

B.C.G.

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BIOLOGY

CURATORS'

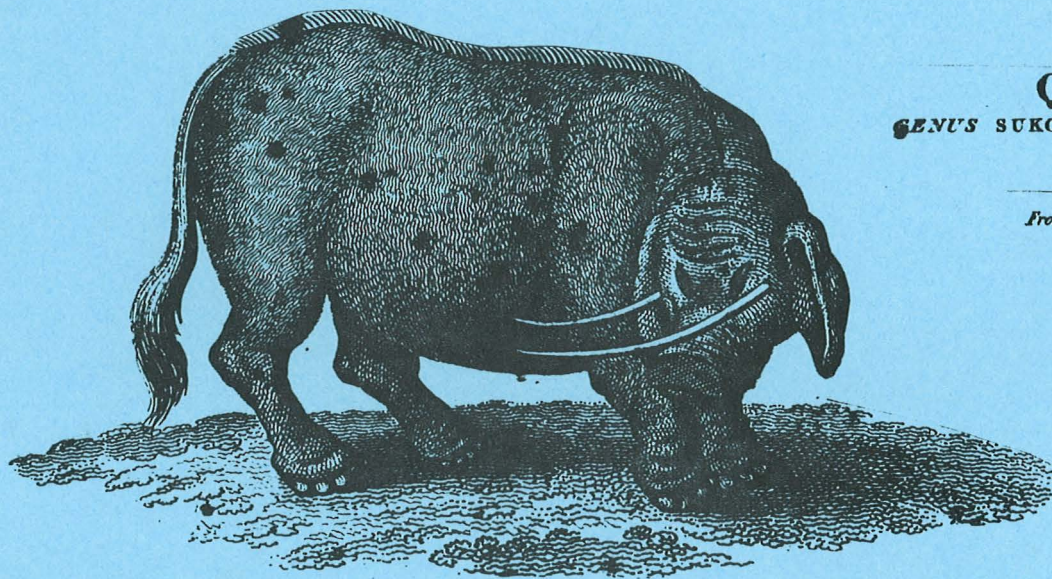
GROUP

Newsletter

Vol.2

No.10 (WITH INDEX)

1981



QUADRUPEDS

GENUS SUKOTYRO.

*From the Drawing of M. John Niewhoff.
Vide travels to the East Indies.*

And lastly, while treating on this subject, we must not omit to mention that mysterious animal the sukotyro. This is the animal introduced to the notice of Europe by a description and figure given in the works of Niewhoff, a Dutch traveller, who spent some time in the East Indies, about the year 1563, and pretends to have seen it in the island of Ceylon. To us it appears of the most ambiguous character, and the representation so miserably defective, that we cannot venture any opinion on its genera, except that we believe it is not really what it professes to be, an animal of a new genus. It bears some resemblance to the elephant; and the French writers even call it the dwarf elephant (*éléphant-nain*); notwithstanding which it exhibits no appearance of a proboscis; its snout is rather that of

the hog, and, in point of size, it corresponds with the buffalo. The less confidence must be reposed on the authorities of the French writers in classing this uncertain quadruped with the elephants, since it is obvious, they have never seen the animal, and it is seriously to be apprehended, we allow more credit to Niewhoff for the existence of his sukotyro than he really merits.

Anyone guess the source ? (No prizes.)

The aims of the Biology Curators' Group are:-

- i) To facilitate the exchange of information between individuals concerned with collections of specimens and records, their conservation and interpretation.
- ii) To present the views of biological curators to the Museums Association of Great Britain and to other bodies.

Copy dates for future issues based on three copies per year

31 August for October issue

31 December for February issue

30 April for June issue

Editor's Note

This issue, with the index, completes Volume 2 of the BCG Newsletter.

The opinions expressed in this Newsletter are not necessarily those of the Committee of the Biology Curators' Group.

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Note: Subscriptions for 1982 will be at a new rate, approved at the AGM in April 1981. £4.00 p.a. for individual membership and £7.00 for institutional and overseas members. Due in January 1982.

Birth Announcement - Barbara Joyce Hancock 3 May 1981

To the editor and Elizabeth (who is also gainfully employed in the museum world) a daughter. As she is named after her maternal grandmother, who also was a zoologist (as Barbara Beatty, *vide* Proceedings Leeds Philosophical Society, 1940), there is a remote chance she may succeed to the editorship of BCG Newsletter. Her father fervently hopes that he won't have to wait until then before relinquishing the task to someone else (any volunteers?).

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BCG Meeting in Manchester 22 September 1981

All members are invited to Manchester Museum on the 22nd September, the day before the Museums Association Conference begins. The subject for discussion is University Museums and speakers have been invited from a variety of university collections for the afternoon session. The programme is as follows

- 10.30 - 11.00 Meet in Museum for coffee
- 11.00 - 12.30 Introduction to Manchester Museum by the Keepers of Natural Sciences (jointly with G.C.G.)
- 12.30 - 2.00 Lunch (jointly with other Specialist Groups)
- 2.00 - 4.30 Session on University Collections

N.B. It is essential to book your lunch in advance by sending a cheque for £2.50 (which includes coffee & tea, etc.) to Dr. M. Hounsome, Dept. of Zoology, Manchester Museum, Oxford Road, Manchester. M13 9PL

PAYABLE TO MANCHESTER UNIVERSITY

Those who do not do this will have to find sustenance elsewhere and there are not many pubs in the Oxford Road area.

A National Plan for Systematics Collections

The B.C.G. is proceeding with the arrangements for this conference to be held probably in July 1982 at Cardiff. The Chairman, Eric Greenwood, is organising the programme and the speakers will include representatives from Research Councils, the Association of Systematics Collections (USA), Universities and other bodies as well as Museums of all kinds. It is also hoped to have statements from the government departments involved (Office of Arts & Libraries, D.E.S., Minister for the Arts) in order that a "National Plan" can be drawn up and used as a basis for furthering the needs of Systematics Collections.

The "Porcupine" group will be holding a meeting at Glasgow in 1982. The topic will be Marine Recording. Contact Fred Woodward at the Kelvingrove Museum (041-334-1134) for details.

or

Federation for Natural Sciences Collection Research

After a minor hiccup in titling this organisation, the following is an account of its genesis.

FENSCORE

On the 5th February 1981 the Federation for Natural Sciences Collection Research, FENSCORE, was formed to coordinate the further development of the work of the Collection Research Units. The Federation committee is composed of two voting members from each of the collection research units and one voting member from each of the seven national museums holding natural science collections (from whom much support has been received), together with one voting representative of Manchester Museum, which institution has agreed to process and maintain the national register of collections.

Observers have been invited from interested organisations such as the Museum Documentation Association, the Society for the Bibliography of Natural History, and the Biology and Geological Curators Groups.

The aims of FENSCORE are:

1. To act as coordinator between the component units of the Federation and the Manchester Museum Computer Cataloguing Unit in order to:
 - a) Devise and maintain data standards used in recording natural science collections.
 - b) Produce and maintain a register of Botany, Geology and Zoology collections housed in the British Isles in a machine readable form.
 - c) Provide an information service from the Register (without prejudice to the rights of the independent collection research units).
 - d) Produce union catalogues from the Register.
2. To encourage and assist the regional Collection Research Units, without interfering with their regional autonomy.
3. To foster the development and implementation of goals and priorities associated with natural sciences' collection research.
4. To seek and advise on the distribution of aid to assist further research into natural sciences' collections.
5. To coordinate searches of bibliographic and archival material to establish the existence and location of natural sciences' collections, including those that may be no longer extant.
6. To establish and develop links with British and overseas organisations having similar aims to the Federation.

There is a constitution and under its rules the chairman, elected at the first meeting for this year, is Peter J. Morgan of the National Museum of Wales and the secretary is Charles W. Pettitt of the Manchester Museum. One of the principal developments from the first two meetings has been the decision to begin immediately organising a Type Registry (reported below). The format of the recording forms is being worked on at the moment. Secondly, formal connections between the essentially provincial Collection Research Units and the National Museums are being forged through the common goals of both types of institution in terms of identifying the destiny and contents of taxonomically and historically important collections. The organisation of all this effort into one body, FENSCORE, is seen also as a potential medium between grant-aiding bodies and the curator working in Natural Science Collection Research.

FENSCORE Working Party on Type Specimens Register

Minutes of meeting on Wednesday 28 April, 1330 hrs., BM(NH)

Present: Eric Greenwood (in the Chair)
Howard Brunton Peter Morgan
Gordon Corbet Adrian Norris
Geoff Hancock Charles Pettitt
David Heppell Andrew Roberts

The meeting took the form of a general discussion, and the following decisions were made about the proposed National Register of Type Specimens.

1/. NEED FOR REGISTER.

AGREED: There is a need for a Register of Type Specimens to be compiled.

2/. OBJECTIVES.

AGREED: That the objectives of the Register should be
a) to identify the location of material likely to be of interest to taxonomists and
b) to stimulate scholarly investigation of this material.

3/. ORGANISATION.

AGREED: That FENSCORE would be the appropriate body to coordinate the compilation of the Register.

4/. COVERAGE.

AGREED: The Register should contain information on
a) type and figured material (see item 5) of
b) Botany (recent and fossil), Mineralogy, and Zoology (recent and fossil) from
c) all collections in the British Isles whether in private or public ownership, although
d) data for BM(NH) and, possibly, other national museums may need to be restricted to citation of published catalogues.

5/. DEFINITION OF TERMS.

AGREED: a) 'Type' to mean any specimen which the recording curator knows, or has reasonable grounds for suspecting, to possess type status at any level (e.g. syntype, paratype,

topotype, etc.) but excluding (Noted: curators to be warned about the continental practice of writing 'type' on a label to indicate merely that the specimen was 'typical' of the species) 'voucher' and 'keylist' material.

- b) 'Figured Specimen' to mean any specimen which the recording curator knows, or has reasonable grounds for suspecting, has been figured in a published work of taxonomic significance (e.g. Monographic revisions, etc. but not in local reports, etc.).

6/. "LOST MATERIAL".

AGREED: Details would be included of relevant material previously recorded but 'not found' or 'not extant' when the collection is investigated for the Register.

7/. NULL RETURNS.

AGREED: An informative entry to be included in the Register for all investigated institutions where no relevant material is found.

8/. FORM OF REGISTER.

AGREED: That a computerised database, probably supported by the periodic distribution of various listings, would be the appropriate form for the Register, at least for the next five years.

SUGGESTED: More permanent publication of inter-related subsets of the data possibly could be achieved later via papers in learned journals. Publication via commercial concerns such as IDC or BIOSIS also should be considered.

9/. DATA CAPTURE PRIORITIES.

- AGREED:
- a) Top priority should be given to recording extant specimens together with all readily available related information.
 - b) Second priority accorded to records gleaned from unpublished documentary sources but for which no specimen(s) can be traced.
 - c) Third priority accorded to the input of data from published sources. (See item 10).

10/. BIBLIOGRAPHY.

AGREED: In association with work on the Register a Bibliography of Lists of Type Material held in Collections within the British Isles should be compiled.

NOTED: Tony Harvey, Chief Librarian (elect), BM(NH), has indicated his willingness to assist in the compilation of this Bibliography.

11/. VETTING INPUT.

SUGGESTED: Some vetting of input be done by the Collection Research Units.

12/. NOMENCLATURAL REVISION.

AGREED: Entries for input need only record names from labels or registers etc.; revision of the outdated nomenclature that inevitably will be found to be left to specialists for each group of material, wroking from computer-produced listings.

13/. DELPHIC EFFECT.

AGREED: The inclusion of records in a computerised database can give a spurious authority to doubtful data, therefore all writings from or about the Register must stress the provisional nature of the information.

14/. DATA ENTITIES TO BE RECORDED.

These are given in Schedule 1 (attached).

15/. Messrs. Roberts and Pettitt were asked to produce specific proposals for the rationalisation of these data standards and to suggest designs for suitable input documents.

16/. The Chairman thanked Dr. Corbet for his hospitality and closed the meeting at 1700 hrs.

Charles Pettitt (secretary)

FENSCORE Working Party on Type Specimens Register

SCHEDULE 1, Agreed data entities making up an ideal type/figured specimen register entry.

Extant/non-extant?

Botany/Mineralogy/Zoology?

Recent/Fossil?

Nature of specimen: Type? Figured?

Status if type: Holotype etc.

Taxonomic names found attached to specimen, with status where known.

Collection within which specimen is housed, if kept separately.

Field locality collected from.

Name of Holding Institution and MDA code.

Recorder (and date).

Any previous registered numbers (or accession numbers).

If additional data present, a brief note of its nature.

Source of data (eg. specimen/mss/published work).

Stratigraphy.

Higher Classification (Phylum level or equivalent).

Citation of publications, with indication of relevance.

Note of any unpublished documentation relating to specimen.

Number of specimens.

Form of specimen, including nature of preservation.

Details of field collection (names, date, field note book numbers etc).

Cross reference to associated material.

BIRMINGHAM, 4 April 1981

The Annual General Meeting was well attended and we were made welcome by the staff of the museum. Dr. Abell Seddon reviewed his work on the herbarium which is being restored and rehoused in an extended run of Solander-type boxes in series, the local plants forming a separate collection. The herbarium is the most advanced of the Birmingham collections in being processed on their own computer. So far they have dealt with the data from 42,780 specimens - the whole of the British vascular plants, Richard South's Lepidoptera and the Chase collection of birdskins, mounts and eggs.

Paul Hamer gave an account of the bird collections which include specimens from George Bristow (of the Hastings Rarities Affair fame) and Mike Bryan discussed the various principal entomologists whose material is preserved in Birmingham Museum. As the papers read at this meeting will form the basis of a "Featured Institution" article for a future Newsletter there is no point in giving a precis of these collections. Those present were able to look around the stores and see the results of the machine-processed data.

Minutes of the Annual General Meeting of the Biology Curators' Group held at Birmingham Museum on Saturday 4th April 1981.

Apologies were received from J.Bateman, P.Davis, H.Mendel, M.Walters, D.Heppell, D.Steward, P.Howard and P.Morgan.

Minutes of the meeting held on 12th April 1980 were approved and signed.

Secretary's Report This had been circulated in the Newsletter There was no discussion

Treasurer's Report This had been circulated in the Newsletter. The Balance Sheet for the year was circulated at the meeting. It was agreed that subscriptions be increased from April 1st 1982 to £4 for personal members and £7 for institutional and overseas members.

Editor's report This had been circulated in the Newsletter. A vote of thanks was recorded to Peter Davis, the previous editor.

Election of officers and committee The Chairman reported that the constitution referred to in the minutes of the previous Annual General Meeting would be presented to the next Annual General Meeting. As there had been no new nominations and as all the officers and committee were prepared to stand for re-election the officers and committee were declared elected 'en bloc'.

Chairman	Eric Greenwood
Secretary	Geoff Stansfield
Treasurer	John Mathias
Editor	Geoff Hancock
Committee	Peter Davis, Peter Morgan, Martin Brendell, Mike Hounsome, Kelvin Boot, and Howard Mendel.

The meeting passed a vote of thanks to the officers and committee.

Date and place of next meeting Invitations were made to hold the 1982 Annual General Meeting at Sheffield and the 1983 Annual General Meeting at Glasgow at dates to be determined.

A vote of thanks was passed to Dr. Seddon and his colleagues for hosting the meeting and arranging the programme.

G.Stansfield

Hon. Secretary

Symposium Towards a Code of Ethics

This meeting was arranged by the Museum Professionals' Group (née Museum Assistants' Group) on the 3rd April 1981 at the Geological Museum, London. The aim was to bring to the attention of a wider audience the current dilemma with regard to the "Guidelines for Professional Conduct" which appear in the Museums Yearbook. These guidelines were originally adapted from a more comprehensive set and were for discussion only but since publication have been used by some employing authorities as a set of "rules".

The background to Ethics in museum spheres was given and the current state of play in both this country and the United States. It is interesting to note that the natural history discipline was for many years the only one to consider problems and foresee complications. In the late nineteenth century T. D. A. Cockerell, a north American entomologist, was the first to point out in print the ethical considerations involved in the maintenance of private collections by publicly employed scientists in charge of specimens. In most cases the introduction of laws preceded the ethics of collecting as in the various protection of birds legislations. On an international scale the ICOM Natural History committee resolved to produce a code of ethics for natural history museums well before there was any move by those in charge of cultural objects.

The net result of the papers read at the meeting and the discussion afterwards was that, following publication by the MAG of the transcripts, the Museums Association will be asked again to consider producing a set of Guidelines which have been considered more widely and fully.

V O T E T R E S I S E

Those members who are also eligible to vote in the Museums Association Council elections may consider putting a cross next to Dr. Geoff Tresise's name on the ballot paper. This will help increase natural science representation on Council - Geoff is Keeper of Geology at Merseyside County Museum and Secretary of G.C.G.

North West Register. There is some delay with printing this but don't panic! Your money is being invested! (Joke) In the meantime the microfiche copies are ready and will be sent out. If you can't wait for your hard copy then microfiche can still be ordered for the princely sum of 50p (payable to North West Collections Research Unit c/o Editor BCG).

Working Party on Scientific Importance of Natural Science Collections

Aim To produce a report for the Standing Commission on Museums and Galleries.

Those Present Ms G. Woodward (Institute of Geological Sciences); A. C. Howell (Geological Curators' Group); R. Perry (National Museum of Wales); G. Swinney (Royal Scottish Museum); G. Hancock & P. S. Doughty (authors of recommendations); P. J. Morgan (FENSCORE); E. F. Greenwood (Biology Curators' Group); T. Besterman (Museum Professionals' Group); Ms J. Chamberlain (Museums Association; Chairperson) 10 June 1981.

The convening of this Working Party is the result of Phil Doughty and myself delivering papers to the Museums Association 1980 Conference which contain recommendations (see below) adopted by the conference. These were taken to the Standing Commission by the M.A. as noticed in the *Museums Bulletin* (March 1981), p.219, and they asked the M.A. to produce a report and hence we have a Working Party for same.

Such a report will be of use in soliciting support, hopefully in financial terms, from H. M. Government in that it will highlight considerable shortfalls in the curation of scientifically important collections. It should also make the point that our collections need more lobbying for which art collections appear to have more effective champions.

The terms of reference of this Working Party are being drawn up and a preliminary report will be given at the 1981 M. A. Conference in Manchester.

The following recommendations, if carried through, would establish a framework within which a national museum service might be brought into being.

1 Legislation defining museums, their functions and responsibilities, based on national, local authority and university institutions, should be introduced.

2 Minimum standards of curatorial care should be determined to include the environment, furniture organization, documentation and conservation, of museum collections, and their staffing, and written into the same Bill.

3 An organization should be established either as an agency of DES or directly controlled by them, with a brief to establish the contents of all UK museums, the prevailing conditions in museums in relation to paragraph 2 of these recommendations, and to frame a national plan for museums accordingly.

4 It is imperative that the Council of such an organization should include among its membership prominent practising curators at least in proportion to the administrators appointed. Without such a balance the reality of the professional situation could remain as remote, and the decisions taken as unreal, as at present.

5 A small full-time secretariat working in close collaboration with specialist panels of professional advisers should be able to take, and act on, decisions requiring special expertise without the necessity for a larger bureaucracy.

It is an incontrovertible fact that there will be no significant improvement in the museums situation without legislation placing well-defined responsibilities on the authorities which maintain or create them. To do nothing would not maintain a *status quo*. There is no stability in the present situation: outside the national museums there is rapid deterioration and decay on a grand scale.

When this recession is over there may be an opportunity to provide a national service at the academic level which, with a little vision and adventurous planning, could make a reality of those much-mouthing ideals of personal enrichment and spiritual fulfilment so often linked with museums and which are now almost discredited political platitudes. The possibilities in its realization may even exceed our boldest vision, but as organized curators we shall first need to be able to speak with authority on the situation which exists in museums now, with the facts and the figures, and, as with all political cases, we shall have to be patient, relentless and prepared to fight on for how ever long it takes to convert an unanswerable case into positive, corrective action.

P.S.D.

Recommendations

1 That the recommendations in the ESF Report¹² in the zoology and botany sections (pp 67-70, 75-78) be endorsed and supported by the Museums Association and the Biology Curators' Group. These cover in part some of the following recommendations.

2 That a complete survey of the state and status of biological collections in the British Isles be initiated and supported at a national level. This could be achieved by postgraduate research grants being awarded for the purpose at Leicester University Department of Museum Studies. The Collection Research Units and the BCG are voluntary organizations covering only a small part of the required field. Full surveys are necessary in order to formulate future policy.

3 To explore how collections gathered in the process of research can be assimilated into public institutions with the appropriate finance being made available before the research programme is initiated.

4 That the Museums Association endorses

and supports Recommendation 6 in *Taxonomy in Britain*¹¹ which says that 'we urge that all non-living collections of specimens of taxonomic value for which adequate curation is difficult or impracticable be offered to one or other of the major national institutions. If such collections cannot be offered by gift or loan, resources for their curation *in situ* should be provided on the advice of these institutions.'

5 That the remaining areas of the country not already covered by Collection Research Units initiate such a body in order to produce a British Isles union catalogue of museum holdings at a named collection level.

6 That based on these areas union catalogues of primary type specimens (at least) be initiated.

7 That collecting policies and preservation techniques be adapted for current research needs.

8 That collections be made available under better conditions for the visiting specialist.

These recommendations are designed to have the effect of increasing the usage of collections. At the moment there is an impasse, in that researchers are not using the collections because they are under-publicized and inaccessible; yet governing bodies are not increasing expenditure in this area because very few people are utilizing the specimens in their research. With effective lobbying in these directions larger grants towards the cost of caring for and maintaining our heritage of natural history reference collections will be forthcoming. The recommendations should be taken as complementing those of the Geological Curators' Group as the aims of both BCG and GCG overlap to a great extent.

¹¹Advisory Board for Research Councils (1979), *Taxonomy in Britain*, HMSO, London 126pp.

¹²(1977) *European Science Foundation report*, 'European Science Research Councils, Strasbourg. E.G.H.

Conservation - Report by a Working Party
Standing Commission on Museums and Galleries, 1980

Comments prepared by the Biology Curators Group on references in the above report to natural history collections and particularly to paras 11.1 - 11.8

Comments on references to natural history collections and particularly to paras 11.1 - 11.8.

The report states that evidence on the conservation of natural history collections was taken mainly from the British Museum (Natural History). We regret that evidence was not also sought from the Biology Curators Group and that our request to be given the opportunity to comment (28 July) could not be met. We also regret that comments made by the Group in August 1979 on Framework for a System for Museums and Galleries (HMSO, 1978) were not taken into account.

The present report, whilst highlighting some important issues does tend to present a generally satisfactory position when we feel that the reverse is in fact the case.

Para 11.1 indicates that the working party found two problem areas; a) the conservation of large mammals and b) the conservation of geological collections. The BCG agrees that both these areas are cause for concern, but feels that the conservation of large mammals is a relatively minor problem and that there are many areas where biological collections are equally if not more urgently in need of attention.

We feel that insufficient distinction is made in the report between material preserved for exhibition and education, and material preserved for scientific use. Natural history collections differ from other kinds of collections in that in many instances a decision must be made as to whether an object is to be preserved for scientific study or for exhibition. The preservation techniques employed will differ according to this decision and in many instances the mounting of a specimen for exhibition will destroy or severely reduce its scientific value and such specimens are seen to have a limited life and to be replaceable. It is true that, in the past, scientifically important specimens have been mounted for exhibition and in situations where this situation cannot be changed (where a mounted bird cannot be relaxed into a study skin) special precautions will need to be taken to ensure the long term preservation of the specimen.

Taxidermy is only one aspect of the conservation of biological specimens in museums. It is largely concerned with display material which forms only a minor part of the collections. Further, legal and ethical considerations of wildlife conservation make it difficult to see a significant role in the future for the presentation of large animals. However, for those large animals which do become available from zoos and other sources, it is important that the skills of taxidermy are preserved and available to the museums.

Paras 11.2 and 11.4 indicate the scientific basis for the conservation of most natural history collections. The BCG would submit that a similar situation in respect of the neglect of biological collections exists to that of geological collections for which the Geological Curators Group have provided detailed evidence. The BCG feels that the working party have underestimated the problem and whilst pointing out that scientific staff need technical support, fails to point out that such support rarely exists. The BCG would question whether adequate support staff are available in the national institutions listed.

The BCG would also wish to make the point that there is need for much more experimentation and research into preservation methods. We would particularly draw attention to the manuscript of A selective bibliography on preservation, macro and micro techniques in zoology prepared by Reg Harris, formerly of the British Museum (Natural History) and which neither the Museum nor the Museums Association have been able to find the resources to publish. Traditional preservation methods are constantly being affected by considerations of safety and there is a need to develop new and safe preservatives. This is particularly true in the field of fumigation where there are no generally accepted procedures.

The BCG would therefore wish to reiterate the remarks which it made in 1979 that conservation problems can best be solved by first tackling the underlying academic difficulties of discovering more precisely the extent and value of collections and making an objective assessment of their conservation needs. When the extent of the problem has been ascertained, it is essential that staff skilled in the conservation of scientific specimens be appointed to undertake the work.

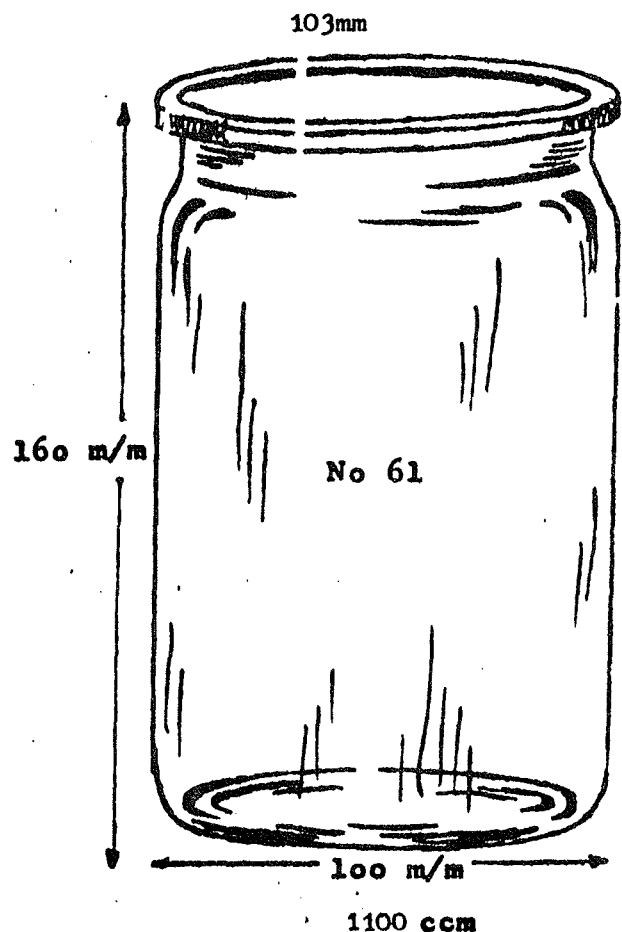
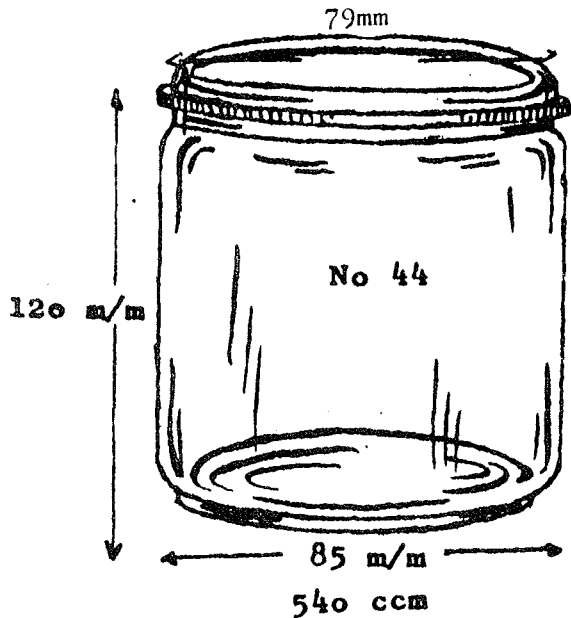
Such staff should be quite distinct from taxidermists and might be designated biological preparators or conservators. There is clearly a need for such appointments, especially in the larger museums.

As far as Area Councils are concerned, we see the need for peripatetic natural history curators with special knowledge of particular types of collections. Such curators should be available to advise museums which do not have the requisite expertise to look after their collections. Whether specialist curators of this kind could be recruited by short term secondment from existing museum needs to be further explored.

G STANSFIELD
Hon. Secretary
Biology Curators Group

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April 1981

BOOK REVIEW

Victorian Taxidermy Its History And Finest Exponents
by C.C. Frost (Price £4.95)

Christopher Frost approaches this subject by firstly looking at the history of taxidermy and bird collecting in this country and supporting this with information on some of the better known Victorian collectors and taxidermists.

Sections on casing and looking after a Natural History collection are also included. The book is illustrated with eight black and white plates showing case labels, some examples of taxidermists' work, and a photograph of Henry Shaw's shop in Shrewsbury taken in 1888.

The book does not aim to give a comprehensive coverage of all the Victorian collectors and taxidermists, but attempts to cover a representative example. Perhaps predictably, names like Booth, Hancock, Potter, Spicer, Cullingford, Ward and Gunn come in for fullest treatment. In total some 20 taxidermists are given detailed biographical notes with a special emphasis on taxidermists of the Norfolk area.

The section on the history and development of taxidermy and collecting is rather brief (four pages) and relies heavily on quotes taken from Swainson's book "Taxidermy with the Biography of Zoologists and Notices of Their Work" published in 1840.

My other major criticism is the price of this publication, which is rather high even taking into account the cost of a limited print run and the eight black and white plates.

While many people in museums interested in historical taxidermy will be familiar with much of the information contained in this book it is nevertheless a commendable effort for someone to accumulate it together and publish it. I feel everyone interested in the subject will glean something new by reading this book, and newcomers to the subject will find a valuable introduction to Victorian taxidermy.

The book is privately published and is available from:-

C.C. Frost (Proprietor)
The Enchanted Aviary,
63 Hall Street
Long Melford
Suffolk CO10 9JR

(£4.95 plus 45p postage and packing)

P. HAMER -
Birmingham Museums and Art Gallery

Announcing —

PEST CONTROL IN MUSEUMS

A new book available from the Association of Systematics Collections.

This \$15.00 volume (\$12.00 if ordered before April 30, 1981) contains over 170 pages of valuable information for anyone responsible for collections susceptible to pest damage.

The chapters in this book cover the identification of common insect pests (which are usually cosmopolitan) and other general museum pests (excluding, one presumes, some of our visitors!), guides to pesticide usage and control of pests, special equipment and technical reports on pesticides. The safety in usage and laws concerning these aspects are, of course, those pertaining to the United States.

The pre-publication offer price arrived too late to be taken advantage of but those interested in obtaining copies, please let Geoff Stansfield (address on back cover) know. The Leicester University bookshop will be stocking this book and the numbers they need to order, if established soon, will mean that curators can obtain copies without bothering with dealing in foreign currency. The sooner he knows the general demand then the sooner copies can be obtained for distribution in this country.

D. L. Coates Collection of Lepidoptera : Perth Museum & Art Gallery

Perth Museum has recently acquired the lepidoptera collection of the late David Laurence Coates of Birnam, Perth. The bulk of the collection (70 drawers) consists of lepidoptera from Scotland - mainly Stirling and Aberfoyle with lesser numbers from Blair Atholl and Birnam. There are a few English specimens mainly from Windsor. The collection contains approx. 10,000 specimens collected between 1960 and 1980 and most of the specimen data is already at BRC. A list of species represented is available and enquiries regarding the collection would be welcome.

M. A. TAYLOR,

Keeper, Natural Sciences

The Evolving Biosphere, Editor P. L. Forey. The second volume of "Chance, Change and Challenge" published by BM(NH) London and Cambridge University Press, 311 pages.

When the Museum moved to South Kensington in 1881, controversy over evolution was at its height and although the reference collections were not at first employed directly to advance evolutionary ideas, the work of its staff has always contributed ultimately to evolutionary knowledge and to explaining the principles underlying natural history. It is therefore appropriate that the Museum's centenary year should be marked by the publication of two volumes on evolution. This subject not only links all living organisms, but also the organic to the inorganic world, and the Past to the Present, thereby providing a theme to which all five science departments in the Museum (Botany, Entomology, Mineralogy, Palaeontology and Zoology) can contribute.

The wide range of subjects currently studied in the Museum ensures that there are many areas and individual spheres of interest and expertise within the broad spectrum of theoretical and empirical evolutionary studies. This knowledge is tapped here in a series of very personal essays which reflect the widely differing approaches to the study of evolution.

The title summarises, in simple terms, the essential elements of evolution. CHANCE - the interplay of cosmic forces that brought the Earth into existence and the often fortuitous, random mutations and other genetical changes that collectively contribute to the evolution of life. CHANGE - the formation and destruction of continents and ocean floors as rocks and sediments are generated, eroded, and recycled, and the infinitely variable patterns of life as plants and animals diversify. CHALLENGE - the ever-changing physical and biotic environments to which living organisms respond, and in so responding, evolve.

Although, in its generally accepted sense, the concept of evolution dates back some 200 years, it did not attract great interest among naturalists (and the general public) until after the publication of the famous paper on 'Evolution by natural selection' by Darwin and Wallace in 1858, followed almost immediately by Darwin's monumental *Origin of Species by means of Natural Selection* (1859). The ensuing stream of publications on evolution and evolutionary theory eventually became a flood which as yet shows no sign of diminishing. The present volumes do not set out to review the research output of the last century, neither are they intended to serve as text-books: their aims are more modest, although not perhaps less important. They show how the evolution of life is linked to that of the Earth itself, thus providing a broader perspective than is possible with most text-books. Intelligible accounts of highly specialised and very different work should help to disseminate ideas between specialists in fields between which there is usually little contact. Finally, students should benefit from a set of essays which are not always uniform in philosophical outlook and which demonstrate the disagreements that are part of the continuing challenge of research and of the theory of evolution itself.

The first volume - *The Evolving Earth* - demonstrates the interrelated contributions of Mineralogy, Geology, Oceanography and Palaeobiology to an understanding of the changing physical and chemical backgrounds against which plants and animals arose and evolved. In so doing it also describes the environments which have supported living organisms, and shaped their adaptation and diversity during the last 3.5 thousand million years.

The revolutionary changes in cosmological and geological thought during this century are reflected in the sections on the origin of the Earth, and on continental drift and plate tectonics. Controversial hypotheses, such as that of an expanding Earth, which still require further testing and evaluation, are included. Apart from those essays which review the background to continental drift, biogeographers should be interested especially in the later chapters on Mesozoic and Cenozoic palaeogeography which provide a framework for the study of present-day distributions.

The second volume - *The Evolving Biosphere* - is necessarily more selective and less comprehensive than its companion since its scope is potentially greater. It is concerned with the mechanisms and interactions which produce and account for the diversity, coexistence, coevolution and distribution of plants and animals in the world today. There is naturally much emphasis on speciation, the basic process underlying these phenomena, and the one subject not discussed in the *Origin of Species* since nothing was known in Darwin's day of the possible mechanisms involved. The arrangement of these essays is essentially similar to that followed by Darwin in '*The Origin*', thus serving to underline changes in thinking on evolution and evolutionary processes since the mid-nineteenth century.

Major problems, both philosophical and practical, which still hinder our understanding of evolution are not avoided. The contributions show the diversity of interpretation and opinion held by students of evolution, and highlight the dynamic state of modern evolutionary biology. They also show how taxonomists have contributed to the advance and interpretations of evolutionary theory, and how in turn a deeper appreciation of evolutionary processes, and hence of phylogeny, has influenced taxonomic theory and the practice of classification.

"

The above notes are from the foreword by Dr. R. H. Hedley, the Director of the Natural History Museum. Twenty-one members of staff of the museum have contributed to this book whose contents are shown on the next page. It describes some of the ways in which the Earth's biosphere has evolved to its present level of complexity and diversity. The first section is concerned with the fundamental unit in biology, the species, and the mechanisms of speciation; the second deals with the interaction between species (and other taxa) and the last with biogeography. Although a paperback the book is stitched in sections and may repay being casebound to withstand heavy use to which it may well be put. It is a fascinating collection of topical accounts of current thinking by taxonomists and evolutionists working in our foremost institution for such studies.

The Natural History Museum at South Kensington - A History of the British Museum (Natural History) 1753-1980 by William T. Stearn.

£9.95, Heinemann in association with the BM(NH); 414 pages.

It's all here - the friction between personalities, the difficulties experienced by the Directors and staff over the years, the changing style and fashion both in the public eye and behind the scenes. The growth of the collections and the individual stamp of the Keepers and other staff, as seen in the development of one of the most famous museums in the world, are all dissected and commented on by Professor Stearn. This is a book notice, not a review, so all I can say is that I believe everyone should have a copy and will undoubtedly profit from reading it. As a paper back, albeit a bulky one, it could have been a little less expensive although it is stitched in sections so there is no chance of any pages dropping out if handled excessively.

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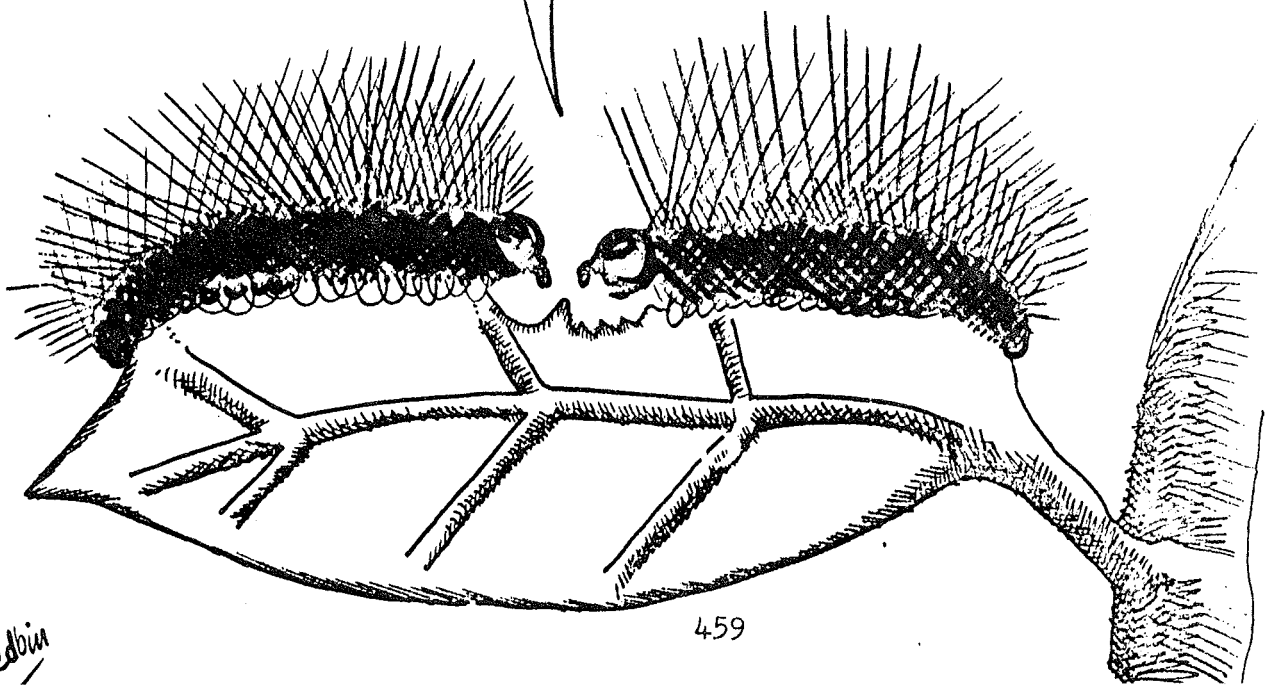
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SEEN ANY URTICA DIOICA LATELY ?



Ray's Dictionariolum Trilingue
1675

John Ray (1627-1705), the supreme British naturalist of the 17th century, was a many-sided scholar who, in addition to his influential theological, philological, botanical and zoological works, produced in 1675 a *Dictionariolum trilingue* in English, Latin and Greek. The utility of Ray's little three-language dictionary led to the issue of eight editions between 1675 and 1736. They were literally worn out of existence by constant handling. Only six copies of the first edition, now reproduced in facsimile, are known to have survived.

This vocabulary lists under 32 subject headings the names of birds, mammals, fish and insects, herbs, trees and shrubs, ailments, diseases, clothes, food and drink, domestic utensils, agricultural, carpentry and horticultural tools, rooms of houses and much else which Ray thought it useful to include. It reveals how little the English vernacular names of plants and animals have changed during the last four centuries and how many of their Latin equivalents became incorporated and established in modern scientific botanical and zoological nomenclature by Linnaeus and others, as generic names or specific epithets, in the 18th century.

Medical men, social, military, naval and agricultural historians, architects, theologians and mineralogists, as well as naturalists and latinists, may all find something of interest here.

The introduction by W. T. Stearn provides a short account of Ray's career, a commentary on the *Dictionariolum*, primarily as a natural history vocabulary, and G. Keynes' bibliography of the edition.

[Notes from dust jacket]

Published by the Ray Society (1981)
Price £7.50.

British Museum (Natural History) by Peter Whitehead
with photographs by Colin Keates

£4.95 Scala/Philip Wilson in association with the BM(NH), 1981, 128pp.

In this centenary year, of the BM(NH) at South Kensington, there have been several books published both by and about the Museum. The exhibition "Nature Stored, Nature Studied" which commemorates the event has its own booklet but this one utilizes much of the same information plus a lot more and is much better value for money. The text is written, one assumes, for the intelligent layman but it is much more than a basic description of the functions of the museum and the captions to the photographs act as a parallel text, all crammed full of interesting facts.

The photographs are of very high quality, all in full colour and number over 200. The book has been printed in Italy and it is quite likely that the quality of reproduction could not have been achieved for this cost in this country. These alone would guarantee to sell the book and the photographer, who gains a warranted "co-authorship" on the front cover, must be highly pleased with the results.

ANNALS of CARNEGIE MUSEUM

CARNEGIE MUSEUM OF NATURAL HISTORY

4400 FORBES AVENUE • PITTSBURGH, PENNSYLVANIA 15213

VOLUME 50

14 APRIL 1981

ARTICLE 3

COLLECTIONS OF RECENT MAMMALS OF THE WORLD, EXCLUSIVE OF CANADA AND THE UNITED STATES

HUGH H. GENOWAYS
Curator, Section of Mammals

DUANE A. SCHLITZER
Associate Curator, Section of Mammals

ABSTRACT

A survey of the Recent mammal collections outside of Canada and the United States revealed the existence of 321 collections with more than 50 specimens. These collections are located in 76 countries and hold 2,358,356 specimens. Fifty collections holding more than 10,000 specimens were located. These 50 collections hold 81.3% of the specimens of Recent mammals in collections outside of Canada and the United States.

INTRODUCTION

Recently, Choate and Genoways (1975) completed the fourth survey of the collections of Recent mammals in North America (Howell, 1923; Douthett et al., 1945; Anderson et al., 1963). These surveys have proven to be useful in locating specimen-based research resources and have documented the development of these resources. Because no survey has ever been made on a worldwide basis, we believed that it would be useful to attempt such a survey. Our main concern was to learn what and where are the specimen-based systematic resources of mammalogy around the world. Because of the very recent survey for Canada and the United States, we did not feel that it was necessary for us to include them in our work.

In order to assess the location and holdings of collections of mammals, we prepared the following questionnaire:

1. What is the formal name (if any), address, and standard abbreviation (if any) of your private or institutional collection?
2. What is the name and address of the person directly responsible for the collection?
3. Approximately how many specimens of Recent (not fossil) mammals were in the collection as of 1 January 1978?
4. How many holotypes are in the collection? Has a catalogue or list of those types been published? If so, please give citation.
5. What geographic areas are best represented in the collection?
6. What systematic groups are best represented in the collection?
7. Does the collection include specimens formerly included in other major private or institutional collections which have been merged with your collection? If so, please indicate the name of these collections.

Copies of the questionnaire were mailed to curators or directors of all known or suspected collections based upon our own experience and listings in such books as *Directory of the Natural Sciences Museums of the World* (Muzeel, 1971) and *Museums of the World* (1975). A total of 740 questionnaires was mailed and second questionnaires were sent when no reply was received within six months. We received 413 replies, indicating the existence of 321 collections of 50 or more mammals and 26 of fewer than 50 mammals

Surveys of museum collections seem to be the in-thing at the moment. The B.C.G. Report No. 1 (1980) like the above was based on questionnaire. The nature of questionnaires and the percentage of returns is an interesting subject in its own right. It is easy to pin-point the basic areas where the method falls down. Firstly, the questionnaire can never be sent to all the respondents who have information of relevance and, secondly, there is always a number of people who do not fill in the forms for various reasons. Possibly a socio-psychologist type of person may have studied the problem. What with this and the vagaries of postal systems and the normal lack of follow-up to check or verify the facts provided, the end results of surveys by questionnaire alone are often disappointing. As one of the editors of the BCG Report I am probably more conscious of this than most. The approach of the Collection Research Units as adopted in this country, that is based on personal visits by experts to all institutions, is obviously preferable and has been proved to be successful, but can only be achieved on a small geographical scale which is ideal for the subdivisions of the British Isles.

Here we have an admirable attempt to catalogue the collections of recent mammals in institutions outside North America.

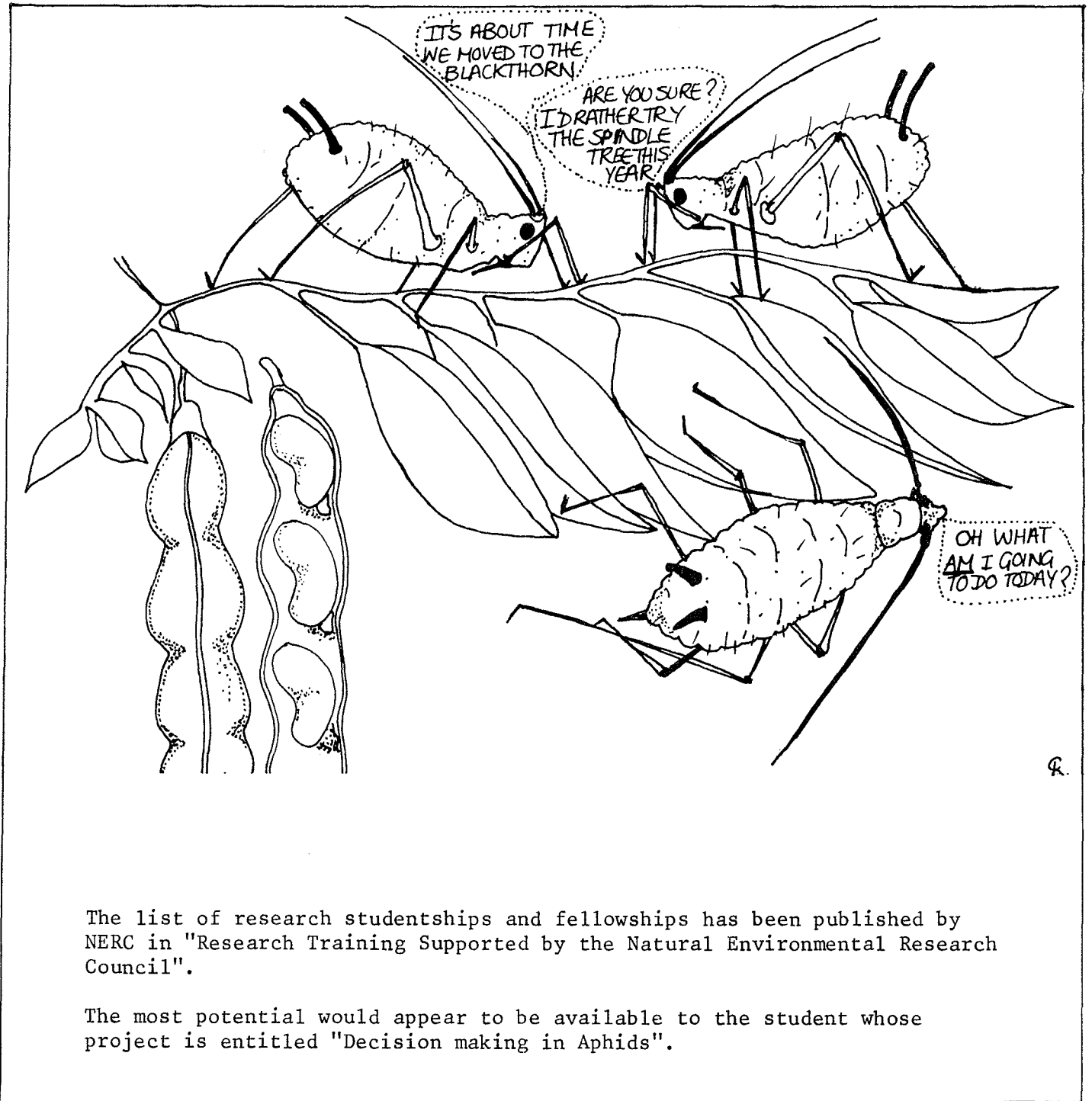
On such a scale the questionnaire is probably the only method. Not being able to comment on other countries, I can only look at the British Isles to assess how valuable this list might be to the outside worker. There are some very noticeable gaps. Outside London the national museums are represented by Ulster and the Royal Scottish but not Cardiff. The provincials with significant collections which are unrepresented are Merseyside (who have type specimens also), Manchester, Exeter, Glasgow, Nottingham, Norwich, Colchester, etc. The University Museums of Oxford and Cambridge are conspicuous by their absence. There are more museums listed in the Republic of South Africa section than for England but can this be taken as a reflection of the true state of affairs? Did these places receive questionnaires but decide not to be bothered about filling them in and returning them to Pittsburg? Does it mean that this survey is of little value to the researcher? To answer the last question, probably not, as long as the user realises it is not exclusive. Those that responded to the survey obtained a free copy of the report, others may be able to obtain one from the Carnegie Museum but there is no indication of price or availability.

E. G. Hancock 1981

Handwriting

There has been justified criticism of the quality of reproduction of the examples given in the last issue (pp.426-7) and the editor is equally disappointed, not with the printing as such, but obviously the technique has not proved adequate. For those examples, the originals were xeroxed and merely pasted up for the Newsletter, which is produced by a multilith copying machine. It would seem that photographs of the originals reproduced by a different method and then perhaps have that page as an insert would be more satisfactory. This is being investigated, especially in light of the fact that it will be slightly more costly.

There is nothing that an improved method can do for poor originals, though, and many labels are in faded ink and light or coloured pencil. Please send in your views and opinions on this. The Museum Documentation Association are interested in being involved in recording handwriting examples for a central register but I am not sure how they would approach the problem.



The list of research studentships and fellowships has been published by NERC in "Research Training Supported by the Natural Environmental Research Council".

The most potential would appear to be available to the student whose project is entitled "Decision making in Aphids".

Taxidermy

A new book has been published by Duckworth's of London at £9.95. Written by John Metcalf, a well known taxidermist, and entitled Taxidermy, a Complete Manual it has chapters on the historical perspective, health hazards, etc., and includes useful appendices on Taxidermists and the law, contagious diseases, a table of eye sizes and colours and a list of suppliers of materials. It is available from Frank W. Joel Ltd., Museum and Laboratory and Archaeological Suppliers, Old Meadow Road, Hardwick Industrial Estate, Kings Lynn, NORFOLK, PE30 4HK.

REVIEW

Natural History Manuscript Resources in the British Isles

Bridson, G. D. R., Phillips, V. C. & Harvey, A. P. (Compilers), 1980. £97.00. Mansell, London; quarto; I-XXXIV, 1-473 pp.

David Allen, in his foreword suggests that in studying the history of our subject there has been too much preoccupation with the printed surface and not enough attention to the untidy, formless world beneath - the manuscripts and archives. This has been changing gradually and the greater awareness of the importance of archival material has led to the production of this book. A postal questionnaire has been the principal method of gathering data, especially from institutions outside London. The results are presented in the body of the book (pages 1-376) under institutional names in alphabetical order. The seventy pages following are an index to the names of the naturalists who are mentioned in the catalogue. This is extensive in that any proper name mentioned in the returns is indexed, not just the main entry name. This can mean that some of the names in the index are not necessarily represented by a manuscript resource, but this is a small proportion. An example of this is C. D. Day's notebooks at Dorset County Museum where he made notes from F. D. Marice (sic) on British Tenthredinidae (Hymenoptera). There is no manuscript material of Francis D. Morice in Dorset, it being preserved at the Hope Dept. Oxford (indexed under his properly spelt name).

This is followed by a place-name index to county level for the British Isles, country level for the rest of the world, the whole being arranged by continent or ocean. Thus, Socotra is found under "Indian Ocean (including Red Sea)". This may be biogeographically unsound but usable. Finally a Subject Guide is provided. Based on the Universal Decimal Classification system of book cataloguing one first looks up the taxon, for example Cruciferae (Plantae) 582.5, to find under 582.5 in the Subject Guide that a relevant manuscript is in the Robert Brown Collection at the BM(NH) in the form of "observations on the class Tetradymania (Cruciferae) of the Linnean Herbarium".

Apart from the catalogue and its indices another useful entity is the Annotated Bibliography which goes with the compilers' introduction. This has ninety-six references and summarises previous work such as the Historical Manuscripts Commissions' National Register of Archives. As a large proportion of naturalists' manuscripts are linked with their collections and therefore usually in museums it is surprising to see no bibliographic reference to museums under the section on Guides to Repositories. Perhaps this is the reason why my own museum only received a questionnaire *via* the local authority's reference librarian. Here we come back to the old question of the efficiency of the questionnaire as a method of compiling catalogues. In the introduction the additional problem of local government reorganisation is mentioned which, taking place early in 1974, coincided with the sending out of the questionnaires. This meant that some of the names and addresses of respondents were lost in the orgy of new titles and the moving of offices but again this is mentioned in the context of libraries and record offices, not of museums which suffered equal if not worse ignominies during this period.

Generally speaking there are few errors of commission and slight misrepresentations are probably the fault of the person returning the questionnaire. One of these, to the embarrassment of the reviewer, concerns

what is probably the most interesting archive in Bolton Museum, that of the herbarium of Charles Ottley Groom (see below). It is the omissions which are so obvious (to a provincial museum curator at least). What happened to Manchester Museum, Birmingham Museum and Exeter Museum (there must be some Percy Sladen archives there to go with others indexed at the Horniman, Linnaean Society and Royal Entomological Society), for example? Nottinghamshire Record Office and the University of Nottingham Library have sent in returns but there is no mention of Wollaton Hall Museum as an institution in its own right housing manuscript material. Perhaps a useful appendix to this book would have been a list of those who were circulated and did not return the questionnaire. The compilers claim to have made an attempt to "include every repository in the British Isles that holds any natural history manuscript or papers by or concerning natural historians". They have deliberately excluded the Public Record Office and collections in private ownership but concerning those other omissions one is left in the dark. They may have occurred because they have no manuscripts (which is unlikely) or that they saw fit not to return the questionnaire (or it was lost in a bureaucratic pipeline) or the compilers were not aware of their existence. The net result is that having paid £97.00 for a book a researcher might reasonably expect it to be as complete as possible. If the person or institution in which one is particularly interested is not listed in the "Natural History Manuscript Resources in the British Isles" this might deter further investigation.

The book is very well produced on good quality paper, with large clear type. It has no dust jacket but does have coloured head bands. The point is that has the reverence for the printed surface taken over to such an extent so that a catalogue of the untidy formless world beneath is virtually impossible for most of us (as individuals and responsible public servants) to acquire? A cheaper form of reproduction would also mean that additions and corrections could be made more readily and frequently. Notwithstanding all this the compilers are to be congratulated on producing the book. A flying start is given to the historian of the subject and the reviewer already has a list of names and places to follow up at the earliest opportunity.

E. G. Hancock.

Groom, Chas. Ottley. Became successively Groom-Napier, Duke of Mantua and Monteferrat, Prince of Mantua, Prince of the House of David. Claimed to be a 'Palaeologos'. Warned off the B.M., said to be dead many times, law case before Sir Geo. Jessel. Sold false nuggets to Ruskin. Had no types. Founded Mantuan Gold Medal of which Owen's specimen is in the B.M. (N.H.). His alleged pedigree is in *The Cornhill Mag.* September 1912. His wife's collections, Sale, *Nature*, May 1895, p. xxxv, etc.; *Ath.* May 1895, 626. Was a notorious rogue and thief, tried to kill Thomas Davies by dropping a boulder upon him from a high ladder in Tennant's shop in the Strand.

A reproduction of the title page of the herbarium catalogue of Charles Ottley Groom, *alias* His Royal and Most Serene Highness the Prince of Mantua and Montserrat. Before realising who this really was, a return was made translating his atrocious writing as H. Randell... etc. The catalogue is over written many times in different inks, nibs, pencil and indelible pencil making it difficult to decipher in places. Once it is known that this is merely an abbreviation for a spurious title it seems obvious, but in the meantime it is catalogued in the Natural History Manuscript Resources in the British Isles incorrectly. The entry is from C. D. Sherborn's "Where is the - Collection" (1940).

A Catalogue
of
The British Herbarium
Comprising Flowering plants and Ferns
collected during 40 years
By H. R. and M. S. Highness the Prince
of Mantua and Montserrat
With indications of their localities attached
to the species by the Prince assisted by
specimens collected & named by
Mr H. C. Watson Mr J. G. Baker Mr Cecil Buekley
Mr W. M. Crotch Mr W. C. Maynard Mr John S. Syme (Bosca)
Rev. W. Newbold Geo. Maw Sir W. C. Trevelyan Bart
Rev. J. S. Henslow J. Ball Dr Melville Rev W. A.
Leighton Geo. Bentham Mr Knapp Mr Bonner
J. H. Stobson J. A. Brewer Mr J. Dimmock J. Jacob
C. A. Johns St. Babyn J. S. Gibson
and G. Rowley (to whom this Catalogue
is dedicated) and which are now preserved
in the Prince's Herbarium

THE PRINCE'S GHOST ORCHID

The Ghost Orchid specimen in Bolton Museum Herbarium is accompanied by a host of information. It is one of the two flower spikes which comprise the first discovery of this species in this country in 1854.

1. Labels on sheet of *Epipogium aphyllum* Sw (Ghost Orchid).
"Epipogum aphyllum Sw. according to Mr. Boswell Syme was found by Mrs. W. Anderton-Smith at Tedston Delamere. This plant had 2 flower stalks proceeding from one root. M & M. (Prince of Mantua & Montserrat).

2. (In pencil) "A. the half of specimen found by Mrs. Smith. 2nd half in possession of Mr. Babington. Mr. Crotch said he thought this had been given to a young lady who was with Mrs. Smith."
3. (In pencil different writing? original label). "Epipogium aphyllum. The only specimen found at Tedston Worcest'r by Rev. Smith."

From Prince of Mantua & Montserrat's Catalogue

4 labels all in different hands plus Prince's title 'Epipogum 1298 aphyllum Sw - 1'.

1. This specimen was found in August by Miss Mason at Tedstone Delmere, Herefordshire.
2. The first (other) specimen as found by Mrs. W. Anderton-Smith belonged to Rev. Crotch's herb., when bought by the P. of Man & Mon. He understood it would be restored to the herb. by Prof. Babington to whom it had been lent, but on the Prince applying for it per Rev. W. W. Newbold he refused to restore it to the Prince.
3. I found $\frac{1}{2}$ specimen in Dec 1883 (In pencil).
4. Label attached "Specimen was found Mrs. W. Anderton-Smith & (Miss Mason), a young lady, it had 2 flowers proceeding from one root (crossed out & plant substituted). Mrs. Smith had one flower, which her husband, Rev. W. A. Smith deposited on Prof. Babington's Herbarium at Cambridge. The other (half, crossed out) the young lady gave me in 1876. The Rev. Crotch with whose herbarium I purchased it (this last sentence crossed out). See his memorandum. It was found at Tedston Delamere, nr. Bromyard, Herefordshire. Rev. W. W. Newbold."



Epipogum aphyllum, Sw.
 according to Mr. Roswell Spence
 was found by Mrs. W. Anderton
 Smith at Tedston Delamere
 nr Bromyard Herefordshire
 this plant had 2 flower stalks
 proceeding from one root
 M.S.H.

SURVEY OF LOCAL & REGIONAL BIOLOGICAL RECORDS CENTRES

by

Paul T. Harding

Institute of Terrestrial Ecology,
Monks Wood Experimental Station,
Abbots Ripton, Huntingdon, Cambs. PE17 2LS

and E.F. Greenwood

Merseyside County Museums,
William Brown Street,
Liverpool, L3 8EN

The Biological Records Centre (I.T.E., Monks Wood) and the Biology Curators Group collaborated in 1980 to compile an inventory of local and regional records centres in the United Kingdom. A questionnaire was designed and circulated to all known records centres in September 1980. The last replies to the questionnaire were received in February 1981.

The questionnaire was sent to seventy-four centres, and replies were received from, or on behalf of, sixty-seven of these. Sixty centres are currently operating, are expected to be operational in 1981 or 1982, or are under active consideration. These centres are listed below and the areas they cover are shown in Figure 1. Four centres have ceased to operate (Appendix 1) and three centres are projected (Appendix 2). No replies were received from seven centres (Appendix 3).

The inventory of existing centres is laid out as follows:

- Number: area of coverage (see Figure 1)
- Title and address
- Telephone number and extension (where stated)
- Geographical area covered by centre. The use of v.c. followed by a number refers to the Watsonian vice-county.
- Date when the centre was set up or is expected to be set up. Some centres are listed as being not fully operational or having ceased operation. These centres still retain or have access to records.
- Name of the person to contact. In some cases this may not be the person directly responsible for the records centre. Where no contact is given the centre is staffed only by volunteers.

The questionnaire contained items on many topics concerned with the operation of centres and their data holdings. Replies to these items will be analysed in due course.

We would be grateful if users of the following inventory could report to us any changes affecting the centres listed, any deletions or additions, and any errors. For the inventory to be kept up to date, all changes must be monitored.

1. CORNWALL
 Cornish Biological Records Unit
 Murdoch House Education Centre
 Cross Street
 Redruth
 Cornwall
Redruth 215736
 Area: Admin Co of Cornwall
 Set up: 1972
 Contact: Dr F A Turk
2. SOUTH & WEST DEVON
 Devon Environmental Records
 Centre
 Dept of Natural History
 City Museum, Drake Circus
 Plymouth PL4 8AJ
Plymouth 68000 extn 4376
 Area: South & West Devon
 Set up: 1975
 Contact: Mr D A Curry
3. NORTH & EAST DEVON
 Royal Albert Memorial Museum
 Biological Records Centre (Data Bank)
 Queen Street
 Exeter
 EX4 3RX
Exeter 56724
 Area: North & East Devon (see
 Plymouth)
 Set up: Not stated
 Contact: Mr K J Boot
4. SOMERSET
 Somerset Records Centre
 Somerset County Museum
 Taunton Castle
 Taunton
 Somerset TA1 4AA
Taunton 73451
 Area: Old county of Somerset
 Set up: 1977 (not fully
 operational)
 Contact: Mr J D L Fleetwood
5. BRISTOL REGION
 Local & Regional Biological
 Records Centre
 City of Bristol Museum & Art Gallery
 Queens Road
 Bristol BS8 1RL
Bristol 299771
 Area: V.c.s 6 & 34 (east of
 R. Severn)
 Set up: Not stated
 Contact: Mr C J T Copp
6. DORSET
 Dorset Environmental Records
 Centre
 c/o Dorset County Museum
 Dorchester
 Dorset
Dorchester 2735
 Area: Dorset
 Set up: 1976
 Contact: Ms S Gowers
7. WILTSHIRE
 Wiltshire Biological Records Centre
 The Museum
 41 Long Street
 Devizes
 SN10 1NS
Devizes 2765
 Area: Wiltshire
 Set up: 1973
 Contact:
8. ISLE OF WIGHT
 Isle of Wight Biological Records
 Centre
 Museum of I.O.W. Geology
 Sandown Library, High Street
 Sandown, Isle of Wight
Sandown 404344
 Area: Isle of Wight
 Set up: 1977
 Contact: Dr A N Insole

9. HAMPSHIRE

Hampshire Biological Records Centre
Hampshire County Museum Service
Chilcomb House
Chilcomb Lane, Bar End
Winchester
SO23 8RD

Winchester 66242/3

Area: Hampshire (pre-1974
boundaries)
Set up: 1971
Contact: Mrs H L West

10. SURREY

Surrey Biological Records Centre
c/o Croydon Museum
Biology Centre
Chipstead Valley Road
Coulston
Surrey

Area:
Planned to be operative in 1981
Contact: Mr J A Keefe

11. SUSSEX (EAST & WEST)

Booth Museum of Natural History
194 Dyke Road
Brighton
Sussex
BN1 5AA

Brighton 552586

Area: East Sussex & West Sussex
Set up: 1976. No longer operational.
Contact: Dr G Legg

12. KENT

Kent Biological Archives &
Records Centre
c/o Natural History Section
Maidstone Museums & Art Gallery
St Faith's Street
Maidstone ME14 1LH

Maidstone 54497

Area: Admin Co of Kent
Set up: 1971
Contact: Mr E G Philp

13. BERKSHIRE

Berkshire Biological Records Centre
Reading Museum & Art Gallery
Blagrove Street
Reading
RG1 1QH

Reading 55911 extn 2149

Area: V.c. 22 & "Oxford south of
the Chiltern escarpment"
Set up: 1976
Contact: Mr H H Carter

14. OXFORDSHIRE

Oxfordshire Biological
Recording Scheme
Oxfordshire County Council
Dept of Museum Services
Oxfordshire County Museum
Woodstock
Oxford OX7 1SN

Woodstock 811456

Area: Oxfordshire (post-
1974 boundaries)
Set up: 1975
Contact: Mr J M Campbell

15. BUCKINGHAMSHIRE

Buckinghamshire County Museum
Church Street
Aylesbury
Bucks

Aylesbury 82158

Area: V.c. 24 (also Admin Co
of Bucks)
Set up: 1963
Contact: Ms J Royston

16. BEDFORDSHIRE

Luton Museum Record Centre
Wardour House
Luton
Bedfordshire

Luton 36941

Area: "Bedfordshire"
Set up: 1977
Contact: Mr F Hackett

17. SOUTH HERTFORDSHIRE & MIDDLESEX

City Museum
Hatfield Road
St Albans
Hertfordshire
St Albans 56679

Area: South Herts & Middlesex
Set up: Not stated
Contact: Mr E Ibbetson

18. NORTH HERTFORDSHIRE

North Herts Biological Records
Centre
North Herts Museum Service
Natural History Dept
Old Fire Station, High Street
Baldock SG7 6AR

Baldock 894352

Area: Herts north of R. Lea
Set up: 1974
Contact: Mr T J James &
Mr B R Sawford

19. SOUTH-WEST ESSEX

Epping Forest Conservation Centre
High Beach
Loughton
Essex

01-508-7714

Area: South-west Essex/
Epping Forest
Set up: 1970
Contact: Mr C R Dale

20. SOUTH-EAST ESSEX

Southend-on-Sea Museums
Central Museum
Victoria Avenue
Southend-on-Sea, Essex

Southend-on-Sea 330214

Area: South-east Essex
Set up: 1975
Contact: Mr J F Skinner

21. NORTH-EAST ESSEX

Colchester & Essex Museum
The Castle
Colchester
Essex
CO1 1TJ

Colchester 76071 extn 344

Area: North-east Essex
Set up: 1975
Contact: Mr J J Heath

22. ESSEX

Passmore Edwards Museum
Romford Road
Stratford
London
E15 4LZ

01-519-4296 & 01-472-4785

Area: Geographical county
of Essex
Set up: 1980
Contact: Mr C W Plant

23. HEREFORDSHIRE

Hereford City Museum
Broad Street
Hereford
HR4 9AU

Hereford 68121 extn 207/334

Area: Herefordshire - v.c. 36
Set up: 1978 (not fully
operational)
Contact: Mr J Cooter

24. WORCESTERSHIRE

Worcestershire Biological
Records Centre
1 Commandery Drive
The Commandery, Sidbury
Worcester WR1 2HU

Worcester 355071 & 25371

Area: Worcestershire - v.c. 37
Set up: 1979
Contact:

25. WARWICKSHIRE
 Warwickshire Biological Records
 Centre
 Warwickshire Museum
 Market Place
 Warwick
Warwick 43431 extn 2481
 Area: Warwickshire - v.c. 38
 Set up: 1973
 Contact: Mrs P J E Copson
26. PETERBOROUGH
 Peterborough City Museum &
 Art Gallery
 Priestgate
 Peterborough
 PE1 1LF
Peterborough 43329
 Area: The old Soke of
 Peterborough, Hunts,
 & part of Cambs &
 Northants
 Set up: 1978
 Contact: Dr P R Crowther
27. SUFFOLK
 Suffolk Biological Records Centre
 The Museum
 High Street
 Ipswich
 IP1 3QH
Ipswich 213761
 Area: Suffolk; v.c.s 25 & 26
 Set up: 1974
 Contact: Mr H Mendel
28. NORFOLK
 Norfolk Biological Records Centre
 Natural History Department
 Castle Museum
 Norwich
 NR1 3JU
Norwich 22233
 Area: Norfolk
 Set up: 1973
 Contact: Mr P W Lambley
29. LINCOLNSHIRE & SOUTH HUMBERSIDE
 Biological Records Centre for
 Lincolnshire & S. Humberside
 Lincolnshire Museums
 Aquis House
 Clasketgate
 Lincoln LN2 1NG
Lincoln 26866, 30401
 Area: Lincs & S. Humberside
 Set up: 1976
 Contact: Mr M Johnson
30. LEICESTERSHIRE
 Leicester Biological Records
 Centre
 96 New Walk
 Leicester
 LE1 6TD
Leicester 554100
 Area: Leicestershire (Admin
 Co & v.c. 55)
 Set up: 1954
 Contact: Dr I M Evans
31. NOTTINGHAMSHIRE
 Nottinghamshire Biological Records
 Centre
 The Natural History Museum
 Wollaton Hall
 Nottingham NG8 2AE
Nottingham 281333
 Area: Nottinghamshire - v.c. 56
 Set up: 1976
 Contact: Mr C P Walley
32. DERBYSHIRE
 Dept of Natural History
 Derby Museum & Art Gallery
 The Strand
 Derby
 DE1 1BS
Derby 31111 extn 401
 Area: "Derbyshire"
 Set up: 1973
 Contact: Mrs S J Patrick

33. STAFFORDSHIRE

Staffordshire Biological Records
Centre
City Museum & Art Gallery
Bethesda Street
Hanley
Stoke-on-Trent ST1 4HS
Stoke-on-Trent 29611

Area: Staffordshire v.c. 39
Set up: 1973
Contact: Mr G Halfpenny

35. NORTH-WEST ENGLAND

North West Biological Field Data
Bank
Merseyside County Museums
William Brown Street
Liverpool L3 8EN
051-207-0001

Area: Merseyside, Gtr Manchester,
Lancashire, Cheshire
Set up: 1969
Contact: Dr J Edmondson

37. LANCASHIRE

Towneley Hall Art Gallery & Museums
Towneley Hall
Burnley
BB11 3RQ
Burnley 24213

Area: Lancs (v.c.s 59/60) exc.
Merseyside & Gtr Manchester.
Yorkshire (v.c.s 63/64) in
100 km sq SD (34)
Set up: 1978
Contact: Dr M A Kirby

39. ROTHERHAM

Clifton Park Museum
Clifton Lane
Rotherham
S. Yorkshire S65 1JH
Rotherham 2121 extn 3559

Area: Rotherham Metropolitan
District
Set up: 1975
Contact: Mr W A Ely

34. SOUTH SHROPSHIRE

Shropshire Biological Records
Centre
Dept of Natural Sciences
Shropshire County Museum Service
(Ludlow Museum), Old Street
Ludlow, Shropshire
Ludlow 3857

Area: South Shropshire
Set up: 1977
Contact: Mr W J Norton

36. BOLTON METROPOLITAN DISTRICT

Bolton Museum & Art Gallery
Le Mans Crescent
Bolton
BL1 1SA
Bolton 22311 extn 361

Area: Bolton Metropolitan
District
Set up: 1974
Contact: Mr E G Hancock

38. SHEFFIELD

Sheffield City Museums
Weston Park
Sheffield
S10 2TP
Sheffield 27226

Area: Sheffield Metropolitan
District
Set up: 1963
Contact: Mr T H Riley

40. DONCASTER

Biological Records Centre
Doncaster Museum & Art Gallery
Chequer Road
Doncaster, S. Yorkshire
Doncaster 62095 extn 5

Area: Doncaster Metropolitan
District
Set up: 1965
Contact: Mr P Skidmore

41. SOUTH HUMBERSIDE

Scunthorpe Museum Biological Records
Centre
Oswald Road
Scunthorpe
DN15 7BD

Scunthorpe 843533

Area: South Humberside & N. Lincs
(E. of SK/SE 700
N. of SK/TF 900)

Set up: 1976

Contact: Dr R Toynton

42. NORTH YORKSHIRE

Yorkshire Museum Biological
Records Centre
The Yorkshire Museum
York
YO1 2DR

York 29745

Area: "North Yorkshire"

Set up: 1978/79

Contact: Mr C Simms

43. WEST YORKSHIRE

Biological Data Bank, West Yorkshire
Region
Cliffe Castle Museum
Keighley
West Yorkshire
BD20 6LH

Keighley 64184

Area: West Yorkshire

Set up: 1974

Contact: Mr J C Lavin

44. DURHAM, CLEVELAND & SOUTHERN
TYNE & WEAR

North Eastern Environmental
Records Centre
Sunderland Museum
Borough Road
Sunderland SR1 1PP

Sunderland 41235

Area: County Tyne & Wear
(south of R. Tyne),
Co Durham & Co
Cleveland)

Set up: 1976

Contact: Mr J Bainbridge

45. NORTHUMBERLAND

Hancock Museum
Barras Bridge
Newcastle upon Tyne
NE2 4PT

Newcastle upon Tyne 22359

Area: Northumberland (old
county)

Set up: 1976

Contact: Mr P S Davis

W1. WALES

Welsh Biological Records Centre
Zoology Department
National Museum of Wales
Cardiff

Cardiff 397951

Area: Wales

Feasibility study in 1978 (not
operational)

Contact: Mr A F Amsden

W2. PEMBROKESHIRE

Pembrokeshire Local Biological
Records Centre
Scolton Manor Museum
Spittal
Haverfordwest, Dyfed

Clarbeston 328

Area: Pembrokeshire - v.c. 45

Set up: 1979

Contact:

W3. WEST GLAMORGAN

Swansea Museum
Victoria Road
Swansea
SA1 1SN

Swansea 53763

Area: West Glamorgan
Set up: 1977. Ceased operation
in 1978
Contact: Dr M J Isaac

W4. GWENT

Gwent Biological Records Centre
Museum & Art Gallery
John Frost Square
Newport

Gwent NPT 1HZ

Newport 840064

Area: Gwent - Monmouthshire
- v.c. 35
Not yet fully operational
Contact: Mr B A Campbell

S1. AYRSHIRE

Ayrshire Biological Records Centre
Dick Institute
Elmbank Avenue
Kilmarnock KA1 3BU

Kilmarnock 26401

Area: Ayrshire (boundaries
before 1975)
Planned to become operational in 1981
Contact:

S2. RENFREWSHIRE

Renfrewshire Biological Records
Centre
Paisley Museum & Art Gallery
High Street

Paisley PA1 2BA

041-889-3151

Area: Renfrewshire - v.c. 76
Set up: 1976
Contact: Mr D G Mellor

S3. STIRLING & CLACKMANNAN DISTRICTS

Central Region Biological Records
Centre
c/o Biology Department Museum
University of Stirling
Stirling

Stirling 3171

Area: Stirling & Clackmannan
Districts
Planned to become operational in 1982
Contact:

S4. FALKIRK DISTRICT

Falkirk Museums
15 Orchard Street
Falkirk
FK1 1RF

Falkirk 27703

Area: Falkirk District
Set up: 1978
Contact: Mr J M Sanderson

S5. PERTH & KINROSS DISTRICT

Perth Museum & Art Gallery
George Street
Perth
Tayside

Perth 32488

Area: Perth & Kinross District
Planned to become operational in 1982
Contact: Mr M A Taylor

S6. ANGUS DISTRICT

Montrose Museum
Museum & Art Gallery
Panmure Place
Montrose, Angus

Montrose 3232

Area: Angus District -
v.c. 90
Set up: 1977
Contact: Mr N K Atkinson

S7. DUNDEE AREA

Dundee Museum Biological Records
Centre
Dundee Museum
Albert Square
Dundee DD1 1DA
Dundee 25492

Area: Dundee, Angus, East
Perthshire & North Fife
Set up: 1974
Contact: Mr R K Brinklow

S8. GRAMPIAN REGION

Grampian Biological Records
Centre
Natural History Museum
Zoology Department
University of Aberdeen
Tillydrone Avenue
Aberdeen AB9 2TN

Aberdeen 40241 extn 6413
Area: Grampian Region
Set up: 1978
Contact: Mr K R Watt

S9. INVERNESS DISTRICT

Inverness Museum & Art Gallery
Castle Wynd
Inverness
IV2 3ED

Inverness 37114

Area: Inverness District
Set up: Not stated
Contact: Mr P Howard

NI. NORTHERN IRELAND

Ulster Museum
Botanic Gardens
Belfast
BT9 5AB

Belfast 668251-5

Area: Northern Ireland
Set up: circa 1975
Contact: Mr P Hackney

IOM. ISLE OF MAN

Manx Museum
Douglas
Isle of Man

Douglas 25125 & 5522

Area: Isle of Man - v.c. 71
Set up: 1922
Contact: Dr L S Garrad

APPENDIX 1

Records centres at the following institutions have ceased to operate or were never fully operational:

Birmingham City Museums & Art Gallery
Gloucester City Museum & Art Gallery
Spalding Museum
Stevenage Museum

APPENDIX 2

Records centres are projected or are being considered at the following institutions:

Carlisle Museum & Art Gallery
Kendal Museum
Portsmouth Museums & Art Gallery

APPENDIX 3

Records centres have at some stage been listed at the following institutions. No replies were received from these centres to either the original questionnaire or to a subsequent request for information. These centres are therefore assumed to be no longer in existence, and any records that may have been held are no longer in safe keeping.

County Museum Service, Church Stretton, Salop
Dorman Museum, Middlesbrough
Gray Art Gallery & Museum, Hartlepool
Hitchin Museum
Scarborough Museum of Natural History
Kirkcaldy Museum
(A centre for the Borders Region of Scotland was listed at several addresses but no response was obtained from any)

NOTE

Records centres are believed to have operated at the Manchester Museum and the Grosvenor Museum, Chester. Questionnaires have only recently been sent to these Museums, and replies have not yet been received.

Cataloguing in the Manchester University Museum

Bird Egg Collection

In view of pending legislation (Wildlife and Countryside Bill) which may require museums to register at least part of their bird egg collection with the DoE, it may interest curators to know that at Manchester we have been running a pilot scheme to catalogue our own egg collection. It was proposed that we start by cataloguing the eggs of schedule I species, just to get some idea of the work involved. We could then record the work statistics which would enable us to estimate the size of the job if we were ever called upon to register all, or part, of our collection.

The work went so well that we decided to go ahead and catalogue all the British Birds; this also went well, so that we decided to do the whole collection. We have no idea how many eggs are involved - it could be as many as 15,000 clutches, say 75,000 eggs. On the other hand, past experience has shown that estimates based on number per drawer and number of drawers usually lead to over-estimates of collection size.

So far (3.4.81) we have filled in data input sheets for 5,900 clutches; 5,640 of these records are now input to the computer, and 2,633 records have been merged to a database which can be used as a catalogue, indexed or searched, even before the whole job is complete.

The work statistics for all 5,900 records are as follows:-

178	man/days	for	coding
25	"	"	" punching onto cards
4	"	"	" input to machine and merging files
50	"	"	" editing
<hr/>			
257	"	"	TOTAL
<hr/>			

This works out at about 23 records/man/day, or 43 man/days/thousand records. At Manchester we are fortunate in that the Regional Computer Centre punches the cards, so that for us the overall figures are: 25 records/man/day, and 39/man/days/thousand records.

It must be emphasised that these statistics refer to all stages of the work, and that the result is a usable catalogue with all the obvious errors eliminated. The process of editing is a continuing one, as one usually finds errors, or improvements to be made, as one uses the catalogue.

In terms of the volume of characters involved, we have calculated that the average record contains 181 characters spread over about 9 lines.

The 4,650 records which have so far been input occupy two magnetic tapes.

We hope that these figures may help other curators in estimating the amount of work required to catalogue their own collections. We are lucky in Manchester in that we have an M. S. C. team of cataloguers (whom we gratefully acknowledge) available to carry out the work. Depending on how many eggs we have, it would seem that a four man team could catalogue all our egg collection in between 20 and 30 weeks (assuming 10,000 and 15,000 clutches respectively).

Dr. M. V. Hounsome

C. W. A. Pettitt

Manchester University Museum.

History in the Service of Systematics 13-16 April 1981

A joint conference organised by the Systematics Association and the Society for the Bibliography of Natural History at the British Museum (Natural History), South Kensington. This conference attracted 103 delegates from eight countries. Twenty one lectures were presented covering a variety of topics ranging from the fate of specific collections and expedition material to the evolution of the Zoological Code of Nomenclature. Examples quoted included algae, lichens and *Banksia* for the botanists and deep sea faunas, insects, molluscs, birds and even a rhinoceros for those whose interests lay with animals. The geologists in the audience had to be content with the remarkable fate of a Shropshire geological collection.

Having catered for the biologists, the needs of the bibliographers were not ignored by the organisers. The hidden resources of part publication and printed wrappers were explored. Those of us who are fascinated by biographical information learnt a great deal more about such characters as Sir Hans Sloane, Joseph Banks, Robert Brown and William Burchall.

The social needs of the delegates were well provided for with a reception at the Linnean Society on the first evening and a splendid buffet at the private view of Nature Stored Nature Studied at the museum. Some delegates took advantage of the afternoon excursions to Charles Darwin's residence at Down House and the Guildhall and Clock Museum in London.

Viewed overall the conference was well organised and provided an enjoyable and informative forum which maintained the standard set by the joint SBNH and BCG Conference of two years ago.

J. R. A. Gray
May 1981

Extracts from the chapter in The Saturday Book for 1953, a copy of which is in the possession of Crispin Paine, Director of the Area Museums Service for South Eastern England. Potter's Museum is now in Arundel after a brief interregnum on Brighton seafront.

Contrary to general opinion, the Great Exhibition of 1851 was not exclusively an affair of pompous solemnity, of which the funny side has been apparent only to our own generation. It actually included quite a lot of comic relief that was officially so intended. A good deal of this was provided by Herrmann Ploucquet, 'Preserver of Objects of Natural History at the Royal Museum of Stuttgart', who showed a number of humerous groups of stuffed animals. These were 'humanized' creatures placed in recongizably human situations, and they were so popular with visitors that David Bogue published a book of hand-coloured engravings of them, employed as illustrations for children's stories specially written for the occasion. *The Comical Creatures from Wurtemberg* quickly went into a second edition. 'Everyone, from Her Majesty the Queen down to the least of the charity-boys, hastens to see the Stuffed Animals from the Zollverein', declared the preface; 'everyone lingers over them and laughs at them as long as the crowd will allow; and everyone talks of them afterwards with a smile and a pleasing recollection'. They were described by the Queen as 'really marvellous'.

One of Ploucquet's most successful pieces was of a frog shaving another frog. Two others, lent by Lord Leigh to the 1951 commemorative exhibition at the Victoria and Albert Museum, show 'Longtail Teaching the Young Rabbits Arithmetic' (Longtail was a stuffed marten) and a group of five kittens seated round a tea-table listening to a sixth ('Miss Paulina') entertaining them with songs at the pianao. Certainly, Ploucquet was an accomplished taxidermist; his work, as the official Catalogue of the Great Exhibition commented, was remarkable for 'the precise expression of intelligence' which he gave to his animals. But, though he introduced Victorian England to the possibilities of 'humorous taxidermy', I do not think that Ploucquet reached the summit of achievement in this curious craft. That honour was reserved for an Englishman, Walter Potter, who spent his whole life in the village of Bramber, Sussex, stuffing birds and animals. Potter had not only an extraordinary gift for humanizing his creatures but a transcendent touch of genius that turned what might have been jokes in rather poor taste - and there is sometimes a feeling of strain in Ploucquet's attempts - into fantastic little poems worthy of de la Mare, minor works of art creditable alike to man and beast (or bird).

Walter Potter was born at Bramber on July 2, 1835, and was therefore a lad of sixteen at the time of the Great Exhibition. There is no evidence that he went up to London to see the Crystal Palace, or that a copy of *The Comical Creatures from Wurtemberg* ever fell into his hands, but I should be surprised if he was not somehow influenced by Ploucquet's *tableaux*, which he might have encountered in reproductions in papers like the *Illustrated London News*, or heard mentioned by visitors to Bramber. Young Potter was well placed to hear any gossip, for his parents owned the White Lion Inn (later re-named the Castle Hotel) and he left the village school at thirteen or fourteen in order to help them run the place. From an early age Walter had been interested in taxidermy. As the number of specimens he had stuffed continued to grow, he was soon given the loft over the stable to use as a storeroom and workroom.

Before he was twenty, Walter Potter had begun to plan his first *magnum opus*. He obtained his inspiration from a little book - *Peter Parley's Present*, published by Orlando Hodgson - belonging to his younger sister

Jane, which contained the stories of Cock Robin and the Babes in the Wood. 'The Original Death and Burial of Cock Robin', a churchyard *tableau*, composed with admirable taste, finished off with pre-Raphaelite fidelity and presented in a handsomely decorated case, took him seven years of intermittent work to complete. The whole story is here, from the Sparrow who killed Cock Robin with his bow and arrow to Parson Rook with his book and the Owl who dug the grave. The sorrowful cortege extends through the churchyard, up a sloping path and out of sight through an archway. Some of the birds in the tree have tears (made from glass beads) in their eyes. Altogether there are ninety-eight specimens of British birds in this case. One is not at all surprised that it created something of a sensation among the visitors to the White Lion, when it was displayed for the first time in 1861, in a summer-house behind the inn.

Henceforth, Potter had no lack of commissions for preparing those stuffed animals which were the pride of so many Victorian parlours, and he found that he was able to make a living as a taxidermist. But the creative artist in him was not satisfied by routine jobs, such as the stuffing of late lamented domestic Fidos and Tabbies, and from time to time he conceived and executed his own characteristic groups which he added to his personal collection. In 1866 his newly founded 'business' was moved from the summer-house and installed in a larger building next door; and in 1880 it was moved again, to a specially constructed building nearby, which was now officially designated 'Museum'. By this time Potter was married to Ann Stringer Muzzell who came from West End Farm at neighbouring Henfield, and was founding his family of three, Walter, Annie and Minnie.

The brewers who acquired the White Lion from his father were very keen that Walter Potter should stay in the village, and built a house for him to live in - they sensed that already he was a local asset. How right these brewers were! Eighty years later, 'Potter's Museum' still draws discriminating visitors to Bramber, although its founder died in 1918 in the adjoining house - a sort of Villa Wahnfried in a taxidermic Bayreuth....

The first impression of the interior of the museum is of a glorious Victorian jumble of odds-and-ends. Stuffed birds and animals abound, including a number of freaks. There is even an enormous Coypu rat, forty inches long, which was shot on a bank of the river Adur, near Bramber; as it is a native of South America, the supposition is that it disembarked from a boat carrying timber at Shoreham, and was exploring the neighbourhood. An alarming apparition! But I soon forgot the rat in the contemplation of some old musical instruments, a length of telephone cable, an albatross, a Siamese war saddle, butterflies, beetles, boomerangs, the front foot of an Indian elephant made into a waste-paper basket, and twelve engravings of the Wandering Jew by Gustave Dore. As the eye accustomed itself to the rich, inconsequential mixture, the major works of Walter Potter - about a dozen of them, in their show-cases - gradually detached themselves from their surroundings. I became aware of a whole new world of fantasy, in which kittens played croquet with fastidious enjoyment, squirrels gravely drank wine and ate nuts, and rabbits frowned over their slates in the village school....

In the early months of the 1914 war, Walter Potter suffered a stroke from which he never fully recovered. He died on May 21, 1918, and was buried in Bramber churchyard, close to the east end of the church. The gravestone, overlooking the village street, can be seen quite clearly from the front of the house in which he lived....

The International Commission on Zoological Nomenclature

Its role in the modern world

by Prof. R.V. MELVILLE, Secretary ICZN, British Museum - London (UK)

Introduction

The Commission's aim is to promote a stable and uniform Nomenclature in Zoology. It works towards this in two ways : first, it develops and improves the International Code of Zoological Nomenclature to provide a set of rules and recommendations for the guidance of zoologists; secondly, it gives rulings on individual nomenclatural problems submitted to it.

The Commission consists of a minimum of 18 (at present, 26) eminent zoologists from a variable number of countries (at present, 18). The number of

its members must be kept relatively small if the Commission is to work efficiently. Efforts are being made to develop relations with zoologists in China, India and Africa.

The Commission's Secretariat is housed in the British Museum (Natural History), by kind permission of the Trustees. Here it has access to the finest library of its kind in the world, as well as to taxonomic advice from the scientific staff of the Museum. These advantages are of great value.

The Commission's work

It may be helpful to explain the background to the Commission's work. Zoologists (including palaeontologists) recognize about a million species of animals, and are describing new ones at the rate of about 15,000 a year, with about 2,000 new genera. Given numbers of such magnitude, it is inevitable that problems should arise. The commonest problems are of three kinds :

- (a) where a - species or genus has been given two or more names independently (some species have been given as many as ten different names);
- (b) where a - generic or specific name has been used to denote different genera or species;
- (c) where a - name has been wrongly used in a sense different from that intended by its author.

Problems under (a) and (b) can, in principle, be easily solved by applying a simple Law of Priority : the oldest name given to a species or genus is the only one to be used; and a name must only be used for the genus or species to which it was first given. This simple rule works well enough for species and genera that are known only to a few academic specialists; but when animals of economic importance are involved (see the following section of this paper), matters become less simple. The names in general use may be heavy with meaning to many workers to whom taxonomic procedures and the

rules of nomenclature are mysterious and remote. To change such names for merely legalistic reasons could cause widespread confusion, if the Commission had not powers to prevent such changes. Problems under (c) may be complex and entail difficult choices : is the original author's intention to be upheld, or should the name be used in its accustomed way ? If the latter, how is the new meaning of the name to be fixed unmistakably for the future ? Where any of these sorts of problems arise there must be an international system of regulation and a machinery for working it that applies without discrimination to zoologists and palaeontologists in all countries and all disciplines.

The Commission accordingly examines problems submitted to it. When a case has been thoroughly prepared and agreed with the applicant, it is published in the *Bulletin of Zoological Nomenclature* and any comments by zoologists that affect the issue are also published there. In due course the Commission votes by postal ballot and the result, embodying the ruling of the Commission, is published in the *Bulletin* as an Opinion.

The Commission has issued over 1,150 rulings giving rulings on some 10,000 names. The demand for its services increases, and the Secretariat holds files on problems of great complexity.

Relevance to human needs

Man and the rest of the Animal Kingdom interact in a number of ways. The plants and animals that are useful to us as food or as raw materials themselves depend on other species for their survival, as food or as commensals or in other ways

(as with insect-pollinated plants). They are attacked by other species as predators, or pests, or vectors of disease. In exploiting the resources of the earth's crust, especially groundwater and fossil fuels, fossils are an indispensable research tool. Communication

between scientists working in these fields depends in large measure on a common system of nomenclature that all can understand.

The Commission cannot control the ways in which scientific names are used. That is a matter of correct taxonomic practice, which is itself a product of training, experience and judgement. The misuse of a name, however, can have very serious consequences. It can vitiate effective communication and may result in inappropriate steps being taken, for instance in pest control, with consequent waste of financial and human resources and increased pollution of the environment. The Commission has given rulings in many cases in which there has

been serious confusion over the use of names, or disagreement among zoologists as to the correct names to be used. Examples include the three main species of human malarial parasites and the generic name of their mosquito vector; the names of such notorious pests of cereals as the cereal-root eelworm, the grain weevil and the corn root weevil; the sugar-cane borer moth; the bee chiefly responsible for pollinating alfalfa (lucerne), which is the world's most important fodder crop; the tick vector of Rocky Mountain Spotted Fever and many other diseases; and a major cutworm pest of cotton, maize and legumes in Africa, Asia and Australia. Many other cases of similar importance are awaiting decision or presentation.

Value in international communication

The future of the human race — and in particular the problems of north-south communication and the progress of the developing countries — must depend in part on mutual understanding within agreed frameworks of communication. The development of the countries of the Third World must in turn depend on their making the best use of their renewable and non-renewable natural resources. For this it is apparent that they need access to the expertise and accumulated knowledge of the developed countries.

The few examples cited in this paper give an

indication of the essential part played by the Commission in the provision of the general framework in which such communications and transfers of knowledge can take place.

The Commission is especially grateful for the generous financial help given by the Union in consequence of a decision by the 1979 (Helsinki) General Assembly. However, this (together with a grant from the U.K. Government) ensures stability only until the end of 1982. The Commission looks forward to working with the Union in building a realistic financial basis for the long-term future.

Appendix

The system of scientific nomenclature used in zoology today was founded in 1758, with the publication of the 10th edition of Linnaeus's *Systema naturae*. There was then no set code of rules; the principles that Linnaeus had earlier laid down for botanical nomenclature provided an informal framework that sufficed for the small numbers of zoologists working on the comparatively small number of species known in those days.

Within less than a century, however, some 400,000 names had been given to genera and species of animals. Much confusion arose because many species had been given several different names, while identical names had been used for different species. The number of investigators and the output of their publications had also greatly increased. The need for some system of regulation was admitted. The first attempt to meet it was made by the British Association for the Advancement of Science in 1842, and their code was succeeded by a number of others produced either by national zoological societies or by workers in particular animal groups.

The existence of these codes, each differing in some respects from the others, and none having a claim to overall authority, was one of the main motives for the establishment of the International Congress of Zoology in 1889. The International Commission on Zoological Nomenclature was set up for the express purpose of producing a single international code, applicable over the whole field of

zoology and palaeontology. The first *Règles internationales de nomenclature zoologique* were published in 1905.

The publication of the *Règles*, however, proved but a first step towards a satisfactory system. The rigid application of its basic principle, the Law of Priority, caused much ill feeling because it led to many long-familiar names being rejected in favour of overlooked names that had been published earlier. In 1913, therefore, the Commission was given plenary powers to suspend the rules when it was satisfied that their strict application would produce more confusion than uniformity.

The Commission continued to be an instrument of the Congress until 1972, when that organization, at its final session in Monaco, invited IUBS to accept the continuing sponsorship of the Commission. While informal relations between the Commission and the Union had existed previously, these were formalized at the 1973 (Ustaoset) General Assembly with the setting-up of the Section of Zoological Nomenclature of the Division of Zoology. It is a pleasure to record the friendly atmosphere that has grown up between the two organizations.

The *Règles*, thus modified, survived with little change until 1948. Since then they have been under nearly continuous reform. In 1961 they were succeeded by the present International Code of Zoological Nomenclature, of which the third edition is to appear in 1981.

Collections & Information

To: All members of the Biological Curators Group and the Guild of Taxidermists.

BONES AND GUTS OF DEAD BIRDS

I am doing some research on various birds in Britain, viz.

- (1) fluoride in owls (all species), raptors (all species) and the cuckoo; certain water birds (Great-crested Grebe, Kingfisher and Heron).
- (2) the diet of the cuckoo.

For the fluoride I need juvenile and adult birds and require one bone only, namely the femur (that is, the whole of the uppermost leg bone) from each bird. (This bone should be removed either by cutting carefully through the ligaments in the joints at each end or by cutting through the pelvis above and the tibio-tarsus below).

For the diet of the cuckoo I need nestling, juvenile and adult birds and require the stomach plus contents.

I should also need the following for each specimen:

- i) the date of finding of the body;
- ii) the place of finding (preferably with a map reference);
- iii) the sex of the bird (preferably by gonad inspection);
- iv) the age class of the bird (details of age can be found in the British Trust for Ornithology's 'Guide to Ageing and Sexing');
- v) for cuckoo nestlings, the name of the host-species.

I am making my appeal to Biological Curators and Taxidermists because they have a unique opportunity to help. If you think you can help (or indeed already have a body), please would you contact me at the address below. I will pay postage on all specimens sent through the post.

Dr. D. C. Seel,
Institute of Terrestrial Ecology,
Bangor Research Station,
Penrhos Road,
Bangor,
Gwynedd.
LL57 2LQ

Telephone Bangor (0248) 4001 (or 0248-712505, evenings).

Records of herbarium specimens of *Pulsatilla vulgaris* Mill. required, particularly from Vice-Counties 20 (Herts), 29 (Cambs) and 30 (Beds). Data should be sent to Brian Sawford at:
North Herts Museums Service,
Natural History Department,
Old Fire Station,
High Street,
Baldock,
Herts.
SG7 6AR

SOUGHT

It has been suggested to me by Gavid Bridson of the Linnean Society that I contact you with a problem that I have about the official collections made by H.M.S. "Beagle" 1831-36. I was Historical Adviser to the television series "The Voyage of Charles Darwin" and I am currently writing a book about the work of the "Beagle" and although I can track down the specimens and collections which were brought back by Darwin, I know that both the captain, Robert FitzRoy, and the acting surgeon, Benjamin Bynoe, made official collections of plants, birds and possibly even minerals for the official naval collections at the Haslar Hospital. I am trying to track down any specimens or documentation connected with this collection which I am aware was given to the British Museum.
David Stanbury, 16 Ian Court, 2 Dacres Road, London SE23.

Peter Lingwood who has been researching into the voyage of the Challenger and other naval expeditions sends the following notes.

1. Albert Gunther (The History of the collections contained in the Natural History departments of the British Museum, Vol. 2 Appendix 1912 HMSO 109 pp,p.5) states:

"The Zoological Collection at the Haslar Hospital which contained the Fishes of the Voyage of the "Erebus" and "Terror" as well as other types was transferred to the Museum in 1855. The specimens arrived without labels and many were in a bad condition, and for economy's sake a solution of chloride of zinc had been used instead of alcohol!"

Presumable only those specimens which could be individually identified i.e. type and figured specimens, could have been re-ascribed to specific expeditions or donors. The remainder, because of their anonymity, would be almost impossible to re-identify today even if they are still at the British Museum (Natural History) and have not been disposed of as 'duplicates'.

2. Gruber, J. W. (1969) who was the "Beagles" Naturalist, British Journal for the History of Science 4, 266-282 contends that Robert McCormick, the ship's surgeon, considered himself the 'official' naturalist but was thwarted from performing the duties of a naturalist by the presence of Darwin. It seems unlikely that McCormick succeeded in collecting any specimens because, as he complained, every obstacle had been placed in the way of his getting ashore and making collections. As a result he sought to be replaced and left the ship to return to England in the April of 1832, after only 4 months aboard the "Beagle".

On a slightly more hopeful note Lloyd & Coulter (1963, Medicine and the Navy 1200 - 1900, Vol. 5 1815-1900 p.75) state that Bynoe's collection of Birds and Insects is 'now in the British Museum' and that his plants are in the Royal Botanic Gardens, Kew. Unfortunately they do not state the date or source of their information.

According to "Natural History Manuscript Resources in the British Isles" (reviewed elsewhere in this Newsletter) there is Robert Fitzroy material preserved in the Michael Faraday Correspondence Collection at the Institute of Electrical Engineers and in the correspondence files and his own account of the discoveries of the "Beagle" at the Royal Geographical Society. Benjamin Bynoe does not appear in the index.

Collections Research: Can you help?

A large number of museum curators with responsibility for natural sciences collections have been collaborating as a team to record the existence (or known fate if lost) of all collections of natural science specimens in the British Isles. Recently the Federation for Natural Sciences Collection Research (FENSCORE) was formed, with representatives from many major provincial museums and from all the relevant national museums. The information being gleaned about collections is fed through FENSCORE into the national database being compiled by the Manchester Museum Computer Cataloguing Unit on the Manchester University computer.

The primary purpose of the database is to provide researchers with a means of rapidly locating collections containing material of relevance to their studies. For example, details can readily be retrieved of the collections known to:

- 1) Contain material of a given group
- 2) Be associated with a particular person or expedition
- 3) Be gathered from a particular area of the world

Until recently the curators involved have been concentrating on collections held in provincial museums and kindred institutions, but now wish to expand the scope of the Register to include details of collections outside museums, such as those in private hands or in the teaching departments of educational establishments.

If you own, or are in charge of, botanical, geological and/or zoological collections, and you think its existence should be recorded in the Register, then please get in touch with Mr. Pettitt at the address given below; note that arrangements can be made to keep the precise location of valuable collections confidential.

You will be sent the necessary forms and instructions, together with the name and address of the nearest involved curator, to whom the completed forms should be returned, and who will be able to answer any queries you may have.

The work of compiling the Register is unfunded, so it would be appreciated if you could include a stamped, addressed envelope (at least 9" x 3½") with your letter.

Charles Pettitt
Computer Cataloguing Unit,
Manchester Museum,
Oxford Road,
Manchester M13 9PL.

Denton's Patent Butterfly Tablets

Here is chapter three of the saga initiated by Penny Wheatcroft (B.C.G. Newsletter Vol. 2 No. 8 p. 391). A small collection of nine butterfly tablets located in the entomological collections at Sheffield City Museum are survivors of 29 purchased from Rowland Wards on 15 March 1929 for £18.6s.6d (Accession numbers F.1929.1 to 29). Some of these survivors bear a 'Rowland Ward Ltd.' trade sticker (see F.1929.29 below) covering the original 'Shelley W. Denton & Co.' label (see F.1929-12). The collection consisted of 22 exotic butterflies and 7 moths from various world localities. Celebes, Mexico, Solomon Islands, Peru, 'Shangai', Madagascar and Queensland are just a few examples.

I suspected that the remainder probably found their way into the museum's school loans collection, as these sturdy preparations make ideal teaching material. Sure enough, one tablet remained in this collection and was promptly 'rescued'. This particular specimen (F.1929-30) is one of three (Red Admiral, Peacock, Swallowtail) accessioned in 1929 and "presented by Shelley W. Denton, some years ago as samples of his work".

The more observant amongst you may have noticed the graffiti on the label of F.1929-12, to which the present curatorial staff accept no responsibility. Our passionate interest in the subject does have limits!!

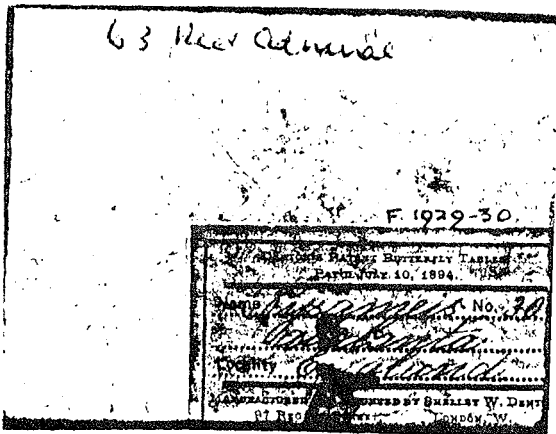
Derek Whiteley
Natural Sciences Dept.
Sheffield City Museums



Denton's Patent Butterfly Tablet.
Awarded Gold & Silver Medals, Paris.

Genus. _____
 Species. _____
 Locality. _____
 Sex. _____ Number. _____
 Notes. *ix/-* *uy/-*

F. 1929-29



Denton's Patent Butterfly Tablet.
Awarded Gold & Silver Medals, Paris.

Genus. _____
 Species. _____
 Locality. *Admiral*
 Sex. *♂* Number. *117* *2000*
 Notes. _____

F. 1929-12

Patented and exclusively manufactured by
 SHELLEY W. DENTON & Co.
 52 REGENT STREET, LONDON W

Alfred Déséglise (died 1883) Botanist

A sizeable herbarium of Déséglise's specimens including several sheets of *Rosa* species are in the collections at Bolton Museum. Déséglise was best known for his work on the roses and the national herbarium have "a very large collection of critical Roses from various collectors containing all the species in his works, purchased 1884". (The History of the Collections contained in the Natural History Departments of the British Museum, 1904). At Bolton we have an accession of 1899 of "2002 species of vascular plants from M. Déséglise collection purchased from E. C. Horrell" and there are also some *Rosa* specimens in the Philip Brookes Mason collection.

A current examination shows that there are more like 1,200 species collected between 1830-1880 from France, Germany, Italy, Sicily, Switzerland, Sweden, Greece, Algeria, the United States, Hungary, Austria, Israel, Holland and Sardinia. The sheets show a range of specimens illustrating the various stages of development and the same site may have been visited several times at different times of the year or even in different years. The P. B. Mason portion was probably obtained by him from the Stevens Sale of 9 July 1895 at which auction parts of the herbarium of the Prince of Mantua and Montserrat (*alias* Charles Ottley Groom, C. O. Groom-Napier, etc.) were sold whose collection is incorporated in the Mason Herbarium. Other collectors in the 1899 accession include C. Billot, Heldreich, Al. Jordan, Ch. Ozanon, Bureau, Huguenin, Franqueville, Tribout, A. Guillon, A. Boullu, D. Boutigny, Savi and Letourneux.

The number of *Rosa* "species" in the Déséglise portion of the herbarium is 57, all non-British. If any museum has spare or duplicate sets of monographs or reprints on his work we would like to obtain them by gift or barter. Also an appeal is made for a rose expert to come and examine and update nomenclature, etc.

Patricia Francis,
Natural History Department,
Bolton Museum & Art Gallery.

FERAL DEER

Muntjac deer were introduced into Britain by the Eleventh Duke of Bedford and feral animals can be found now over much of East Anglia, the Midlands and Southern England.

Both the Indian and Chinese species were introduced (and escaped) and there has been, and still is, confusion as to the identity of the feral deer. Although it is generally accepted that it is the Chinese Muntjac that is at large, some people still think that it is the Indian species and the author of a recent article in "Deer", the journal of the British Deer Society, believes that the deer are probably bybrids.

The Mammal Fund, which is administered by the Mammal Society, has awarded me a small grant to study the taxonomic status of feral muntjac in England. I wish to borrow specimens of skulls and jaws of feral deer from as many localities as possible, so that I can measure them. Specimens from animals that died in the first half of this century would be of particular value. In addition, I would like to borrow authentic specimens of both Indian and Chinese muntjac. I have written already to many museums that I thought might have specimens. If, however, any museum has specimens but has not received a letter from me, I should be very pleased to hear from them.

D. I. Chapman
"Larkmead"
Barton Mills
Bury St. Edmunds
Suffolk
IP28 6AA

British Herbaria - An Index to the Location of Herbaria of British Vascular Plants - Douglas Kent (1957). The Botanical Society of the British Isles.

New Edition?

We have received a request (reproduced below) to provide information for a new edition of this work. It may be, with the labours of the Collection Research Units well under way, that some discussion with the BSBI as to linking them in with FENSCORE would save the BSBI a great deal of time and expense. This would be especially true in terms of present costs of publication. Also, of course, the CRUs are collecting information on all herbaria, that is foreign vascular plants and non-vascular groups too, but requests for print-outs on the basis of *British vascular* herbaria can easily be met by machine processing of the data on file at Manchester and elsewhere.

REQUESTS

BRITISH AND IRISH HERBARIA

British Herbaria, an index to the location of herbaria of British vascular plants, with biographical references to their collectors, was published by the Botanical Society of the British Isles in 1958. Since then, data on many additional collections have been accumulated, and some information given has become outdated. The Society has, therefore, authorised the preparation of a new edition of the book with a view to its being published in 1983. Curators of herbaria at university botany departments, museums and other institutions are accordingly invited to submit to the undersigned data on collections in their care for inclusion in the revised edition. The information required is (1) Surname and full Christian names of collectors. (2) For deceased botanists, year of birth and of death, where known, alternatively approximate period when collection was made. (3) Approximate number of sheets in each herbarium or collection if known. A herbarium should be prefixed by an asterisk to distinguish it from smaller collections. (4) Any area of specialization, e.g. vice-county or smaller area, particular groups or genera studied, etc. Similar data in respect of herbaria in private hands is also solicited.

D.H. KENT, 75 Adelaide Road, West Ealing, LONDON W.13 9ED.

Crabs and Crayfishes - an appeal for museum records

In 1973 distribution recording of British marine crabs was initiated by the Biological Records Centre and is operated by the Crustacea Section of the Natural History Museum, London. Sufficient data has been accumulated to allow production of species distribution maps of the British crab fauna. A final 'trawl' is being made for records held by field stations, university and provincial museums. Some curators have kindly provided information on their holdings of crab material and others are now encouraged to assist the recorders by indicating whether their institution has such material or records.

The organisers of the marine crab recording scheme are also updating the distribution of our endemic freshwater crayfish (*Austropotamobius pallipes* (Lereboullet)) and of alien species that have escaped from captivity. Records or specimens of crabs and crayfishes should be sent to the address given below. All specimens or records will be gratefully received and acknowledged.

R. W. Ingle or P. F. Clark
Crustacea Section
Department of Zoology
British Museum (Natural History)
Cromwell Road
London SW7 5BD

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Typed by Denise Roscoe, produced at Bolton Museum and printed by Prinstat House, Bolton Metropolitan Borough.

THE ART OF GETTING STUFFED

Taxidermists seek a new image by Ann Hills

WHEN the Queen previews the Darwin Origin of Species exhibition at the Natural History Museum later this month she will see some three dozen exhibits by craftsmen who would like to be thought of as "artists of conservation".

The exhibits will be lifelike specimens of birds and animals—stuffed ones, in fact, though that is not how their contrivers would put it. Says Graham Teasdale, who has a two-year waiting list of clients for his specimens: "Taxidermy is pure art—you have to be a sculptor. A wild duck mounted on a turntable should carry a heading like a piece of intricate carving or Royal Worcester."

Certainly the prices seem to be in a similar league. "A lion, depending on the mount, could fetch up to £5000. Small birds might be worth £80 or £90."

The change of image sought by taxidermists matches the changed conditions of their trade. They can no longer find their raw material by going out and slaughtering suitable creatures—too many of them are protected. A section of the controversial Wildlife and Conservation Bill, if it becomes law this summer, would make taxidermists accountable for every specimen of a protected species they handle, and require them to affix their trademark to each.

Roy Hale, of the Natural History Museum, can already give a confident account of his Darwin exhibits: "The mule was bought from a knacker's yard. A wolf from Whipsnade Zoo—it met its end in a cull. A jaguar came from there too. A stuffed polecat in the show was found dead on a Hereford road, and two drake shovelers, both in breeding plumage, had been shot legally during the winter season."

Mr Hale works at his craft in an airy building just off London's North Circular Road, a white-coated faintly medical figure in a clinical studio setting. "We don't like to get involved with dubious sources," he says. "We try all the known establishments first."

He was last year's chairman of the Guild of Taxidermists, a five-year-old body with 280 members, including some biologists. Most of them welcome the legal moves to control the trade, under which



Museum expert prepares drake for show

every taxidermist would have to be registered in future.

Any reservations concern the dangers of a black market or of deterring genuine finders of dead specimens from offering them. There are also doubts about how the regulations could be enforced without

a prodnose bureaucracy. Museum owner Bob Reid adds: "There is a large second-hand and antique trade. When is an antique piece of taxidermy not an antique?"

Mr Reid owns the North Wales Museum of Wildlife, called Encounter, and he has just put on show there a rare albatross sent home by the British Antarctic Survey. He considers it educational to show the public specimens of endangered wildlife so long as they are respectably come by.

This is a diametrical change of outlook from that of the Victorian taxidermist Potter, whose tableau "Burial of Cock Robin" mustered no fewer than 98 species (many of them protected today) collected from the farm where he lived.

The exhibit is still on view in the High Street of Arundel, Sussex. There, too, is Potter's "The Kittens' Tea Party", for which he retrieved drowned kittens, and "The Guinea Pigs' Cricket Match".

Such extravaganzas are unthinkable in the age of conservation, which drove the famous Rowland Wards of Piccadilly out of business in 1977. But if stuffing is a declining industry (there are only 14 museums with taxidermists on the staff), it is technically more advanced than ever.

A tigress is now light enough to be carried by one man, which reduces labour costs of displays. Bones are wanted only for measurement—apart from skull and teeth, which usually remain. The skins are folded round plaster or glass-fibre moulds and wooden shapes, with metal rods inside the legs. Corpses are kept till needed in industrial freezers.

So much expertise and so little scope for exercising it. Should anyone be wondering how to dispose of deceased creatures, from toads to red squirrels, which came to a lawful end, Roy Hale and colleagues would gratefully receive them. It is not a decent burial but it has a semblance of immortality. ●

Sunday Express Magazine
3 May 1981

NEWSLETTER
OF THE
BIOLOGY CURATOR'S GROUP

VOLUME 2

(10 PARTS plus index)

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