

June 1979



BIOLOGY CURATORS GROUP NEWSLETTER VOLUME 2 No. 3 JUNE 1979

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Edited by Peter Davis Cartoons by Derek Hall

PUBLICATIONS

Amphibians and Reptiles of the Sheffield Area by Derek Whiteley, illustrated by Jeremy Lee. Sheffield City Museums Information Sheet No. 17.

This information sheet is a summary of the present status and distribution of amphibians and reptiles in the Sheffield Area, based on surveys carried out by the City Museums during the period 1975-1977. Brief notes on the species accompany clear distribution maps, and attractive line drawings by Jeremy Lee enhance the publication. Price 5p (47p p+p).

The Things you brought in Annual Report (1978) of the Biological Records Unit and Interpretive Centre, Scunthorpe Museum.

This 26 page report prepared by Natural Sciences staff at Scunthorpe Museum outlines progress of the Records Unit and highlights events and records of interest received. Primarily produced for the local naturalist and fulfilling the important roles of any record centre in encouraging and directing biological recording, and disemminating information. No price given.

Mini Print Sets for Marine Life Identification. Underwater Conservation Programme, Underwater Conservation Society.

During 1977 and 1978 amateur and professional divers have been recording sublittoral animals and plants at different sites around Britain as part of the Underwater Conservation Programme. Consistently one of the major problems has been identification of the organisms since often sublittoral species are not illustrated in the current general field guides or the illustrations given bear little resemblence to the living organism.

To help overcome this problem of identification, coloured mini prints measuring 9cm x 6cm have been duplicated from slides of the commoner sublittoral organisms that were mostly taken underwater. Three mini print sets are available for selected projects in the Underwater Conservation Programme.

The Species Recording Scheme: 71 prints of common sublittoral animals and plants are combined with a text giving details of their key identification features, geographical distribution and the types of habitat and sea bed where they occur. The prints and text cost $\pounds 8$.

The Nudibranch Recording Scheme: Mini prints have been produced of 50 of the commoner species (and some problematical forms) of sea slugs. These prints were designed for use with the Linnean Society Synopsis 'British Opisthobranch Molluscs' by T.E. Thompson and G.H. Brown but the notes accompanying the prints explain several recent nomenclatural changes and new additions to the British fauna. It is hoped that photographs will also be of particular use to participants in the Conchological Society's marine census. The prints and notes cost £5.

The Sponge Project: Sponges are often difficult to identify from preserved specimens but the growth form and the colour of living sponges are often very distinctive. The sponge project aims to develop greater understanding of the nature, distribution and biology of the British sponges. A sponge guide is available and contains 42 mini prints of 26 species of British sponges together with a text on their identification and costs £4.50.

If you would like further details or to order any of the mini print sets then please contact Dr. Bob Earll, Zoology Department University of Manchester.

Porcupine Newsletter Vol. 1 No. 8

This issue of the newsletter includes reports from the Spring Seminar held at the Royal Scottish Museum on 31st March and 1st April 1979, the theme being 'Biological Frontiers'. Nine abstracts of papers presented are printed here, relating to the factors affecting the distribution of a variety of marine organisms, including deep water corals, fish and pogonophora. Copies of this issue, and other back numbers, are available price 70p (inc p+p) from Fred Woodward, South Shields Museum, Ocean Road, South Shields, Tyne and Wear.

REQUESTS

Microscope Wanted

Can any well equipped Museum loan a microscope to John Cooter, Keeper of Natural History at Hereford City Museums? Please contact John at Hereford 68121 ext. 207.

Skeletal material wanted

Rogan Jenkinson of Creswell Crags Visitor Centre is in the process of building up a comparative bone collection of modern and Pleistocene Northern European species. This collection will be used at this classic site to facilitate identification of animal bones. If you have surplus skeletal material or would be prepared to donate carcases please contact Mr. Jenkinson at the Visitor Centre, Crags Road, Welbeck, Worksop, Notts S80 3LH (tel. Worksop 720378)

COLLECTIONS SURVEY

This has now been typeset and publication is imminent. Committee are now seeking the additional finance required for publication, and it is hoped that the report will be available on time for the Museums Association Conference.



EDWARD HEARLE RODD (1810-1880) - PROBLEM SOLVED

Having just received Roger Penhallurick's "The Birds of Cornwall and the Isle of Scilly" (1978, Headland Publications, Penzance, 478 pages) I now find that several question marks in the previous note (BCG Newsletter, Vol. 2, p. 56) are resolved.

E.H. Rodd's Collection apparently numbered at least 45 cases with 270 specimens mostly obtained in Cornwall and mounted by W.H. Vingoe (1808-1888), credited with being the most skilled of Cornish taxidermists. Francis Rashleigh Rodd (1839-1922), a nephew of E.H. Rodd, inherited the collection. The notes on the destiny of this collection are supplied by Roger Penhallurick (in litt., 24 April 1979). Trebartha Hall, North Hill, Cornwall (F.R. Rodd's home) was systematically demolished in 1949. There probably was no fire as mentioned on page 68 of Birds of Cornwall and the Isle of Scilly. The collections had been disposed of in or about 1940, some seem to have gone to the Truro Museum though there is no accessions record of this. During the war things may have been chaotic and neither is there any record of how the Rodd manuscript notes came to the museum. In the collection there are many "Edwardian" birds mounted by Vingoe which may be ex Rodd. There could be a connection here with W. Dodd of Barrow-in-Furness as the probable dates of disposal of the Rodd collection match or pre-date the period when Dodd was selling off his books.

As some of the birds originally mentioned in Rodd's lists are preserved at the Royal Institution of Cornwall in Truro and possibly elsewhere but bearing in mind the fact that much of both the Rodds' manuscripts are preserved in Truro, the annotated copy which arrived at Bolton Museum has been passed to them.

Penhallurick's book deserves a full review by an ornithologist but I must say that I am impressed by the depth of coverage achieved and the quality of not only presentation, printing and binding, but also the back up information. This is not just another county list of birds but a full faunistic survey and historical review of Cornish ornithology. Chapters are included on the county, its landscape and habitat structure, past ornithologists and their work, a systematic list of the birds and full delineation of authenticated records. There are appendices on Rookeries, Falconry, Dovecotes and an analysis of Churchwardens' accounts. A supplement gives an updating of the author's previous Birds of the Cornish Coast (1969) and there are 10km square maps being an atlas of breeding records for Cornwall.

The cost price if £11.75 which in the light of the cost of many much poorer books on a variety of subjects presently being published, would seem to be a relative bargain. Copies can be obtained from R.D. Penhallurick, Royal Institution of Cornwall, County Museum and Art Gallery, River Street, Truro.

E. G. Hancock Bolton Museum

DECOMPOSITION OF THE NEW ECOLOGY GALLERY OF THE BRITISH MUSEUM (NATURAL HISTORY) or (REAL LIVE ANIMALS IN THE NEW BRITISH MUSEUM DISPLAYS)

On a recent visit (4.4.1979) to this new gallery, with which I generally approve, I was interested to see that the small section devoted to decomposers was very appropriately itself decomposing!

The unprotected "Letraset" labels were not unexpectedly being erased by one type of animal <u>Homo sapiens L.</u> (larval form). However, much more exciting was the end module of this section showing a dead rabbit being currently decomposed by the Clothes Moth <u>Tinea biselliella L.</u> (larval form). To be honest I was first struck by the skill of the model maker at constructing such amazingly realistic insect droppings and the wonderful lifelike setting of the adult moth when a wriggling in the pile of frass gave the game away (or has the silicon chip struck here as well as in the last interactive unit of the gallery).

Incidentally I thought that the role of detritus as a foodsource e.g. for filter-feeders or as a primary energy source for some food chains would have been made at other places in the gallery as well. Perhaps its just a personal bias but after collecting marine life in the Mersey Estuary one does tend to be impressed by the importance of detrital particles - one way or another.

Ian Wallace Merseyside County Museums

Minutes of the Annual General Meeting of the Biology Curators Group held at the British Museum (Natural History), 3rd April 1979.

1. Apologies received from P. Morgan, D. Erwin and C.A.B. Steel

2. Officers Reports

Reports were received from the Chairman, the Editor and the Treasurer/Membership Secretary. A vote of thanks was proposed to the Officers by G. Stansfield, seconded E. Greenwood.

3. Election of Committee and Officers for 1979/80

The list of nominees was circulated at the meeting. Michael Taylor (Perth Museum) had agreed to act as Scottish representative on the Committee, and Bari Logan will represent the Guild of Taxidermists. Proposed J. Grav and seconded that the Committee and Officers be elected en bloc.

Officers:	Chairman Secretary Treasurer/Member-	Eric Greenwood Stephen Flood
	ship Secretary	Kelvin Boot
	Editor	Peter Davis
	Asst. Editor	Geoff Hancock
Members	of Committee	Geoff Stansfield, Peter Morgan, Mike Hounsome, Martin Brendell, Peter Lambley, John Matthias
Co-opted	Members	Dave Erwin, Ray Ingle, Mike Taylor, Bari Logan, James Bateman

4. Manchester Meeting

The problems of taxidermy/preservation of biological specimens which had arisen at Manchester had been discussed at the last Committee Meeting with representatives of the Taxidermists Guild. A joint meeting of BCG/TG will be arranged for the near future to discuss these issues.

5. Museums Association Professional Groups Committee

G. Stansfield outlined the new proposals for the M.A. Diploma, which had caused concern at the Professional Groups Committee, and the the production of a 'manual of curatorship'. It is though essential that BCG maintain close contact with the M.A.

with regard to the latter.

6. Return of Cultural Property

This will be discussed by ICOM/Museum Association and representatives of the National Museums at a Conference at the Museum of London on May 24th. It was felt that BCG should keep in touch with developments, but not make a definite statement. It was felt however, that a statement of policy from the National Museums was required. Restrictions on research in other countries was discussed.

7. Museums Association Conference

Arrangements for Portsmouth meeting were outlined. The 1980 M.A. Conference (London, 8-9-10 October) makes no provision for a 'specialist session', although the results of the M.A. questionnaire may yet influence the form of Conference.

8. Any Other Business

- Drew Report this holds implications for all museums, and the views of the membership are required. The Editor agreed to place an appeal slip in the March Newsletter.
- Small Mammal Exchange Kelvin Boot raised the question of this publication, and would welcome comments from members.
- iii) Collections Research in N.W. England Geoff Hancock reported on the availability of the Computer produced catalogue of collections in the N.W.

P. S. Davis 1.5.1979

MINUTES OF B. C. G. COMMITTEE MEETING: THURSDAY 26th APRIL, 1979

Members PRESENT:

Eric Greenwood (Chairman), Stephen Flood, Peter Davis, Mike Hounsome, Mike Taylor, Geoff Hancock, Martin Brendell.

- 1. <u>APOLOGIES</u> were received from Peter Morgan, Kelvin Boot, Geoff Stansfield, Peter Lambley, Jim Bateman, Dave Erwin and John Mathias, Bari Logan.
- 2. THE REPORT OF THE COMMITTEE MEETING of 2nd March 1979 which appeared in B. C. G. Newsletter Volume 2 Number 2 page 62 was accepted as a true record of the proceedings.

3. MATTERS ARISING

3.1 Meeting with Guild of Taxidermists.

Discussion took place on the form and content of the proposed joint meeting. The problems appear to revolve around the training of taxidermists and of general natural history technicians to museum requirements. The Museums Association has established examination standards, although these are open to criticism, and appears to be withdrawing from any form of training. There was therefore value in B.C.G. and Taxidermists trying to establish common ground on these topics. Members wished to emphasise that the demand for general technical work in natural history was of greater importance than preparation of display specimens which could, if necessary, be brought in from Area Services or others who work to museum standards. Agreed that S. Flood liaise with Bari Logan over time and place and B.C.G. to be represented by P. Morgan. D. Erwin, J. Bateman, E. Greenwood and S. Flood. (Meeting at Museums Association offices at 2 p.m. on 13th June).

3.2 Collections Survey.

Delay in details of costing may jeopardise the M. A. G. block grant of £100 so agreed that S. F. contact P. M. to obtain costings and emphasise importance of making the report available for M. A. Conference.

'Drew' Report

It was clear that a response was necessary. Discussion took place on the recommended structure for application of grant aid to museums and special note taken of the support recommended for Area Councils and County Consultative Committees. It was regretted, however, that it suggested aid applied to institutions rather than collections, that there was no encouragement of academic work on collections, and that the problem of uncurated collections was not covered. The BM (NH) appears to wish to establish much closer relationships with provincial museums and perhaps it is up to B.C.G. to foster this in view of the lack of guidance in the Report. It was obvious that the scale of the problem of unrecorded collections and the curator/specimen ratio needs to be established.

Agreed that E.G. prepare a paper covering these points, emphasising B.C.G.'s survey achievements and plans, and circulate it for comment.

Members attention was drawn to the report of the Research Council Review Group on Taxonomy now published by HMSO, which may also require a response from B.C.G.

- 3.3 <u>Museums Association Conference</u> Details of the meeting had been passed to the Museums Association, and S.F. would be circulating speakers with a suggested general common outline on the subject of collections and displays.
- 4. A. G. M. April 3rd 1979

Minutes of the A.G.M. had been prepared by P. Davis and, subject to addition of some names, were accepted.

Matters arising

4.1 Manual of Curatorship

Little was known on this subject as no correspondence had been received from the M.A. It was generally felt that there would be many difficulties in describing all the curatorial techniques for natural sciences and that comprehensive bibliographies linked with information sheets on general museum topics (such as legal and administrative problems) would solve most curatorial problems. Agreed that S.F. write to the M.A. asking for further information, offering help but pointing out the view of the Committee.

4.2 Small Mammal Exchange

It was reported that the Mammal Society were not taking any action on this matter, but that a number of other interested parties had been contacted.

4.3 Exchange of Cultural Property

Details of the joint M. A. /I. C. O. M. meeting in London were read out. The B. M. (NH) would be attending but at this stage had not formulated official policy, beyond pointing out that, with the possible exception of extinct species and unique anthropological material, natural history specimens could not really be classed as being of cultural significance. Committee <u>agreed</u> to make no formal comment at this stage but to continue to study the situation.

5. LONDON CONFERENCE 1979

Short reports had been prepared for some publications and M. T. agreed to write an account of the proceedings for the B. C. G. Newsletter.

The Systematics Association and S.B.N.H. were organising a conference for Easter 1981 on History in the Service of Systematics.

Members discussed ideas for the B.C.G. Conference in Autumn 1981, possibly joining with N.C.C. to discuss a range of topics connected with collecting and collections by government agencies, universities and museums. S.F. and P.M. would draft suggested programme etc., for next committee meeting.

6. FURTHER MEETINGS

Committee members will be urged to organise regional meetings to encourage better communication with members, but wherever possible to give them wide publicity (B. C. G. Newsletter, M. A. Bulletin) so that members from other regions can attend. (S. F. will coordinate topics to avoid duplication!). S. F. to receive suggestion for A. G. M., Easter 1980.

7. ANY OTHER BUSINESS

Committee Meetings. S.F. to prepare a cycle of meetings (provisionally May, September, February) and suggest dates for a meeting in Leicester in September. (Leicester Museum, 13th September).

THE INTERNATIONAL CONFERENCE ON THE HISTORY OF MUSEUMS AND COLLECTIONS IN NATURAL HISTORY. 3 - 6 April 1979 - A PERSONAL VIEW.

Although Scotland is a veritable paradise for the naturalist/ geologist, living here does have certain disadvantages. One is the comparative scarcity of one's museum colleagues when compared for instance with the cheek by jowl museums of the English Midlands or North-West and another is the distance involved in travelling to any meeting or conference organised south of Edinburgh. However, because of my own interest in the history of 'natural history', I could not miss the 'International Conference on the History of Museums and Collections in Natural History' and so boarded a British Caledonian One Eleven at Edinburgh for my first ever flight which after forty-five adrenalin filled minutes, touched down at Gatwick with a screech of tyres and a sigh of relief! - so much for the Biggles instinct!

Having been 'out of circulation' for almost a year, I looked forward to the start of the conference and the two AGMs which preceeded it. The BCG's Annual General Meeting took place on the Tuesday morning at the BM (NH) and went off quite smoothly as most AGMs do, though it could have been better attended. Democracy works better when as many people as possible are consulted. Possibly members claiming three days London expenses for an AGM would have a hard job justifying a further day for an AGM.

This meeting was followed in the afternoon at Kew by the AGM of the Society for the Bibliography of Natural History. After a brief formal session, Mr. R. D. Meikle presented a most lively and entertaining history of Kew Gardens and its staff which might well have featured in the main conference programme. That evening, an 'informal gathering' (the first of many!) allowed those of us who had not met for some time to renew old acquaintances. It has been said many times before, but it really is surprising how much information comes to light during these often impromptu 'gettogethers'.

The conference 'proper' was divided into five themes: Collectors and Collections in Europe; Travellers and Explorers; Zoological Gardens; Books in the Museum and North American Collectors and Collections which formed a natural follow-on the SBNH's 1977 Easter meeting. Each one of these topics could have been the theme for a conference and despite the profusion of papers, could only wet one's appetite for more.

The way that the various papers were received varied of course with the interests and attitudes of the individual listener. Any delegates present who believed that such historical researches are irrelevant to contemporary museum work no doubt benefited little from their attendance. However, I am convinced that an increasing number of curators are well aware that the collections in their charge can only be properly 'curated' (in the fullest sence of the word) when as much as possible is known about the original collector, the motive behind the formation of the collection and the local scientific 'climate' at that time. This knowledge is basic to our understanding and assessment of the collections. The function of collections was not dealt with but this was not the organisers brief and perhaps the future conference on history in the service of systematics will correct this to some degree.

There were various visits on the Thursday afternoon and I elected to go to the Chelsea Physic Garden. This oasis of green adjacent to the embankment is now surrounded on three sides by large blocks of red brick Chelsea flats but was originally in the countryside. It's history and important contribution to English botany is nicely dealt with in D.E. Allen's book 'The Naturalist in Britain'.

Another conference 'spin-off' was the magnificent exhibition of works relevant to the themes of the conference in the BM (NH) Library which included such gems as Darwin's Beagle notebooks and the MS. of the 'Origin', 'Museum Tradescantiamun', Smith's 'Strata identified by organised fossils', Harris's 'The Aurelian' and many others. If only the catalogue had been annotated!

Being particularly interested in British collectors, I found the papers on Darwins plants (many of which are still unidentified), Wallace, Swainson, Cumming, Bruce and Hunter particularly edifying while from abroad the papers on Spencer Baird and his network of collectors; The Jardin des Plantes; Joachim Barrande, Ward's Natural Science Establishment (I recently found a volume of his catalogues in my own institution), and A. Agassiz also held my attention. The papers on Zoological Gardens at first glance seemed rather out of place, but it soon became apparent that their contribution to science has often been neglected and is considerable. The withdrawal of A. P. Harvey's paper on the history of publishing by museums was a disappointment to all delegates but will apparently appear in print with the rest of the conference proceedings.

One last point. I must confess to being ignorant of the protocol involved when inviting delegates from non-english speaking nations to present papers at conferences, but I hope that I am not being too critical if I suggest that their standard of English might be assessed first. It really was very courageous of some delegates to read their papers albeit in broken english, but I for one will have to wait until they are published in the Journal of the SBNH next year to find out what in fact they were saying.

However, I would like to add my thanks and BCG's to Judith Diment and John Thackray of the SBNH for all their efforts in organising an interesting, informative and successful conference.

Michael A. Taylor, Keeper of Natural Sciences Perth Museum

REPORT OF THE MEETING OF THE ICOM INTERNATIONAL COMMITTEE OF NATURAL HISTORY MUSEUMS HELD IN AUSTRIA FROM 13th to 19th MAY 1979.

This was the second meeting of the International Committee of Natural History Museums to be held outside the general ICOM triennial conferences, the first having taken place in Canada in 1976.

The conference was attended by some 70 delegates representing the natural history museums of 20 countries and including 30 delegates from Austrian museums.

The formal sessions were held in the Museum of Natural History in Vienna from 14th to 16th May, followed by an excursion to visit museums in Graz, Salzburg and at the Kremsmunster monastry.

There were three main themes to the conference.

Dr. David Munro, Director-General of IUCN was the opening speaker for the first session on <u>Natural History Museums and the International</u> <u>Union for the Conservation of Nature</u>. Dr. Munro outlined the need for a public awareness programme to draw attention to the destruction of wildlife and wildlife habitats. This was followed by a paper on the Role of the Museum in Environmental Education by John Whiting of the National Museum of Natural History in Ottawa. A lively discussion took place and this in turn led to the adoption of a resolution at the business meeting later in the week (see attached paper).

In the second session on Ethics and the Collecting of Natural History Material, Dr. Mahan of the Cleveland Museum, Ohio, outlined the guidelines incorporated in the Museum Ethics paper of the American Association of Museums. Dr. Klemmer of Frankfurt and Dr. Engstrom of Sweden described the situations in Germany and Sweden respectively. This subject is of growing concern to museums in the light of the possible effects of collecting on rare and threatened species and the need to observe the new conservation laws of individual countries and the Convention on International Trade in endangered Species of Wild Fauna and Flora.

During the discussion it became clear that there was a need for more information from different countries and a resolution to this effect was adopted at the business meeting.

The third session was devoted to the International Year of the Child. Dr. Padget described the new Children's Hall at the Natural History Museum in Vienna and delegates were able to visit the hall and see it in use. Dr. Nair from New Delhi also presented a paper on Natural History Programmes for Children.

In addition to the three main themes the conference also provided the opportunity for papers to be presented on miscellaneous subjects. During this session the writer gave a paper on the Training of Natural History Curators. The paper described the teaching of the natural history option of the Museum Studies Course at the University of Leicester. It was received with interest and generated a useful discussion with several enquiries about the possibility of overseas students attending the course. It appears however that the Leicester Course presents one of the few opportunities for specialised training in this field. The writer was also able to speak briefly in an informal session about the three specialist groups in Britain, the Biology Curators Group, the Geology Curators Group and the Group for Educational Services in Museums. Samples of the literature of the three groups were displayed.

As is usual the case with such conferences, the informal and social sessions also resulted in many useful discussions and exchanges of information. There is no doubt that these meetings will result in the continued exchange of information and the establishment of new links between museums and curators.

Draft of the main resolutions passed by the ICOM International Committee of Natural History Museums in Vienna in May 1979

Resolution 8

a) Recognising the vital and urgent importance of promoting broader public understanding of ecology, including human ecology and the conservation of natural resources.

b) Convinced that natural history museums can contribute effectively to promote this understanding.

c) Noting that while appropriately designed exhibition and extension programmes are needed in all parts of the world, the most serious problems of conservation and renewable resources are in the developing countries.

d) Aware of the capability of IUCN through its network of commissions and members to identify and define critical conservation issues throughout the world.

e) Noting also that the committee encourages and promotes the philosophy of museums working together to solve global problems.

f) Aware of the necessity that local museums of a country are the

best and most appropriate advisors on the interpretation requirements of the country.

Be it resolved that the International Committee of Natural History Museums of ICOM establish with IUCN a small working group to define methods and undertake pilot projects for co-operative museum based activities aimed at enhancing public understanding of ecology and conservation and to report its findings through the committee's newsletter and bring for discussion at the next meeting of the committee in Mexico City in 1980.

Resolution 9

a) Desiring to develop a world wide code of ethics for Natural History Museums,

b) Recognising that few facts are available regarding present codes of ethics (if any), that already exist in the world's natural history museums.

Be it resolved that in so far as is possible, the Natural History Museums Committee of ICOM inquire about the present status of ethics codes for the world's natural history museums and further that the committee develop a world wide code of ethics for all natural history museums.

Resolution 10

a) In as much as one of the handicaps in the development of Natural History Museums in the developing nations of the Asian and South East Asian Region is the shortage of technically trained personnel,

Be it resolved that the Natural History Committee of ICOM recommend to ICOM to recommend to UNESCO to consider the possibility of organising a Regional Training Centre for Natural History Museum personnel in Asia.

G. Stansfield, May 1979

ONE-MAN BAND

At the March AGM, I wondered how long it would be before the Buckinghamshire County Museum was asked to contribute to the 'area' theme, and I have not had to wait long. However, I regret I am unable to write about the history of the museum collections or their collectors as other contributors to this series have done, though this article will explain why.

I, alone, am the entire staff of the Botany, Zoology and Geology Departments - a Jack of all trades and master of none. I began as the Educational Assistant as well, transporting models around the countryside, but gladly relinquished that after a few years. Every museum activity has (in theory) to be covered by me, from feeding the livestock and topping up the naphtha, to providing for research workers and locating site data for enquirers.

I started in 1963 with a collection which had been left unattended since the last Curator interested in natural history had died 20 years before. My first job was to create a natural history gallery and, with no academic institution to satisfy, we settled for the needs of children and shoppers, in the hope that we could encourage them to be more observant in the countryside and therefore more concerned for wildlife conservation. I did a little fieldwork to acquire some knowledge of the distribution of species in Buckinghamshire, obtained enough mounted specimens to look good, and made many buckets-full of papier-mache to prepare six display cases. These show different habitats to be found in the county, with the right species and stages of development to represent a particular month of the year. Two 'topic' cases gave an opportunity to use larger animals and ease the storage problem. Just before the gallery was due to be opened, we concentrated on geology and, in a hotel bedroom during a diploma course, I prepared the maps and labels. These went into a tiny gallery with just room for two cases of local fossils and one of local rocks and their uses. At the opening ceremony (by a grand-daughter of Charles Darwin, who lived locally), a wood-boring beetle emerged from a fumigated piece of dead wood and settled on the head of the coypu.

Once it was open, there was an influx of 'things' to identify, lessons to be prepared to school parties and loan service boxes of local interest e.g. snails of Chiltern Downland and fossils from the Aylesbury limestone to be made. We started a Holiday Club, which has become a success, so that now there is no rest from children. With Environmental Studies in their heyday, I prepared displays for several local centres, wrote nature trails, taught in the field, answered teachers' enquiries on sites suitable for fieldwork and suggested projects to do there. I had come to know many local naturalists and to be known so that telephone calls, requests for talks and involvement with several committees was inevitable and has never let up.

When I got round to the collections half of the specimens were a green pin, a pile of dust and no label, the animal having ended up on a different bit of the food chain to what it anticipated. The rest were put in a recognisable order and I began to fill in IRGMA cards. I was glad of volunteer help for this gargantuan taks, but it proved to be false economy as I know some mistakes have been made (though keepers have been known to make them as well). However, the Buckinghamshire material is catalogued after a fashion, the non-Bucks being still an unknown quantity. (I have often cherished a hope that County Museums could do some swapping of noncollection material, and return the specimens to their native land, for instance, I would find herbarium specimens from Bucks much more useful than fossils from the Bristol Channel). Long term care of the collections, especially chemical conservation of decaying fossils is a problem in an office with no laboratory facilities, and takes longer to do as a result.

Although this was and is my only experience of museum life, I had come from a place where we habitually recorded the distribution of plants and animals in the parish, and I extended this practice to cover the whole county of Buckinghamshire plus vice-county 24. Thus, we had an embryonic record centre before they were called such.

So, after fourteen years we have natural history galleries, an active teaching role, liaison with local people, volunteer helpers, additional collections given in the last few years, biological and geological record cenrres, very little time for fieldwork, certainly no time for 'research' or publications and very little hope of the extra staff I have long been asking for. It is a tall order for one person - I know of County Museum Services where many more are employed to cover this range of activities. This year we have a temporary zoologist and botanist under the government STEP scheme which is enabling the biological record system to be improved and it is good to have colleagues in one's own discipline to talk to. The need for a geologist was accepted by the Education Committee and put up as a policy option, but rejected on financial grounds.

With the bags of fossils from half-term still waiting to be identified and a project on mammal skulls to complete for the summer holiday club, I am quite sure I am not the only 'One-Man-Band' in a County Museum Service where daily 'interruptions' are a full-time job. I probably speak for many when I say I am very conscious of all the jobs which do not get done - the temporary geological exposures we fail to record or collect from, the inadequacy of the biological site data, the galleries needing a spring clean, the need of conservation for specimens etc etc... and finally, the research into the collections which would make a useful contribution to the BCG newsletter.

Jill Royston Keeper of Biology and Geology Buckinghamshire County Museum, Aylesbury

A COMPARISON OF THE FAMULUS AND GOS PACKAGES FOR HANDLING MUSEUM DATA

INTRODUCTION

While awaiting the completion of the GOS package, Manchester Museum has been using the FAMULUS package to produce computeraided catalogues of certain collections. As the results from this FAMULUS work appear satisfactory it has been asked 'why consider changing to GOS?' To answer this query the present paper has been written; it is aimed at non-computer trained Museologists and so the jargon has been kept to a minimum and certain finer technical points have had to be glossed over.

THE PACKAGES

The two packages are large but of roughly equal size; although either can be run on a dedicated mini-computer, they require a fairly big machine if they are to handle large files of data in a reasonable time.

FAMULUS is written in standard FORTRAN, and FORTRAN compilers are available for most machines; FAMULUS is already implemented on a wide range of computers and is comparatively easy to transfer to most machines. GOS is written in BCPL, a powerful but comparatively little-used language, originally designed for writing compilers for computers. Although theoretically BCPL is easy to transfer between different computers, few manufacturers yet seem to offer BCPL compilers for their machines, which means the implementation of GOS can involve quite a lot of preliminary work in first implementing a BCPL compiler. However, recently a Cambridge firm have taken on development and support of BCPL and will write a compiler for it on any machine for about £2,500.

DATA INPUT

Both packages require a record to be broken down into its discrete data 'elements'; FAMULUS is limited to 60 elements and to a maximum of 4000 characters per record, although longer records may be accommodated by using duplicate entries. Theoretically the number of GOS elements is unlimited as is the total length of the record, but in practice speed of execution will introduce a space limitation. The breakdown of the data into elements for both packages would normally follow the MDA data standards for the subject of the record. Both require each 'element' to be labelled uniquely within a record. Data prepared for input to FAMULUS can generally be made GOS compatible; the reverse is also possible but may prove more complicated.

FORMATS

Each package requires a 'formatting statement' to enable it to 'understand' the data input. For FAMULUS this consists merely of a list of the data element labels or 'fields', given in the order of their occurrence within a record; all the fields are of one type and are of equal status.

For GOS the field names are again declared, but fields ('elements') may vary in type depending on the sort of data to be placed in them (e.g. Integer); also one may link fields into a hierarchical structure of several levels.

Thus in FAMULUS the data field DATE '16 MAR 1978' would be treated as one unit for manipulation (although 'MAR' or '1978' can be searched for), but in GOS the 'day', 'month' and 'year' may be treated as sub-elements to the main element 'DATE', if desired.

With both packages fields, although 'declared', may be null i.e., neither the label nor any data needs to be entered for a record, if none exists.

HANDLING DATA ITEMS (or 'ELEMENTS' or 'FIELDS')

If a FAMULUS field contains more than one item of data it needs considerable juggling with extra 'delimiters'' to enable individual items to be operated upon independently (eg: to produce an index of donors from an ACQUISITION field when that field may also contain date of acquisition and the names of people from whom collections have been purchased). It can be done but it is complicated and time consuming.

With GOS the problem does not arise as all the items within the main field ACQUISITION can be themselves labelled as sub-elements and thus independently accessed and manipulated.

OPERATION: 'DRIVING' THE PACKAGES

A major difference between the packages lies in the method of operation. FAMULUS consists of 12 sub-programs which cover all the main operations required on a data-file, such as sorting, searching, editing, printing-out, etc. Each sub-program has a small range of options, e.g. for SORT - one can select the field or fields upon the contents of which the file is to be ordered, for GALLEY (to print-out data) one can select the width of the output, i.e. the number of characters to be printed across the page, etc. These options are chosen by placing 'control cards' in the instructions to the computer, e.g. '/FIELDS/ (GLAS, GENR)' or '/WIDTH/(68)'; only rarely are more than 6 such control cards required to drive a FAMULUS subprogram. Thus FAMULUS is very easy to use, but this simplicity carries the penalty of a strictly limited range of, for example, output formats. The FAMULUS sub-programs may be run alone or they may be linked together within one 'job', e.g. to produce a catalogue plus three different indices in one go.

GOS, on the other hand, has far more sub-programs or 'processors', ca. 60 of them, and these can be linked in a great variety of ways, including the ability to act recursively (i.e. a processor may call itself again within the process job it is doing). Again, the processors offer a large range of options, but those required for a given job have to be set by means of 'control statements'', and these can be quite complex, it is expected that most of the 60 or so processors available will be used but rarely. Thus GOS is very much more complicated to use than FAMUS, but is considerably more flexible; the user has a virtually unlimited range of output formats available, for example.

Of course, if a limited, preferred, range of option is accepted then the control statements have to be written only once for each set of options, whereafter GOS can be 'driven' in a similar manner to FAMULUS. This is the expected way the GOS package will be used in service, although the operator will retain the advantage of being able readily to produce new option choices as the need arises. MDA expect, in time, to provide GOS with a full library of control statements or specifications; these would allow, inter alia, some hundred or so index specifications.

To a Museum Curator, probably the most important difference between the packages is the ability of GOS to 'layout' its output in almost any format that may be designed. To do this with FAMULUS would require writing a set of FORTRAN programs to 'post-process' the output before printing.

CONCLUSION

To sum-up, FAMULUS permits a strictly limited range of options but is simple to use, whereas GOS requires considerable expertise to run, but permits choice from a wide range of options. FAMULUS was originally designed for handling bibliographic information, while GOS is specifically designed to handling the often complex data attaching to museum objects. In basic terms the intending user has the choice between an airbus and Concorde - remembering an airbus at the moment can land at many more airfields!

NOTE 1

The current FAMULUS package suffers one or two minor constraints

in the EDIT and INDEX sub-programs which have been ignored for the purposes of this comparison, as it is intended to eradicate them in the near future.

FAMULUS is currently upper-case only at Manchester and because of the complications involved in a upper and lower case implementation, Manchester GOS initially also would be in upper case only.

For both packages, however, it is relatively simple to convert some outputs from the package so they can be printed in upper and lower case, ie., a "cosmetic" job.

Charles Pettitt Manchester Museum

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THE BOTANICAL COLLECTIONS AT DERBY MUSEUM

The Derby Town and County Museum was founded in 1836. It was a private Society originally but in 1870 the collections were transferred to the Borough of Derby and were finally housed in the present building in the Wardwick in 1876.

Alexander Croall was Librarian and Curator from 1864 until 1873, and was a botanist of some repute, but sadly he does not appear to have contributed to the botanical collections, and we have no records of botanical specimens acquired by the Museum until 1878.

In 1889 the Rev. W. H. Painter published "A Contribution to the Flora of Derbyshire" followed by 'A Supplement to a Contribution to the Flora of Derbyshire including a list of mosses found in the county", 1902. His collections given to the Museum support many of the records in these publications, see below.

"The Flora of Derbyshire", by William Richardson Linton was published in 1903, and much of his herbarium is now in the collections of the Merseyside County Museums in Liverpool. There are only a few plants collected by him in the Gibbs Herbarium at Derby.

In 1949 a committee of local botanists was formed to work on a revision of Linton's Flora. A. L. Thorpe, Curator of Derby Museum from 1942-1971, was one of the members and in 1968, "The Flora of Derbyshire", ed. A. R. Clapham was published. Subsequent recording stimulated by this publication necessitated 'a Supplement to the Flora of Derbyshire", in 1974. Many recent specimens in the Herbarium support records for these publications. The Herbarium

Vascular Plants

There are four main collections:

Rev. William Hunt Painter 1835-1910

1878 Derbyshire Herbarium. The catalogue entry states '29 Folio Volumes', a later entry, now known to refer to the Whittaker Collection, but erroneously added to this entry. Painter subsequently donated more than 340 sheets between 1880 and 1891. The collection is combined with the others in the Herbarium and is estimated at 1,350 sheets. In his Supplement to the Flora of Derbyshire, Painter states that 'Specimens of nearly all the plants recorded in my 'Contribution', and in the following 'Notes', have been placed in the Derby Museum, ''.

John Whittaker 1823-1894

1894

This collection of 2,200 sheets is bound in 29 volumes, and having been catalogued, is being incorporated with the Herbarium, as the specimens are in danger of damage when the books are opened.

The earliest specimen is 1807 but most were collected between 1830-70. All British, many from Breadsall, nr. Derby, and a fair proportion collected by H. H. Crewe, another local botanist.

Many specimens are vouchers for records contributed by Whittaker to the Floras of Linton and Painter.

Rev. Canon Edmund Carr 1826-?1916

Herbarium, approx. 1,350 sheets. British with only a small proportion of Derbyshire specimens, some of which support Carr's records contributed to Painter's Flora.

Thomas Gibbs 1865-1919

1919

1916

British Herbarium, approx. 2,000 sheets. A high proportion is Derbyshire material, some being voucher specimens of Gibbs records contributed to the Derbyshire Flora by Linton.

Since 1968 a further 700 sheets have been added to the collection by local botanists, principally the County Recorder.

Recently the Rubus specimens have been checked by A. Newton.

Bryophytes

c.1960	The collection made by F. Crosland contains approx. 560 species, of which 300 are Derbyshire specimens, the remainder British. Collected between 1910-50.
	There are also two Victorian collections perhaps of historical interest, ''Mosses of Derbyshire'', and ''Ferns & Mosses of Derbyshire'' in bound, printed volumes which may have been produced in some quantity. There is no locality data with the specimens.
1916	Another volume, ''The Sph agnaceae or Peat Mosses of Europe and America'' by R. Braithwaite, 1877, was given as part of the Carr Herbarium. Approx. 80 species.
Algae	
1919	33 species. British, collected 1860's. Miss J. Clark
1929	8 volumes, probably all collected by C. E. Hurt, mid 19th century. Approx. 450 specimens. British and specimens from Labrador and Jersey.
1966	40 species. N. Wales. S. Herriott.
1882	Another small folder is probably commercially produced and of historical interest. Ferns, Mosses and Seaweeds of New Zealand. Those dated were collected in 1860.
Fungi	
1969	200 freeze dried specimens, duplicates from the D.A.L. Davies Collection. See B.C.G. Vol. 2, no. 2, p.66.

Data associated with the Herbarium includes the original records for Clapham's Flora of Derbyshire, on foolscap sheets, and subsequent records of Derbyshire plants stored on standard 8" x 5" index cards.

Botanical site records are housed separately and cover a large number of sites in the county. There is also a considerable amount of historical information relating to local botanists, and perhaps another collection should be included here, 180 herb and spice samples collected as a record of the stock of local Medical Botanist, A.R.S. Proctor, the fittings of whose shop were acquired by the Museum after his death in 1971.

Sue Patrick Derby Museum

THE GENERAL PUBLIC AS A SOURCE OF BIOLOGICAL RECORDS -THE NORTH EAST EXPERIENCE

Unfortunately the majority of biologists working in museums do not have sufficient time or opportunity to spend on field recording, the luxury of days spent in the field now being largely the perogative of STEP (formerly JCP) assistants - indeed a useful means of distinguishing permanent and temporary staff in an examination of skin pigment in September. However, the boom in 'leisure' and ready access to the countryside has resulted in many more people making contact with the natural environment and discovering their local wildlife. One would imagine that here is an extremely useful source of information if only it can be tapped in a way which will yield meanginful results. Natural History curators in north east England meet on a regular basis as the 'Natural History Panel ' of Museums North (the N.E. equivalent of Federations) and have tried to obtain biological records from the general public in the form of three regional surveys (amphibia, squirrels and the hedgehog) carried out since 1975. The following notes are a brief examination of the ways in which the surveys were conducted, the problems encountered and the value of the results.

First choose your animal...

The choice of subject is arguably the most difficult decision to be taken, and a number of criteria need to be met:-

1. Is the animal large enough to be seen, or if small is it conspicuous?

2. Is the species relatively common?

3. Is the animal comparatively easy to recognise?

In other words there is little point in asking a non-biologist to look out for a species there is little chance of seeing or which he cannot identify.

4. Has the animal got 'public appeal'? (a cuddly, furry animal is much more likely to solicit a response)

5. Is there an interest angle? (An absolute essential for publicity)

6. Is there a valid scientific/conservation/educational objective which will be realised by studying the distribution of the species?

It is probably impossible to find one species or group of animals which fit all the requirements. Amphibia were chosen as our first survey because of interest created by a film about them shown on a regional natural history programme. Opportunism can be important! Also, our knowledge of distribution was scant, not only of the animals but also of the available breeding sites. Amphibia are perhaps not cuddly, but they are interesting and to some even appealing. Identification, however, was to be a major problem.

The distribution of red and grey squirrels was particularly interesting in the region as subjective evidence suggested a continued northward spread of greys in Durham. This also provided an angle for the media – conflict (?) - resulting in good publicity. Both species are reasonably abundant, though with a patchy distribution, and can be readily distinguished. The hedgehog variation was chosen to gain basic distribution data. It has proved to be a popular choice because it is a widely distributed, appealing animal.

Then reach your public...

Obtaining the information required needs concentrated planning and not a little spoon-feeding. We are attempting to get accurate information from people who are not scientists and this has to be kept in mind throughout the exercise. We need to:

- 1. Generate public interest
- 2. Sustain that interest over a period of time
- 3. Make explicitly clear the nature of the information required
- 4. Ensure that records can be verified

In each of the surveys conducted in the north-east the main means of achieving these aims has been to produce an A4 handout.^{*} This states the reasons for the survey, a guide to identification (if necessary), and a tear-off slip listing the information required which can be returned to a museum in the area. The handout needs to be as attractive as possible to catch attention, and illustrations are an obvious aid here. The academic hat needs to be put aside too - a heading 'North east Museums Amphibia Distribution Survey' does not roll off the tongue as easily as 'Spot the Frog', the title eventually chosen. Having produced a handout

* copies of these are available from Sunderland Museum

this can then be made available through the usual channels to the public museums, libraries, leisure centres, etc., and be used to contact the media as a press release. Publicity is the key to success in a survey of this kind, and press, radio and television are fortunately always eager for natural history 'stories'. Our experience is that a television slot is (not surprisingly) the most productive - indeed a 'squirrel hot-line' is an essential the day following a broadcast and telephonists should be forewarned. Making a productive start can usually be guaranteed, but sustaining interest is more difficult. Assessing the information received at a later date can usually produce something of interest to return to the media with - an under-recorded area or the occurrence of species in unusual habitats (the toad in the pantry, the voyeur hedgehog found in the ladies room in the local hospital) for example.

The hedgehog survey has an additional facet. The handout (shown) followed the same pattern as before, but also acted as a carrot to hedgehog spotters. who would be rewarded with a 'hedgehog wallchart' if they forwarded at least two records. The wallchart was prepared jointly by the panel and was illustrated by a notable local wildlife artist - the cost of handouts (5000) and wallcharts (2000) was £200, the money being found from Tyne and Wear Museums Education budget and grant aided by the Area Service. In this instance the wallcharts were also used to gain publicity for the survey. The impact of the wallchart has been particularly significant in the five weeks the survey has been in operation a total of 600+ records have been received. It was suspected that a crop of spurious records would arrive from unscrupulous hedgehog wallchart seeking youngsters but this has not proved to be the case. In fact the majority of records are extremely well documented, often with a dossier on 'their hedgehog' and accompanied by Instamatic 'hedgehog at dusk' or the popular 'blurred hedgehog with hand' colour prints. When producing a wallchart postage costs must also be taken into account, and it is estimated that each record costs museums approximately 8 pence. This could be considered prohibitive, but undoubtedly it is an aid to success, provides good publicity for museums generally and plays a valuable educational role.

Assessing the results...

In each instance one member of the panel has taken responsibility for collating and interpreting the information received - indeed it could not be done in any other way. A number of points are immediately evident when working through the records. Identification at even the most basic level is a real problem for the majority of the general public, and most do not know how to give a grid reference. This means a good deal of time needs to be spent verifying records and adding grid references for (often obscurely named) sites. In addition, historical records are frequently given even though it is explained that only current information is required. Irrelevant information is often provided.



The hedgehog or urchin *Erinaceus europaeus*, is the largest insectivore (insect eater) found in Great Britain, owing up to a foot in length. It is unmistakeable due to its spines, which are modified hairs providing a very effective defence against predators. An attractive wallchart* telling you more about the hedgehog - its diet, breeding biology, behaviour and folklore has been prepared by Tyne and Wear County Council Museums. All you have to do to win a wallchart is to send in to your nearest Museum (listed below) information about where a hedgehog has been seen. Records of dead hedgehogs (they are often killed by cars) do count - and the more records sent in the better. The information received will help the natural history curators in Museums in North-East England to plot the distribution of this interesting animal in our area.

Hedgehog Survey

Hedgehog Survey

I saw a hedgehog at (place)	I saw a hedgehog at (place)
••••••••••••••••••	
Grid Reference	Grid Reference
Dead or Alive?	Dead or Alive?
ate seen	Date seen
Time seen	Time seen
Name of Recorder	Name of Recorder
•••••	Address

I do/do not want a wallchart.

Please detach this portion of the sheet and send your information to one of the following Museums: Preston Hall Museum, Yarm Road, Stockton-on-Tees The Gray Museum, Clarence Road, Hartlepool The Dorman Museum, Linthorpe Road, Middlesbrough The Hancock Museum, Barras Bridge, Newcastle Sunderland Museum, Borough Road, Sunderland

* Only a limited number of wallcharts are being printed, but they will be fowarded to recorders as long as stocks last.

The Amphibian survey, although resulting in a total of 417 sightings from 334 sites (Pettigrew 1977), was perhaps the least successful. The problem of identification of newt species was perhaps inevitable, but I remain to be convinced that the public can distinguish between frog and toad - even with a comprehensive handout! The majority of records were from garden ponds - perhaps one of the less threatened wetlands. However, for all the records were a mixed bag, we did learn of some important breeding sites of which we were unaware, and paid follow up visits to those of particular significance or which were under threat, and we have added to our knowledge of species distribution. Add to that the publicity gained for wetland conservation and the survey must be considered worthwhile.

The squirrel survey resulted in fewer records - 235 from 152 contributors - yet the standard of information received was higher. A high percentage of recorders contributed a grid reference, accurate locality and habitat details and descriptions of their sighting. It would seem that this survey appealed more to the amateur naturalist rather than the public generally, a high proportion coming from County Trust or Field Club members. A number of very suspect records for grey squirrel, well outside the expected range were received, and most of these (after consultation with the recorder) were eventually discounted. It is extremely important to obtain the recorders name and address, and this is an essential feature of the 'tear-off' slip accompanying the handout.

Unlike the amphibia, there was comparative squirrel distribution data for the north east of England from comprehensive searches undertaken by staff of the Ministry of Agriculture in 1946, 1957, 1962 and 1971. Our results (Davis P 1979) indicate a continued spread of the grey squirrel in the south of the region.

At this stage it is difficult to comment on the scientific value of the hedgehog survey, but it is already evident that we will have a considerable amount of data to analyse. Undoubtedly it has aroused public interest and acted as a public relations exercise for the member museums. The number of records from schools and schoolchildren indicate that the educational potential of the survey is also being realised.

Involving the general public in biological recording could perhaps be considered a dangerous practise, giving erroneous results and being too time consuming for the people co-ordinating the survey. Undoubtedly the latter is true - a good deal of effort is required to make the survey a success, but I feel that provided the target species is the right one, and the survey is conducted in a responsible way, the general public do have a role to play. One obvious critiscism is that time would be better spent by museum biologists in recording threatened species or sites rather than the more general surveys which can be aimed at the public. All I can say in defence of biologists (and geologists) in the N.E. is that we do both - I believe rather well!

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