

NEWSLETTER

Vol 4 No 8

Reg Harris: an Appreciation

An Appreciation of Reg Harris
by Rosina Down

The death of Reg Harris FMA, Hon FLS, MIBiol, founder member of BCG, has left a gap that will be difficult if not impossible to fill.

Reg was born in 1920 over a jeweller's shop, of which his father was manager, on the corner of Hampstead and Euston Road in Central London. Interested in Natural History from an early age, he joined the staff of E. Gerrard, Royal College Street, straight from school. He moved to the Wellcome Museum of Medical Science (just over the road from his home) in 1936. The war saw him in the Navy, in the Laboratory at RNH Haslar, from 1939-1941, aboard HMS Colinwood from 1941-1943 as Sick Berth Petty Officer in the Sick Quarter Laboratory, and attached to the Royal Netherlands Navy on the Hospital Ship HMHC Ophir, Eastern Fleet, in 1943, both of which took him to numerous exotic places.

Returning to the Wellcome Museum in 1946, he moved on after a year to the Zoology Department UCL as a Teaching Technician. Appointed Curator of the Museum of Zoology and Comparative Anatomy a year later, a post the then current Professor relinquished in Reg's favour, he realised the vision of a former Professor, JP Hill, "for a trained zoologist who was also a good technician". His time at UCL was a fruitful one for the Museum with much new skeletal material being prepared; the collections were overhauled and the mammoth task of reclassifying and recataloguing was begun. His experimentation at this time produced new ways of preparing teaching specimens, one of which he came to regret in future years because of the long term problems of specimens embedded in resin.

The move to the British Museum (Natural History) as Experimental Officer in 1956 gave Reg the time and the scope to develop further experimentation in new ways of specimen preparation. The work for which he is best known began in 1960 after a talk with

Dr Meryman (a Washington Naval Physicist) who described a method of drying entire biological samples in their natural shape and proportion without distortion. A subsequent meeting with Dr Roland Hower of the Smithsonian Institute led to the technique being developed simultaneously in the USA and the UK. Together with Edwards High Vacuum the highly successful Ef2 freeze-dryer was evolved, which is used all over the world. The arrangement of spring flowers buried in Westminster Abbey in 1977, as part of the Queen's Jubilee Year celebrations, were freeze dried by Reg.

Work on other applications of freeze-drying for stereoscan electron microscopy, marine archaeology (including the earliest ship's brush ever preserved), marine zooplankton and geological applications together with critical point drying followed. He was deeply involved with the problems of biodeterioration and very keen that this work should be continued by other workers.

"Retirement" in 1980 saw him moving to Alderney for four years to become Curator of the Alderney Museum, where he discovered just how hard a 'general' curator's life can be. Back on the mainland he was still involved in promoting interest in research into biodeterioration and took part in seminars for the Leicester University Museum Studies courses.

A very private man devoted to his family, Reg had a keen sense of humour and was a fund of knowledge. He had the rare gift of communicating his love of and boundless enthusiasm for everything connected with natural history and geology, which has enriched the lives of countless students, technicians and many others.

A student himself of the Working Men's College he was awarded among others the Foster Memorial Prize for Bacteriology in 1939 and the Fotheringham Prize for Geology in 1949, and invited to teach biology in 1950. He taught biology and museum techniques on the Science Laboratory

Technicians Course in the evenings at Paddington Technical College for many years.

It was said of E Ray Lankester (a former Professor of the UCL Zoology Department and Director of the BM(NH)) that "he influenced the whole course of Zoology in the British Empire". I think the same could be said of Reg Harris's influence on the course of practical biological techniques.

Bibliography

- 1950 (with H.C. Bartle) Marco resin embedding. Bull. Sci. Tech. Ass., 1 (10).
- *1951 The use of enzymes in the osteological preparation of the Emperor Penguin. Mus. Journ., 51, 97.
- *1952 Demonstration of the supporting tissue in the manus of the Indian Elephant by the use of a specific stain. Mus. Journ., 52, 206.
- 1957 (with C.A. Wright and D. Clangher) Paper Chromatography in taxonomic work. Nature, 180, 1489.
- 1958 The extraction of bones from bird pellets. Essex Nat., 30 (2).
- 1959 Small vertebrate skeletons. Mus. Journ., 58, 223-224.
- 1960 Alizarine transparencies. Mus. Journ., 60, 99-101.
- *1964 Vacuum dehydration and freeze drying of entire biological specimens. Ann. Mag. Nat. Hist. Ser. 13, 7, 65-74.
- 1964 Freeze drying - a Natural History Preservation Technique. Trans. Mus. Ass. Grp., 3 (Sept).
- *1965 Simple technique for the embedding and supporting of delicate biological specimens. Nature, 208, 199.
- 1965 Vakuum - und Gefrietrocknung ganzer biologischer Objekte. Der Preparator Jahrgang II. Heft. 4. (translation of Vac. dehydration and freeze drying 1964).
- 1967 Edited: Secrets of the Microscope, Aliverti, Ciccioli and Laudi. (further detail not presently available)
- 1968 A new apparatus for freeze drying whole biological specimens. Med Biol. Ill., 17 (3).
- 1968 Edited: Life on Earth, Hamlyn
- 1968 Book review in Laboratory Practice, 17.
- 1969 Nature collecting, Hamlyn. (republished 1972 by Grosset & Dunlop Inc in USA and Canada)

- 1972 (with B.S. Martin and C.G. Ogden) Notes on the preparation for scanning electron microscopy. Bull. Mus. Nat. Hist. (Zool), 24.
- 1976 Preparation techniques for biological material. BCG Newsletter, 1 (2), 2-5.
- *1976 Freeze-drying of marine Zooplankton. IV Monograph on Oceanographic Methodology "zooplankton fixation and preservation". UNESCO Press, Paris.
- 1978 Biodeterioration. BCG Newsletter, 1 (8), 3-12
- 1979 Introduction to Freeze-drying Biological Specimens, a laboratory manual. R.O. Hower. Smithsonian Institution Press, Washington.
- 1979 The conservation of one of the earliest known examples of a fluid preserved injection dissection (of a Marine Coelenterate from the John Hunter Collection). Mus. Journ., 79, 71-72.
- 1984 A Selective Bibliography on Preservation, Macro and Micro - anatomical Techniques. BCG Special Report, 3.

* Original work - none previously carried out.

Papers given at Seminars, etc. (thought not to have been published).

- 1968 Conservation in the Natural Sciences. City of Liverpool Museums Service Symposium.
- 1974 Preservation techniques in the Natural Sciences - Modern Methods.
- 1975 Invertebrate preservation techniques in the small and medium museum. Norfolk Museums Service Symposium, Norwich.
- 1977 Course in Natural Sciences. Booth Museum of Natural History, Brighton.
- 1983 Freeze Drying - Miracle or Menace? AMSSEE Seminar at the Powell Cotton Museum. (review only published in AMSSEE News, April 1984). note: AMSSEE had photocopies of notes on invertebrate and plant material, and these may still be available.

Rosina Down
Museum of Zoology and Comparative Anatomy,
University College,
London WC1E 6BT

MDA Museum Terminology Group

BCG have been approached by this recently established informal working party to assist with the co-ordination and development of museum terminology control initiatives.

In due course the group will turn its attention to terminology control specific to particular disciplines and will be seeking assistance from specialist curatorial groups.

Initially, I shall attempt to collate ideas and comments specific to the biological disciplines from members and forward these to the new group.

Has anyone produced a thesaurus, standard list of terms, or internal conventions relevant to any aspect of cataloguing biological specimens? Please could I see examples, as it seems a waste to re-invent the wheel, or duplicate work currently in hand.

Please note that this applies to both MDA and non-MDA users. BCG would like to hear from you.

BCG Secretary
Derek Whiteley
City Museum
Sheffield S10 2TP

Collections

Vanishing herds

- large mammals in museum collections?

Many museums over the past decade or so have destroyed their large mammals for various reasons. The problems of storage, past neglect and the costs of cleaning and restoration are often cited as being major factors. The modern museum philosophy of only displaying local material has also added to the toll. Important historic material has been lost, and much more will be lost in the future, if care is not taken to research and document these irreplaceable specimens.

Several years ago I was asked, by the then director of Leeds City Museum, to make out a case for the retention in the collections of several large mammals held in one of our out-stores. The store, part of a large house in a park, was in need of renovation, and a full maintaining lease had been agreed with the tenants who would take over the entire house, as and when the stores could be cleared.

The museum's collection of large animals had been acquired over its 160-odd years of existence. Some specimens, such as the Giant Panda and the magnificent Bengal Tiger, had always been on display to the public, but others such as the Polar Bear, Hippopotamus, Wild Boar and the American Bison had not been on display for many years. The collection had been examined, without my knowledge, and the subsequent report stated that the mammals could no longer be used for display, and therefore should be disposed of, or destroyed. The documentation relating to these large specimens proved almost non-existent. At best, all we had in the way of information was the donor's name, in some cases even this was unavailable without considerable research. Fortunately, I was able to justify the retention of the animals through our involvement with the World Wildlife Fund who regularly borrowed them for promotional displays.

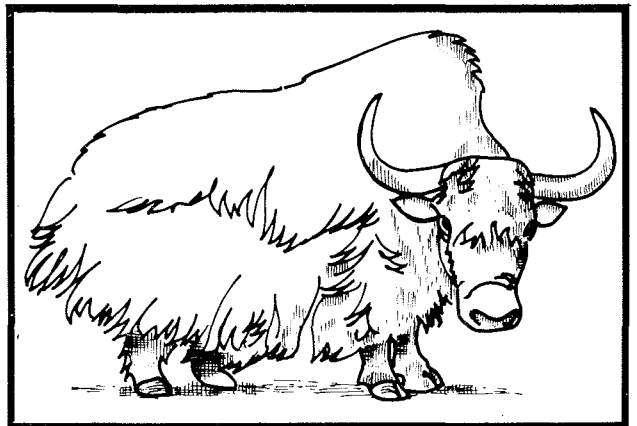
This justification exercise, although unpleasant at the time, did highlight the lack of good documentation. Without the aid of the local branch of the World Wildlife Fund, it would have been very difficult to persuade the Director to retain the animals. Over the last few years, therefore, I have spent a considerable amount of time trying to bring the documentation up to an acceptable standard, so as to avoid this problem in the future. I also realised that I would not be able to justify any expenditure from our limited resources for the much-needed cleaning and repair of the animals without this documentation. Many of the animals, such as the Hippopotamus, Gorilla and Giant Panda proved fairly easy to research with the help of the Zoological Society of London. In some cases, the Tiger for example, my research led to the person who shot the

animal - in this case, Major-General Sir Charles Reid, G.C.B. of H.M. 2nd Goorkhas (Gurkhas), (Sirmoor Rifles), who distinguished himself and his regiment at the siege of Delhi in 1857.

Some animals proved almost impossible to research, however, including a large mounted specimen of a Yak (*Bos grunniens*). The only documentation we had relating to this animal was found in the accession register for 1862/3, 'Capt. Edmund Smyth, Bengal; very fine specimen of the Yak; and male and female Argali, from India', and a file card which read 'Great Indian Yak E. Smyth'. This limited information seemed hardly enough to justify a great deal of expenditure on cleaning and restoration. The long-term future of the Yak, therefore, seemed to be in doubt.

The full information relating to this animal did, however, turn up by sheer chance, over 120 years after its acquisition by the museum. The author Charles Allen was researching a book on early explorers and pioneers in the Himalayas, when he came across a reference in a private diary to a Yak having been shot by Edmund Smyth and Robert Drummond which was subsequently presented to Leeds Museum. His interest in the preservation of the Yak in the Leeds Museum was limited mainly to curiosity, as the presence or absence of the animal made little difference to his book. We were fortunate, therefore, to receive a letter from him asking if the animal was indeed given to the museum. With Charles Allen's help we were thus able fully to document the animal. The following details give a short account of the information we uncovered.

Capt. Edmund Smyth (1823-1911) immortalised as Crab Jones in 'Tom Brown's Schooldays', was the first European to go mountaineering in the Himalayas. A pioneer of hunting and mountaineering trips into the Garhwal Himalayas over 20 years, he made many such journeys into that region, as well as into Tibet, and in 1862 he led a party to the sources of the Tsangpo-Brahmaputra. Capt. Smyth was considered to be something of an eccentric who never bothered to publicise any of his activities, and as a result much of his life's work was ignored. The Yak itself is referred to in Maj. Gen. D. MacIntyre's book 'Hindu Koh: Wanderings and



Wild Sports on and beyond the Himalayas', published in 1889. The Yak would seem to be the first wild Yak to have been brought into Europe, and it is now understandable why no details of its place of origin were given. Capt. Smyth was employed by the government as an Education Officer, and his friend and fellow hunter was another government officer, The Hon. Robert Drummond, a younger son of the Eighth Viscount Strathallan. The hunting expeditions undertaken by Smyth and Drummond were in direct defiance of a government ban on entering Tibet. It was particularly important to Robert Drummond that these illicit trips into Tibet were kept a secret as his elder brother happened to be the Lieutenant-Governor of the newly-formed North-Western Province. The Yak which came to Leeds was shot on the shores of the sacred lake of Manasarover in Tibet in 1860, violating not only British and Indian laws but also the Tibetan religion in one of its most sacred shrines. It is little wonder that their activities did not emerge for many years.

This information on Edmund Smyth, and his hunting trips to Tibet, could not have been traced through normal sources as Smyth himself never wrote an account of his activities. Without the chance find of the reference in Drummond's diaries none of this information might ever have come to light.

It proved to me once again that it is never safe to assume that a specimen has no data and, therefore, can be disposed of. It is only safe to dispose of material when it is fully documented, and the documentation is of limited value or the specimen is of no use. The Yak, along with the Tiger, Bison and Giant Panda has now been fully restored and placed on permanent display at the Leeds City Museum.

Adrian Norris, Leeds City Museum

Microcomputer help with library cataloguing

Abstract

A system using a Sirius microcomputer to produce index cards for easier book cataloguing is described. This has proved to be of considerable help in our herbarium library which as a result has become more accessible by our students and staff.

Introduction

Some years ago our herbarium library was presented with a valuable collection of botanical books by the executors of Norman Douglas Simpson (1890-1974), late of Bournemouth. Many of the books were old, rare and of considerable value to systematists, and it was of importance to catalogue the collection professionally (as well as the rest of the fast growing library). Information on pre 1800 books was required for the British Library's Short Title Catalogue. We were extremely fortunate in gaining the part-time services of a highly

skilled cataloguer, Mrs Clare McWilliam, on a voluntary basis. Catalogue cards were made at first by the main University Library Cataloguing Department, using an old mechanical duplicating machine, and a set sent to our herbarium library, as well as one for the main University Library catalogue.

This system failed when the machine broke down and increased pressure on a reduced staff prevented further collaboration, the University library now using its own computer system. Some cards were then typed onto index cards by our own departmental secretary, but this was a particularly tedious and repetitive job, and progress was lamentably slow. It seemed the job was one which could be assisted by the use of a microcomputer and an investigation was carried out into the feasibility of this with the help of Mr G P Ibbett, an undergraduate in the Department of Computer Science. A program was written by him, subsequently modified by one of us (DJF), to produce catalogue cards on our Sirius* microcomputer.

Requirements

Often a book has more than one author, and two, three or even more cards are required for these 'additional authors' for the author catalogue. Often they are produced by duplicating a standard card and typing the additional author's name along the top as a heading. Similarly the title, series, periodical (as appropriate) and subjects can also be added as headings for title, series, periodical and subject catalogues. Our library also uses a second title card for a shelf index, used when checking and ordering the library; other libraries use another first author card. All cards need the same basic information: location in library, author(s), title, imprint, collation, series/periodical and notes (e.g. "Bequest of ...", "p.6-10 missing", "Copy annotated by ...", "Preface by ...", "Illustrations by ...", etc). It is also necessary to add 'tracings' on the back of the shelf card (or another as decided for the library) to indicate the cards used for each book in the catalogue. Should the book be removed from the library all the cards can then be removed from the various drawers in the catalogue.

The herbarium data processing room has a Sirius microcomputer with a daisy-wheel printer, relatively slow, but producing good quality copy, ideal for the implementing of such a system.

It was decided that data would not be stored, so after printing out the memory is automatically cleared. The system required was simply catalogue card production. Our microcomputer has numerous other herbarium jobs to perform (specimen label production, seed allocation and dispatch from our annual Index Seminum, for example) and therefore would not always be available for immediate access to library users for book catalogue use, a requisite of all library catalogues.

*SIRIUS is a trademark of Sirius Systems Technology, Inc.

CARD INDEX DATA

LOCATION 1	Herbarium	(15)	LOCATION 2	581.012	(15)
NAME 1	HEYWOOD, V. H.	(25)	NAME 2	MOORE, D. M.	(25)
NAME 3	-	(25)	NAME 4	-	(25)
TITLE 1	Current concepts in plant taxonomy.	(55)	TITLE 2	-	(55)
IMPRINT	London: Academic Press Inc. (London) Ltd., 1984.	(55)	COLLATION	xvi, 432 p.	(55)
SERIAL 1	The Systematics Association Special Volume no. 25.	(55)	SERIAL 2	-	(55)
NOTE 1	Presented by Professor V. H. Heywood.	(55)	NOTE 2	-	(55)
NOTE 3	-	(55)			
SPECIAL ENTRY 1	TAXONOMY - Plants	(55)	SPECIAL ENTRY 2	PHYTOGEOGRAPHY	(55)
SPECIAL ENTRY 3	PHYTOCHEMISTRY	(55)	SPECIAL ENTRY 4	DATA BASES	(55)
SPECIAL ENTRY 5	-	(55)	SPECIAL ENTRY 6	-	(55)
ADDED AUTHOR ENTRY 1	The Systematics Association.	(55)	ADDED AUTHOR ENTRY 2	-	(55)

Figure 1 A completed input form

Operation

G P Ibbett wrote a program to accommodate these requirements and an appropriate input form (Figure 1) was designed. Location 1 usually contains the room and Location 2 the Dewey Decimal or shelf number in the case of valuable books locked away. Title 2, Serial 2, Notes 2 and 3 are overflow lines for Title 1, Serial 1, Note 1 respectively. Numbers refer to the number of characters and spaces available for each field.

On completion of input, a strip of thin 'two-sheet' white card (127mm x 600mm) is placed in the printer and the cards (127mm x 76mm = 3" x 5") produced, together with cut-up marks. After printing of the cards is complete, the strip is removed, turned round and on depressing the 'return' key on the computer the tracings are printed on the back of the first card.

The original program has now been modified by one of us (DJF) to allow easier editing of data, repeat input of the individual fields (several books may have the same author or imprint, etc) and repeat printing of the cards for other catalogues or duplicate copies of the book in different locations. Underlining is possible. Certain key words such as "Herbarium", "Reprint" for the location have been added to the program and can be produced by the use of soft-function keys, saving again on input. An example of output is shown in figure 2.

The program was written in 'BASIC86' and has been compiled for use with the 'MS-DOS'* operating system but can also be used with the 'CPM**' system. The possibility of selling the program on Sirius double sided diskettes, or even as printout, which could be modified to run on other machines, is being investigated.

* MS-DOS is a registered trademark of Microsoft Corporation

** CP/M is a registered trademark of Digital Research, Inc.

	Herbarium 581.012
Current concepts in plant taxonomy.	
HEYWOOD, V. H. and MOORE, D. M.	
Current concepts in plant taxonomy.	
London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25.	
Presented by Professor V. H. Heywood.	
-	
	Herbarium 581.012
Current concepts in plant taxonomy.	
HEYWOOD, V. H. and MOORE, D. M.	
Current concepts in plant taxonomy.	
London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25.	
Presented by Professor V. H. Heywood.	
-	
	Herbarium 581.012
HEYWOOD, V. H.	
HEYWOOD, V. H. and MOORE, D. M.	
Current concepts in plant taxonomy.	
London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25.	
Presented by Professor V. H. Heywood.	
-	
	Herbarium 581.012
MOORE, D. M.	
HEYWOOD, V. H. and MOORE, D. M.	
Current concepts in plant taxonomy.	
London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25.	
Presented by Professor V. H. Heywood.	

Figure 2 Example of output

<p style="text-align: right;">Herbarium 581.012</p> <p>The Systematics Association Special Volume No. 25.</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. Presented by Professor V. H. Heywood.</p>	<p style="text-align: center;">ENTRIES</p> <p>Current concepts in plant taxonomy. HEYWOOD, V. H. MOORE, D. M.</p> <p>The Systematics Association. The Systematics Association Special Volume No. 25. TAXONOMY - Plants PHYTOGEOGRAPHY PHYTOCHEMISTRY DATA BASES</p>
<p style="text-align: right;">Herbarium 581.012</p> <p>TAXONOMY - Plants</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25. Presented by Professor V. H. Heywood.</p>	<p>SL Jury and DJ Farmer Dept of Botany University of Reading PO Box 221 Reading RG6 2AS</p>
<p style="text-align: right;">Herbarium 581.012</p> <p>PHYTOGEOGRAPHY</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25. Presented by Professor V. H. Heywood.</p>	<p>William B L Manley Collection of Lepidoptera</p> <p>The Lt Col Manley collection of butterflies and moths was bought by Glasgow Museum and Art Gallery from his widow, Margherita, in 1986. Manley died in 1985, aged 85, (Tremewan 1986) having built up a collection of about 60,000 specimens contained in thirty-two cabinets and sixty store boxes. It contains, amongst others, all the specimens of his figured in Manley and Allcard (1970). The illustrated examples are clearly marked as such, as are the types of the various taxa described by him or by other entomologists from his collection. The most remarkable aspect of this collection is the perfect setting and condition of each insect. This, combined with the extensive coverage for Western Europe, makes it a resource of high quality. Glasgow's offer for the collection was accepted in the face of competition from the Smithsonian Institution, Washington, DC, USA.</p>
<p style="text-align: right;">Herbarium 581.012</p> <p>PHYTOCHEMISTRY</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25. Presented by Professor V. H. Heywood.</p>	<p>The collection divides itself into four identifiable sections. Firstly, there is a forty drawer cabinet and twelve store boxes of mainly tropical Lepidoptera. These have their origin in Manley's father's days in the army and the genesis of his interest in collecting can be traced to seeing the specimens sent back from Sierra Leone in 1904 (in litt: Margherita Manley to Glasgow Museum, 19 August 1986). The second part forms the bulk of the collection in twenty-one ten drawer Hill's cabinets and thirty-six store boxes being the western palaeartic Rhopalocera plus Zygaenidae. The third section in eight Hill's cabinets and nine store boxes is of British moths. These are restricted to mainly British specimens of macro moths and pyralid and tortricoid micros. These last named are particularly developed into the last section, the varieties of <u>Acleris cristana</u> and <u>A hastiana</u> occupying two Hill's units and three store boxes. It includes the specimens referred to in his paper on the subject (Manley, 1973).</p>
<p style="text-align: right;">Herbarium 581.012</p> <p>DATA BASES</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25. Presented by Professor V. H. Heywood.</p>	<p>It is a fine collection and with few exceptions contains the entirety of one man's effort, with the assistance of members of his family. The purchase was a major proportion of the museum's budget for such purposes and</p>
<p style="text-align: right;">Herbarium 581.012</p> <p>The Systematics Association.</p> <p>HEYWOOD, V. H. and MOORE, D. M.</p> <p>Current concepts in plant taxonomy.</p> <p>London: Academic Press Inc. (London) Ltd., 1984. xvi, 432p. The Systematics Association Special Volume No. 25. Presented by Professor V. H. Heywood.</p>	

Figure 2 (contd)

was assisted in part by a grant from the Local Museums Purchase Fund. Its acquisition makes the museum a significant resource for the study of European butterflies. Those wishing to study it should make contact with the Keeper of Natural History prior to a visit.

Geoff Hancock
Glasgow Museum and Art Gallery
Kelvingrove
Glasgow G3 8AG

References

- Manley, WBL and Allcard, H (1970)
A FIELD GUIDE TO THE BUTTERFLIES AND
BURNETS OF SPAIN. 192pp, 41 plates.
EW Classey: Hampton, Middlesex.
- Manley, WBL (1973) A Guide to Acleris
crustana (D&S) (Lep: Tortricidae) in
Britain. ENT. GAZETTE, 24; 89-206.
- Tremewan, WG (1986) WBL Manley (obituary)
ANTENNA, 10; 68-69.

Fish conservation

The Fish Specialist Group of the Species Survival Commission (of the International Union for the Conservation of Nature) is currently preparing a policy document entitled 'Fish Conservation: a Worldwide Strategy'. Any BCG members with an interest in this area and who would like to receive or contribute information or be involved in particular conservation projects should contact:

Dr P S Maitland
Chairman, Fish Specialist Group
IUCN, SSC
c/o Sloy Power Station
Inverglas, Arrochar G83 7DP
Scotland

AGM 88

Bolton Civic Hall, 15 & 16 April 1988

The 1988 AGM meeting at Bolton will have two themes: non-chemical methods of pest control and computer applications in museums. It has not proved feasible to put together a full meeting on non-chemical pest control, so computer applications has been included to keep members informed of developments in that field at Liverpool Museum, and to have desk top publishing methods reviewed and demonstrated. The full programme will appear in the next Newsletter.

The AGM will be held at 4pm on Friday 15 April; full notification and agenda in the next Newsletter.

BM(NH) Charging Policy - Members' Referendum

Towards the end of 1986, the BCG Committee discussed the problem of charging for services, bench space, enquiries and entrance to the British Museum (Natural History). After a long debate the Committee felt that BCG should oppose all charges for bench space, services, enquiries and consultation of collections.

However, after further discussion, and a vote carried by a majority of one, it was agreed that charging for entrance to the BM(NH) was a matter of personal opinion, and beyond the remit of Committee. At the same time we agreed to support Penny Wheatcroft's IPCS Union initiative by enclosing a letter and petition "deploring the decision to introduce admission charges to the British Museum (Natural History)" in our Newsletter.

The subject was again discussed at our Sheffield AGM in April 1987, resulting in a proposal by Dave Mellor (seconded by Sue Cross) that "the Committee take steps to canvass the opinion of the membership and to seek a mandate" with respect to BCG's involvement and further action over the BM(NH)'s policy for charging entrance to the museum. The motion was carried by a majority vote of about 75 members present at the AGM.

In line with the AGM directive, a ballot of members has been organised; a ballot slip is enclosed with this Newsletter, and members are urged to make their feelings known by mid January for discussion by Committee at their meeting on February 1st 1988.

A vote against the BM(NH) policy will result in further action by your Committee. A vote in favour of the policy will result in the item being effectively removed from the Committee agenda.

For further background reading see BCG Newsletter vol 4 (5) and the IPCS enclosure in that issue (copies available by request).

Derek Whiteley
Secretary

Request for material

The Department of Zoology, University of Tasmania, Hobart would like on long loan (or preferably gift) a mounted specimen of Thylacine or any good skeleton or skin, if anyone has such a treasure they wish to part with! Contact Professor DM Stoddart at Hobart or Rosina Down, Museum of Zoology and Comparative Anatomy, Biology Dept, (Medawar Building) University College, Gower Street, London WC1 E6BT.

Letters

Changes at the Association of Systematics Collections, USA

Dear Dr Mathias,

This letter is to introduce myself as office manager of the Association of Systematics Collections, as well as to bring you up to date regarding some information mentioned in Biology Curators' Group "Newsletter", Vol.4, No.6.

On October 1st, 1986, the ASC relocated to Washington, D.C., and subsequently there has been a turnover in staff. Dr Stephen R. Edwards, past Executive Director, is now Executive Officer of the Species Survival Commission of IUCN in Gland, Switzerland. The position of Executive Director has been filled by Dr J. Elaine Hoagland, formerly of Lehigh University, where she held the position of Senior Research Scientist. Dr Richard Schrock, formerly Assistant Director of ASC, has taken a position at Emporia State University in Kansas. His position has been filled by Dr Lincoln Fairchild, formerly Director of the Bohrer bioacoustics Laboratory at the Ohio State University. Myself, Briece R. Edwards, was formerly at the University of Kansas.

The price of the CITES Identification Manual has been increased to \$275.00 US, due to the state of the dollar on the international market, as well as an increase in postage. If these changes (address, personnel, and cost of the CITES Manual) could be noted in your next Newsletter it would be greatly appreciated.

Sincerely yours

Briece R. Edwards
Office Manager
730 11th Street, N.W.
Third Floor
Washington DC 20001
USA

Dear John

The attached letter was found recently during file sorting. It is particularly interesting now because of growing concern over the fate of the Black Rhino which is threatened with extinction in the wild as a result of poaching. The price then offered for the horn was £1 per pound which compares with a present black market value of something like £15,000 for a good specimen - much greater than ivory (Black Rhino - the Last Stand, Channel 4, 7.15pm, 25 October 1987).

It is worth considering this value, and that of other marketable rarities, when assessing security and insurance needs - theft of rhino horn from a British museum is likely to result only in a fine - in Zimbabwe poachers face possible death.

The October issue of World Wildlife Fund News informs us that the United Arab Emirates, the main market for rhino horn, is due to withdraw from CITES in January 1988, at a time when the convention are increasing their efforts to stop the illegal trade in ivory and rhino horn.

Simon J Knell
Keeper of Natural Sciences
Borough Museum and Art Gallery
Oswald Road
Scunthorpe
South Humberside
DN15 7BD

The letter Simon sent was from Arthur Manning Ltd, Importers and Exporters of Animal By-Products, Twickenham, Middlesex and dated 26 September 1958.

"We have recently purchased from other Museums Rhinoceros Horns, surplus to their requirements, and we wonder whether you have any which you would care to dispose of. For Horns in fair condition, we are ready to pay 20/-d. per lb.
Awaiting your further news,

Yours faithfully,

Arthur Manning

The following letter has been circulated by the police investigating the theft of British Butterflies and Moths from Bristol Museum. Anne Hollowell, Curator of Natural History at Bristol, has asked that any response by BCG members be made initially to her at the Museum, and by letter not telephone.

Dear Sir,

We are currently investigating the theft of a large number of British Butterflies and Moths from the Bristol City Museum between 1983 and 1986.

Most of the Butterflies and Moths are from the collections of BARTLETT, CONEY, LODGE, BLATCHFORD and NORGROVE and all have data labels bearing the location and date taken, along with the name of the collector. These are either hand-written or typed.

If you have been offered or sold any specimens of British Butterflies or Moths, especially of species which are now extinct, or of a rare or collectable nature, or of any unusual aberration or have any other information regarding the theft of the Butterflies and Moths, please contact me on the following telephone number.

Yours faithfully,

M Lewis
Detective Constable 525
Criminal Investigation Department
Avon and Somerset Constabulary
Central Police Station
Nelson Street
Bristol 1 Tel: (0272) 277777 ext 7161

Book Reviews

DIRECTORY FOR THE ENVIRONMENT:
ORGANISATIONS IN BRITAIN AND IRELAND
1986-7

by Michael J.C. Barker

2nd Edition 1986. Published by Routledge and
Kegan Paul. £15.95. ISBN 0-7102-0961-4.
pp.227.

This directory contains addresses and details of 1,400 organisations "that are involved in activities that relate in some way to the natural, physical or human environment" ranging from those with an international function to those with 'city wide' concern. Though Michael Barker has brought together in one book Pagans against Nukes, The Association of Designer Leather Workers, MAFF, and the Swan Rescue Service, the number of wildlife, conservation and governmental organisations presented will make this a handy aid for curators.

I can see three potential uses for this book in museum natural history. Firstly I find a proportion of public enquiries fall outside my experience and the museum's facilities, and could well be referred to a more appropriate authority. The directory provides a wealth of handy looking organisations dealing with all aspects of pollution, animal welfare, animal rights, sick and injured animals, domestic stock and rare breeds.

Secondly, rather in the manner of the DICTIONARY OF NATURAL HISTORY the information provided for each organisation is sufficient to give an outline of its function. The Directory can be used to gain concise insights of 'new' organisations as they are encountered in the course of day to day work.

The entry for an organisation details address, phone number, contact name, aims, activities, status (voluntary, statutory, charitable), and publications. For example I found the Directory useful in pinpointing where in DoE, MAFF and the Scottish Office responsibility is taken for Wildlife and Conservation. A useful checklist for periodicals and their originators is given.

Finally if you haven't already got the NCC or RSPB headquarters phone number in your address book the Directory is as handy a place to keep such routine addresses as the card file with the missing cards

All County Trusts for Nature Conservation, Urban Wildlife Groups and even the odd Badger Group have found a place in the Directory; but not one museum or records centre. The author gives a means of rectifying omissions and I suggest BCG should seek inclusion.

Obviously keeping tabs on 1,400 addresses has led to come error but this seems minimal and with a possible new edition in 1988 I think £16 split over two years for several hundred useful addresses is good value and a bargain if your concern is natural history plus archaeology and geology.

Lawrence Way

BREEDING BUTTERFLIES AND MOTHS -
A PRACTICAL HANDBOOK FOR BRITISH AND
EUROPEAN SPECIES

by Ekkehard Friedrich. Translated into
English by Steven Whitebread.
English edition edited and enlarged by
A Maitland Emmet.

25 x 20cm 176pp with 47 text figures.
Harley Books, Martins, Great Horkesley,
Colchester, Essex CO6 4AH.
Price: paperback £9.95, hardback £20.00.

The rearing of butterflies and moths is becoming an increasingly popular pastime. Once the preserve of the ardent collector in search of the perfect insect for his cabinet, it is now practised more widely by naturalists and conservationists as a means of learning more about the biology of species or purely for pleasure.

The vast amount of information available on the subject is widely scattered in the literature and so not readily available. This volume draws together a wealth of practical hints and useful information which will be of value to both the beginner and the experienced entomologist.

Originally written in German, the book reads well unlike many translations. Part 1 deals with the basic principles involved in breeding butterflies and moths, the various techniques most likely to result in success and the equipment that will be required. Part 2 treats each species or species group in turn under the headings, 'Mating, pairing', 'Oviposition', 'Rearing of larvae', 'Overwintering', 'Pupating' and 'Foodplants'. A more general but substantial chapter on the rearing of Microlepidoptera has been written by A Maitland Emmet and the section covering the Geometridae has been considerably expanded by J Reid. A useful account on artificial diets has been supplied by BOC Gardener.

This book should be used in conjunction with a standard text as information on foodplants is at best brief or else has a decidedly European flavour. This detracts little from the usefulness of the publication which should prove invaluable to curators so often presented with larvae of rare species, such as the Death's-head Hawk, and having little idea how to rear them.

Howard Mendel
Ipswich Museums and Galleries

THE MOTHS AND BUTTERFLIES OF GREAT
BRITAIN AND IRELAND

by J. Heath and A.M. Emmet

Published by Harley Books, the paperback
edition (September 1986), volumes 1, 9 and
10. Price £24.95 per volume.

In the 1960s, there was a very great need for
a comprehensive work on Lepidoptera. For
many years most lepidopterists turned to
Richard South. In the early 1960s, a new
edition became available using new plates
which were thought by most to be inferior to
the older ones. Bernard Skinner's recent,
and excellent book on British Moths, coupled
with Higgins and Riley's book on European
Butterflies, fulfil the identification needs
of most lepidopterists who study the 'macros'.

THE MOTHS AND BUTTERFLIES OF GREAT
BRITAIN AND IRELAND is a series for the
specialist, and the student of
microlepidoptera. The drawings of genitalia,
venation, scent glands, etc., are excellent,
clear and easy to use. Until now, there has
been no comprehensive reference work for the
identification of all microlepidoptera and
the critical macrolepidoptera, and, when
finished, this work should fulfil this need.

As a reference book dealing with the subject
in depth, it is good to see the sections on
parasites, diseases, conservation, collecting
and preserving techniques, habitats,
migration, etc. The distribution maps are
also very useful and although a ten kilometre
square cover for the microlepidoptera is not
available, presence or absence by vice county
is certainly the next best thing. It is also
good to see proper identification keys. The
colour illustrations are absolutely
excellent, and of the standard one has come
to expect in recent years. It is a pity that
the printing is not always all it might be;
the Sphingidae plates in volume 9 are
particularly poor. The bibliography and
references, placed conveniently at the end of
each section, are exhaustive and extremely
useful.

There is no doubt that, when complete, this
work will be the greatest contribution to the
study of Lepidoptera for many years.

However, at £24.95 a volume, I am at a loss
to know who the paperback edition is aimed
at. Libraries and learned institutions will
surely have purchased hard back copies of the
volumes available already, and will wish to
continue to do so. Perhaps it would have
been better to have produced a reference book
containing just the sections on
Microlepidoptera identification. This would
certainly have filled a much needed gap, and
could have been produced at a price that many
microlepidopterists could afford.

To date, Volumes 1, 9 and 10 are available in
hardback and paperback. Volumes 2 and 7 are
promised in 1987 while the others are being
worked on and should be ready in due course.
When finished, which I am sure all would hope
will not be too far into the future, I am

certain this will be the definitive work on
Lepidoptera for many years to come. However,
I do not think even in this paperback
edition, it is for the private library of any
except the most dedicated, and exceptionally
well off.

Simon Davey
Hampshire County Museum Service

BIOLOGICAL RECORDING IN A CHANGING
LANDSCAPE

edited by P.T. Harding and D.A. Roberts

Published by the National Federation for
Biological Recording, 1986.

Available from Museum Documentation
Association, Building 0, 347 Cherry Hinton
Road, Cambridge CB1 4DH.

Price £6.00 (£4.50 NFBR members) plus p&p.

The inaugural conference of the National
Federation for Biological Recording (NFBR)
took place at Fitzwilliam College, Cambridge,
on the 15th and 16th of April 1986. This
booklet, the proceedings of that conference,
is a collection of four seminar papers and
ten workshop reports covering wide-ranging
topics highly relevant to anyone involved in
biological recording. The editors are to be
congratulated for producing the booklet the
same year that the conference was held - a
rare feat these days.

"The need for biological recording now"
(Dr. F.H. Perring), the "Botanical Society
of the British Isles monitoring scheme"
(R.G. Ellis), "An ecological data unit"
(G.L. Radford) and "Survey and monitoring in
the Nature Conservancy Council" (Dr. R.J.
Keymer) are the seminar paper titles.
Workshop reports include: "Priority taxa",
"Created habitats", "Hidden data", "Handbook
for biological recording", "Habitat
classification" and "Consultancy work".
In all a wealth of information.

My only criticism is the price which seems
excessive for a 60 page booklet with a soft
card cover.

Howard Mendel
Ipswich Museums

Non-chemical pest control systems

If you have any experiences, no matter how
minor, with pest control using freezing,
heating, freeze-drying, microwave or
irradiation techniques, please send details
to Steve Garland at Bolton Museum. Steve
will collate the returns and write a summary
for the Newsletter which may form the basis
of a future Group meeting. Include details
of the pest species and type of specimen
involved and the success or otherwise of the
treatment.

In the Press

The current issue of STUDIES IN CONSERVATION (Vol 32 No 4) contains two articles of interest to biology curators although not specifically written for them. The first 'Protection of museum textiles and leather against the dermestid beetle by means of antifeedants', is by a Russian conservator, GA Zaitseva, and gives an account of experiments to determine which of a wide range of compounds are the most effective 'antifeedants' for the larvae of a range of dermestids. 'Antifeedant' is a new word for me, but it is defined as a substance which prevents a dermestid larva from feeding.

The 50 substances tested were derived from four chemical groups (details are in the paper) which included known repellants of blood-sucking insects. The test material was wool, soaked in various dilutions of the chemicals, and conclusions are drawn on the most suitable chemical, its threshold value and the duration of effective protection.

'Carboxide' demonstrated a high antifeedant activity combined with sufficient persistence to allow its consideration for practical application. But BEWARE, this is not the highly toxic fumigant sold under the 'carboxide' trade name in the UK and USA; in the USSR, carboxide is the common name for the insect repellant hexamethylene carbamide.

The second article of interest is 'The potential long-term effects of gamma irradiation on paper' by Fiona Butterfield. The increasing use of gamma irradiation as a biocide in what might be called 'Sensitive' areas, like hospital sterilization and food preservation has alerted some conservators to its possible use as a single-treatment pesticide for infested museum objects. Damage to the treated items seems to be the primary cause for concern and the extent and nature of this damage appears to be the main line of research.

The article in question summarises the effects of treating various papers with IOKGy gamma radiation. The results indicate unacceptable levels of paper degradation - specifically a decrease in mechanical strength measured by fold endurance and tear resistance.

What biologists need is some base-line data on the effects of this treatment on biological specimens; there is an open field of research for someone - any takers?

A short article by Mike Wilson of the Commonwealth Institute of Entomology should be read by any curator dealing with small insects which need to be dry mounted after being preserved in alcohol: 'Removing Auchenorrhyncha from Alcohol using Critical Point Drying' is in TYMBAL (Auchenorrhyncha Newsletter) no 4, 1984.

The technique of removing minute and fragile specimens from alcohol with no distortion or appreciable colour loss by critical point drying is discussed in detail and seems to be much the best means of carrying out this difficult operation. The article also has a short bibliography of North American papers on the same subject.

The Society for the Preservation of Natural History Collections met at Redpath Museum, McGill University, Montreal in early June. Two small publications emanating from there are A PRELIMINARY LIST OF CONSERVATION RESOURCES FOR THE PRESERVATION OF NATURAL HISTORY COLLECTIONS produced by the Conservation Committee of SPNHC and A LISTING OF PUBLICATIONS PERTINENT TO NATURAL HISTORY COLLECTIONS. Both are available from Catherine Hawks and Caralyn Rose, US National Museum of Natural History, Smithsonian Institution, Washington, DC 20560, USA.

The UNESCO publication, MUSEUM, has in issue 154, a review of natural history exhibition development in regional museums in France and a discussion of present and future trends in display. The whole question of 'permanence' being a desirable feature of any natural history exhibit is discussed as is the integration of complementary media with more traditional forms of display. The paper is called 'The vexed question of permanent exhibitions in natural science museums in the provinces'.

British Museum (Natural History) changes hands

No, it's not been privatised! Yet.

In July the Prime Minister announced her decision to transfer responsibility for the BM(NH) from the Secretary of State for Education and Science to the Arts Minister, so it is now sponsored by the Office of Arts and Libraries.

In her own words "Such a change will enable this world famous Museum to play its full part alongside the other great national museums and galleries in the government's developing policies for the national heritage".

You can read into that classic piece of political verbiage anything you want!

The transfer requires no change in the pay, conditions and grading of current or future staff. As well as the BM(NH), the Minister for the Arts and OAL now has responsibility for the BM, Imperial War Museum, National Gallery, National Maritime Museum, National Portrait Gallery, Science Museum, Tate Gallery, V&A, Wallace Collection and the Merseyside Museums.

There will be no reduction in the planned level of Government funding for the BM(NH) as a consequence of the transfer.

Techniques

Paper specifications for spirit collection labels.

The following information arrived in the form of a request from the Fishes Division of the Smithsonian in Washington who are trying to enlist partners in a scheme to have manufactured a large batch of special paper they use (and have found to be the best over years of testing) for labelling spirit specimens. It is probably too late now for readers of the Newsletter to be included in the purchase, but the note is printed here for the relevant technical information it contains. Samples are available from the Smithsonian.

The Committee on Curatorial Supplies and Practices, of the American Society of Ichthyologists and Herpetologists, has been researching label paper for use in alcoholic specimen collections. Our consensus is that Bryon Weston Resistall Ledger no 36, which has been in use in the USNM's and other collections for many years, is still the best available considering all requirements (durability, longevity in alcohol, ability to feed through a laser printer, takes ink and pencil well, etc.). The paper is 100% cotton rag and is specially manufactured to incorporate the "Resistall" treatment, which allows it to withstand long-term storage in alcohol or other fluids.

Since the paper is only manufactured to order, a special run by the paper mill is required to produce it. It appears that all remaining stock from previous runs, that had been stored at paper distributing companies, has been exhausted. Yet a number of museums are urgently in need of a new supply of paper. These facts have led to an effort by this committee to initiate a joint purchase of paper from the Byron Weston Company. Les Knapp of the Smithsonian Oceanographic Sorting Center will be coordinating this activity.

Preliminary estimates indicate that the paper will cost approximately \$198.00 per 100 lbs, with the additional costs for cutting, perforating and/or hole-punching for use with tractor feed devices.

Please respond to the following questions if you are interested in purchasing the paper:

1. Do you want the paper in sheet form, in continuous rolls, or both? If in cut sheets, what size? Do you want continuous sheets with accordian folding?
2. What is the quantity you need (in terms of pounds)? [See below]
3. How urgent is your need?

To give you some idea of a weight to no-of-labels conversion factor, the USNM Fish Division uses the paper in continuous

rolls, producing labels 5" wide. We estimate that one roll (15" outer diameter, 3" core diameter, approx 33 lbs) produces approx 10,000 labels on an average length of 3".

For those of you who do not require ledger weight paper, you may be interested to know that a large order of Byron Weston Resistall Index 110 has recently been purchased by Texas Tech University Press, PO Box 4240, Lubbock, TX 79409; phone (806)742-2768 (ask for Lee Daniels or Dildford Carter). This paper has the same Resistall treatment as the ledger paper, is also 100% cotton rag, but is of heavier weight. The index paper is used in the Mammal Division in the USNM for bone and skin tags. The main drawback of this paper for catalog labels is it's bulk. It apparently does not feed through laser printers and is a bit heavy for other computer-generated paper labels.

Please respond to this query as soon as possible. If I have not heard from you by September 18, I will assume you do not have an immediate interest.

Susan L Jewett
Chair
ASIH Committee on Curatorial Supplies
and Practices
c/o Division of Fishes,
RM WG-12, NMNH
Smithsonian Institution
Washington DC 20560
USA

Subscription rates are £6.00 for individual membership and £10.00 for institutional membership. Contact Adam Wright, Herbert Museum, Jordan Well, Coventry, for application forms.

Published by the Biological Curators' Group. The views expressed in the Newsletter do not represent the opinion or policy of the Biological Curators' Group committee or membership except where specifically stated.

Edited by John Mathias, Leicestershire Museums Service, 96 New Walk, Leicester LE1 6TD (Tel: 0533 554100 ext.3030) to whom all contributions should be sent. Back numbers are available from the Editor.

Typed by Mrs Judy Marvin, Leicestershire Museums Service. Design consultant Miss Angela Pope, Leicestershire Museums Service. Printed by Leicestershire County Council's Reprographic Unit, County Hall, Glenfield, Leicester.

© The Biology Curators' Group.

ISSN 0144 - 588X