

BCG

Newsletter Vol 2 No 2

March 1979



C O N T E N T S

Letter to the Editor	53
Requests for Information	54
Edward Hearle Rodd, Ornithologist - G. Hancock	56
Museums Association Conference, Specialist Session	57
Chairman's Report 1978/9	57
Treasurer's Report 1978/9	59
Editor's Report 1978/9	61
Committee Meeting of 2 March 1979 - Minutes	62
The Herbarium - Leicestershire Museums Service - A. Fletcher	64
The History of the Maples Bird Collection at Spalding - E. J. Redshaw	68
Birmingham Nature Centre - D. Walker	72
Natural History at Ludlow Museum - J. Norton	78
Natural History in Staffordshire	83
Museum Biology Specimens and their educational potential - C. N. G. Scotter	84
Staffordshire Biological Records Centre	85
Addenda	87

LETTER TO THE EDITOR

Dear Mr. Davis,

Those responsible for the Human Biology Exhibition at the British Museum (Natural History) must be disappointed with the quality of the criticism which this display has received from their museum colleagues. Dr. Seddon's letter in the last issue of BCG, is a particularly unfortunate example of misplaced criticism and unsubstantiated assertions made about this Exhibition.

Some question the location of the Exhibition, like Tony Duggan (Museums Journal 7882) who believes its relationship with the Natural History Museum "seems almost accidental". A view of natural history which excludes human beings is a strange one indeed. Homo sapiens is of such overwhelming importance on this planet that surely one of the world's great natural history museums is more than justified, it is obliged, to explain its biology. How often must it be repeated that this is only the first step along the road to modernization which the Natural History Museum has chosen? The Ecology Gallery is different enough to demonstrate what the Museum has explained, that they are not committed to a uniform approach to the successive phases of their overall plan. Dr. Seddon's assertion therefore that this Exhibition will set the seal on a widespread deleterious museum policy is far-fetched.

One of the baleful influences Dr. Seddon anticipates "is a tendency to use specimens...as adjuncts to a dominant theme". I find it impossible to visualize the creation of a meaningful exhibition which has not got a dominant theme or themes to which the specimens should properly be subservient. A museum exhibition is a medium of communication which like all communication is better understood for being the more clearly expressed. Others have complained that there are no specimens anyway, or at least no "real specimens" (a point made for example in the discussion about the Exhibition at the Museums Association Conference.) This point is equally groundless. In the field of natural history especially, it is not possible or desirable to exclude representations of living creatures from a satisfactory definition of "display specimen". A stuffed and mounted cheetah and a film of the cheetah hunting are both representations, each illustrating different attributes of the living animal as it exists in nature. To demonstrate human biology many types of representation are needed and in very many cases are the only practical method of communication. After all, the Hall of Human Biology has the unique advantage of having its spectators as specimens.

Dr. Seddon also objects to the requirement to follow a didactic exhibition in a prescribed sequence, a complaint I would expect from someone

who dislikes the concept of thematic displays and is concerned that the creation of such exhibitions "precludes the visitors option to view selectively and his freedom to interpret facts for himself..." But few specimens have the magical property of radiating information unaided. Curators have a fundamental obligations to interpret their collections, and the selection of themes, the choice of specimens and the organization of information, are the techniques we use to fulfill this duty.

The fundamental question to be asked of the Hall of Human Biology is how effectively has it enhanced knowledge of human biology amongst its visitors? Many museum curators ask instead whether it should be there at all, whether displays should be didactic, whether the absence of bits of human body ('real specimens') lessens its value and so on. Even worse, one critic, P. S. Doughty, stooped to gratuitous rudeness when, in his review on "Britain Before Man" a display in a neighbouring national museum (Museums Journal 78.2) he made passing reference to the Hall of Human Biology as "a kind of lewd offal-shop nightmare".

The quality of much criticism ranged against this Exhibition has therefore been unhelpful at best. My own impressions have up to now been based on a rather brief visit, but they were gained in the company of my wife and two young children. It is their reaction, rather than Dr. Seddon's or Mr. Doughty's, that make me believe that the Hall of Human Biology deserves far more intelligent criticism from museum curators than it has received so far.

Yours sincerely,

Stephen Locke
Director
Royal Albert Memorial Museum,
Exeter.

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SLENDER-BILLED CURLEW (*Numenius tenuirostris*)

An attempt is being made to gather together all records of Slender-billed Curlew with the aims of assessing the apparently very small present population size, changes in status and the migration pattern. The information will be reported to the International Waterfowl Research Bureau and ICBP. In order to provide background information on past status and migration patterns we would like to include data

derived from museum collections.

Details required are date, place, sex and age (only if certainly correct). For example even 'Undated, Italy' would be helpful.

Please send any records to British Trust for Ornithology, Beech Grove, Tring, Herts.

A. J. Prater,
Dr. D. Scott

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DURHAM FLORA PROJECT

The production of a Durham Flora is the aim of this project which has now been in operation for 10 years, under the guidance of the B.S.B.I. County Recorder for Durham (V.C.66), Rev. Gordon Graham, and Sunderland Museum. The recording of species distribution on a tetrad basis is now virtually complete, and data are stored both manually and on computer, the latter enabling rapid searches to be made, and the production of distribution maps without error. A start is now being made on writing the Flora, but information would still be welcomed from anyone with Durham specimens in their herbarium. The historical component to the Flora will be of particular interest, and I would be pleased to have details of individual specimens (particularly where these have been examined by a recognised expert), or hear of the existence of major Durham collections - please do not assume that they are known to us. If the preparation of a list of specimens is impossible, a note of the existence of them would still prove useful.

Peter Davis
Sunderland Museum
Borough Road
Sunderland

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FIELD STUDY COURSES ON REPTILES AT POOLE AQUARIUM

Courses formerly run by the Reptile Institute of Great Britain are now being organised by Poole Aquarium. Two weekend courses are planned for September, and three captive husbandry courses on reptiles for November. Anyone interested in attending these should

contact Tony Phelps at The Poole Aquarium, Blue Boar Mill, The Quay, Poole, Dorset.

Affluent BCG members may wish to partake of a reptile field study course in Zambia from October 25th - November 11th, the cost being a mere £700. Details from Tony Phelps.

FUMIGATION

The use of Lindane smoke generators for fumigation (as at Bradford Museums - see BCG Newsletter No. 10) has been questioned. Apparently Lindane will not kill all insects and mites and smoke generators are not the most effective form of insecticidal treatment. Other forms of control are suggested in the ADAS leaflet 'control of Insect Pests in Museums' available free from the Ministry of Agriculture.

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EDWARD HEARLE RODD - ORNITHOLOGIST

Bolton Museum has recently acquired, with the purchase of 15 cases of mounted birds, a handful of reprints among which is the following:

Rodd, Edward Hearle (1864) A list of British Birds as a guide to the ornithology of Cornwall, especially the Land's End district with remarks on the capture, habits, etc., of some of the rarer species.
Octavo, 42 pages
Published by Simpkin, Marshall & Co., London and W. Cornish, The Library, 2 Market Place, Penzance and printed by the latter.

This is the first edition, a revised version was produced in 1880 considerably enlarged, edited with a memoir on the author by J. E. Hartig which I have not seen. However, the interest in this copy lies in some annotations which indicate it once belonged to the original author. For example, under the Great Grey Shrike with reference to the Scilly Isles record is the following note:

"Male with 2 spots on wing - I have this bird and I think it will prove to be the Loggerheaded Shrike of America - the subject is being investigated by Mr. Gould - see Zoologist for last month. EHR. "

My feeling concerning this catalogue is that if a curator can prove to possess this specimen or holds the Rodd Collection (if such exists) then they can have the booklet. Otherwise we shall hang on to it in Bolton as we have many specimens from the extreme southwest of

England, built up over a period of about 25 years contact with naturalists in the area (initiated by Alfred Hazelwood) and have very little in the way of published notes on the area.

How did Andrew Mayoh of Adlington, near Chorley, Lancashire, acquire this item before he gave it to us? He bought it from W. Dodd of 17 Oxford Street, Barrow-in-Furness who was selling off his library of bird books in 1946 and there the story ends. Incidentally, W. Dodd had a collection of 6,000 Birds' Eggs (of which 500 were destroyed in the Blitz on Barrow). Does anyone know where they are now?

E. G. Hancock
Bolton Museum.

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MUSEUMS ASSOCIATION CONFERENCE -
SPECIALIST SESSION - WEDNESDAY 11 JULY

Provisional arrangements for the BCG Specialist session are as follows:

Meet at Cumberland House, Portsmouth by 10.30 a.m. A tour round the Museum will be followed by a local field trip. Lunch (will anyone not having the official lunch let Peter Sewell, Keeper of Natural History at Portsmouth, know) will be followed by an afternoon session devoted to 'The relevance of natural history collections in the leisure age'. Speakers will include Peter Sewell and Peter Morgan, and it is hoped that a representative from the British Museum (Natural History) will be present to speak about exhibition policy at that establishment.

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CHAIRMAN'S REPORT 1978/'79

In reviewing the last year of BCG activities, the first thing to notice is that it had lasted fifteen months. The only benefit the group appears to have gained from this is that the officers have had an extra three months to produce their reports, but in the case of the Chairman's remarks this has not been used to much advantage.

It is a temptation in annual reports to recite the year's activities, but most of these have been well reported in the Newsletter. Unfortunately the two meetings held since last year's AGM have only

attracted about a quarter of the membership, but it is to be hoped that many more will be attending the major Conference on the history of Museums in April. The quality of papers to be presented seems to be outstanding, the topics have an international range - and there will be a major publication on the same topic produced after the Conference. Even those not attending should try to get to London on Tuesday April 3rd, not only because it is the BCG AGM but also to visit Kew and meet many museum colleagues from abroad.

In the absence of meetings the burden of communicating between members has fallen to the Newsletter; a task it has fulfilled with admirable style and wit. This publication is a great credit to the group and has gained us many friends. A measure of its success has been the number of original suggestions taken up by other museums (notably the work on locality spread in collections) and accounts of previously unpublished collections appearing as a result of the regional themes.

Remaining unpublished, however, is the 1977 BCG survey of provincial museum collections. By the time this report is prepared the Committee will have met to decide on the action necessary to speed the appearance of this survey but I will be doing everything possible to ensure that the results appear in some form in time for the April Conference, even if the final printed version (for which members' subscriptions have already paid!) is delayed until supplementary grants are available.

1978 did, however, see the production of the 'Handbook for Biological Records Centres', jointly sponsored by BCG and the Biological Records Centre. The response has been gratifying and the Nature Conservancy Council has bought copies in some quantity. I could perhaps suggest that the mechanics of records centres have received sufficient attention and more thought should be given to the relationships of this work to normal curatorial activities, but there are in fact suggestions that regional centres are disrupting established record 'supply routes' without providing a regular service themselves. With the departure of Frank Perring to the depths of Lincolnshire, and the stated intention of BRC staff to visit all regional centres in the next year, I would hope that BCG will give time to discussion of biological recordings in its next session.

I suppose it is inevitable the Chairman's report should contain platitudes about girding loins for the future and so on, but I do feel that the BCG has not yet realised the influence it can have on museums and the care of biological collections. I fear that the only way to achieve this laudable state is to adopt a more 'political' approach to our professional status, although not, I hope, with the single-mindedness of some other groups. For this reason, among others, I feel it would be wise for me to resign from the Chairmanship of the group in the hope

and expectation that someone more able and experienced is elected, with the ability to command respect in the upper orbits of museums and biology. I do hope, however, to stand as Secretary and give time to supporting the endeavours of Chairman and Committee. Perhaps the one aspect of the BCG I would like to emphasise is that there is a danger that the executive could become too remote from the members and the aims of the group. The way members can ensure that this does not happen is by making their views known at every opportunity.

Finally I would like to place on record my thanks to the Committee for their support in the last fifteen months and pass on my best wishes to the new Chairman.

Stephen Flood
St. Albans Museums

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TREASURERS REPORT 1978/79

The financial year for BCG closed on 9th January 1979, on this day the group had assets of £306.01. A detailed breakdown of the accounts is shown below. A few points may need explanation. The large surplus is a result of a subscription rise for 1978 and the unfortunate delay in publication of the Collections survey, for which this sum is earmarked.

Sales of the BRC/BCG Handbook have been going well with a return so far of £60.20.

I have agreed a deposit account for the Liverpool Conference surplus of £68.38. This account is to be kept in reserve for financing similar activities, while at the same time securing a little interest.

This year's major items of expenditure are the BRC/BCG Handbook and Newsletters.

The question of back issues of the Newsletter had been raised by many people and costs of production are being examined.

Payment of subscriptions for 1978 started very slowly and reminders were repeatedly sent out. Out of a total membership of 180 there are still 31 subscriptions outstanding. It is hoped that the introduction of Standing Orders will speed up the paying process and negate the need for a memory. New members continue to drift in.

A positive drive by members to encourage new recruits would prove of great advantage to the group.

Three members have resigned from the group during the year and some others have disappeared. These disappearances are normally due to changes of address. If you change your address please let me know immediately.

Finally, I would like to thank on behalf of BCG Stephen Locke (Director of Exeter Museums) for allowing me the time and facilities to carry out my duties as Treasurer/Membership Secretary. Also Clive Fisher (Admin. Assistant, Exmus) for checking my figures and Sue Challacome for patiently typing many address labels, reports, letters etc.

Kelvin Boot
Exeter Museum.

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BIOLOGY CURATORS GROUP

Income and Expenditure Account for the period 1st January 1978 to 9th January 1979

<u>Expenditure</u>		<u>Income</u>	
Cost of Producing:		Subscriptions	472.00
i) Handbook	104.50	Sale of i) Handbooks	60.20
ii) Newsletters	175.14	ii) Newsletters	5.00
Stationery	13.90	Surplus in respect of	
Postage	51.36	Liverpool Conference	68.38
Surplus carried to Members Fund in Balance Sheet	<u>260.68</u>		
	<u>£605.58</u>		<u>£605.58</u>

BIOLOGY CURATORS GROUP

Balance Sheet as at 9th January 1979

<u>Members Funds @ 1/1/78</u>	45.33	<u>Cash at Bank</u>	
Add surplus from Income		Current Account	233.26
Expenditure a/c	<u>260.68</u>	Deposit Account	68.38
Balance at 9.1.79	306.01	Cash in Hand	11.00
Amount due to P. Morgan	<u>6.63</u>		
	<u>£312.64</u>		<u>£312.64</u>

K. J. Boot
Hon. Treasurer
1.3.79.

EDITOR'S REPORT 1978/79

My principal aim as Editor has been to raise the standard of the Newsletter - to make it larger, more entertaining and with as broad a range of articles as possible. I hope that the issues produced this year have succeeded to some degree, although I would be the first to admit that there is still room for improvement. The success achieved has been in large part due to the regional structure of BCG, and my being able to contact members via a regional representative. Unfortunately few submissions for the Newsletter arrive spontaneously, the majority of articles being the result of relentless pressure from myself and the regional contact on unsuspecting biology curators! To those authors who have suffered in this way go my sympathy and thanks for producing the goods (usually) on time. Any member not contacted to date - be forewarned!

What of the future? The regional themes will no doubt be pursued as they give a broad range of interesting articles within the geographical framework. However, it would be useful to occasionally produce an issue on a subject theme - a technical issue, a biological recording issue, or an issue dealing with current research in provincial museums. This requires an effort on behalf of the membership to write an article without unsubtle hints from myself - content of the Newsletter is ultimately dependent on members, and the more scripts I receive the greater the

opportunity to develop different themes, and raise the quality of our publication. So I hope to see more submissions on a variety of topics in the coming year. Advertising in the Newsletter as a source of revenue for BCG should also be actively pursued. I feel that the Newsletter is now of sufficient quality to warrant support from more institutions - the institutional membership of the group is noticeably low. Enrol your authority now! My message then is a simple one - become involved in your Newsletter - write for it, advertise it, encourage others to read it. In this way we might achieve a healthier bank balance and increased membership.

Finally I would like to thank again BCG Committee members in the regions for their support, all the authors and contributors, my assistant Editor, Geoff Hancock, and Tyne and Wear County Council for allowing me the time to perform duties of the Editor, and providing typing and help in design and production.

Peter Davis
Sunderland Museum

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MINUTES OF THE MEETING OF THE COMMITTEE OF THE
BIOLOGY CURATORS GROUP HELD AT THE BRITISH MUSEUM
(NATURAL HISTORY), 2 MARCH 1979.

Present: P. Lambley, G. Stansfield, S. Flood, P. Morgan,
A. Ritchie, G. Hancock, M. Brendell, P. Davis,
K. Boot, E. Greenwood.

B. Logan, R. Hale (Guild of Taxidermists)

Apologies: J. Matthias, D. Erwin, J. Bateman

1. Taxidermy

Following publication of notes of the Manchester Meeting in BCG Newsletter (Vol. 2 No. 1), the Chairman had received a letter from Bari Logan of the Guild of Taxidermists, in which attention was drawn to a) the involvement of BCG in the Carnegie scheme for training in taxidermy b) discussion of Guild affairs without representation and c) formation of a technical group within BCG. The Secretary explained the impromptu nature of the discussion, which had arisen out of his comments about the location of the studentships at the Area Services, divorced from a museum situation,

and consequent fears about the preparation of research material. The open discussion which had followed had included a suggestion of the formation of a wide ranging technical group within BCG - but not a firm proposal.

Mr. Logan described the formation of the Guild of Taxidermists and its attempts to raise standards of work and to make provision for training in taxidermy. The Carnegie scheme, a two year studentship in which the second year would be spent on secondment to a museum would provide a much needed training scheme for the taxidermist. Mr. Logan argued that a trained taxidermist, having manual dexterity, could deal competently with research material given a little training - but that a technician could not necessarily become a taxidermist. It was evident that there was a need for both taxidermist and natural sciences technician, to cope adequately with display and research needs respectively, but at the present moment the 'taxidermist' was dealing with both of these.

Following further discussion it was agreed that a joint meeting of the BCG/Guild Committees be arranged for the near future to discuss matters of common interest (including an examination of the syllabus for the Museums Association Technical Certificate) and to arrange a joint BCG/Guild Seminar.

2. Collections Survey Report

Concern was expressed by the Committee about the long delayed appearance of the Collections survey report, and of the necessity of its production in some form in time for the April BCG/GCG/SBNH Symposium. The Secretary explained reasons for the delay and explained the present situation regarding publication. The text and maps now being complete, it was agreed that the Secretary produce 1000 copies via the NMW, but that all attempts to obtain grants or loans be actively pursued. If for any reason the report could not be produced in this way then it should be made available in cyclostyled form.

3. Committee

Two nominations (MH & PL) had been received. After prolonged discussion, in which the need for a continued regional representation on the Committee was recognised, the following Committee structure was proposed:-

Officers:	Chairman:	Eric Greenwood
	Secretary:	Stephen Flood
	Treasurer/Membership	
	Secretary:	Kelvin Boot
	Editor:	Peter Davis
	Asst. Editor:	Geoff Hancock

Members of Committee:

Geoff Stansfield
Peter Morgan
Mike Hounsome
Martin Brendell
Peter Lambley
John Matthias

Co-opted members:

Dave Erwin
Ray Ingle
Representatives for Scotland,
Guild of Taxidermists, South East
(for M. A. Conference).
James Bateman

4. Annual General Meeting

This has now been arranged for Tuesday 3rd April, 11 a.m., at the British Museum (Natural History).

5. Treasurer's Report

Copies of the income and expenditure budget were circulated by the Treasurer and approved. It was agreed that additional revenue should be sought from advertising in the Newsletter. Geoff Stansfield offered to follow this up, and seek a commitment from relevant manufacturers.

6. Editor's Report

The Editor indicated that provided copy is received on time, an issue should be produced in time for the April Symposium.

7. Museums Association Conference

Discussion took place on the arrangements for the specialist session day. It was agreed that the morning session involve a visit to Cumberland House and site visit, and the afternoon session centre around 'natural history collections and leisure'. Speakers from varied institutions, including the B. M. (N. H.), would be approached by the Chairman.

P. Davis

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THE HERBARIUM - LEICESTERSHIRE MUSEUMS SERVICE

Before 1895 the Leicester Town Museum had a miscellaneous

collection of plant specimens, totalling about 3,000, but these were not organised into a herbarium as we know it today. After 1895 however, an active policy of collecting plants and keeping them as a well-ordered part of the Museum Service has resulted in the large provincial-museum collection which we have now.

In about 1895, a programme of collecting voucher material to support the 1886 Flora of Leicestershire was undertaken with the aid of two volunteers, namely Mr. A. B. Jackson and Reverend T. A. Preston. These workers also founded the Herbarium of the Leicester Literary and Philosophical Society, which was housed within the Museum but kept separately from the Museum herbarium. The first curator with Botanical interests to be permanently appointed was A. R. Horwood in 1902, who built-up the collections to about 25000 by the time of his departure in 1922. The distinction between the Town Museum and Leicester Lit. & Phil. herbaria was still maintained, and indeed, this state of affairs continued until a transfer agreement was formalised in 1949, whereby the Museum took charge of all Botanical collections within the buildings. Horwood was responsible for housing much of the voucher material for the 1933 Flora of Leicestershire. From 1922, despite the appointment of a series of curators, namely G. J. V. Bemrose (1922-1930), R. Wagstaffe (1930-1934), and C. J. Lane (1934-1946) with the assistance of M. E. Usher during the wartime period, and her continuance as Keeper until 1949, the herbarium was quiescent. A major change took place in 1947 when the Botany Section was merged with Zoology to become the Biology Section, under the Keepership of T. A. Walden with the consequent loss of a permanent Botanical curator. This situation prevailed until 1974, when the post of Assistant Keeper in Botany was introduced, and Dr. D. C. Lindsay, a lichenologist, was appointed. He was replaced by C. H. G. Scotter in 1976, and upon the latter's resignation, the author, again a lichenologist, was appointed in 1978.

Despite the lack of permanent staff from 1947, the Botanical collections increased during the post-war period, particularly after 1959 when I. M. Evans took over as Keeper of Biology. During this latter period, the collections increased to the present approximate number of 100,000; a four-fold increase since the time of Horwood. This acceleration in the number of specimens acquired may be attributed to the deliberate policy of collecting voucher material to support the coming Flora of Leicestershire expected in 1980 and the acquisition of collections of special interest from the point of view of their scientific or historical importance, large size or good state of preservation. The bias throughout however, has always been towards (1) Leicestershire and Rutland material, (2) a reference collection of British species and introduced aliens, and (3) Cryptogamic plants from world-wide sources. At present, non-British vascular plants entering the Museum are loaned to the University of Leicester Herbarium, but non-British Cryptogams are acquired because of the scarcity of herbaria of good quality outside those of the major national museums.

A brief account of the major plant groups represented in the Leicester Herbarium is as follows.

FUNGI

These collections are fairly small, totalling about 3500 specimens. The mainstay is the 1200 specimens of freeze-dried Agaricales obtained from D. A. L. Davies. This collection is of some historical interest as it was produced during the evolution by Davies of this fungal preservation technique. All specimens are from southern England and were collected during the 1950's and 1960's. An active policy of acquiring Leicestershire fungi is now under way and is supported by donations from local Mycologists. Specimens are kept in both air-dried and freeze-dried conditions.

Of particular interest is the Myxomycete collection of about 1000 boxed or slide-preparations. Most of these unusual plants were collected by F. A. Sowter and K. Higgins, and come from Leicestershire, southern England and the U.S. A. All were redetermined recently by B. Ing.

ALGAE

As with Fungi, these collections are fairly small and number about 2000. The larger, marine algae are poorly represented, but by old specimens dating from early last century. There are larger collections of Desmids and microalgae preserved on microscope slides by F. Bates and G. A. Mitchell, often of Leicestershire material. Several hundred sheets of Charophyta are also available from the collections of C. R. Billups.

BRYOPHYTES

This section of the herbarium is especially rich and contains about 7000 packets from many parts of the world. The collections of A. R. Horwood, H. P. Reader and F. A. Sowter form the bulk, but there are also many early gatherings by other collectors from unusual localities, for example, by J. Nowell from the Todmorden area in 1850-1865, and a problem collection from Devon, dated 1821 which includes the initials of an unidentified collector "M. A. D.", possibly Miss Dale of Heavitree near Exeter.

Much of the Leicester material supports the flora of Sowter (1945) and includes many early records, notably those of Reverend A. Bloxam.

LICHENS

This section is again of especial interest, partly because many of the Museum curators have been specialists in this group or because the richness of the collection has encouraged further donations by amateurs and specialists. The 10,000 specimens originate from most parts of the world, with most of Europe, U. S. A. and Antarctica being especially well represented. Collectors include Reverend A. Bloxam, the discoverer for the first time in Britain of the now ubiquitous Lecanora conizaeoides, W. H. Pearson, A. R. Horwood, H. P. Reader, W. Watson, A. E. Wade, D. L. Hawksworth, D. C. Lindsay and many foreign specialists. The herbarium houses the large collection of F. A. Sowter, supporting his Flora of 1950. Many exsiccati are present, with some isotypes and at least one record of international interest, namely Acarospora rufescens which was otherwise only known from the holotype gathering. The lichen collections will soon be increased by duplicates from the author's herbarium of British seashore specimens.

VASCULAR PLANTS

About 60,000 plants are present, with the earliest being dated 1795. Most of the collection is of local interest providing voucher specimens for the various Floras. However, an extensive collection of British Reference Plants is also housed and probably most of the British Flora can be inspected here. Some Foreign exsiccati, notably Tiselius's Swedish Potamogeton and specimens from the old Botanical Exchange Club are also held.

Some rare or interesting plants include Inula britannica, known only from a Leicester location within Britain and now extinct, Polygonum cuspidatum, an alien first recorded from Leicestershire in 1908, and Epilobium adenocaulon which is apparently the first British record of a plant now widespread throughout Britain. The herbarium has a number of bound collections, some of scientific interest, while others, lacking locality data, are of aesthetic or historical interest, reflecting the interests of the collector. Associated with the Herbarium is a bank of historical data chiefly pertaining to local botanists but of interest to all.

Dr. A. Fletcher
Assistant Keeper, Botany
Leicestershire Museums

THE HISTORY OF THE MAPLES' BIRD COLLECTION AT SPALDING

The Spalding Gentlemen's Society's collection of birds and eggs is believed to have been based on the collection of Thomas J. H. Brogden of Spalding, (born 1863, died 1899). In the "Lincolnshire Free Press" of 18th April, 1899 there appeared the notice of the sale of the late Mr. Brogden's effects including "the valuable library of books, and collection of stuffed birds and eggs. The latter was probably one of the finest collections of British birds eggs ever collected in the British Isles by an amateur, including about 236 varieties. The stuffed birds were also a remarkably fine lot". The press report records that the books sold well, "but for the collection of birds and birds' eggs very little was offered, and they were unsold. A proposal has been made that they be purchased for Ayscoughfee Hall, as a nucleus of a museum".

For some time Brogden, a solicitor in Spalding, was Hon. Secretary of Spalding Gentlemen's Society. It is believed that his collection was acquired by Ashley Kilshaw Maples, a fellow ornithologist and also a solicitor in Spalding, (born 1868, died 1950). Maples was elected Hon. Secretary of the Society in 1899 and continued to occupy the post until 1935. From 1930 to the time of his death he was President of the Society. It is known that Maples had a fine collection of stuffed birds and eggs at his home prior to the formation of a Bird Museum in Spalding. Forays along the Norfolk coast resulted in considerable additions to the collection.

On 27th January 1927 the Society accepted transfer of part of the buildings of the former Spalding Mechanics Institute, situated in Red Lion Street, Spalding. A Deed of Trust dated 2nd October 1936 relates that the original portion of the Institute was transferred to the Society, together with an adjoining portion, which had been purchased by Maples in order to extend his private bird museum in 1934. According to the local press "the collection of birds in the Mechanics Institute was opened for public inspection by Mr. A. K. Maples (Secretary of Spalding Gentlemen's Society)" on 23rd June 1931. Approximately 2000 specimens were displayed. On 23rd February 1934 Maples presented his collection to the Society. On that date he also asked the Society to appoint a small committee to look after the building and the collection. Messrs. J. W. Hayes, B. Smalley, C. H. Naylor and J. F. Alexander were appointed. The Society's minutes record that the building was first opened to the general public as the Society's Bird Museum on 25th October 1934, and that "several hundred people passed through; the admission was free".

There is a lack of information for the period from 1936 to 1946, except for the occasional reference to election of members of the Society to serve on the sub committee as the original members died. The Bird

Museum was closed throughout the war years (1939-45) and was reopened for public viewing on 18th July 1946. The local press records that, as in former years, Mr. Maples acted both as curator and guide to all visiting parties.

At a meeting of the Council of the Society on 4th October 1946 Maples reported on "a magnificent gift of ornithological specimens, which he had received from Lord Lilford, and which he proposed to hand over to the Society for the Bird Museum where they would be known as "The Lilford Collection". Due to lack of space it was proposed that the Society should purchase additional premises adjoining the Bird Museum, however it was reported a year later that negotiations had proved fruitless. For some considerable time the Lilford Collection was stored at Maples' home. Maples continued to acquire additions for the collection, and in July 1947 some 140 cases were obtained from the late Lord Lilford's collection. It is understood that during this period Maples was a close friend of Mr. Moody, the curator of Lilford's aviaries. Regrettably there is no record in the Society's archives of the contents of the various cases acquired in 1946 and 1947.

From about 1934, and possibly earlier, specimens acquired by shooting or from other collections were mounted by Ben Waltham, a self-taught taxidermist. One press account relates that Waltham mounted over 2500 specimens for Maples during the first 17 years of his employment. Ben Waltham continued to work as taxidermist for the Society after the death of Ashley Maples, and retired in 1969.

After Maples died in February 1950 it became necessary for the Bird Museum sub committee to re-organise itself. This it did under the Chairmanship of A. H. Smith supported by Messrs. Alexander and Smalley, (members of the 1934 committee) together with Messrs. D. Frost and J. A. Prentice. Mr. George Bailey, the Society's Secretary acted "ex Officio" as secretary for the new Bird Museum Committee. The first motion passed was that Ben Waltham should continue as taxidermist for the rate of 2/6 per hour!

In May 1950 Major Stuart Maples of Salisbury donated his collection containing two cabinets of skins, three of eggs and four loose drawers of assorted skins and eggs, the collection to be transported from Salisbury to Spalding by the Society. Resulting from this large donation, and due to the problems presented by the Lilford collection, part of which was still in store, the Council of the Society agreed to purchase Mr. Collier's premises next to the Bird Museum as soon as possible. Apparently this purchase was never executed, and on 13th December 1950 arrangements were made to obtain the use of a room in Elsom's warehouse in Albion Street (formerly Lee & Green's premises), for the storage of all the material which could not be accommodated in the Bird Museum. Mr. Raymond Hastings, a member of the Society's

Council was asked to approach the Urban District Council, of which he was Clerk, to ascertain if some of the birds could be put on display in Ayscoughfee Hall. By March 1951 Messrs. Smith and Frost had brought the Salisbury collection to Spalding and this collection of skins and eggs was placed in store in Elsom's Warehouse. In September 1951 the Urban District Council agreed to accept the British birds for display, and by August 1952 all the British material had been catalogued by Mr. Edward Flaxman, junior, and reference charts and sketches prepared by B. Smalley.

The selected cases of birds, containing approximately 850 specimens, were moved into Ayscoughfee Hall during 1952 and on 6th October were inspected by members of the Bird Museum Sub-Committee. Thus after a period of 53 years the proposal put forward at the Brogden sale in 1899 became a reality. On 28th October a Joint Committee was formed consisting of members of the Urban District Council and the Society; Flaxman was elected Chairman and Smith became Secretary of the new committee. The collection, formally known as "The Ashley Maples' Collection of British Birds" was officially opened on 5th February 1953 by F. T. Baker, Curator and Deputy Director of the City and County Museum, Lincoln.

In 1954 the collection of ornithological books and the eggs were moved from the Albion Street store to Red Lion Street where space had become available in the old Bird Museum following transfer of most of the British birds to Ayscoughfee. In that year the old museum was opened again to the public to show the collection of foreign birds and Maples' small collection of British mammals. Also in 1954 the Trustees of the late William Dent (a former member of the Society) donated "a fine collection of eggs housed in a beautiful cabinet".

Due to problems of maintenance connected with the property, the Society's officers made extensive enquiries during the next five years, in an attempt to dispose by sale or loan to museums all of the specimens with the exception of the collection at Ayscoughfee. In 1959 several duplicate cases of British birds and a selection of skins were loaned to the Gibraltar Point Bird Observatory. The ornithological books were transferred to the Society's main museum in Broad Street, 'by wheel-barrow', and on 14th September 1960 all the remaining duplicates of the British birds, the study collection of 550 skins (mostly of British species), the eggs and the foreign birds were transferred to Leicester Museum, initially for a loan period of ten years. However, due to lack of suitable quarters in Spalding this loan period became considerably extended.

In January 1956 Smith resigned as Secretary of the Bird Museum Committee and E. W. Flaxman became the first formally elected Hon. Curator of Birds. He, in turn, was succeeded in May 1960 by

D. Frost the present Curator of Birds.

In 1962 the cases at Sycoughfee were completely relabelled, and in 1963, following a check of the exhibits a missing waxwing was replaced. Ashley Maples' friend and taxidermist, Ben Waltham, retired in 1969, after being associated with the collection for at least 35 years, and was succeeded by J. Brannan, a local naturalists. In 1969-70 it became necessary once more to relabel the cases due to vandalism.

In May 1970 the Curator and Taxidermist, in association with South Lincolnshire Nature Reserves Limited, staged the first Tuliptime Exhibition, supported by a display relating to fenland wildfowling. Exhibitions in 1973 and 1974 were supported by the R. S. P. B. and the Wildfowl Trust, together with an excellent display of ornithological photographs taken by S. Bayliss Smith. Also in 1974 the collection of birds was supplemented by loan, from Leicestershire Museums Service, of the Hurst Collection of British Birds. A further Tuliptime display in 1975 was supported by the Nature Conservancy Council and S. Bayliss Smith's photographs. It was during this period of annual exhibitions that P. Moore, the District Council's Parks Superintendent became involved in assisting with the curation of the collection at Ayscoughfee. Brannan resigned as taxidermist in 1976.

Once more, in 1976, part of the bird collection was placed in store, this time as a result of renovations and repairs to the building. Also, several of the cases were in need of attention due to damage from children and wood-worm. The Society was fortunate when, in 1978, the South Holland District Council decided to make more use of Ayscoughfee Hall for museum purposes, and began to re-organise the bird collection. The Council was also able to obtain the services of Ian Holmes, a local professional taxidermist, for several months on a full-time basis to re-groom and disinfect the specimens and remount those that had been removed from worm-eaten cases. Early in 1979 some of the loan items were withdrawn from the Leicestershire Museums Service in order to replace missing items.

Very little is known about the origins of most of the specimens in the Ayscoughfee collection, except that many came from the Lilford donations. Research is in hand to obtain more information on the contents of the early Brogden collection and on items not obtained from other collections. Probably the most interesting specimens so far identified include

Two male long-tailed ducks, believed ex Brogden, and shot in the R. Welland estuary in December 1895,
One adult snow goose, one of three shot at Wexford
November 1871.

Three black-winged stilts; shot by Atkins,
Cowbit near Spalding, no date.
Three Pallas' sand-grouse; three of several
taken by Brogden in S. Lincs in 1888,
& a taxidermist's model of a Great Auk.

The writer would be glad to hear from anyone having any information relating to the original Lilford collections. It is believed that many of the species may have been bred in captivity, in particular the birds of prey and the wildfowl. It is known that some were obtained from Rosenburg, London, and that a few were shot in Portugal and the south of France.

E. J. Redshaw
Hon. Assistant Curator
Spalding Gentlemen's Society
The Museum
Broad Street
Spalding
Lincs

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BIRMINGHAM NATURE CENTRE

The Natural History Section of Birmingham Museum and Art Gallery is famed for its fine life-size model of the carnivorous dinosaur Tyrannosaurus rex, complete with sound effects. A distance of two miles from the Museum on the edge of Cannon Hill park you can see by way of contrast another side of the department's enterprise in the shape of the Birmingham Nature Centre.

In 1972 Birmingham Zoo, which was managed by an investment company, closed down, and an opportunity arose for the City Council who owned the four acre site, to develop it as some form of leisure garden. It was due to a far-sighted leisure services committee inspired by the knowledge and fertile imagination of Peter Hanney, late Keeper of Natural History, that a Nature Centre was proposed to replace the zoo. During 1973 plans were drawn up for a Nature Centre, which would be a free public amenity aimed at enabling the people of Birmingham in particular to gain some knowledge and enjoyment from nature and the countryside. The ideas were both novel and realistic, and were widely acceptable to the Director of Museums, the General Manager of Parks, and the Leisure Services Committee, each of whom was to play a significant part in realising this ambitious project. A leisure service's sub-committee working party was soon formed to steer a course for the Centre, and included councillors with a genuine concern for the success of this new venture.

Although its conception was a swift process, the Centre's gestation period was the opposite. This was due mainly to the fact that major landscaping and building works had to be carried out in order to transform a rather run down and sterile zoo site into something which, given time, could justly be called a Nature Centre.

In the early stages of discussions it had been agreed that the Parks Department would be responsible for the purchase of the zoo buildings, initial landscape work and eventual upkeep of the more formalized garden. The Museum would provide for staffing, livestock and day to day running of the Centre. Inevitably there was some overlap between the two departments' roles according to availability of money and labour resources. After almost two years of highly intensive work on the part of Parks, City Engineers, Public Works and Natural History departments the Centre was officially opened in April 1975. The opening ceremony was a rather grand civic affair that coincided with the official launching of the Birmingham Nature Centre Wildlife Appeal run jointly by the City Council and the World Wildlife Fund. The Appeal Committee consisted of members of the Working Party, the Director of Museums and the Keeper of Natural History along with an Appeal Director for the World Wildlife Fund, under the chairmanship of Birmingham industrialist Sir Frank Price. Patrons of the appeal included other Birmingham and Midland names associated with local industry. The appeal lasted about ten months and went some two thirds of the way towards its target of £35,000. The money raised was to be used to carry out capital projects that could not be financed by City Council budget. In addition to the variety of monied gifts, which have ranged from small donations by school children to substantial sums by individual companies, gifts in kind were received. These have varied from golden pheasants to turf, trees, loads of sandstone and puddle clay for creation of miniature wildlife habitats.

There is insufficient space to illustrate how the Centre, still in its infancy, has attempted to achieve its objectives, so an account of some of its more successful features must suffice. Only a visit, preferably in Spring or Summer, will bring home the true value of the Centre as a place where people from the city can enjoy and learn from a variety of British and European wildlife seen at close quarters. The Centre has been likened to an amalgam of zoo, museum, wildlife park, garden and nature trail, and so we believe it is quite a unique animal.

Since it opened the Centre has acquired a further two acres of land, making a total six acres. It is situated in a favourable area of the City to attract a good deal of urban wildlife, from the ubiquitous fox to the occasional kingfisher, being close to Cannon Hill and Edgbaston Parks and the Botanical Gardens. It is also near to large and often derelict grounds in the Moseley, Edgbaston and Selly Park areas. The Centre is bounded on the west by the busy Pershore road, and on the

east by the River Rea; here it backs onto the Cannon Hill park. To the north, except for a chain-link fence it is continuous with the park, and to the south it is bounded by a park service road, landscaped drainage culvert and private gardens.

One of the most important and imaginative features of the Centre is its system of man-made ponds and streams, planted and stocked with appropriate vegetation and fish. A reservoir pool allows water to flow along a stream at a rate of from 50 to 100 cubic feet per hour, and in this way attempts to simulate a lowland reach in miniature. The stream has undergone some natural colonization by algae, water plants, invertebrates and a few vertebrates such as stickleback and frogs. The stream flows into a shallow pool 36' x 24' at the side of which is a marshy area. In the pool the observer is able to learn something of the freshwater life to be found in the various zones and niches of a pond. During the short time since it was established this area of water and the surrounding reeds and sedges have attracted frogs, dragonflies, and reed-buntings. The water leaving this pool is carried by another shorter stream leading through a small boggy area before emptying into another deeper pool. This is stocked with coarse fish such as barbel, tench, carp and roach which can at times be observed through underwater windows. The water in this pool is fed back to the reservoir pool direct through an underground pipe by means of a high-powered centrifugal pump. The total volume of water involved in this closed system amounts to 5,500 cubic feet. The variety of freshwater habitats which this feature provides has particular potential for preliminary studies with primary school children from the city. Associated with it is a building housing aquaria displaying freshwater fish, amphibia and some invertebrates.

There is in addition to the ponds and streams a water course (Bourne Brook) which rises several miles to the west of the Centre and which flows through it on the northern side before it joins the river Rea. Though the brook has a bricked bed and acts as a drainage channel it is capable of supporting a certain amount of life. The water is regularly monitored by the Severn Trent River Board, who have given authority to place removable weirs at intervals along the channel to encourage greater colonization. There is obvious scope here for elementary pollution studies. The water course is a natural wildlife corridor for certain species of birds, including Kingfisher, Grey Wagtails and House Martins.

The landscaping carried out during the Centre's conversion from a zoo included a great deal of planting, though many of the trees suffered in the 1976 drought. Many flowering and berry-bearing shrubs, herbaceous perennials, including a wide selection of herbs were planted with the particular needs of insects and fruit and seed eating birds in mind. From a year before the Centre opened up to the

present day observations have been made on the populations of ants, solitary bees and bumblebees that breed here or collect pollen and nectar from the cultivated and wild plants. Among the birds which benefit from these plants are Goldfinches, Yellow buntings, Stonechats and Bramblings. Several pairs of magpies nest each year on the perimeter of the Centre, feeding on the areas of pasture used to keep a flock of Soay sheep. These birds are also one of the main predators of wood ants imported from Wyre forest and living on a moated island - to prevent excessive predation the nest has to be protected during part of the year by a metal cage. Although there are a few mature trees in the Centre, on which bird nesting boxes have been erected, some of the cedarwood buildings that house displays and live exhibits have been used as sites for martin and swallow boxes.

One area of rough grassland and scrub has been set aside for a small apiary consisting of four hives illustrating the National, WBC and traditional styles. One colony lives in a section of hollow tree and is not managed. Consequently it swarms several times each year and, apart from being a good insurance against loss of one of the managed colonies it invariably provides an on-the-spot display to illustrate colony reproduction. Associated with the apiary is a building containing a large observation hive in which many of the activities of a honeybee colony can be seen at close quarters. The hive was specially designed to take six frames so that the colony would be able to sustain itself through the Winter without special attention. A particular refinement of the hive is Pilkington vacuum double glazing which reduces excessive heat loss and condensation. This exhibit has been one of the most popular, and along with the conventional hives has been used widely by schools, and by myself as a teaching and demonstration aid. Another of its attributes is its ability to show building of queen cells, colony behaviour prior to swarming, and emergence of a new queen. I am often asked by the public what we do with the honey. Where possible the honey surplus to the bees' needs is extracted, and the process, at least the preliminary stages, can be a fascinating spectacle. In 1975 honey was extracted from two colonies then kept, and was sold with the Centre's own label listing the plants from which it was made. Since 1974 when hives were first kept regular observations on the foraging behaviour of the Centre's honeybees have been recorded and the information used to form displays as a back-up to one on the life-history.

Another special feature involving insects is a butterfly and moth breeding house and walk-through enclosure where, in the summer months larval, pupal and adult insect can be seen. The enclosure is planted out with nettles, bramble, currant, buddleia and other plants which provide food sources for larva and adult. This may not be one of the easier exhibits to maintain, but judicious selection of a few commoner species can provide an enjoyable and at the same time instructive spectacle. Among species that have been reared are peacock,

small tortoiseshell, red admiral, poplar hawk, elephant hawk and lime hawk. As well as captive species the Centre's rough grass areas and flowering shrubs attract a variety of lepidoptera, including brimstone, common blue, meadow brown and skippers.

The small mammal or rodent house, designed and built by Peter Sewell, has always been one of the main attractions showing as it does a selection of British mammals such as harvest mouse, house mouse, wood mouse, edible and common dormouse, and brown rat. By means of red light the animal's day is turned into night enabling the visitor to observe some aspects of behaviour. Inevitably, there have been casualties, and the number of species exhibited has fallen. It is eventually planned to modify the display and to incorporate outside enclosures for grey squirrel, marmot and porcupine. Recently a rabbit warren has been constructed in a grassed compound surrounding the mammal house, and this summer this will be ready for the introduction of domestic rabbits possessing the wild-type coat colour.

A covenanted donation has enabled the present Keeper of Natural History, Brian Seddon, to design a vivaria for the display of British and European reptiles and amphibia. There is a range of dry, moist and watery environments set aside for the appropriate species or association of different species, each with controlled heat and plant growth-promoting illumination. One large wet vivarium takes advantage of natural sunlight passing through two large picture windows. In the vivaria, which will shortly be open to the public, most of the British species and a few southern European ones will be seen.

Several large aviaries accommodate birds, including barn and tawny owl, common and golden pheasant, carrion crow, rook, jackdaw and jay. The corvids in particular provide instructive exhibits on account of their feeding and food catching behaviour, not to mention their powers of mimicry! Seasonal exhibits include a demonstration egg incubator in action in which eggs laid by the Centre's bantams, ducks and pheasants are hatched.

Neighbouring enclosures house wildcats and a pair of badgers. The badgers were obtained as orphaned cubs in 1976 from the Forestry Commission in Sussex and were reared by hand for a time. They were eventually given a specially landscaped and secure enclosure built mainly by voluntary labour, in which was made a consolidated mound of soil reinforced by rock and old tree trunks. The animals soon constructed their own sett in preference to the stone-built den also provided. During the day the pair are often out, and the female may be seen removing soiled bedding and dragging in new. A pair of European lynx are probably among the more appealing larger mammals as far as the public are concerned. These are shortly to be given a commodious enclosure in contrast to the rather limited one they now

occupy. Adjacent to the lynx pen a large compound, landscaped with rock mounds planted with conifers, will house a pair of wolves. Other carnivores on display are red fox, arctic fox, ferret and polecat.

The main exhibition hall shows permanent displays centered around the theme 'Man and Nature' and illustrates by graphics and museum specimens how man has often worked against nature, especially in the way he manages the land. Traditional methods of cultivation are compared with modern methods of agriculture, and examples of farm implements and machinery are shown. Man's exploitation of animals such as the whale and endangered fur-bearing species is also illustrated. The hall is used as a meeting place for school parties as well as a venue for occasional external societies. Demonstrations of living animals and temporary exhibitions are also staged here.

A separate building exists for childrens' activities connected with visits to the Centre in which film shows and practical work take place. The room is equipped with working surfaces, lenses, microscopes and drawing materials. Sessions are organized by the museum education department covering aspects of animal behaviour based on animal groups seen at the Centre.

How is the Centre administered? The Keeper of Natural History decides what policy is to be followed, taking into account the opinions of the Nature Centre Working Party. A warden and assistant warden, both of whom are biology graduates, administer the Centre's daily running, but are responsible to the Keeper of Natural History. Their main duties are care of livestock, care and management of the sites natural and man-made features and their development, and public relations. They are also in charge of a work experience force of school leavers who carry out routine feeding and cleaning and provide much of the labour for development work such as landscaping and planting of animal enclosures. Since the scheme started in 1977 twenty five young people have gained from their experiences at the Centre. They have been given an opportunity to work closely with animals and to learn something of natural history. In return they have contributed significantly to the welfare and progress of the Centre in many ways. The security staff, working a shift system, are responsible for general security and care of grounds and buildings, and supervision of the public. In addition most of them undertake certain other duties including care of aquaria, painting bee-hives, and erection of fencing. In fact, before the work experience programme started we were highly dependent on the men's woodwill, and without them much of the manual work would not have been achieved. They are the first to admit that being involved in the Centre's development in this way breaks the monotony of routine duties and gives them real satisfaction. It should be added that one week-day closure enables the men to carry out these 'unofficial' duties unhampered by uniform patrol.

In the first two years of its life the Centre staged a number of week-end demonstrations and activities with a rural flavour. These included sheep-shearing, using Jacob sheep which were then kept, spinning and weaving their wool, corn dolly making, woodcrafts, beekeeping, ferreting, pond making and ploughing by a team of shire horses. A number of these activities are still shown at certain times of the year as part of the museum education's department's programme. Such events have undoubtedly helped to stimulate interest in country-based crafts and practices and this fulfills another of the Centre's aims.

The Birmingham Nature Centre has been, and will continue to be a success as long as there are people around to care for its welfare. During its four year's existence a total of 575,000 adults and school children have passed through the turnstile. This represents a daily average of between 575 and 655 over the same years. In 1976 the Centre was among the six runners-up in the Museum of the Year Award. We realise there have been failures, but there have been an enormous number of successes.

David Walker
Birmingham Natural History Dept

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NATURAL HISTORY AT LUDLOW MUSEUM

The first proposal for a Museum in Ludlow is believed to have been made during the Napoleonic Wars. When Napoleon's brother, Lucien Bonaparte, was taken captive the Earl of Powis, in consequence of the King ordering that Ludlow or it's vicinity should be the abode of this distinguished prisoner, offered Dinham House as a temporary residence. Lucien lived there from December 1810 until June 1811 and during his enforced stay formed his own museum in the stables. On his departure from Ludlow Lucien left behind certain items which he hoped would form a nucleus for a town museum. A few years later it was suggested that the stable and barracks block of Ludlow Castle should be restored to house the museum, but nothing ever came of this, which is much to be regretted as it would have provided an ideal setting.

The actual founding of Ludlow Museum originated from a meeting held on the 12th October 1833, when the Ludlow Natural History Society came into being. In the printed notice of this meeting it was proposed "That there be a museum and library, illustrative of the various departments of science, for the use of members". It is interesting to see it also stated "That ladies be eligible to become members of

this Society" and "That the subscription of one guinea per annum shall become due on the first day of January in each year, and any member who shall neglect to pay this within one month from the above date, shall forfeit the sum of five shillings". The Committee for the first year consisted of Doctor Lloyd and the Rev. T. T. Lewis, (joint discoverers of the famous Ludlow 'Bone Bed') The Rev. T. Wellings, Mr. Hutchings, Mr. Henry Meymott and Mr. Clark. Among the list of the original forty-five members were the names of T. A. Knight Esq. of Downton Castle who was then president of the Horticultural Society, author of the beautiful "Pomona" and of many papers on plant breeding, R. I. Murchison Esq. (later Sir R. I. Murchison) President of the Geological Society, the pioneer geologist who first described the Silurian System and Mr. Salwey a botanist.

At first the specimens were stored at Dinham House but as the collections grew rapidly it was soon agreed that larger premises would be required. In the second annual report of the 17th March, 1836 it said "The Committee of the Ludlow Natural History Society have much satisfaction in being able to announce that the prosperity of the institution continues undiminished and notwithstanding the expenditure which has been incurred in the purchase of new cases, and in other improvements connected with the museum, the funds of the Society are in a prosperous state. The Committee have to congratulate the Society on the removal of it's collection to a more spacious and convenient situation allowing a better arrangement of specimens". It also mentions that "The museum has received great improvement from the attention of those gentlemen who have undertaken the duties of curators, and considerable progress has been made in it's classification and arrangement, so as to render it a useful source of reference to the student of natural history, and worthy of the spirited support with which it has been encouraged". A list of accessions is appended which includes donations of a pine marten, polecat, weasel and several bird species. It is also to be noted in the same report that several birds, including a pair of snowy owls, were purchased by the society.

About the year 1840 special museum premises were built in Mill Street, and although this is just within Queen Victoria's reign the style of architecture is Georgian and so blends well with many other buildings of the town which had been constructed during the second half of the eighteenth century, when Ludlow enjoyed a burst of prosperity as a select residential centre. In the report of the 24th January, 1847, owing to increasing expenses a reminder is given about unpaid subscriptions. The specimens were thoroughly cleaned and for the most part newly labelled and during the same year there was a great increase in the number of specimens received. By 1848 fresh subscribers were urgently required, for the report says "The Society is burthened with a debt of £200 - the interest of which weighs heavily on the resources,

and to pay off which no means present themselves, but continued economical management, and the unremitting exertions of the present members to increase their numbers".

Lectures were frequently held in the museum room and the printed notices advertising these would do credit to the sensational press of our own day. The evolution controversy had reared its head in Ludlow and there is a poster advertising lectures by J. W. Salter the geologist on the 22nd and 23rd July, 1863 which endeavoured to show there would be a future harmony of science with religion (no doubt meaning evolutionary ideas), and suggesting that the order of creation is given in the scripture chronology of the inspired books with the probable explanation of the "days", while a Mr. D. Mackintosh in lectures held on the 26th November and the 3rd and 10th December of the same year bitterly opposed any idea of the evolution of man.

By 1866 it was noted that four additional cases of birds had been completed by Mr. H. Shaw the Shrewsbury taxidermist. Throughout the remainder of the nineteenth century and indeed until the time of the 1914-18 war everything seemed as if it would go on progressing to better things. As well as biological material, Ludlow Museum at that time contained a superb geological collection and many objects of local history interest. The outbreak of the 1914-18 war altered a whole way of life and in the years which followed there was a decline in interest. Those people who had done so much during Victorian times had either passed on or had grown old and the younger generation had neither the money nor the leisure time to devote to scientific hobbies. The county land-owners, members of the medical profession and the clergy who made up a considerable percentage of the old time naturalists of this district, many of whom did some really splendid work, were, with the evils of inflation and taxation, finding it difficult to make ends meet. In consequence the museum suffered and even attendance figures dropped; however, even then some really excellent work was still being done to keep things going by the honorary curator, Doctor J. G. Lang, (then in his eighties) and a few other stalwart supporters.

After the Second World War the museum was administered, first of all, by the Borough Council and then later by the Salop County Council. Unfortunately many of the old collections had deteriorated and nearly all the biological and geological material had been disposed of to other museums, schools and private individuals. The countrywide revival of interest in the natural sciences and local history which came after the war was beginning to be felt in Ludlow, and twenty years ago it was decided that a part-time curator should be appointed. The author secured the post, and as well as having curatorial duties, was to be attendant, typist and book-keeper. The post was later made a full-time one.

The biological and geological specimens had long since gone, but, I was determined that the tradition in natural sciences which had grown up in Ludlow over so many years should be maintained and immediately set about re-building the natural history collections. I brought in most of my own specimens and was fortunate in being able to recover some of the old Ludlow museum items, from various places. At that time the display and reference material was housed at the Butter Cross, but a museum office was provided for me in the branch library. The collections soon outgrew the storage space so I was later offered the old Ludlow fire station to house the specimens - this building also had some useful workroom space. By then I had an attendant and part-time secretarial help together with some splendid volunteers. Attendance figures rocketed and in the year 1966 we had nearly 36,000 visitors. The museum came under the County Education Committee then, but although now administered by the Leisure Activities Committee our close liaison with schools continues and school visits and excursions are still a feature of our work at Ludlow. It was a great step forward when I was provided with a part-time museum assistant; Mr. Bernard Thirsk being appointed to the post. When he left, Ann Waite was appointed part-time administrative assistant and later Howard Cheese (previously a part-time attendant) was appointed as full-time technician.

As time went on even the Old Fire Station became too small for our reference collections, and we have now moved into an Old Primary School building which has become the centre for the County Museum Service Natural Sciences Collections. Here we have a well-lit lecture room on the first floor in which Birmingham University extra-mural classes are held and talks given to groups of school children and other students. A flourishing biological records centre also functions in our Old Street premises. Until 1974 Ludlow was the only museum administered by the Salop County Council, but during that year, Mr. McCabe was appointed as County Museum Curator and since then the Information Centre at Ludlow and a farm museum at Acton Scott have been started. Much Wenlock Museum has joined the Service and we have acquired a store at Whitchurch in the north of the county.

Some of our natural history specimens are kept specially as loan material for schools, which can be borrowed by teachers in the South Shropshire area during school term to illustrate biology lessons and to interest children in their Shropshire Country heritage and its conservation. Naturally loan material has to be restricted to the less important specimens.

The geological reference collection now consists of approximately 30,000 specimens. The following is a brief summary of our biological collections at present. I would be very glad to know the whereabouts of any other, so far, undetected material from the old Ludlow museum.

HERBARIUM

The collection consists almost entirely of British material, most of the specimens being local. They are mounted on standard size sheets, except for those in their contemporary albums, where they are often accompanied with water-colour drawings; such examples are those which were collected by the late Miss M. D. Wood of Whitton Court. There is a microscope slide collection of bryophytes formed by the late Rev. N. F. Tripp. The Rev. T. W. Bree was a well known early 19th century botanist and we are fortunate in having a collection of pteridophytes formed by him between the years 1810 and 1817. Some very interesting correspondence about lichens from 1823-1842 to and from the Rev. T. Salwey contains letters with the original penny black stamps. We have a useful collection of flowering plants, most of which are from the Welsh Borderland.

INVERTEBRATES OTHER THAN INSECTS

There are small but useful collections of sponges, coelenterates and echinoderms also a few flatworms, roundworms and annelids. We have a fairly large collection of shells of British and foreign marine molluscs with an almost complete and well documented series of British land and freshwater species, and there are also a few arthropods other than insects.

INSECTS

British Odonata in two cabinets of 12 and 8 drawers. There are also smaller collections of Diptera, Hymenoptera and other orders. The collection of British Coleoptera is in a 20 drawer cabinet and belonged to the late Miss Frances Pitt, a celebrated Shropshire author, naturalist and wild-life photographer. Specimens of British and foreign Lepidoptera are contained in 14 cabinets (ranging from 6 drawers to 32 drawers), and in 91 store boxes.

FISHES

About 60, mostly British.

AMPHIBIANS AND REPTILES

Approx. 60, British and foreign.

BIRDS

Approx. 400 mounted specimens, mostly British (including the old Whitchurch Museum material) and collections of British Birds' eggs.

MAMMALS

Approx. 75 mostly British; also a small amount of osteological material.

JOHN NORTON
LUDLOW MUSEUM

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NATURAL HISTORY IN STAFFORDSHIRE

The Natural History Section of the City Museum and Art Gallery of Stoke-on-Trent has received from the Staffordshire County Museum at Shugborough their entire collection of Natural History material. This move allows Shugborough to concentrate on aspects of Staffordshire folk life and agricultural history, whilst the new museum at Stoke becomes the major county centre for biological and geological recording, collections and information.

Although the new museum will not open to the public until the end of this year the collections are housed in new storage rooms and are available for study by interested persons. Thus any information required regarding collections or recordings in Staffordshire can now be obtained from this one source.

Geoff Halfpenny
Don Steward

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MUSEUM BIOLOGY SPECIMENS AND THEIR EDUCATION POTENTIAL

Biology curators are primarily concerned with the careful maintenance of their collections. Furthermore, the potential for increasing their collections is often limited by their sensibilities with regard to the conservation of living things. In spite of these constraints, I contend that biological collections have a unique contribution to make towards engendering peoples' interest in wildlife.

Specimens do not fly or run away and thus present the observer with the unique opportunity to note colours, comparative sizes and textures in his or her own time. A very good mount can even convey a typical posture or frozen movement. With such clear impressions, reinforced by a discussion with the museum Education Officer, Curator or knowledgeable teachers, the chances of recognising creatures in the wild will become much greater, and the interest in them more likely to be maintained.

The temptation to stroke fur and feather is nigh overwhelming and one way to divert attention from mounted specimens is to provide skins which can be handled gently. Fragile insects can be viewed quite satisfactorily without danger of damage, by being pinned to the bases of a clear topped box.

Herbarium specimens, especially those pressed to sheets of paper, present fewer observational advantages over well illustrated texts unless, of course, microscopic examination is required. Nevertheless, fresh collections of flowering plants particularly, sealed to an herbarium sheet with clear film and made accessible to the public in the form of a ring bound volume, would provide a valuable reference source. Mosses, liverworts, lichens and microscopic algae could be treated in a similar manner, although recourse to a microscope or chemicals is necessary at a more advanced level of identification. Air dried fungi are probably more prepossessing than the anonymous grey or brown rubber that pickled specimens change into. Freeze drying, however, greatly increases the value of such specimens for educational demonstrations, although with the fungi, at least, colours become severely faded after some months even when the specimens are kept in the dark.

As an example of the interest shown in biology museum specimens by schools I cite a questionnaire sent to them by the Education Section at Leicestershire Museums. The questionnaire took the form of a list of topics which could be ticked according to the teacher's view of their usefulness or interest when bringing a group of children to the museum.

Over 200 responses were received, mainly from Junior and Infant schools. Seventy-three percent of the respondents, for example

regarded Leicestershire and British birds and mammals as usefully dealt with by the museum, but only 5.5% noted Leicestershire Naturalists as of interest. This last result is somewhat surprising since Leicestershire has spawned such eminent naturalists as Henry Walter Bates and David Attenborough, to name only two of a number that readily spring to mind.

Museum biological collections thus offer a unique potential recognised by many teachers. Having their interests encouraged by, and gaining their knowledge of key features from museum collections and personnel, people can then be encouraged to collect information about wildlife localities and behaviour rather than be encouraged to collect the wildlife itself.

Christopher N. G. Scotter
Teacher Leader Natural Sciences
Leicestershire Museums.

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STAFFORDSHIRE BIOLOGICAL RECORDS CENTRE

The Staffordshire Biological Records Centre was set up in 1973, following the stimulus provided by a Conference on "Centres for Environmental Records" held under the auspices of the Department of Museum Studies of the University of Leicester and the National Biological Records Centre.

Once the project had been launched data began to come in and past records were extracted from the literature. The scheme is primarily based on species recording but site data is now being compiled in co-operation with the Staffordshire Nature Conservation Trust. It was our intention from the outset to publish "Atlases" as soon as sufficient data became available. We are quite fortunate in having some extremely knowledgeable naturalists in the county and we have been able to make good use of their talents.

1975 saw the production of our first publication, an "Atlas of the Lepidoptera of Staffordshire, Part 1 Butterflies" with Mr. R. G. Warren the county recorder for this group as its author.

By undertaking the artwork and copy preparation for production by the "offset-Litho" process we were able to keep costs to a minimum. Unfortunately, the machinery in use by the City's Printing and Stationery department was unable to undertake the work and so following the receipt of tenders 300 copies were printed by George St. Press of Stafford for £110.

The basic lay-out decided upon was an A5 booklet with a distribution map for each species (where warranted), together with a summary of historical records and an assessment of the status of the species at the time of writing.

The distribution maps for the Lepidoptera series (the 4th part of which will be produced by the end of March 1979) indicate the presence of each species in a 10km square of the National Grid. This may seem a little coarse on a county basis but the man-power and data did not allow meaningful publication on a lesser scale. In addition to the Lepidoptera series we have published An Atlas of the Amphibians and Reptiles of the county showing distribution on both a 10km. square and tetrad (2 x 2km. sq.) level, and Part 1 of An Atlas of Diptera of Staffordshire dealing with the hoverflies (Syrphidae).

These publications seem to have been a great stimulus to local recording work as well as performing one of the major roles of a Biological Records Centre, namely the dissemination of information.

Geoff Halfpenny,
Keeper of Natural History,
City Museum & Art Gallery,
Stoke-on-Trent.

Atlas of the Lepidoptera of Staffordshire Part 1 Butterflies R. G. Warren	50 pages	1975	40p
Atlas of the Lepidoptera of Staffordshire Part 2 Moths Lasiocampidae- Geometridae (Larentiinae) R. G. Warren	66 pages	1976	50p
Atlas of the Lepidoptera of Staffordshire Part 3 Moths Geometridae (Larentiinae) R. G. Warren	57 pages	1977	55p
Atlas of the Lepidoptera of Staffordshire Part 4 Moths Geometridae (Ennominae) - Nolidae R. G. Warren	c. 60 pages	1979	(price to be fixed)
Atlas of the Diptera of Staffordshire Part 1 Hoverflies (Syrphidae) G. E. Rotheray	49 pages	1979	(price to be fixed)
Atlas of the Amphibians and Reptiles of Staffordshire G. Halfpenny	48 pages	1978	60p

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ADDENDA

Taxonomy of Sorex and Neomys

Peter King, Department of Genetics, Royal Free Hospital School of Medicine, is engaged in research into the taxonomy of European shrews of the genera Sorex and Neomys, using non-metric skeletal variants as a taxonomic tool. He is interested in locating skeletal material, particularly large samples of material, and in any material from the Scottish islands, but details of any skulls, either from Britain, from the rest of Europe or from the extra-European parts of the range of these genera would be welcome. Details to Peter King, University of London, 8 Hunter Street, London WC1N 1BP.

Open Letter on Exhibition in Natural History Museums

The staff of the Natural History Department of Birmingham City Museums (D.R.G. Walker, P. Hamer, M.D. Bryan and J.E. Needle) wish to make it clear that they dissociate themselves from any views expressed by B. Abell Seddon in his 'Open Letter' published in BCG Newsletter Vol. 2 No. 1.

Museums Association Council 1979/80

Members may wish to note that Geoff Hancock will be standing for election to Council this year.

Specialist Session Day at Conference

The Chairman has now received confirmation that Dr. Miles of the B. M. (N. H.) has agreed to speak at the BCG meeting in Portsmouth.

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