of material affected by pollution, whether it be atmospheric or oil pollution. Modern trapping techniques and the effects of culls and pollution produce large numbers of zoological specimens at one time and we must be equipped to deal with this sort of challenge. It is no good one or two museums trying to deal with it in isolation. There must be a fundamental policy change augmented from the top. In this connection I would recommend that in the report back to the Museums Association we should ask for an inquiry into methods of funding, the operations of the natural history sections of museums, future policies be examined and determined and that some plans be made for the future in terms of staffing and of the links with NCC, Universities and other bodies.

In this sense, therefore, and in connection with the title of this talk, I would suggest that the present leisure age refers to the majority of people in this country and their use of the environment. In order for us to play a proper role in the conservation of that environment we must make certain that the background data to ensure the proper conservation is always available in the terms of two, and more importantly, three dimensional material. The present will certainly not be a leisure age for zoological and botanical curators. Our main commitment lies primarily with our collections and any display commitment should be towards small scale interpretive units or cases or to specific projects outlining endangered species thus encouraging people to explore and
conserve the environment for themselves.

P. Morgan  
Keeper of Zoology  
National Museum of Wales

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BEWARE MR. SHORTHOUSE!

FULL NAME - MERVYN P. SHORTHOUSE  
AGE - c.30  
DISTINGUISHING FEATURES - INJURY TO HANDS AND WALKS WITH A STICK  
HOBBY - EGG COLLECTING  
RECENT PLACE OF ACTIVITY - BM (NH) TRING  
RECOMMENDED ACTION - KEEP WELL AWAY FROM EGG COLLECTIONS  
NOTE- BEWARE ALIASES!

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1. The Biology Curators Group (B.C.G.) welcomes the report and hopes that the recommendations will be implemented. However, the B.C.G. does have a number of more specific comments which it is hoped the Standing Commission will find useful.

2. The B.C.G. recognises that the report covers all museums and their collections but, in so doing, the report does not recognise that there are different requirements for different subject based collections.

3. Nevertheless, the proposals for financial support are especially welcomed but the B.C.G. fears that, even if fully implemented, they will only enable a start to be made on solving the many problems facing biological collections in provincial museums. The B.C.G. notes particularly that central government grant will be available only if matched, at least to some extent, by local funds. The B.C.G. also feels that the criteria on which grants can be made available to provincial museums need to be strengthened and clarified.

4. Chapter 14 of the Report raises important issues concerning the way in which local authority museums receive central government grant aid through the Rate Support Grant. The B.C.G. would like to support the comments made in the Report and to point out that plants and animals do not conform to administrative boundaries. As a consequence most biology curators serve areas extending beyond the boundaries of their employing authority into areas of local authorities which frequently do not maintain a biological museum service.

5. The report points out that many collections are not displayed adequately, if at all. It does not indicate, however, that many collections, as in biology, should not be displayed and that other interpretative methods, e.g. publication, can be used to make them available to the public. (Para. 3.12)

6. The report stresses the importance of local authority museums being able to purchase specimens for their collections but, unlike so many museum disciplines, biology specimens are not usually acquired by purchase. Initially, all biology specimens are collected as a consequence of research and field work. Unfortunately, funds
for research and field work cannot be obtained from local authority purchase funds although most authorities do make money available through travel allowances. Similarly the purchase funds for local museums administered by the Science Museum and the Royal Scottish Museum are not available for research and field work. The B.C.G. feels it would help greatly if these funds could be used to help finance the acquisition of specimens through field work and where no purchase as such is involved. (Para. 3.13).

7. In biology many museums are now collecting and acquiring far fewer specimens than in previous years. This trend is likely to continue but in place of the more traditional specimens, or in support of them, museums are acquiring large data banks of biological records. This development is not noted in the Report and the B.C.G. would like to stress that these new two dimensional collections should be regarded in exactly the same way as the more traditional three dimensional museum specimens.

8. Furthermore, biological field work and subsequent work on the collections (both two and three dimensional) does not attract central government grant aid, yet similar work in other disciplines, notably archaeology, receives substantial aid. As the information gathered and the expertise necessary to interpret the data is analogous to the situation in archaeology and is widely used by planning departments and conservation agencies, the B.C.G. feels that there should be central government recognition of this work in the form of specific grant aid. The B.C.G. is aware of the work of the Nature Conservancy Council and the Institute of Terrestrial Ecology, but their work is essentially of a national nature whereas at a local level museum biology curators usually provide the service, including giving advice and information to the Nature Conservancy Council and the Institute of Terrestrial Ecology.

9. The report recognises that provincial museums require improved staffing but it does not highlight the need for improved scholastic standards. In particular, the curation of biological collections requires research in systematics (taxonomy and related branches of other disciplines, e.g. ecology, history of science etc) in order that the acquisition, documentation and interpretation of collections can be properly undertaken and fully appreciated by the public. The development of research programmes linked to work in national museums, universities and polytechnics is viewed by the B.C.G. as a much needed development.

10. The B.C.G. would like to point out, however, that in a recent report (Advisory Board for the Research Councils (1979) Taxonomy in Britain: Report by the Review Group on Taxonomy H.M.S.O.)
the role of provincial museums in taxonomic research is hardly mentioned, yet this is a fundamental use for which museums, especially large ones, acquire biology specimens. The B.C.G. suggests, therefore, that the function of museum biology collections should be reviewed at a high level so as to take account of the full opportunities presented by provincial museum biology collections, the expertise available in provincial museums and the research needs of the research councils, universities and polytechnics, etc.

11. The need for close links between museums is mentioned several times in the report. The B.C.G. would particularly like to stress the need for close links to be forged between: a) the national museums (including the Royal Botanic Gardens at Kew and Edinburgh) and provincial museums and b) the universities and polytechnics and their local museums. At a personal and group level these links are being strengthened but there is no financial or administrative framework within which to develop these contacts fully.

12. Many institutions and research bodies undertake extensive field collecting in connection with environmental monitoring and other research programmes, but often the specimens acquired are subsequently destroyed despite their importance as reference or voucher material. Together with collections already held by museums they could form a unique record and where they have survived they have been shown to be of considerable importance (e.g. the use of eggshell thickness in pesticide research). In this obvious area of collaboration central government recognition of the museum's role and funding where appropriate would be invaluable.

13. The proposal to form countywide museum consultative committees is particularly welcomed. These committees should provide the necessary liaison and forum for discussion on museum matters within a county but the B.C.G. stresses the importance of universities and polytechnics (not mentioned in the report), whether or not they have museum collections, taking an active part in the work of these committees. The universities will no doubt continue to be the main centres for research and it is important that local museums should be closely associated with any collection-based research so that at least the future safekeeping of the collection can be assured (see para. 12 above). Topics for research could be suggested by countywide committees but it should be noted that, at present, Area Councils would not be able to grant aid research projects under their existing rules.

14. The report stresses the importance of Area Councils in administering government grant aid and in the work of museums generally. However, they frequently do not have the academic expertise on their own staff to advise on biology collections and access
to such advice for the more scholastic needs of the collections is especially variable.

15. The problems of conservation are stressed by the report and, whilst these are recognised by the B.C.G., it is suggested that they can be best solved by first tackling the underlying academic difficulties which will then lead to a clearer definition of the technical and conservation requirements. In particular, no suggestions are made for solving the problem of collections not curated by qualified biologists. However, Area Councils should be able to give grants to staff in their area, or outside, who are suitably qualified to look at and advise on collections in the Area Council’s region and this would, to some extent, help solve the problem of uncurated collections.

16. There is also a serious shortage of both biology technicians and taxidermists. Biology technicians, though essential for the proper curation of biology collections are rarely employed and no training facilities exist whilst taxidermists are gradually declining in number. The situation is now so serious that special facilities have been made available for the training of taxidermists, but the B.C.G. would like to point out that this contributes little to solving the conservation problems of biology collections where the position is even more critical. At present technical expertise is scattered amongst various university and polytechnic biology departments and in the national museums. Very special measures are now required to solve both the training and employment problem. The Area Councils could help. They are achieving considerable success in their conservation work generally, which is particularly appreciated by the small museums. If, however, all the Area Councils employed a small staff of both biology technicians and taxidermists, it might be possible to give a basic service to all provincial museums and provide the necessary continuity of employment.

17. The B.C.G. is conscious that it has not yet been able to define fully the problems of biology in provincial museums. It can, however, indicate the following broad areas of need:-

i) improved documentation of collections
ii) improved levels and standards of staffing
   a) academically
   b) technically
iii) implementation of research projects in various fields of systematics, including ones linked to the acquisition of specimens.
iv) improved conditions for conservation, storage and study of collections.
18. The B.C.G. has organised conferences and commented on various professional matters; see for example Conference on the functions of Collections, Museums Journal, 77:129 (1977); Recommendations to the Museums Association on Environmental Conservation, Museums Journal, 77:185 (1978) and Recommendations to the Museums Association on proper curatorial care, Museums Journal, 78:80 (1978). Perhaps its greatest contribution, however, has been to the documentation of collections through its own survey of biology collections in museums (Hancock, E.G. and Morgan, P.J. (eds) in press. A survey of zoological and botanical material in museums and other institutions of Great Britain B.C.G. Cardiff) and through its encouragement of regionally based surveys of collections (see Hancock, E.G. and Pettitt, C.W. (eds) 1979. Collections and Collectors in N.W. England. Manchester Museum Computer Produced Publications). The variability of existing staffing situations in relation to the needs of different museum collections is, however, so great that a detailed survey is required before the difficulties can be defined and suggestions made for improved staffing. Similarly, the research needs of biology collections and problems of collaboration with other organisations should be defined on a wide basis and here the work of the Advisory Board for the Research Councils could be particularly useful.
PROPOSED WILD LIFE AND COUNTRYSIDE BILL

UPDATING OF THE PROTECTION OF BIRDS ACTS 1954 and 1967

On 2nd April 1979 the United Kingdom along with other member states adopted the EEC directive on the conservation of wild birds. The United Kingdom has until 1981 to implement the requirements of the directive and in this connection the Protection of Birds Acts are to be amended and updated. In Article 6 the directive requires that member states prohibit the sale, the transport for sale, the keeping for sale and the offering for sale of live or dead birds and of any readily recognisable parts or derivatives of such birds except certain species listed in annex 3 of the directive (Game birds) which are legally acquired during the closed season. Article 9 allows exceptions to be made provided that strict controls are introduced and a report on any exceptions is required to be made annually to the EEC Commission. It is proposed in the Bill to prohibit the sale of birds other than those on the excepted list except under license. Therefore, the selling of birds and of eggs will be illegal except under extreme circumstances and indeed the selling of eggs at the present moment is illegal. In the new Articles, Article 5 prohibits the taking of eggs from the wild and keeping, even if empty, Article 9 allowing exceptions provided there is strict control.

To ensure that the new Bill can function properly and be properly enforced a registration system both for bird egg collections and for skins has been envisaged. A brief history will help to put all the members of the Biology Curators Group in touch with the current situation. It is best to deal with two distinct sections as they both pose different problems.

SECTION 1 REGISTRATION OF BIRD EGG COLLECTIONS

It was suggested some time ago that the Department of the Environment and the Royal Society for the Protection of Birds along with the Advisory Committee for Bird Protection should investigate the possibility of the registration of bird egg collections. Unfortunately, this, although very much wanted by all parties, was not feasible under any existing systems. The registration of egg collections would essentially be a one-off operation, all egg collecting after the Bill becomes law being illegal. Therefore, no new collections would become eligible for registration. It was tentatively suggested, therefore, that Provincial and National Museums combined could operate under the aegis of the BCG and the Museums Association a registration system and then the centralisation of documentation. This would be isolated from the enforcement aspect of the new Act which
would be under separate panels of a Government Statutory body appointed by the DoE. The major stumbling block to the entire system was however the initial registration. In late October the BCG (Peter Morgan) was approached to suggest how such a system could be operated and how many museums should be involved. Initial discussions with individual committee members and other museum curators and especially Colin Harrison of the BM (NH), Tring who specifically curates eggs and is on the Advisory Committee for the Protection of Birds resulted in a total of eight museums initially being selected. A meeting was then held with the DoE and the detailed discussion undertaken on how the system would operate. For convenience, one museum in each Area Museum Service has been selected where there is a Keeper of Natural History of a Curator of Zoology. The eight museums listed below would act as regional centres.

1. **SCOTLAND**
   Department of Zoology, Royal Scottish Museum, Edinburgh

2. **WALES**
   Department of Zoology, National Museum of Wales, Cardiff

3. **NORTH OF ENGLAND**
   Department of Natural Sciences, Sunderland Museum and Art Gallery, Tyne and Wear

4. **YORKSHIRE AND HUMBERSIDE**
   Department of Biology, Yorkshire Museum, York

5. **NORTH WEST ENGLAND**
   Department of Zoology, Manchester Museum, Manchester

6. **MIDLANDS**
   Department of Natural Sciences, Leicestershire Museums, Art Galleries and Records Service, Leicester

7. **SOUTH EAST ENGLAND**
   Sub-Department of Ornithology, British Museum (Natural History) Tring

8. **SOUTH WEST ENGLAND**
   Department of Natural History, Royal Albert Memorial Museum, Exeter

The Keepers would be required to pass the information or copies of it to the BM (NH) at Tring. The system of registration as proposed would be voluntary, although in practice it will be virtually mandatory.
Under a voluntary system, museums themselves would not have a time limit imposed upon them in which to register their collections or data associated with them.

If museums had not become involved in this registration system it is almost certain that museums would have had to document their collections anyway in order to prove that no recently taken material was present. It is most important to realise that the registration system fundamentally alters the aspect of enforcement of the new Act. The biggest barrier to the enforcement of '54 and '67 Acts has been that material had to be proved to be taken recently i.e. within the last breeding season, prosecution therefore being limited in terms of possession but not for sale to within six months effectively of the last breeding season. With a registration system, all be it voluntary, the words "recently taken" would disappear from the new Act and any egg collected after the date when the Bill becomes law would then be deemed to be held illegally. Therefore, no collecting of any eggs apart from those of game birds etc allowed could be collected after the new Act became law. Thus if an egg had been collected in May 1981 prosecution would normally have taken place by February or March of the following year i.e. a recently taken protected bird. Under the new Act with the new registration system a person can be prosecuted ten years later for having in his possession an egg taken after the date of the new Bill. This important link with conservation of our environment is one of the major reasons why museums should undertake this rather small task in order to ensure effective enforcement of the new law. Although voluntary, it would obviously be in anybody's interest to register egg collections, but it is realised that common sense in enforcement is needed where people have egg collections in their attic etc. It is also realised that museums are liable to receive a large number of small collections throughout the country after this Bill becomes law.

There is still room for discussion, however, as several points are being discussed i.e. should aspects of the registration of egg collections be compulsory. If the scheduling of Schedule 1 Birds is made compulsory then all major egg collections will be registered. Under a voluntary system some of these may not be registered. It is proposed that an amnesty will ensue on those eggs collected illegally under the '54 and '67 Acts up until the time that the new Bill becomes law. The registration and the involvement of museums will ensure that the new Act works well. The process of registration is envisaged as follows in two stages:-

1. There would be initial registration of a collection and this would include detail of each species held, the number of clutches held for each species and possibly the day, month and year of each clutch collected. The form would be produced based on Voous's list of...

193
Holarctic Birds with which the Euring code numbers would facilitate easy computerisation of data. This list will be available during the next two weeks.

2. Full details of every single clutch to be forwarded which will include the collector's name, the mark number for identification and other information normally associated with specific clutches.

This double form of registration should ensure that the majority of egg collections in Great Britain would have detailed information centralised and then could be used for correlating distribution patterns and effects due to environmental change in very much the same way as the current data in Biological Records Centres are used for interpretation. The benefits to be gained from this voluntary registration system are immense and the involvement of museums is most important. Due to the time limits imposed upon us discussion has been restricted to the Committee and others, but consultation has been maintained with the MA including a meeting with the Director, John Sheriff and contact has also been maintained with Patrick Boylan who produced the initial document for the MA. It is hoped that a member of the DoE will be at the MA Council meeting to discuss various aspects of this registration scheme.

The suggestions so far are for discussion and indeed are not final. There is therefore leeway for amendments. The question of voluntary versus compulsory registration and to what degree is obviously going to crop up at some stage either before the Bill is finalised or at the amendment stage when it reaches Parliament, but it would be useful if Museum Curators and indeed Directors could assess the influence of the three systems.

1. An entirely voluntary registration with no time limit upon registration. In essence it would seem odd if somebody possessing an egg collection had not initially registered it within three years of the Act becoming law.

2. A system which is voluntary but requires compulsory registration of all those species on Schedule 1.

3. The compulsory registration of all eggs in egg collections.

With either 2 or 3 the time limit of six months could possibly be extended to a year. Therefore, museums and all bodies would have to register the Schedule 1 or their entire egg collections in that period of time. There would be a possibility, however, and it must be considered that if the system became compulsory, museums with large collections could be exempted from the time limit imposed. The BCG does have information on egg collections held from the study of the Standing Commission undertaken two years ago. However, if
museums wish to send me the number of clutches in their egg collections now it will give me a far better idea when discussing with everybody else and Committee members the whole situation. The major barrier to compulsory registration is one of finance. The DoE and the financial restrictions imposed for the operation of this Act means that not a great deal of money would be available if it were compulsory and therefore a voluntary system is preferred from that angle, but if it became compulsory some form of funding would have to be found in order to operate the registration system. In this connection the one-off registration of egg collections would be similar to the next section.

SECTION 2 THE REGISTRATION OF BIRD SPECIMENS

The sale of skins, mounted birds and feathers contains more problems as licences are issued on a continuing basis either to individuals to operate a practice or to dealers to sell individual specimens. Under the new Act, if dealers wish to continue selling birds once the proposals are enacted some form of registration with or licensing by the DoE will be required. This has now been made possible following discussions between the Guild of Taxidermists and DoE. It is envisaged that a registration system be operated by the GoT or a body specifically set up for the purpose although the register will be held by the DoE and the regulations will have a statutory force. Anyone wishing to sell protected birds will be affected by this requirement and the details of the system will be worked out to keep bureaucracy to a minimum consistent with the requirements of the directive. In the discussions between the GoT and the DoE several points have emerged. The registered dealer must keep detailed records about bird specimens which have come into his possession i.e. who gave them to him and when, what the birds were and the history. Each bird should be clearly marked or ringed so that the above details could easily be obtainable from the dealer's record book. In essence, this means that each bird must be traceable individually so that there is no chance of individual specimens of the same species being exchanged. A dealer's records should be sufficiently detailed to satisfy a court that the birds found in his possession were legally obtained. These records should safeguard a dealer from accusation of complicity in breaking the law if he had been led to believe that a bird had been legally obtained from the seller/donor when it had not. A registered dealer will be required to take on registration to allow access to his premises at any reasonable time so that an inspector authorised by the DoE can compare his records with his stock. Finally, a registered dealer will have to present to the DoE through the registrar details of the number of species of birds he has sold. Initially as all birds will be either marked or ringed this will be done when requests were made for marks or rings only to be obtained from the registrar. Requests for further issues of marks or rings would not be met unless the
records were supplied.

The above information relates primarily to commercial taxidermists who are selling material but there are two other parameters which need to be considered which as far as I am aware have not been considered in enough detail so far. In its present format the Act is concerned primarily with birds mounted for display and those that are therefore sold. However, if the actual terms which are drafted come into force it means that as at present museums will have to keep a very careful register of all material that comes into deep freeze and what subsequently happens to it, which includes individually marking each bird so that there is no chance of it being transferred, just in case in the future it was decided to sell a specimen. This will be applicable to all museums and most museums at the moment comply with the registration of material coming into deep freeze, but it is more complicated with relation to the Area Services where material is effectively sold for display. Here, material would have to follow exactly the same registration under the GoT as does that of commercial firms. It is suggested that the paper work be as simple as possible and the Act is attempting to prevent the sale of protected birds. The problem is that most museums including a very large number without taxidermists will have to register themselves and have to be inspected at the present moment under the GoT. As far as I am aware discussions have not taken place with the MA as an overall body controlling the work. It is intended now that discussions between the BCG, the GoT, the MA and the DoE take place to resolve some of the problems of working and enforcing the Act. The idea behind the control of commercial taxidermists is fine, but unfortunately it does mean that museums have to change their practices. Curators control fresh material coming into museums and ultimately what happens to it apart possibly from the Area Service and museums with a large Conservation/Taxidermy studio.

The registration procedure here is statutory and will be financed by the DoE with the central registrar kept there. Under this registration system it will be incumbent upon museums to prove that material which they now hold was not illegally taken after this law comes into force. This includes all material which finally ends up either as osteological material or skins. The actual sale of recently prepared material throughout Britain is therefore relatively small compared with the number of specimens coming into museums either through oil pollution incidents, natural disasters, culls or as road casualties. The Committee would be grateful for the views of curators on this issue to discuss with the GoT and of any thoughts as to who should be directly in charge of registration and/or enforcement and the role of the MA in this particular field. This area so far has not been discussed by the Committee of the BCG, but will be shortly before the final draft of the Bill appears at the end of next January. It is
suggested that certain problems may arise whereby curators in museums have to refer to the GoT in order to have the procedure and enforcement of the new law vetted. It might be possible to have another system whereby registrars are indeed departments of natural history in twenty museums say around the country being paid for by the DoE, but where the enforcement panel is controlled by the GoT. It is important to look at the stability of different areas when one is dealing with legislation and its control. One needs a stable situation and one could contend that the MA and departments of natural history throughout museums are more stable than the position of taxidermists. It is, therefore, suggested that the actual registrar should be under the control of curators who at the present moment control material coming into museums and that taxidermists should primarily be the enforcing agency that decides on whether a recently mounted specimen in a commercial taxidermists is recent or old. These problems which are not small have to be resolved both with the Association to which the BCG and the GoT are linked and the BM (NH) and the DoE before the beginning of January. Once this Bill is implemented, amendments can be put forward, but it would be best if the museum world were clear as to its own attitude before the Bill is finally drafted.

Individual contact has already been made with the BCG and the GoT, but it will probably mean a joint meeting to resolve some of these aspects. I believe personally that it must be made clear who controls material coming into museums. Many other curators and certainly taxidermists will agree with me and the Committee will be grateful for anyone's comments.

This paper is intended as a discussion document only and I would be grateful for comments as quickly as possible so that papers can be formulated for the Committee.

Peter J. Morgan  
Keeper of Zoology  
National Museum of Wales  
Cardiff
CORAL COLLECTIONS FROM THE CHAGOS ARCHIPELAGO, INDIAN OCEAN, AT SUNDERLAND MUSEUM

During 1977 the attention of the Natural Sciences section of Tyne and Wear Museums was drawn to the extensive invertebrate collections from the Chagos Archipelago stored at Durham University. These had been formed as a result of Joint Services Expeditions to Chagos in 1972 (Egmont Atoll) and 1975 (to Danger Island and others along the western rim of the Chagos Bank), all collections being carried out by SCUBA divers under the scientific leadership of Dr. David Bellamy. The coral collections, which were most extensive (some 4000 specimens) had been initially researched by Dinesen (1977) following the Danger Island expedition (see Baldwin AE (1975)), but had remained largely otherwise unworked. It became apparent on subsequent examination of the collections that their full potential had not been realised - much more work was required on the identification and taxonomy of the collection, and the data associated with each specimen (exact location, depth etc) provided a valuable contribution to the distribution and ecology of corals. Only a small number of specimens were of display quality, the majority being hand samples collected at specific points along a line transect.

Obviously the scientific value of the collection was unquestionable, but it was debatable that its proper place was in a local museum. However, Durham had been the recognised centre for research on Chagos, and a further expedition, of a years duration, was then being planned from the University. Because of this strong link, and the fact that reorganisation of the basement area at Sunderland could allow for storage of such a large collection, an approach was made to David Bellamy regarding the collection's future, and the possibility of its donation to Tyne and Wear Museums. Only a little persuasion was necessary (a large part of the collection being housed in the Bellamy garage), and the collection was formally handed over at the opening of the Local Wildlife Gallery in Sunderland Museum in December 1977. (Davis 1978).

It was fortunate that the arrival of the collection coincided with the approval of a Manpower Services Commission Scheme devoted to the cataloguing of museum objects. Charles Sheppard, a member of the 1975 expedition, was employed on this scheme to carry out sorting, identification and documentation of the coral collections, whilst also being encouraged to carry out the organisation of the next Chagos Expedition, planned to begin November 1978, from the Museum.

Specimens were cleaned, transferred to individual polythene bags, and following identification placed in robust plastic stacking trays,
one genus per tray. These were stacked on open Dexion racking. Following this initial sorting, work began on the tedious but necessary task of numbering the individual specimens and entering the information associated with them onto MDA cards - this work is still, inevitably, continuing. The benefits of this task (often difficult to see when confronted by yet another tray of corals) will become apparent when the information can be manipulated by computer. One major problem being faced is the storage of the large 'display' specimens which inevitably have to be separated from the genera trays, making the location of all specimens of a particular genus extremely time consuming. To overcome this problem (and that of gaining access to specimens in the bottom tray of a stack) units with adjustable shelving have been designed to allow storage of all specimens in taxonomic order, and installation of these into the basement will begin in 1980. The arrival of coral specimens from the 1978/79 Expedition has now consumed all remaining basement space, so the installation of the new units is even more desirable.

Because of its central position the Chagos group is very important biogeographically but before the present work was carried out on the Expedition collections the coral fauna appeared to be a little anomalous. Due partly to previously incomplete sampling the increase in generic diversity that existed southwards along the Lacadive-Maldive ridge suddenly appeared to reverse with Chagos being lower than the Southern Maldive. Charles Sheppard has now identified the Scleractiniangenera, showing that Chagos is in fact currently the most diverse of all sites in the Lacadive-Chagos chain. Following the recent expedition to the Northern atolls it is also, with present knowledge, the most diverse site generically of the Indian Ocean.

The following genera and sub-genera are now recognised in the collection:-

<table>
<thead>
<tr>
<th>Psammocora</th>
<th>Leptoseris</th>
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<tr>
<td>Stylocoeniella</td>
<td>Pachyseris</td>
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<tr>
<td>Stylophora</td>
<td>Gardineroseris</td>
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<tr>
<td>Seriatopora</td>
<td>Agariciella (Wells M.S.)</td>
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<tr>
<td>Pocillopora</td>
<td>Goniopora</td>
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<tr>
<td>Madracis</td>
<td>Porites (Porites)</td>
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<tr>
<td>Acropora</td>
<td>P. (Synaraea)</td>
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<td>Astreopora</td>
<td>Alveopora</td>
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<tr>
<td>Montipora</td>
<td>Cycloseris</td>
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<tr>
<td>Coscinaraea</td>
<td>Diaseris</td>
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<td>Pavona (Pavona)</td>
<td>Fungia (Pleuroctis)</td>
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<td>P. (Polyastra)</td>
<td>F. (Verrillofungia)</td>
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<td>P. (Pseudocolumnastraea)</td>
<td>F. (Danafungia)</td>
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<td>Fungia (Fungia)</td>
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<td>Herpolitha</td>
<td>Oulophyllia</td>
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<td>Halomitra</td>
<td>Goniastrea</td>
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<tr>
<td>Herpetoglossa</td>
<td>Platygyra</td>
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<td>Polyphyllia</td>
<td>Leptoria</td>
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<td>Podabacia</td>
<td>Hydnophora</td>
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<tr>
<td>Fungiacyathus</td>
<td>Diploastrea</td>
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<td>Madrepora</td>
<td>Montastrea</td>
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<td>Galaxea</td>
<td>Leptastrea</td>
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<td>Culicia</td>
<td>Cyphastrea</td>
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<td>Oulangia</td>
<td>Echinopora</td>
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<td>Echinophyllia</td>
<td>Merulina</td>
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<td>Physophyllia</td>
<td>Caryophyllia (Caryophyllia)</td>
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<tr>
<td>Oxypora</td>
<td>Paracyathus</td>
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<td>Mycedium</td>
<td>Polycyathus</td>
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<td>Pectinia</td>
<td>Desmophyllum</td>
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<td>Blastomussa (Blastomussa)</td>
<td>Stephanocyathus</td>
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<tr>
<td>B. (Ceriomorpha)</td>
<td>Euphyllia (Euphyllia) (Veron et al MS)</td>
</tr>
<tr>
<td>Scolymia</td>
<td>E. (Fimbriaphyllia)</td>
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<tr>
<td>Acanthastrea</td>
<td>Plerogyra</td>
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<tr>
<td>Lobophyllia (Lobophyllia)</td>
<td>Physogyra</td>
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<tr>
<td>Symphyllia</td>
<td>Balanophyllia</td>
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<tr>
<td>Ctenella</td>
<td>Denrophyllia</td>
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<tr>
<td>Caulastrea</td>
<td>Tubastraea</td>
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<tr>
<td>Pleisiastrea</td>
<td>Turbininaria</td>
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<td>Favia</td>
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The realisation of the importance of the collections lead to the decision to produce an illustrated booklet (Corals of Chagos) which would serve as a generic guide to any curator with a collection of Indian Ocean Corals. Although this would include chapters on corals in general, and the history of scientific discovery on the Archipelago, the bulk of the publication would be short descriptions of each genus, with accompanying photographs. Charles Sheppard completed the manuscript before leaving for the Indian Ocean, and all the plates have been produced. Unfortunately the booklet has been yet another victim of the cuts in expenditure, and although other means of finance are being sought, its fate remains uncertain.

Peter Davis and Charles Sheppard
Sunderland Museum

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Museums Journal V. 78 No. 2 pp70-72.


THE WORK OF THE MUSEUMS NORTH NATURAL HISTORY PANEL

Most B. C. G. members will be familiar with the various panels which provide, on a voluntary basis, specialist advice to the various Area Museum Services, and many will probably be members of their own area Natural History panel. This panel "System" dates from the formative days of the Area Services, back in the early 1960's.

In North East England one of the driving forces behind the establishment of the North of England Museum Service was Museums North, the Northern Federation of Museums and Art Galleries. The Federation carried out a survey amongst museums in the region to discover what they would like to see provided by an area service, and it was instrumental in getting Durham County Council to convene a meeting of all interested local authorities, to which the Federation's findings were reported. One of the recommendations of the report was that a number of advisory panels (with membership drawn from specialists working in the region's museums) should be set up. An important feature of this system, which was accepted, was that the panel chairmen would be full voting members of the Area Council.

A number of technical officers were appointed to the new service. They were all hosted by various member museums, the Natural History Officer, Beverley Christopher, being based at the Hancock Museum at Newcastle upon Tyne. The job of the panels in those days was, broadly speaking, to help the officers to determine their priorities of work.

The North of England Area Museum Service did not, however, become established on a really firm basis until 1974, at a time when Local Government re-organisation had brought about a number of major changes in museum organisation in the North-East, particularly in the Tyne and Wear and Teesside areas.
Whilst some area natural history panels play a more passive role, giving advice and providing information for their area services only when asked, the members of the Museums North panel felt that it should take on a more active role, the major objective being to improve the status of natural history collections and recording in the region, by providing a platform for the exchange of information and ideas, and a pool of resources and expertise. It was thought that as fair a balance as possible should be achieved between the care and research of collections, biological recording, and the involvement of members of the public with the wildlife of the region and the work of the museum natural historian. In effect the Panel was taking upon itself the mantle of a regional biological curator's group.

Early meetings were taken up in finding out more about the extent of each others collections and about their relative strengths and weaknesses, work was done on compiling a register of experts (both in and out of museums) around the region, and in discussing collecting policies and arriving at common boundaries for collecting areas. Biological data banks were established or extended to cover Northumberland and that part of Tyne and Wear north of the River Tyne (based at the Hancock Museum) and for Durham, Cleveland and Tyne and Wear South of the River Tyne (based at Sunderland Museum - with the Gray Art Gallery and Museum, Hartlepool, and the Dorman Museum, Middlesbrough acting to a limited extent as sub-centres).

It was at a meeting held in August 1975 that the then Panel Chairman, Fred Woodward, suggested that as the Panel now had coverage throughout most of the North East it should be possible to organise some sort of regional investigation, and he offered as a possible topic the status and distribution of amphibia and reptiles in the region, using school children for field observations. This was to set the tone for much of the Panel's activity over the following years.

'Spot the Frog' was the cry which echoed around schools throughout the North East in the spring of 1976, as the publicity for the survey got under way. Members of the panel appeared on local radio and television, and the local press followed. Despite its title, the survey was aimed at recording amphibia generally, and involved the distribution of duplicated leaflets with identification information on the five species concerned. Response to the survey was excellent, and by the end of July 417 sightings from 334 habitats had been received.

Emboldened by the success of the project, a "Squirrel Search" was instituted in 1977/78 to try to determine to what extent the red squirrel had been displaced by the grey squirrel since the latter's introduction into the North in 1906 and 1913. Using similar methods to the 'Spot the Frog' campaign, a total of 235 records were received from 152 contributors - these records suggest that whilst the red squirrel retains Northumberland as a stronghold, its range is declining in the south of the region.
However, the greatest success so far is the 1979 "Hedgehog Survey", helped, no doubt, by the offer of a free colour-printed hedgehog wallchart (provided by the Tyne and Wear County Museum Service) in return for records, and by the excellent publicity gained for it by panel members Tony Tynan, Sue Turner and Peter Davis on B.B.C. tv's regional natural history programme "Look's Natural". Much work still remains to be done on collating the information which has flooded in - a total so far of nearly 2,500 sightings:

And what for the future? Either 'Spot the Frog II" (to give improved coverage and record changes in status and distribution since the 1976 survey) or else a regional wetland survey, using a specially-commissioned limited edition natural history print as "bait" for (confirmable) reports, are being planned by the Panel for 1980. The possibility of producing small travelling exhibitions on subjects such as natural history photography, traps and trapping, whales and dolphins and field sports have been discussed, and at the time of writing the first and last of these seem to be getting going with the aid of the Area Service.

It might be argued that the activities which I have outlined above are not those of an Area Service panel. But while the North East is rich in wildlife it is not, regrettably, over rich in museums - especially in the realm of natural history. So those of us with natural history responsibilities feel that by combining these various activities we have benefitted all concerned, whether it be the area service, our museums and their collections, the wildlife of the North East, or, perhaps most important of all, the general public - upon whose interest and support we all depend.

References


Henry Middleton Curator Hartlepool Museums and Art Gallery Service

203
HOW TO ATTRACT THE WOMBAT - A TALE OF FIVE DAYS OF DISCOVERY.

(with apologies to Harold Cuppy).

On Monday August 20th the Hancock Museum was visited by Mr. J. A. Mahoney of the Department of Geology and Geophysics, University of Sydney, on sabbatical leave at the B.M. (NH) Mammal section. He is working on a revision of the checklist of Australian mammals and monotremes with a colleague from Canberra. He had arrived in Newcastle unexpectedly and requested to see the skins of the Duck-billed Platypus and Wombat described and figured in Bewick’s fourth edition of the History of the Quadrupeds (1800). These specimens were amongst the first to be sent from Australia by Governor Hunter in 1798. They were preserved in spirits and sent via Sir Joseph Banks for the attention of the members of the Literary and Philosophical Society, and the story goes that as they were being carried up from the Quayside, one of the casks, possibly the one with the Platypus, broke and poured the contents all over the young woman who was transporting it on her head! (Fox 1827). "The poor soul was nearly suffocated by the pungent and foul smelling spirits. Only those who are familiar with alcohol in which animal matter has been preserved can fully appreciate the sufferings of the poor woman. Apart from her physical nausea one can picture her mental horror at seeing a strange creature, half bird, half beast, lying at her feet" (Russell Goddard 1929).

Unfortunately despite a short search, in the absence of our taxidermist Eric Morton, both myself and the curator Mr. Tynan were unable to locate the specimens. In fact they had always been presumed destroyed or lost prior to 1959 when Mr. Tynan became curator. Russell Goddard, Dr. Mahoney reminded us, states that the skins were in existence when he wrote his centennial History of the then Natural History Society of Northumberland, Durham and Newcastle upon Tyne, (a daughter of the Newcastle Lit. and Phil.) in 1929.

We did manage to find one mount of a Platypus with no history, but this did not match either the type (Shaw 1799) or Hunter’s description in Bewick. We advised Dr. Mahoney to return the next day to see Mrs. Grace Hickling, the secretary of the Natural History Society of Northumbria, in case they held the original Hunter letters and drawings.

This proved to be a fruitless request the next day, but we managed, with the help of one of our design assistant’s memory, to locate another Platypus mount in the loft. This was brought down and dusted off for inspection, but was found to be a 1941 bequest. However we ascertained that the other mount was a male by checking for the spurs of the hind limbs. Dr. Mahoney then had to leave to go to the Royal Scottish Museum, but was to take up our suggestion to contact the Librarian at the Lit. and Phil.
On Wednesday 23rd, when I was checking the accession dates of the platypuses, Mr. Tynan and I discovered various lists of mammal skins, mounts, etc. made by Stephen Cook, taxidermist (around 1930-1962), sometime after 1950. In these there is a list of 3 platypus mounts and 3 skins, and 1 wombat skin or mount - this was not made clear. There was a note against one of the platypus skins that it was in poor condition and had been destroyed. This may have been the Hunter specimen. The wombat at that time had been in our Upper West corridor store which had been cleared out and altered around 1959. Where to look to see if it still existed?

The following day Eric Morton returned from holiday and began a search of our mammal skins, managing to turn up the remaining two platypus skins, one of which has no history but bears a close resemblance in size and form to the figure in Bewick and is in good condition, a female or immature. There is no way to ascertain whether or not this is the Hunter specimen. I decided to contact the Lit. and Phil. and went down to find that they had preserved the original Hunter letter, with a contemporary copy, which had been read to the Society on December 10th, 1799. I could not find an actual reference in the donations list of 1798. The letter is bound in Tracts of the Society, but as yet there is no sign of the drawings which Hunter sent and Bewick used. Perhaps they went to the publisher Edward Walker and were not returned. Hunter's original descriptions had been slightly paraphrased despite a suggestion by Goddard that they were reported verbatim, and I append the original here. To me it brings to mind all the problems of looking after any wild creature in captivity let alone a form totally new and unknown.

On Friday afternoon Eric Morton made my day - (I must add that the wombat is my favourite marsupial). At the back of a store cupboard above the Red Deer case in our British Mammals display, he found the wombat, no longer a flat skin spirit but mounted, sitting on its haunches, with a handwritten label on the base that it was Phascolomys fusca from Tasmania presented by Governor Hunter in 1798. This is not quite correct as the specimen came from an island in the Bass Strait, probably Furneaux's Island according to Fox (1827). Here then was the first wombat to be described and to come to Britain. Although, according to Troughton (1941) the first scientific description made by Shaw in 1800 was based on a different specimen, I feel we can claim scientific precedence for Hunter's example of the animal "the mountain natives call the Wombach". The specimen was a female according to Hunter but Mr. Wingate who prepared or mounted the skin could find no evidence of the marsupium (Wingate 1826, Fox 1827).

Fig. The Island Wombat (Wombach or Womat) Vombatus ursinus, Shaw 1800
Why John (sometimes printed as James) Hunter (1738-1821), vice-admiral and 2nd governor of the Australian colony from 1795 to 1801 should send his specimens to the Lit. and Phil. of Newcastle upon Tyne remained a small mystery. He became an honorary member of the Society in 1796, as did Sir Joseph Banks, when already residing at Port Jackson. He was born in Leith and had a distinguished naval career, despite two court martials. He sailed to Australia with Commodore Arthur Phillips and the First Fleet, landing in 1788. He died in London. I finally discovered the connection with Newcastle upon Tyne in a footnote in Townsend Fox's Synopsis (1827). Hunter married a Miss Kent, sister of the first naval commander in the colony who took Hunter to Port Jackson, niece of Bartholomew Kent of Newcastle, who proposed Hunter and young Kent as the first honorary members of the Society.

Fox also relates the story of the discovery of the dried up skin nearly 30 years after it was donated, tucked away in a drawer when they were reorganising the Museum. He states "we have had the annexed engraving made of it by Mr. Bewick Jnr. after resetting it by Mr. Wingate, in an attitude, which he conceives, from 2 calliosities on its haunches, to be more adapted to its habits, than that given in the former figure".

It seems quite fitting that at the time of the 150th anniversary of the formation of the Natural History Society of Northumbria which took over the Museum from the Lit. and Phil. that one of the earliest and most intriguing specimens should be 'discovered' yet again.

Acknowledgements

I would like to thanks the Librarian and staff of the Literary and Philosophical Society of Newcastle for all their help.

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Susan Turner
The Hancock Museum

Governor J. Hunter 1798

A description of an amphibious animal caught on the coast of New South Wales Lat. 40. 36W.

Revd. October 8th, 1799

Sydney N.S.W. August 5th, 1798. Was in considerable numbers. Caught by the company of a ship wrecked on a voyage from Bengal to Port Jackson. As it appears to be unknown I have preserved it in spirits for the inspection of the learned members of the Literary and Philosophical Society.

I received the animal alive by a vessel which I had sent to the relief of the sufferers.

It was exceedingly weak when it arrived having during its confinement on board, refused every mind of sustenance, except a small quantity of boiled rice, which they forced down its throat.

I had it frequently taken out of its case or box in which it was kept, and exposed it in a small place enclosed, where it could get in the daytime, the benefit of the warmth of the sun which however it did not seem to enjoy, but whenever it could shelter itself under a shrub, there it would continue and sleep. It refused every kind of food on shore, as it had done on board, but we could see it sometimes nibble a little of the roots of bushes (rushes?) and grass, this kind of provision was not sufficient for its existence, I saw that it would inevitably die soon if we could find no particular food which it would voluntarily swallow - it grew weaker every day, was exceedingly harmless and would allow any person to carry it about - after having lived, we may say without any kind of food about six weeks, it died; on opening the body to see if anything new was to be seen in the construction or figure of the intestines, no discovery worth notice was made; the brain was taken out of the head, the intestines removed and the body immersed in spirits.
I feel myself unequal to relate a correct description of the living state of this uncommon animal, but shall observe that its size was nearly that of a badger, a species of which we supposed it to be by the dexterity with which it would bury itself in the earth by means of its fore paws, but on watching its general motions it struck me on having much of the manners and motions of a bear - its head is large particularly the forehead above the eyes where its breadth appeared uncommon for a creature of that size - tapers to the nose which is a hard grissly substance as if used for removing the earth when burrowing. Its teeth are in each jaw forward, two cutters long and sharp, like those of a kangaroo - then a space of an inch of naked gum and then a set of strong teeth and well set, but has no appearance of being a carnivorous animal as far as I can judge from its teeth. Its eyes are small and black, its ears short and pointed, its paws are something like the bear and all its motions partake of that animal, it is not so swift, but a man can overtake it for it gallops exactly in the awkward manner, in which a bear runs. I judge the weight of this creature to be about 40 lbs. There is something uncommon in the make of its hind parts, from the hip joint the posterior do not round off like most other animals but fall suddenly down quite flat in a sloping direction, commencing nearly from the hip joint and descending with this flat shape to the knee joint of the hind legs, from this joint to the toes it appears to tread flat upon the ground, its tail is so very short that it is scarsely discoverable in its common state, its colour is a light or cream-coloured brown intermixed with coarse black hairs. This animal has lately been discovered to be an inhabitant of the interior of this country also, its flesh is delicate meat the Mountain natives call it Womach this one is a female and has the false belly for the security of its young.

An amphibious animal of the mole kind found in the fresh water the size of about that of a small cat or larger say considerably than the land mole; it inhabits the banks of these lakes, it has exactly the bill of a duck and probably feeds in muddy places in the same way, its eyes are very small, it has fatter legs and they are short, the fore one from the claws being shorter than those of the hind, and the web of them spreading considerably beyond, is evidently their principal assistance in swimming - the hind legs are also webbed but the claws are long and sharp, they are frequently seen on the surface of the water, upon which they rise and blow like a turtle, their tale is thick, short and very fat. The natives say they sometimes see them of a very large size.

J. Hunter
COMPUTER-CONTROLLED DATA BANK SYSTEM AT THE HANCOCK MUSEUM, NEWCASTLE UPON TYNE

Abstract:

In July 1977 a pilot scheme began for the transfer of a small part of the Hancock Museum's geological data onto a computer data-bank. This data was geological site information, collected by a Job Creation team employed by the Northumberland Wildlife Trust. Computer facilities were made available at the University of Newcastle upon Tyne, using specifically the Stamford Public Information and Retrieval System - SPIRES. This new process has been successfully applied to several other aspects of the museum's collections.

There can be little doubt of the very considerable advantages to be gained by handling large amounts of data using a computer system. Large organisations with excessive information have been operating such systems for several years. In the case of the Hancock Museum the existing geological data has already increased in size beyond the capability of a card index system, and of course the accumulation of further data serves only to intensify the problem.

The changeover to a computer-based data bank from the running catalogues which already exist has not only attractions in improving the efficiency of storing existing data, but also allows for more peripheral information to be filed which might otherwise be rejected. Exhaustive cross-referencing to published literature is easily accomplished. Comments of local geologists can be incorporated, a source of valuable information which can so often be lost to all but the immediate geological community.

In July 1977 there was a meeting of the Geological Curators Group on storage of data for the National Site recording scheme, at which several museums discussed plans for using a computer system. Following this, the authors decided to implement the use of the computer to store and retrieve their geological data at the Hancock Museum. Peter Robson had previously decided this would be the best way to handle the Northumbrian site records, collected by permanent and J.C.P. geologists, which are the basis for the development of a National Site Records Centre for Northumberland at the Hancock Museum.

Up to 1976 Museum data had been stored in running catalogues only. A mineral card file was begun by J.C.P. geologist John Mennear, after
a decision not to use IRGMA cards because of the lack of clerical staff. If the Museum was to use a computer system it had to be flexible enough to feed in data almost directly from the current catalogues. When we began to consider the system we were not too certain of the outside demands that might be put on it initially, but we wanted to make internal indexes for sites, fossils, minerals, rocks and bibliography, and eventually to publish an up to date type and figured specimen list of fossils.

Mr. A.M. Tynan the Curator of the Hancock Museum, and Mr. R. Norman, Assistant Secretary of the Northumberland Wildlife Trust gave their permission for a test study to go ahead and Mr. Tynan obtained permission from the Director of the Computer Unit of the University of Newcastle upon Tyne to use the facilities of NUMAC. With this go-ahead we contacted Dr. Nick Rossiter of NUMAC who was to act as our liaison officer.

After discussions on the means of transferring our data, Dr. Rossiter informed us of the arrival in Newcastle of the package called SPIRES (Stanford Public Information and Retrieval System) from Stanford University which had been used successfully in North America for a wide variety of uses. Our data was then structured in a manner to be accepted onto SPIRES and test samples of data were drawn up. Dr. Rossiter then wrote the initial file definition and the data was compiled onto SPIRES.

By September 1977, the tests having been successful, Mr. Tynan received acceptance for the proposal of a Job Creation team to handle the computerisation under the supervision of the authors. It was to comprise one geology graduate and two clerical assistants for 52 weeks. Paul Bootes, a Lancaster graduate, was employed and began to familiarise himself with procedures. Peter Robson continued to deal with site records and Paul Bootes dealt with Museum data and the two main sub-files were made to interconnect, so that one operator can read all records at one time. By October two clerical assistants had begun to put data onto cards and submit it overnight in batch. Paul Bootes then checked data and altered or added to it and compiled it onto SPIRES. To date approximately 4,300 museum and 220 site records are on file.

During the first few months of use, the file definitions were constantly being improved little by little. A major alteration was effected in April 1978 which had markedly simplified the file structures, making data easier to put on and easier to retrieve.

In January 1979 a further grant from Manpower Services allowed for the employment of two further graduates, Ian Webster and Michael Daly and four punch card operators who have become Computer Assistants.
The museum acquired a card punching machine and by May/June 1979 a print-out terminal TTY43 model was installed with University aid at a cost of around £700.

The Hancock Museum Database now comprises the Geological collection data, fossil, mineral and rock catalogues (about 18,000 to date); the geological site information from Northumberland (220 sites), a slide catalogue, the collections of bird and mammal skins, lepidoptera and palaeobotany. Following a meeting of the Natural History Panel of the North-East Federation earlier this year we have also set up a North-east Collector Data-bank to store information on the major collectors of the region, on the lines of the N.W. Collections Research Unit.

Of the collections on file the fossil list is the largest, over 10,000 records. Updating of information is undertaken as and when needed e.g. the location of each specimen in the museum is being added.

The Spires information has already proved very useful in obtaining lists of sites or subjects to answer enquiries, and even for locating specimens in the museum collection. Lists of collectors can be obtained as a source for the Collector file, and specialists in various fields can be given an output of relevant data either before or when they visit the museum.

In the near future the Herbarium and ethnographic collections will possibly be added.

The example of the collation of data from several museums being undertaken for the collector survey could become a more widespread phenomenon as other museums become capable of creating compatible databases using a system such as Spires or the GOS package of M. D. A.

To prove a point the Hancock Museum has become one of the main computer users in the University of Newcastle upon Tyne in under two years, and hopefully this will continue.

The future of the scheme is still uncertain once the Job Creation Scheme ends. The University will continue to allow its Museum free computer time and space. If the bulk of records are stored, then the permanent geologist should be able to add data to the system as easily as normal cataloguing and up-dating. The Museum should be able to afford the back up disc space and tape duplicates. In time we hope to have all our records stored on computer. Cataloguing of the geological collections is almost up-to-date thanks to J. C. P. graduate assistance. The Museum could then extend the use to the ethnographic, zoological and botanical collections. This would necessarily entail all future Hancock curatorial and possibly technical staff learning the basics of the M. T. S. and SPIRES computer system as part of their initial training.
Acknowledgements:

We would like to acknowledge the help and encouragement of Dr. N. Rossiter and other members of the Computer Unit of N. U. M. A. C., Mr. A. M. Tynan and Mr. R. Norman of the Hancock Museum and Northumberland Wildlife Trust, and thank all our J. C. P. colleagues for their hard work over the past two years.


Susan Turner and Peter Robson
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A NEW BIRD DISPLAY AT THE HANCOCK MUSEUM

"Incidentally the cheque is for twenty thousand pounds......." the voice at the other end of the telephone was that of John Sisson, a senior partner in a local firm of chartered accountants. He had been explaining that his aunt, Miss K. M. Hancock, for whose financial affairs he was responsible, had just asked him to send me a little something to help with a project to redisplay her great-great uncle John's collection of birds. "Aunty Kitty" an elderly little lady, now living on the south coast, had recently visited her relations in Newcastle and the Sissons had brought her down to the Museum to see the collection and meet me. I had told her of our plans for the modernisation of the displays and how we had a little money from the University Development Trust to spend on the Bird Room. I knew that the Hancock brothers had not been rich and had no reason for believing that their descendants were otherwise, nor indeed that there were any who had any real interest in their illustrious forbears' activities in natural history - I did not even know of the existence of Aunty Kitty. There is a small wonder then that the size of her gift came as a huge and splendid surprise. The immediate question was what to do next?

At that time a major project was being undertaken in the Geology Room, funded by the University Development Trust with staff provided by the Manpower Services Commission. This had demanded the closure of this room and it was decided therefore, to delay the refitting of the Bird Room until it's neighbour was finished and available to visitors. The Manpower Services Commission looked healthy, with every expectation of a long life, so why rush in and reduce even further the value received for the entrance charge by placing yet another major display area out
of bounds? Events however overtook this decision and rumours began to circulate that government were having second thoughts about the M.S.C. and its programmes.

Smoke implies fire and the decision of October 1976 was reversed two months later. A successful application was made to M.S.C. for more help under the Job Creation Programme. By this time a "close-down" date of September 1977 had been announced for the J.C.P. Two zoology graduates were to provide the raw data to two '3D' designers who would produce working drawings for 4 joiners. The displays would be created by 2 graphic designers. This team of 9 would be supervised by the Curator, and the museum taxidermist would, of course, be a vital member. In hindsight this was a ludicrously small team, but M.S.C. was subsequently reprieved and the day was saved. A S.T.E.P. scheme which began in 1979 numbered 17, comprising 7 joiners, 8 graphic designers, and two zoologists.

Interviews and appointments began in January 1977. By this time a few basic targets and philosophies had been worked out - first let me explain a little of the background.

John Hancock and his brother Albany had been lifelong supporters of the Natural History Society of Northumberland, Durham and Newcastle upon Tyne. John, after his brother's death in 1870, had driven the movement which culminated in the present building. Into it he moved his magnificent collection, all superbly mounted in glass-fronted boxes built to a modular design and stacked on shelves from floor to ceiling. John was one of the first great taxidermists and his collection was slowly increased by subsequent workers employed by the Society. In 1977 there was little room for expansion and no attempt to present anything but a vast series of birds, frequently duplicated, in the main from Europe but with a substantial number from many other parts of the world. For birdwatchers in the region, the Hancock was a Mecca where field-notes made at the thrilling sighting of a new rarity could be compared, not against a myriad of pictures, but against the real thing - this a role of the museum. It was determined therefore, that this facility should be preserved and the gallery level of the room should present a straightforward no-nonsense systematic series of European birds in as many different plumage stages, sexes and ages as was possible, with tidy labels which gave a precis of the kind of information to be found in, for example, a field guide. Birds are, in addition to ticks on a bird-watcher's list, beautiful, fascinating and often medodious creatures which have exploited almost every corner of the globe.

The rest of the area available was to present "essence of bird"; and at a very early stage, ideas were being drawn together and lists of 'topics' prepared. Although presentation within a topic would be sensibly logical, no attempt would be made to relate one topic to another in a strictly didactic sequence. In this way the un-committed visitor could "bounce"
around areas full of interest until they were fixed by one and then perhaps by another - and another - and so on. The alternative, a logical text book maze could easily bewilder and depress them. Displays called 'birds and man' would include an introduction to bird-watching and bird identification, somehow we would try and relate this physically to the systematic panorama on the gallery (first floor) level.

The field was enormous, the space inadequate, and the room barn-like. An architect was commissioned to suggest ways of increasing the available floor-space, retaining the 'airiness' - and providing additional storage rooms. His solution was to build a 20ft. mezzanine 'shelf' at each end of the room, connected with the ground floor by a circular steel staircase and with the gallery level by orthodox timber steps. Supported by four concrete-block walls, this arrangement provided two store-rooms, a small a/v theatre and 5 new separate display 'alleys' each about 10' wide. All these major structures and the completely new electrical installation were done by teams of previously unemployed young people, provided with supervisors by Community Industry, backed by funds from local and central government.

Into these 'alleys' and into new fittings in the central area between the shelves, the 'topics' were slotted.

At the time of going to press, Phase 1 (1st floor - 'Birds of Europe') is virtually complete, Phase 2. (ground floor) is about 75% complete and Phase 3. (mezzanines) is about 50% complete. Major display structures will be completed (hopefully) by the end of 1979. An application will have been made to M.S.C. for a short extension to ensure completion. After this, a part of the 'Aunty Kitty Hancock' gift remains to ensure that sometime in 1980 some birdy noteable will be able to reveal, again, to an astonished public, the beauty that is bird.

T. Tynan
Curator
The Hancock Museum

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COLLECTION SURVEY IN CANADA

Following a short note I sent to Antenna (the Bulletin of the Royal Entomological Society of London) which mentioned the North West Collection Research Unit's work on collections and collectors, I received a letter from Dr. H.V. Danks of Ontario. This was to point out that the Secretariat of the Biological Survey of the Insects of Canada had been commissioned by the Canadian Government to carry
out a pilot study on the insects of Canada and that the first part, "Collections of Canadian Insects and Certain Related Groups" (supplement to the Bulletin of the Entomological Society of Canada, Vol. 10 (No. 1), March 1978) had been completed.

It will be noted that this project was not an end in itself but a small part of the Biological Survey which will also include reviews of the state of the current knowledge on insects and resources for insect identification as well as what will eventually amount to an enormous body of data resulting from field work throughout the country. Also, it is interesting to contrast the British with the North American approach. Here, the BCG is a small enthusiastic body comprised mainly of individual curators keen to communicate. In the United States, the ASC (Association of Systematic Collections) is based on institutional memberships and has money granted by the U.S. government to assist in all their functions which are essentially the same as those of B.C.G. In an exact parallel, the NWCRU, and others now starting elsewhere in this country, are quite voluntary and self-motivated activities, whereas the Canadian Biological Survey of Insect Collections has been financed directly from their central government. Clearly, we have a different concept of approach and I would suggest an inferior one when it comes to raising finance for these small but important (to the scientific community) projects. However, it is not difficult to imagine the response if BCG had gone to the Department of Education and Science in 1974 and asked for financial support in order to found and run our activities!

The survey of Canadian insect collections is a comprehensive compilation of public and large private collections listed by institution. A subject index in the form of tables shows a breakdown by numbers of each collection where returns to their questionnaires provided this amount of detail. In this respect it is similarly arranged to the BCG "Survey of Zoological and Botanical Collections in the British Isles" (being published soon). It does not list individual collectors or collections and so cannot be used in the same way as the Collection Research Units' productions.

E. G. Hancock
Bolton Museum and Art Gallery

THE ALCAN BLAKEMOOR FARM TRAIL

Blakemoor Farm is a small mixed lowland farm on the coastal plain of Northumberland, some fifteen miles north of Newcastle and half a mile north of Cresswell. The farm buildings are situated on slightly rising ground some four hundred yards behind the line of sweeping
sand-dunes that separate the farmland from Druridge Bay and the North Sea. Much of the land in this area is owned by the National Coal Board, but some is now leased to Alcan, the large multinational aluminium company which some years ago built a large smelter some two miles down the coast at Lynemouth. The siting of the smelter was determined by the ready supply of coal from the modern Lynemouth Colliery. The 4,500 acres leased to the company is now managed as the Alcan Farm Estates.

The trail and the recently opened centre are of interest from two points of view. Many trails and centres do not explain about farming, but concentrate on the wildlife of an area, perhaps ignoring just how much of our countryside is man made and man-managed. It is also evidence of the work of the Wildlife Advisory Group - whose aim is to bring together land owners and land users as a way of sorting out problems resulting from the differing needs of farmers and wildlife conservation. The local group of this national organisation are known as the Northumberland Countryside Liaison Group.

Discussion between Alcan and the Northumberland Countryside Liaison Group led to the formation of an Alcan Farms Working Group - chaired by Alcan and having representatives from the National Park Authority, the Northumberland Wildlife Trust, the R.S.P.B., the County Council and the Ministry of Agriculture. Discussions at these meetings centre on ways in which the farms can best be managed with regard both to the needs of agriculture and to the needs of wildlife. The Blakemoor Farm Trail emerged from these discussions providing a way of explaining the activities of the farmer and the subsequent effects on wildlife and also providing public access to the farm and fields that otherwise would not be possible. While the formulation of such management plans for the farm inevitably take time (proposals being based on biological surveys of the area and are hence still in their infancy), the provision of a trail for the public was quickly achieved, satisfying one of the management proposals and also providing useful prestige for the firm of Alcan, whose name appears on the signs and Trail leaflets.

A plan of the Trail accompanies this article and from it are easily seen the main features which are dealt with in the fourteen page leaflet under the following headings; The Farm, Silage, Sheep, Barley, Cows, Grass, Shelter Belts, the Lanes and the Pool. The leaflet is very informative, does not get bogged down with technicalities and firmly emphasises the farming activities, explaining where necessary the theory and the practice involved in, for instance, cattle breeding or cereal growing and how these are inter-related on the farm. The consequences for wildlife tend to follow such information but are explained in simple unemotional terms, e.g. 'modern weed killers really work don't they - there's hardly another plant in the field except wheat or barley'. The Trail leaflet is not of the stop-look-read instructional type but more the story of the farm and can be dipped into, when you want to know what sort of sheep they are, or what the odd
vegetable is that looks like a turnip but isn't.

The pool by the way, is a typical local feature though not all farms have them and is caused by subsidence due to the extensive mining of coal seams. Though it is a godsend for birds and birdwatchers, it is a real problem for the farmer, having submerged one lane (an important access route) and extending gradually northwards to consume more land.

For anyone interested in the country and not of farming stock the leaflet helps to fill the large gaps of knowledge that often exist even among those who can readily identify every bird seen or give the Latin name for each plant, no matter how small.

Following the success of the Trail, Alcan approached the Countryside Commission for a grant towards refurbishing some of the old stables and piggery at Blakemoor Farm to develop an Interpretative Centre. In all, some £30,000 was probably spent on the project. The Centre was opened in September this year (1979). Essentially it complements the information available in the leaflet and of course, provides extra facilities such as toilets, car-parks and a lecture area for parties. The appearance of the buildings have been altered as little as possible. The roofs have been re-tiled and some skylights put in, the doors and frames are all new, but the rest is much as it was, the stable floor being left complete with the gulleys for cleaning out, the old hay-racks are still in position and the old pot containers at the head of each stall have been retained and in some cases contain exhibits. The old pig-sty, which now serves almost as a roundabout in the car-park, has obviously been renovated and must be one of the plushest in the country containing two young healthy snorters and a dove-cote in the roof space.

The reception area leads to the right into a short arm of the building, mainly housing the toilets and cloakroom area, whilst straight ahead is the long room with the interpretative displays. The displays themselves are simple, consisting of a series of bays with mainly graphical information but some specimens to excite interest, for example a selection of dried grasses, a barn owl on the beam, some of the birds associated with the pool and hedgerows and a few old agricultural instruments, though no attempt is made to show the history of farming. These objects along with the pigsty merely reflect the changes that have taken place. One nice feature is the presence of packets of food-stuffs, (including Scots Porage Oats & Weetabix cartons) which serve to drive home the point of agriculture - that of providing food for us the visitors.

The displays were professionally done by a firm in Newcastle and scripted by Tony Tynan, Curator of the Hancock Museum. The tailpiece of the exhibition is an elaborate flow chart made of cogs and pathways showing all the inter-relations between plant, man and beast.
on the farm - Heath Robinson would have been proud of it!

All in all, I was impressed by the Trail and the Centre, perhaps because it isn't full of platitudes and philosophy. I have no doubts there are and always will be conflict between the need of farmers and those of wildlife conservation, but if this scheme is the result of a liaison between such groups, then it is obviously a good path to follow.

John Bainbridge
Principal Education Officer
Tyne and Wear Museums
THE ROLE OF THE TAXIDERMIST

It has taken about 300 years for taxidermy as we know it to develop into its present state. Some would say it has changed little in that time but those familiar with taxidermy in museums are aware of the exceptional quality of many recently prepared specimens. The museum taxidermist today is continually in search of improved methods. It must be realised that a large part of any taxidermist's knowledge is self-taught and that only a lifetime of study in the subject can produce the high quality of specimens on display in a number of our museums. However it is not just an ability to mount animals that produces these results. Due to a sound knowledge of general Natural History it is the taxidermist who is best qualified to design the lay-out of dioramas. It is he also who has the knowledge and capability to produce the model groundwork and plants suitable for each individual display. Familiarity with all species dealt with is of course essential whether they be mammals, birds, reptiles, amphibians or plants. The taxidermist then is no longer the "Animal Preserver" of the Victorian era but a scientific craftsman.

Modern technology and materials have influenced the development of taxidermy with polyester resins, alginites and other moulding and casting materials being the most noticeable of these. The last few years have also seen the widespread use of freeze driers though the considerable limitations of these are now realised. The quality and permanence of animals and plants prepared in these machines rarely compares with the results obtained by a competent taxidermist using more traditional methods.

A wide selection of mounted specimens in artistically produced and accurate dioramas is obviously essential for relaying to the public an understanding of the environment. However the present day taxidermist is responsible, more than ever before, for preparing study skins, any of which may become essential for scientific research. These appear to be favoured by many museums largely because of the reduced storage space available. However another factor influencing this matter is the comparative ease with which study skins can be prepared and the mistaken belief that the appearance of these is less important than that of a conventional mount. This results in museum technicians being given the task of preparing skins which while convenient and possibly cheaper can result in deterioration of standards. Freeze driers have also increased the number of study specimens prepared by technicians. The outcome of these changes is obvious, more technicians producing study skins, dried specimens and fluid preparations and less taxidermists. Any reduction in the number of museum taxidermists will inevitably lead to the loss of a skill which has been perfected by generations and will not be replaceable when, after the passing of a few
more, our present collections have fallen into decay.

If Natural History museums are to continue in their role of educating the general public and displaying exhibits rather than purely storing scientific information taxidermists must be encouraged to continue to improve standards and to train other Naturalists in the art.

Chris Stoate
Natural History Officer
North of England Museums Service

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A BRIEF SURVEY OF THE MAJOR NATURAL HISTORY COLLECTIONS AT THE DORMAN MUSEUM, MIDDLESBROUGH

The present building of the Dorman Memorial Museum was presented to the town of Middlesbrough by the late Sir Arthur J. Dorman in memory of his son, Lieutenant G. L. Dorman and the men of the 3rd Battalion, Princess of Wales Own Yorkshire Regiment, who fell in the Boer War of 1819-1902. This coincided with the gift by the late Sir Alfred E. Pease of a large collection of mammals, birds and other specimens brought mainly from East Africa.

The building was opened in 1904 but in fact there had been a museum movement for some years before this. This movement was mainly in natural history, indeed the Dorman Museum can be said to have its roots in natural history.

In 1863 the Cleveland Literary and Philosophical Society with its connected Field Club decided to establish a museum. Objects were collected in the ensuing years and placed in the new hall of the society in 1877-1878 as exhibits of the Field Club and Science sections of the Society. In 1884 these, (by now large), collections were given into the care of the Free Library Committee of the Corporation. They were stored in various places before being exhibited in rooms in the Municipal Buildings on Dunning Street. These exhibitions were opened to the public in 1890 and formed Middlesbrough's first public museum for ten further years.

Situated at the main entrance to Albert Park, the Dorman Museum was extended in 1968 and there are plans for further extensions in the future to provide much needed storage and display areas.

The Keepers

With its background of natural history the Dorman Museum has naturally enough had a number of naturalists among its staff.
Mr. Baker Hudson Curator (1904-1923)

This first Curator was a well known conchologist and Secretary to the Conchological section of the Yorkshire Naturalists Union in the late 1800's. His mollusc collections and books came to the museum on his death.

Mr. Frank Elgee Assistant Curator 1904-1923
Curator 1923-1932
Honorary Curator 1932 until his death in 1944

Mr. Elgee, a famous local naturalist, was given the popular name 'the man of the moors' because of his love for the Yorkshire Moors and his expertise on their natural history, geology and archaeology. His published works include 'The Moorlands of N.E. Yorkshire, Their Natural History and Origin' and 'Early Man in North East Yorkshire.'

On his retirement in 1932 his wife Mrs. H.W. Elgee B.A. became curator.

Mr. G.G. Watson Curator 1965-1975

Mr. Watson has done much to promote a good relationship between museums and the public, especially involving young people. He was the founder of the British Young Naturalists Association in Scarborough in 1957.

Mr. Cliff Thornton Curator 1975-1979

A Curator of wide interests who initiated the Zoological gardens at Preston Hall Museum, Stockton, and many interesting local studies.

The Collections

The original nucleus of the collections and displays at Middlesbrough had a scientific bias; birds, birds eggs, crustacea, butterflies and moths, a few local antiquities and a large geological collection, chiefly local. Added to these was the Pease collection of African mammals and birds. Since Local Government reorganisation over the last decade this emphasis has changed, together with the specimens. The present display is as follows:-

Ground floor

| Gallery 1 | The History of Middlesbrough |
| Gallery 2 | The Geology and Industries of Teeside, plus unrelated, individual display cases. |
The present natural history collections are those that remain after the Local Government re-organisation. In 1974 many of the exhibits were removed to form the nucleus of displays and collections in neighbouring districts. Also many specimens were found to be infested and consequently had to be destroyed. Yet others were directed into the School Loans Service, now a County function. Much of the Pease Collection was dispersed in this way.

As far as I have been able to ascertain during my short time in my present appointment the following major collections (in part or complete) can be found on display and in store at the museum.

**Ornithology**

**The Nelson collection**

172 cases of mainly Yorkshire birds collected by Mr. T. H. Nelson of Redcar and presented by Mrs. Nelson in 1918. About 435 species are represented, some of the rarer being the Little Bittern, Red Crested Pochard, Wood Sandpiper, Levantine Shearwater and Kentish Plover. Under the terms of the bequest the cases are in their original arrangement and the specimens are in a good condition. This provides an interesting historical aspect to the display.

There is also a collection of 2,700 eggs representing 253 species (apart from about 30, stolen in 1974). Treasures of this collection mentioned in a reprint from the North Western Naturalist (Dec 1935) are "A fine series of Guillemot eggs from the Speeton and Bempton cliffs, and two clutches of Ruff eggs from the Teesmouth Marches....."

A bookcase from Mr. Nelson's own library holds a valuable collection of interesting books on natural history, mainly ornithology.

**Mollusca**

**Dorman Collection**

Lieutenant G. L. Dorman, in whose memory the present museum building
stands, was a keen naturalist, collecting shells as well as ethnographical material from all parts of the world.

The Official Guide to the Museum (1909) says that 'In the Dorman Collection is an almost complete series of volute shells and numerous beautiful cowries (Cypraea)." The collection dates mainly from the late 1800's.

The Fryer Collection

This comprehensive, world-wide collection was made by J.H. Fryer of South Shields and presented to the museum in 1904 on the event of his death.

There are good examples of many species, in fact together with the Dorman Collection it spans most of the mollusc families.

Geology

Collection of Dr. W.Y. Veitch

At one time the Honorary Curator of the Museum (1904) Dr. Veitch presented a series of fossils and minerals.

The Hawell Bequest

A large collection of shells, fossils and minerals bequeathed by the late Rev. J. Hawell, Vicar of Ingleby Greenhow, in 1904. Among the rock and mineral specimens of Cleveland are maps and photographs. The collection is noted in detail by Rev. Hawell in a number of catalogues, some in the museum.

Entomology

Some of the more spectacular examples of insects are on display in the Nelson Gallery and a number of cases are in store. Some are from small collections but I believe the bulk of the butterfly collection is from Mr. Frank Elgee. Also in the early 1900's the Victoria and Albert Museum presented a large collection in 18 cases, illustrating the classification and geographical distribution of the Coleoptera.

Botany

The Herbarium of Margaret Stovin

This beautiful collection of British and Exotic species made in the early 1800's was presented in 1922 by Lt. Col. J.B. Pennyman. The plants are in a large number of volumes, British and Exotic kept separately. There is a detailed classification and details about each plant based mainly on "Smiths English Flora (1824)" and "Sowerby's English Botany".

223
Sowerby Plates

A collection of hand-coloured illustrations from the 1st edition of Sowerby's "British Botany" (1790-1814). These formerly belonged to R.A. Salisbury of Leeds, a well known British botanist who pencilled notes on the plates. At one time they were on display illustrating cases showing the orders of British flowering plants and typical habitats.

There can be added to these collections a miscellania of specimens from a number of different collectors, mainly local. In time I hope to assess these and obtain a clearer idea of the extent of the natural history collections at Middlesbrough.

Denise Cutts
Dorman Museum
THE F. R. WOODWARD COLLECTION OF FRESHWATER BIVALVES (MOLLUSCA; LAMELLIBRANCHIA: UNIONACEA).

The collection, consisting of dry shells and preserved animals of recent species plus some fossil material, together with an extensive library of Molluscan books and reprints, specially rich in papers on Unionidae, was presented to Tyne and Wear Museums in 1977.

The fossil material includes remnants of specimens used in the preparation of a monograph of British Tertiary Unionidae, together with Mesozoic material accumulated for a proposed monograph of British Mesozoic Unionidae. It includes paratypes of Unio cumberlandi Woodward and Unio andersoni Hudson. (The bulk of the Tertiary Unionid material was presented to the Hunterian Museum, Glasgow in 1969, whilst the holotype of Unio cumberlandi is in Birmingham Museum and Art Gallery, paratypes being in Liverpool, Hunterian, Tyne and Wear County Museums Service and the British Museum).

The recent collection consisting of over 5,000 specimens, contains a considerable number of types, figured and cited specimens including a large proportion of the material upon which the Revision of the freshwater bivalves of Lake Nyassa was based, further material being in the possession of T. Pain and T.E. Crowley. It has been built up since 1956 by purchase and exchange and includes material from the collections of H.H. Bloomer, P.T. Deakin, H.H. Overton, J. Linton, A.E. Salisbury (including a large proportion of the stock formerly belonging to the dealers Sowerby and Fulton), H. Genge, Stelfox, etc.

Also many additions have been obtained from correspondents abroad, including the remnants of Carlos J. Risso Dominguez collection of Unionids from the area around Buenos Aires, a formerly rich molluscan area but now virtually barren due to pollution. (A larger collection was presented by Carlos J. Risso Dominguez to the Museum of Comparative Zoology, Harvard, soon after the war). Other workers providing material in recent years include Fritz Haas, S.P. Dance, L.W. Stratton, A.H. Clarke (Junior), Dick Dell, Major Earle, T. Pain, T. Crowley, D. McMichael, D. Stansberry, R. Brandt, Dr. Bonnetto, J. Knudsen, R.I. Johnson and Mahomed el Noir.

Amongst the more historically important material mention should be made of an example of Pleiodon McMurtrie Conrad, 1834, TWCMS: Bl1767 (= Pleiodon ovatus (Swainson, 1823) ), believed to have belonged to Mrs. Corrie of Birmingham and possibly sent her by Conrad. In the 1830's she was reputed as having probably the finest collection of Unionidae in Europe and Isaac Lea made her acquaintance...
during a visit to Europe resulting in his naming *Unio corrianus*
Lea, 1834 (= *Lamellidens marginalis* (Lamarck)) in her honour.
The collection also includes specimens from Isaac Lea, J. G.
Anthony, Hugh Cuming and others, and is still being actively added
to. It is hoped that at a future date a more comprehensive history
of the collection can be published, together with a list of all type,
figured and cited specimens.

Fred Woodward
South Shields Museum

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**COLLECTIONS RESEARCH IN NORTH EAST ENGLAND**

The need for research into the location and condition of named
collections in the natural sciences has been explained admirably
by Geoffrey Hancock (1977, 1978a, 1978b), in describing the origins
and function of the North West Collections Research Unit (NWCRU).
The achievements of NWCRU are remarkable, raising collections
from obscurity and making 'rescue' operations feasible. The
lead taken by curators in the north west has been followed by those
in the north east - an area defined as the counties of Northumberland,
Tyne and Wear, Durham and Cleveland, and equivalent to the area
covered by the North of England Museums Service.

North East England is a fairly compact unit, with the major museums
being located in the industrial zones of Tyneside, Wearside and
Teesside. There are at least 8 museums with natural science
collections, but only two of these (the Hancock Museum and Sunderland
Museum) have full-time curatorial staff with responsibility for
biological and geological specimens. There are a number of smaller
(and remote) museums - Berwick for example - many private collections
(Wallington Hall, Cragside), and two major Universities housing
collections. Obviously a great deal of potential for collections
research! Two factors acted as a catalyst to the development of the
work now in progress. Firstly, the regular meetings of the Natural
History Panel of Museums North - a potential 'collections unit' in
all bar name, and secondly the presence of NUMAC (Northern
Universities Multiple Access Computer) and the proven ability of the
available package SPIRES (Stamford Public Information and Retrieval
System) in handling museum data. The Hancock Museum had successfully stored information relating to geological sites and specimens using SPIRES, and had plans to install a terminal in the building and hire a card puncher.

Collections research was first discussed by the Panel in December 1978. The decision to begin the project was made immediately, with Susan Turner and myself taking on the task of designing a suitable form to collect the information, which would then be fed into NUMAC via the Hancock Museum. The final form evolved as something of a hybrid between NWCRU's 'Collections' and 'numerical assessment' forms - a completed form is given as an example. Grant aid (100%) was obtained from the North of England Museums Service (NEMS) to print 2000 forms, which were then distributed (along with sets of instructions) to panel members to complete. Meanwhile, Peter Robson - previously a member of the computing team at the Hancock Museum (Turner 1979) - had agreed to handle the computing side of the project. It is largely due to his expertise that considerable progress has been made, the file definitions and output format being completed in the spring of 1979. The sympathetic attitude of NEMS was also of prime importance, as they supplied the finance for Peter Robson's work for the Panel - it must be stated however that a considerable amount of his time has been given free of charge, and his interest in the scheme has been a most important element in its success. Data input has been carried out by members of the STEP cataloguing project at the Hancock Museum.

From April 1979 there has been a steady input of data. This has not been as spectacular as the rapid growth of NWCRU's files, largely I feel due to smaller numbers of specialist staff in the region, and certainly not due to lack of enthusiasm. Completing forms can be extremely frustrating, the realisation of how little is known about the majority of collectors and collections (even in museums with reasonable records) quite stunning. Inevitably much of the data input is far from complete, often no more than a name and a brief description of the collection. However, it is a beginning, and files can be easily recalled and updated as more research reveals more facts about the collection. One major problem that has occurred in the course of the work is the inability to avoid being sidetracked by such research. Filling in a form arouses curiosity, which is extremely difficult to control until the batch of forms is complete! The Captain Calver who appears on the completed form for example, led me a merry chase around various local Libraries, the Public Records Office and ended with a search for (and discovery of) additional 'Porcupine' material in the region. (Davis 1979)

The present position is that some 137 records have been entered onto
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<th>SURNAME</th>
<th>INITIALS</th>
<th>TITLE</th>
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<td>(OR COLLECTION/EXPEDITION)</td>
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<td>E.K.</td>
<td>CAPTAIN</td>
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<td>-----------------</td>
</tr>
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<td>Fouquierid Oozae</td>
</tr>
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<td>Malaxis</td>
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<tr>
<td>Echinodermata</td>
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<td>Anthozoa</td>
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<td>Crustacea</td>
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<th>MISCELLANEOUS DETAILS</th>
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<td>Small collection of dredgings, many unidentified, but could be useful.</td>
</tr>
<tr>
<td>See also Clas. Lawson Collection, Hancock Museum</td>
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</table>

(For specimens from dredging expeditions of H.R.S. Porcupine). |
the computer. An attempt is now being made to obtain data for all named collections within museums where a Panel member is working before the end of December 1979, when help with data input at the Hancock will cease with the demise of the STEP scheme.

On the computing side, two varieties of output format have been devised, one of which is shown, as well as the normal default computer output. In addition, Peter Robson has developed a protocol, or automatic command system, which will enable any panel member to input data at the Hancock Museum terminal. In simple terms, this system takes the initiative away from the operator, and gives it to the computer, which is then steered by the protocol. This means that the operator no longer needs to know how the system functions - he or she merely has to respond to a series of questions put by the computer, and thus in the process builds a complete record into the data bank.

A similar protocol system could be devised to assist the operator in carrying out a successful search of the data base. The essence of protocol usage is that it provides a means for the would be operator who is totally unfamiliar with computer methods to handle the system with ease and efficiency.

The final and most sophisticated step to be taken is the development of translation programs to enable a free-flow of data between SPIRES and the Manchester equivalent data-base, FAMULUS. This achievement would of course represent a highly desirable state of affairs.

Geoffrey Hancock (1978a) hoped that NWCRU would be the forerunner of similar regional projects 'culminating in a national index of collections'. In the north east it is felt that a reasonable start has been made in the region toward that goal.

Peter Davis
Sunderland Museum

References


Hancock, E. G. (1978a) The North West Collection Research Unit. Museums Journal V77 No. 4 p. 188.
RECORD-NUMBER = 300;
MUSEUM-NAME = SUNDERLAND;
MDA-CODE = TWCMS;
RECORER = P.S.DAVIS;
CURATOR = N.T.SINCLAIR;
COLLECT-PERIOD = 1869 & 1870;
MISCELLANEOUS = SMALL COLLECTION OF DREDGINGS, MAINLY UNIDENTIFIED BUT WITH FULL DATA. SEE ALSO HANCOCK MUSEUM. (SPECIMENS FROM HMS PORCUPINE).; DAVISON C. COLLECTIONS, AT THE 

COLLECT-SUBJECTS = ZOOLOGY;
NAME = CALVER, EDWARD KILLWICK;
COLLECTOR-TITLE = CAPTAIN;
ADDRESS = 16, ROKER TCE., SUNDERLAND.;
DATE-OF-BIRTH = 1813;
BIRTH-PLACE = SOUTHWOLD;
DATE-OF-DEATH = 1892;
PLACE-OF-DEATH = VEVEY, SWITZERLAND;
COUNTRY = N.E.ATLANTIC;
SUBJECT = FORAMINIFERAL OozeS;
SUBJECT-ASSESS;
MODERN = YES;
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TOTALS = 36;
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CONDITION = SEPARATED;
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TITLE-ETC = ANON, SUNDERLAND DAILY ECHO, NOVEMBER 6, 1879;
AUTHOR+DATE = ANON, 1910;
TITLE-ETC = ANON, SUNDERLAND LIBRARY CIRCULAR, 1910, PAGE 386.;
AUTHOR+DATE = DAWS, 1979;
TITLE-ETC = P.S.DAVIS. COLLECTIONS FROM THE DREDGING EXPEDITIONS OF HMS PORCUPINE IN NORTH EAST ENGLAND. PORCUPINE NEWSLETTER

AUTHOR+DATE = ANON, 1894;
TITLE-ETC = ANON, CAPTAIN CALVER. DODDS ALMANAC, SUNDERLAND. 1894;
AUTHOR+DATE = DAWS, 1855;
TITLE-ETC = L.S.DAUSON, MEMOIRS OF HYDROGRAPHY. EASTBOURNE. 1855;

****

230
NAME: CALVER, EDWARD KILLWICK  
(CAPTAIN)
ADDRESS: 16, ROKER TCE., SUNDERLAND.
BORN: 1813, AT/IN SOUTHWOLD
DIED: 1892, AT/IN VEVEY, SWITZERLAND

PRESENT LOCATION DETAILS OF THE COLLECTION:
MDA CODE: TWCMS
COLLECTION RECORDER: P.S.DAVIS
MUSEUM CURATOR: N.T.SINCLAIR
MISCELLANY: SMALL COLLECTION OF DREDGINGS, MAINLY UNIDENTIFIED BUT WITH FULL DATA. SEE ALSO DAVISON C. COLLECTIONS, AT THE HANCOCK MUSEUM. (SPECIMENS FROM HMS PORCUPINE).
MUSEUM: SUNDERLAND
CONDITION: SEPARATED

ACQUISITION DETAILS:
ACQUIRED: PRE 1879
ACCESS NUMBER: NONE
MEANS: GIFT

REFERENCES RELATING TO COLLECTION:
ANON, 1879
   >>>>> ANON, SUNDERLAND DAILY ECHO, NOVEMBER 6, 1879
ANON, 1910
   >>>>> ANON, SUNDERLAND LIBRARY CIRCULAR, 1910, PAGE 386.
DAVIS, 1979
   >>>>> P.S.DAVIS. COLLECTIONS FROM THE DREDGING EXPEDITIONS OF HMS PORCUPINE IN NORTH EAST ENGLAND. PORCUPINE NEWSLETTER 1979.
ANON, 1894
   >>>>> ANON, CAPTAIN CALVER. DODDS ALMANAC, SUNDERLAND. 1894
DAWSON, 1855
   >>>>> L.S.DAWSON, MEMOIRS OF HYDROGRAPHY. EASTBOURNE. 1855
Local Government reorganisation in 1974 resulted in the formation of a County Museums Service for the Metropolitan County of Tyne and Wear. Of the ten Museums brought under the County umbrella, three had collections of biological specimens - South Shields Museum, the Shipley Art Gallery, Gateshead and Sunderland Museum. The latter has collections of some significance, and became the focal point for the natural sciences section of the service. Centralisation of specialist collections in the various disciplines took place from the inception of the County Service, and the majority of the natural sciences collections previously stored at South Shields and Gateshead had been transferred to Sunderland by 1976.

The following notes outline briefly the development of the three institutions concerned, and the principal donors of biological specimens.

South Shields Museum

The first Working Men's Club and Institution in Britain was established in South Shields on March 11th 1850, in a schoolroom in Queen Street. By 1865 the membership had grown to 463, and new premises had been leased in East King Street. Although the Institution provided recreational facilities - these included rooms for bagatelle and chess and a large yard for quoits - its main function was as a library, newsroom and centre for debate. Two scientific societies, the South Shields Microscopical Society (founded November 4th 1861) and the South Shields Geological Club (founded October 9th 1862) were established as offshoots from the Institution and a small museum was established to exhibit items 'of scientific and mechanical interest'. Little is known of the personalities, achievements and eventual fates of these two societies. Only the Geological Club's first President, George Lyall, F.G.S. (1818-1896), appears to have had a scientific reputation, being a notable and active member of the Tyneside Naturalists Field Club.
In 1870 the Working Men's Club and Institution amalgamated with the South Shields Literary, Mechanical and Scientific Institution. The latter had been established on November 23rd 1825, in the basement of the Primitive Methodist Chapel in Cornwallis Street. A new building in Fowler Street housed their library and recreation rooms from 1855 to 1859, but as the membership grew it became evident that there was a need for a building with reading and recreation rooms and a hall for public meetings. On August 18th, 1859, the foundation stone of the present museum - then the new 'Mechanics Institute' - was laid by the President of the Institution, Robert Ingham M. P., the building being opened on April 10th 1860.

Following the amalgamation in 1870 the Mechanics Institute, its library and museum were offered by the Literary, Mechanical and Scientific Institution to the Corporation as a public library, subject to existing liabilities of £2150. The offer was accepted and the building formally opened as a public library by the Mayor, Alderman Terrot Glover on October 15th, 1873. The museum was placed in a room on the ground floor and opened to the public on February 24th 1876. Bailey, a local historian, gives a graphic description of the museum - "a little dingy, stuffy room...that was the museum containing some weird and wonderful exhibits. Then I fancy the museum was largely dependent for its additions upon the well-meaning but doubtful generosity of the busy housewife who, in the conscientious execution of her annual spring cleaning discovered 'bits of things the museum would be glad to have' ". The museum and reference library were moved to the public hall (the former meetings room of the Society) on the first floor in 1898, the extended library being opened by Mr. J. C. Stephenson on 25th August of that year.

Apart from some re-labelling and cleaning carried out by the Area Museums Service in 1967, the museum had changed very little since 1898 when Tyne and Wear County Council took responsibility for it in 1974. Biological and geological specimens formed the majority of the collections, but as the museum had never had specialist staff, let alone a Curator, inevitably these were uncatalogued, unsorted and in extremely poor condition. Storage for biological and geological collections not displayed was a shed at the rear of the building - another addition to the catalogue of nightmare stores. With few exceptions all specimens found here had to be discarded. Details of donations to the museum are traceable in the Minute books of the Library Committee, and the biological items reflect South Shields' connection with the sea, with frequent donations of 'sawfish snouts' and 'shells from a Pacific Island'. Because of the mistreatment and disregard of the collections, few of the surviving items can be traced to their original donor.
Only two collections are worthy of mention. The Runciman Collection of mounted birds and mammals was bought for and donated to the museum in 1921 by Sir Walter Runciman (1847-1937), senior partner of a Newcastle steamship company. This consisted of 60 cases of specimens prepared by William Yellowley (1823-1893), and his sons. William was a pharmacist and taxidermist in South Shields, and had acted as honorary curator of the museum and served as a member of the Library Committee from 1874 to his death. The Percy Hedley Collection of local Butterflies and Moths was donated to the museum in 1902. These two collections have been moved to Sunderland.

In 1977, The Curator of South Shields Museum, Mr. F. R. Woodward, donated his large collection of freshwater bivalve Mollusca to Tyne and Wear Museums, and this is now housed in South Shields.

Collections from Gateshead - The Shipley Art Gallery and Saltwell Towers Museum

Joseph Ainsley Davison Shipley, a prominent Gateshead solicitor, died at his home, Saltwell Towers, on 4th February 1909, aged 86. In his will he left a bequest of £30,000 to build an Art Gallery, and his collection of 500 paintings to put in it, to Gateshead Corporation. Saltwell Towers, erected in 1871 by William Wailes, a local manufacturer of stained glass windows, was also bequeathed to the town. This building was distinguished by fine wood carving on the doors and panelling executed by Gerrard Robinson (1832-1881), and excellent examples of late Victorian moulded plaster ceilings. Shipley had lived at Saltwell Towers from 1889.

The terms of the bequest were carried out and the Shipley Art Gallery opened to the public on the 29th November 1917. The building was quickly to become more than an art gallery, basement rooms being adapted to display the Ravensworth Bird Collection in 1920, and items of social history and natural history interest being acquired by donation and purchase. The new building flourished, with changing displays, evening lectures and civic receptions.

Saltwell Towers meanwhile, appears to have become something of an embarresment. The building, often referred to as 'The Mansion House' at Council Meetings, had been tenanted by a number of people, and acted as a childrens hospital for a short period during the Great War. In June 1932 the Council first considered utilising a portion of the house for the purpose of a museum, a suggestion that 'a sum of £100 should be provided to form the nucleus of a collection, and that a sum of £200 per annum would cover the salary of a caretaker/attendant, including house, fuel and lighting'. A Steering Committee was appointed, alteration work proceeded, and Saltwell Towers Museum
opened to the public on 8th July 1933. The natural history, social history and technology collections were transferred to the new museum, from the overcrowded Shipley Art Gallery.

A number of references are made in Council Minutes and Annual Reports of the museum to dry rot, and its treatment, in Saltwell Towers. However, the following statement appears in the Annual Report for 1968-69. 'In view of the cost of repairing the damage by dry rot in Saltwell Towers Museum, the Committee decided to close the Museum from 12th February 1969. The specimens are to remain there, for the time being, until alternative accommodation is found.' One wonders if a decision to leave 'specimens' unattended would have been taken so readily had they been fine or applied art? - particularly considering that the Museum had been subject to burglary and vandalism just prior to closure. The collections were eventually removed from Saltwell Towers to the basement of the Shipley Art Gallery in May 1969, where they remained until 1976, subject to poor climatic conditions. The remnants of a once interesting and diverse collection were transferred from Gateshead to Sunderland Museum in 1976. Saltwell Towers is still standing, but under the threat of a demolition order.

The following is a brief list of major donors:-

**Mounted birds:**
- J. Lawson (1921); Mr. Watson (1922);
- Lord Ravensworth (1928 & 1936);
- G. T. Tweddie (1933); Mrs. Emley (1934);
- Mr. Henderson (1934); Hancock Museum (1935 & 1947); Mrs. Bell (1936); J.H. Ritson (1937).

The major collection is that of Lord Ravensworth (Gerald Wellesly Liddell) (1869-1938), his birds regarded by members of the Museum Committee as 'a small museum in themselves'. Some 350 birds and 200 eggs were donated in 1928, when a basement room at the Shipley Art Gallery was converted to a 'bird room', to display them. It is unclear how many specimens were received in 1936, but reference is made to specimens mounted by R. Duncan (1857-98), R. Duncan Junior (1877-1905) and J. Jackson, celebrated Newcastle taxidermists, and John Cullingford (fl. 1878-1905) of Durham.

**Birds eggs:**
- Mrs. Humble (1921); H. Russell Eastcott (1927); Lord Ravensworth (1928); Mrs. J. Taite (1935); Mr. C. Bolam (1937); Capt. Nash

Russell Eastcott’s collection was unfortunately a prime target for the theft and vandalism which occurred at Saltwell Towers, although
his record books indicate the true extent of his collection.

**Mammals:**
Lord Ravensworth (1928); Hancock Museum (1935); Messrs. Pape & Sons (1935)

**Entomology:**
Mrs. Humble (1921); R. Swinburne (1933); Mr. Haig (1935); Mr. Hepple (1937); Mr. Ridley (1940); W. B. Charlton (1947)

**Mollusca:**
Mr. Carrick (1939)

**Flowering plants:**
H. Warlock (1933); Miss R. Dodds (1940)

**Sunderland Museum**

Until quite recently, it was a long held belief that the origins of Sunderland Museum lay with the formation of the Sunderland Natural History and Antiquarian Society in 1836. However, Tim Pettigrew, Assistant Keeper of Natural Sciences, recently discovered a reference to a Sunderland Museum of 1829 in a paper by Adam Sedgwick (1829) where (p118) in describing the fossil fish of the magnesian limestone he states 'To this list may be added the fossil fish found at Pallion, and described by Dr. Clanny and Mr. Winch. The specimen is preserved in the museum of Sunderland, and has been referred to the genus Chaetodon, but this cannot be considered as well ascertained till a more elaborate figure of the fossil has been published.' This specimen (the holotype of Platysomus parvus (Agassiz) ) is still in the collections. It is assumed that the museum referred to by Sedgwick is that of the Literary and Philosophical Society (founded 1795), and further research is now being carried out to determine the nature and extent of this Museum.

Sunderland Natural History and Antiquarian Society was founded on 17 November 1836, and the original Committee (listed by Bowley (1896)) includes a number of prominent philanthropists and naturalists. The Earl of Durham George Frederick Darcy (1828-1879), Edward Backhouse (1781-1860), Edward Backhouse jnr (1808-1879) and Robert Vint (1807-1890) were all to support the museum and donate significant collections to it. The Society collections grew rapidly, accumulating first of all in the passages of the Subscription Library, afterwards in the rooms of the Literary Society in Villiers Street, and eventually under the wing of the Literary and Philosophical Society in the Athenaeum building in Fawcett Street (possibly the time of merger of the two Museum collections).
In May 1846 the collections were transferred to Sunderland Corporation, which appears to have been one of the first two local authorities to implement the 1845 Museums Act. Colchester Corporation also decided to establish a public museum in the same month as Sunderland, but as this was not open to the public until 1860, Sunderland would seem to have a good claim to be the oldest local authority museum in the country. The Natural History and Antiquarian Society produced a report which surveyed the collections about to pass to the corporation. These were mainly natural history items, birds, mammals, insects, plants and geology, and the report itself was an extremely enlightened document, stressing the educational potential of museums and the value of having a collecting policy.

As the collections in the Athenaeum continued to grow, frequent complaints were made regarding the lack of space, and in September 1877 the erection of a new Museum and Library Building was approved by the Borough Council. The foundation stone of the Borough Road building was laid on 24 September 1877 and opened to the public on 6 November 1879. This building remained unaltered until 1964, when large extensions to the rear of the building provided much needed storage, display space and office accommodation.

In 1974 the Museum came under the Tyne and Wear Museums umbrella, and a new generation of displays started with the opening of the Local Wildlife gallery in 1977 - in the same room which had housed the natural history exhibits from 1879. Redisplay of the gallery necessitated reorganisation of storage areas, a problem heightened by the rescue of material from South Shields and Gateshead. Only the modification of the basement area for the geology and coral collections now remains to complete this reorganisation.

List of major donors with date:-

Flowering Plants -  Thomas Robson (1893); E. Backhouse & 'JB' herbarium (1894); Rev. W.S. Harrison (1895); Rev. A.M. Norman (1898); Miss H. Panton (1903); Rev. W.J. Wingate (1912); D.C. Ungley (1960?); M.H. Oates (1960's); E. De Vesian (1974); R. Maycock (1978); Wallis (1978); G. Graham (1977/8/9)

Although the majority of the Edward Backhouse (1808-1879) collection (some 20,000 natural history specimens) came to the Museum in 1907, a small, yet interesting collection of plants was donated in 1894. The 'E. Backhouse' herbarium includes specimens collected in the late 18th century and has been attributed in the past to Edward Backhouse (1781-1860), although this appears doubtful. The 'JB' herbarium is equally problematical, being attributed at one time to James Backhouse.
of York (1825-1890), although a comparison of handwriting has now discounted this.

The herbarium is a major growth point, due to the association with the Durham Flora project, and its co-ordinator the Rev. G.G. Graham. All voucher specimens for the Flora, which is now nearing completion, will be housed at Sunderland.

<table>
<thead>
<tr>
<th>Group</th>
<th>Contributors</th>
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</thead>
<tbody>
<tr>
<td>Bryophytes</td>
<td>Sunderland Natural History and Antiquarian Society (1850); E. Backhouse (1894); Miss H. Panton (1903); A.J. Campbell (1908); W.J. Wingate (1912); Angus Haw (1933); Rev. G. Graham (1977/8/9);</td>
</tr>
<tr>
<td>Fungi</td>
<td>E. Backhouse (1907); A.M. Norman (1898)</td>
</tr>
<tr>
<td>Marine Algae</td>
<td>W.M. Wake (1880); A.M. Norman (1898); Edward Backhouse (1907); W. J. Wingate (1912)</td>
</tr>
<tr>
<td>Non-British Ferns</td>
<td>M.N. Chevalier (1893); Colonel Lake (1899); Edward Backhouse (1907)</td>
</tr>
<tr>
<td>Diatoms</td>
<td>C.T. Trechmann (1966)</td>
</tr>
<tr>
<td>Anthozoa - (Scleractinia)</td>
<td>Dr. D. Redpath (1901); J. Morgan (1902); J. Potts (1909); Durham University (1977)</td>
</tr>
<tr>
<td>Mollusca - (British)</td>
<td>Percival Vernon (1882); A.S. Thompson (1882/33); Joseph Taylor (1889); Wilcox (1898); L. Hartman (1902); E. Backhouse (1907); I. Sharpe (1910); Rev. E.P. Blackburn (1962); C.T. Trechmann (1964); R. Lowe (1979)</td>
</tr>
<tr>
<td>Mollusca - (non-British)</td>
<td>E. Backhouse (1907); Rev. E.P. Blackburn (1962)</td>
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Some 4000 foreign shells were included in the Backhouse donation, and a significant number are labelled 'ex-Reeve' and 'ex-Cumming colln'.

Insecta

<table>
<thead>
<tr>
<th>Group</th>
<th>Contributors</th>
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</thead>
<tbody>
<tr>
<td>Lepidoptera - (Foreign)</td>
<td>Mason (1877); Beckwith (1881); F.T. Toft (1885/88); Miss Marshall (1897); A.M. Long (1898); Rev. Walter Andrews (1905); E. Backhouse (1907); Earl of Durham (1907); Rev. J.W. Brent (1908); A. Ritson (1908); Miles Moss and Walker Binns (1948); Shipley Art Gallery (1976).</td>
</tr>
</tbody>
</table>

The Backhouse material includes specimens collected by Alfred Russell Wallace from the East Indies, and James Backhouse (of York) from
South America.

Lepidoptera (British)  J. Bell (1881); J.W. Corder (1898, 1903, 1908); C. Boyat (1907); E. Backhouse (1907); J.W. Prince (1908); Dowsey & Richardson (1914); Harbottle (1914); Nat. Hist. Soc. Northumberland & Durham (1950); J.W.D. Magog (1953); C.T. Trechmann (1964); M. Milburn (1956); J. Newton (1965); D.A. Sheppard (1977); T. Jefferson (1979)

Coleoptera (British)  Rev. W.J. Wingate (1911/12); A. Harbottle (1913); J. Gardner (1915); Rev. H.J. Holme (1929)

Coleoptera (Foreign)  J.W. Corder (1898); Earl of Durham (1907); W. Peacock

Diptera (British)  Rev. W.J. Wingate (1911/12); C.T. Trechmann (1964)

Hymenoptera (British)  A. Harbottle (1913); C.T. Trechmann (1964); D. Sheppard (1977)

Hymenoptera (Foreign)  Earl of Durham (1907)

Odonata (British)  A. Harbottle (1913)

Odonata (Foreign)  Earl of Durham (1907)

Phasmida, Dictyoptera & Hemiptera (Foreign)  Earl of Durham (1907)

Birds  Robert Cameron (1876); Magog (1878); F. Toft (1886); N. Chevalier (1893); J.L. Scott (1921); M. Platt (1919); W. Rowe (1927); De Costa (1927); Hedworth-Williams (1935); T.W. Parrington (1962); C.T. Trechmann (1964)

Birds Eggs  G.C. Heslop (1874); J. Lintell (1878); F. Corder (1880); Duncan (1880); W. Rogerson (1881); R. Cameron (1886); E. Backhouse (1907); B.B. Mewburn (1907); J. Potts (1909); J.W. Bell (1919); Webster (1926)
Mammals W. Rowe (1927); W.J. Potts (1963, 1964)

Acknowledgements:

Thanks are due to the local studies librarians at South Shields, Gateshead and Sunderland, to Sarah Welbourn for her work on the insect collections, and Tim Pettigrew for much useful information.

Peter Davis
Sunderland Museum

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Shields Gazette 1926 (article in Library Cuttings Book p. 85 - ref. to E. Bailey).


Sunderland Library Circular (from 1877-1918).
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