

BCG

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BCG Activities 1979

In preparation for the AGM the Committee are considering a number of activities for next year. These are almost certain to include a follow-up to the 1977 collection survey and a membership drive, but other suggestions from members would be most welcome, addressed to the Chairman please.

International Conference on the history of museums and collections in natural history

London April 4-6 1979

There has been a most encouraging response, following the circulation of the leaflet on this conference, sponsored and organised by BCG, GCG and the Society for the Bibliography of Natural History. Already 170 replies asking for further details have been received, and as it will probably be necessary to restrict attendance to 200, anyone who has not replied is encouraged to do so as soon as possible (to Mrs. Judith Diment at the Palaeontology Library in the BM (Nat. Hist.), the organising secretary).

Even more pleasing has been the arrival of some 60 abstracts of papers for the Conference. They have a truly international coverage, with over 20 papers from the United States alone. A summary of titles is given below to give some idea of the scope of the conference but, as the organising committee has not yet undertaken the difficult task of selecting a programme, this is no guarantee that a particular paper will be read at the Conference, although we do hope to publish all suitable papers.

Summary of synopses submitted:

Species covered include Woodlice, the Large White, 18th and 19th century ornithological collections, Brazilian grasses and South African snakes.

Collectors dealt with are Lyell, Bright, Bradford Meek, the Sowerbys, Sloane, Banks, Buckland, Hooker, and Darwin's plant collections from the Beagle voyage.

Among museums surveyed in this country, The British Museum (Natural History) York, Liverpool and Edinburgh are prominent, with foreign contributions from Poland, Egypt, Canada, Spain, Germany, Vienna and many American museums.

Request for Information

W. Harcourt Bath, W. H. Nunney and J. Mearns collections

Any information on the whereabouts of the insect and other collections of these Naturalists would be welcome. Also any information on the men

themselves. Bath resided in Birmingham and formed extensive collections of Lepidoptera, Dragonflies, shells, crustacea, birds eggs and nests. Nunney resided in London and had collections of aquatic insects especially dragonflies. Mearns was from Aberdeen and formed collections of insects especially Odonata. Please contact K. G. V. Smith, Department of Entomology, British Museum (Natural History), London, SW7 5BD.

Restitution and Return of Cultural Property

The following paper was presented at the Professional Members Meeting at the Museums Association Edinburgh Conference, and, as reported in the August 'Museums Bulletin', specialist groups have been asked to comment on the contents. Natural history material is included in the proposed negotiations.

Although the majority of biology curators would regard any return of foreign material as unacceptable, there appears to be a danger that this problem will become 'political' and solutions could be imposed upon museums in this country. Apparently Scandinavian museums have already embarked upon large scale return of specimens. Ethnographers in this country are establishing an 'exchange club' for two-way traffic in collections.

It is hoped that the subject will be given a suitable airing at the AGM, and it would be wise to consider drawing up guidelines and conditions for such material as will not affect research and education programmes in this country and will be secure and available when returned.

THE RESTITUTION AND RETURN OF CULTURAL PROPERTY

A note by Geoffrey Lewis

1. UNESCO, at its 19th General Conference in 1976, adopted a resolution (4.128) which inter-alia provided for all necessary measures to be taken for an inter-governmental committee to be established (at its next session) to facilitate bilateral negotiations for the restitution or return of cultural property to those countries having lost them as a result of colonial or foreign occupation. The resolution also sought technical guidance in this matter from ICOM which was available at a meeting of experts in Dakar, March 1978.
2. A mass media campaign to promote this programme and influence public opinion towards it will be organised on a world-wide basis this summer and will be intensified during 1979-80. This is also intended to encourage cooperation between museums to establish inventories of material existing in collections abroad. UNESCO has already initiated a world-wide inventory of representative objects of Oceanic culture and a UNESCO consultant is currently in this country for this purpose.
3. To date the British Government has opposed or abstained from voting on

issues of this nature on the grounds that museums and their collections were not under direct government control.

4. The issue, however, affects national, local authority, university and independent museums in this country. Further, whatever the political considerations, there are profound professional matters involved in these proposals which have never been debated in any detail by museum colleagues in this country. These include:

- (a) the accessibility of the world heritage to scholar and general public alike;
- (b) the implications of split systematic scholarly collections;
- (c) the extent to which a country receiving any returned material can maintain the necessary standards to ensure its preservation and security;
- (d) the impact that the availability of any international monetary fund to assist in the purchase of material might have on world art prices;
- (e) the legal implications of the removal of items from public collections

GDL
18.5.78

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FINANCIAL YEAR AND THE A. G. M.

At the September meeting of BCG Committee the problem of subscriptions was raised by the Treasurer, with a suggestion that the financial year be changed to run from January to December to encourage prompt payment. This was agreed by the Committee. This in turn influences the date of the AGM, originally planned for December with Manchester Museum as the venue. It is now proposed that the AGM will be held following the International Conference on Natural History Collections in April 1979 at the British Museum (Natural History). Provisional date for the AGM is Friday 6th April. See next Newsletter for confirmation.

Manchester Meeting - all day Seminar - Friday 1st December *Given Jan to 1978.
6.11.78*

This meeting has been planned to enable members to discuss BCG policy matters and propose motions for the AGM in April 1979. A number of issues were raised at the last AGM which never received the attention they deserved, and further matters have arisen since then. The current computing work being undertaken at Manchester is also of obvious interest, and Charles Pettit will provide an introduction to the system being used and its compatibility with other computer packages.

Members are asked to meet at the Manchester Museum at 11.00 a.m. Morning and afternoon sessions are envisaged, with a break for tea and biscuits in the afternoon. The meeting should end about 5 p.m. Anyone requiring advice on overnight accommodation are asked to telephone Mike Hounsome (061 273 3333 ext. 3129).

Committee 1979

Nominations are invited for members of BCG Committee for next year. All positions are open for election and there is no actual limit on the numbers on the committee (names of current officers and members can be seen inside the back cover of the Newsletter).

To date only Peter Morgan has expressed a wish to resign from his post as secretary, although he may be persuaded to stay on the committee. Until March the Chairman will be dealing with correspondence etc., so please send nominations to St. Albans, duly seconded and with the consent of the nominee.

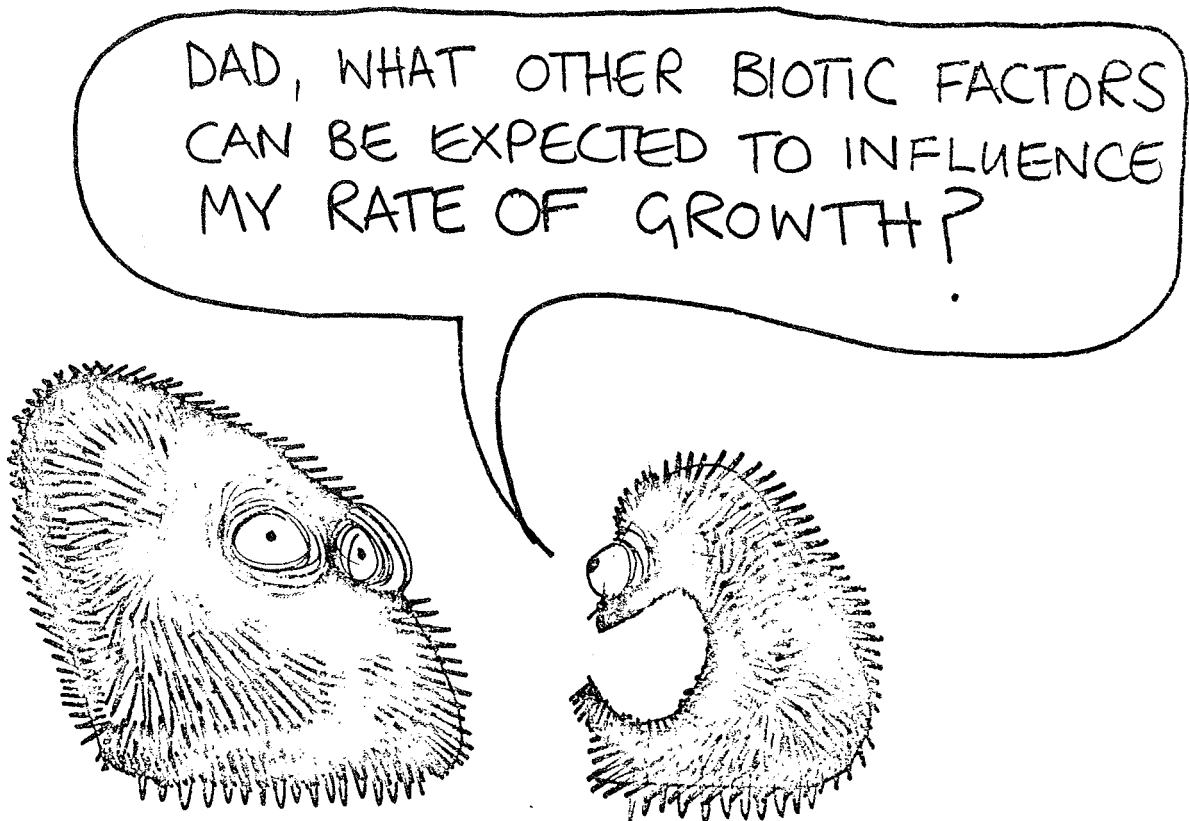
Membership News

Belated congratulations to Jim Bateman on his move to Oxfordshire in July and to Peter Morgan, his successor at Cardiff (from September).

The Editor will be pleased to pass on news of members activities - movements, publications, expeditions etc.

Read any good papers lately ?

If so, why not inform other BCG members via the Newsletter? The Editor would be delighted to receive short abstracts from other publications which may be of interest to the membership.



THE HERBARIA AT BANKFIELD MUSEUM, HALIFAX (HFX)

The herbaria at Bankfield Museum, Halifax have almost entirely been added since 1970. The present collections are the result of a vigorous collecting policy and several generous donations. For many years, several important 19th century herbaria (including those of S. Gibson, S. King and R. Leyland) were housed at Belle Vue Museum, Halifax (the home of all the Natural History collections before their transference to Bankfield Museum in 1964). I have not been able to find out what happened to these herbaria, or when, but I strongly suspect that they were thoughtlessly destroyed some time prior to 1964. If this is so, then Gibson's type specimens no longer exist. Fortunately, there are some duplicates of Gibson's types in the Babington herbarium at the Botany School, Cambridge, and at least one of these (Hieracium hypochaeroides Gibs.) has since been selected as a lectotype.

Since 1970 I have endeavoured to build up the collections once again, with particular local bias. My main interest has been in lichens, but we now also have substantial collections of bryophytes and fungi and a small collection of vascular plants. Details of all these collections are as follows:-

(1) Lichens

This herbarium consists at the present time of some 3,300 packets, although many further specimens are still being studied and will subsequently be added. All but a very few of these specimens have been collected from the British Isles over a period of eight years. There are some 1400 or so lichen species in the British Isles and our herbarium contains nearly half of these. The herbarium is particularly strong in Yorkshire specimens (335 different species) and also in specimens from the Isle of Man, Huntingdonshire and Scotland (the latter mainly collected by my assistant P. R. Stewart). At present we have no types, although several species were first British/European records when found. A number of specimens have been or are to be cited in various publications. Several species being studied at the present time are thought to be new to science. The genera Lecanora and Lepraria are particularly well represented in the herbarium. The lichen herbarium is the only major modern lichen collection housed in a public museum in northern England, and is available for study, either by personal visit to the museum or by postal loan, to all serious students and researchers.

(2) Fungi

The fungus herbarium has mainly been built up since 1973 and consists of 400 packets of collected material together with c.100 packets of donated material. The collected material is nearly all from Yorkshire and includes examples of most groups, although being particularly strong in

members of the Ascomycetes. We have recently (1978) had a donation of c.100 packets of fungi from the University of Leeds. This collection consists mainly of members of the Aphylophorales and was collected by Dr. J. D. Lovis in the early 1960s. The majority of the specimens are from Yorkshire.

(3) Algae

This is a small collection of 13 sheets of marine algae collected by my predecessor, Mr. R. Penrose, from Filey, Yorkshire in 1966 and 1967.

(4) Bryophytes

In 1974, Bankfield Museum was donated a major plant collection by the Hebden Bridge Literary and Scientific Society. The bulk of this collection consisted of bryophytes collected by two local men, namely James Needham (1849-1913) and William Sutcliffe. The Needham collection consists of 448 packets of bryophytes from all parts of the British Isles. These were mainly collected by Needham between 1880 and 1910, but there are a few earlier specimens collected by John Nowell in the 1850s and the 1860s. Although Needham was a well-known botanist, I have been unable to find any information of William Sutcliffe, except that he lived at Slack, near Heptonstall (VC 63). There are c. 500 packets of bryophytes in Sutcliffe's herbarium and these were mainly collected in the 1850s and 1860s. A large percentage of these specimens were collected locally. Some of the bryophytes were collected by well-known bryologists of the day e.g. W. Wilson, Dr. J. B. Wood, H. Boswell etc., but I think it likely that these came to Sutcliffe via John Nowell. There is no mention of Sutcliffe in "The Flora of the Parish of Halifax" (Crump and Crossland, 1904) which is very strange indeed. Sutcliffe's herbarium is at present being thoroughly checked by Mr. T. Blockeel with the view to publishing the information in the near future.

In 1972, Mr. F. Murgatroyd presented us with a bryophyte collection made by another local man, Harold Walsh (1881 - 1962). There are 415 packets in this collection with 141 of these being from the Halifax region. The collection was made between 1940 and 1950. In 1978, Mr. G. Shaw of Leeds University donated to us a small collection (18) of bryological slides also made by Harold Walsh. In recent years, I have also added a small number of Yorkshire bryophytes to the herbarium.

(5) Vascular Plants

As well as presenting us with bryological herbaria the Hebden Bridge Literary and Scientific Society also donated a small collection of vascular plants. These were mainly collected by John Dewhurst and total 168 sheets of specimens. They were collected between 1870 and 1903 and are principally

from Yorkshire (the rest being mainly from Lancashire and North Wales). A few specimens were collected by James Needham.

While searching in vain for the herbaria of King, Gibson and Leyland in the attics of the old Belle Vue Museum I did find a single small collection of vascular plants. These were presented to the museum by a Colonel Akroyd and were collected by numerous people, in particular by J. Ward, and also by such eminent botanists as Dr. Hooker. There are 81 sheets in all, mainly dating from 1821 to 1841 and being from all parts of the British Isles, with only 13 sheets of local specimens. A further folder with 9 sheets of plants collected between 1852 and 1868 was also found. These specimens were all collected from the Halifax area but bear no collectors name.

Finally, we have a small collection of vascular plants made in 1966 and 1967 by my predecessor, Mr. R. Penrose. There are 76 sheets of vascular plants all of which are from the Halifax region. I hope to be able to continue and enlarge this collection in the future.

P. M. Earland-Bennett
Calderdale Museums Service, Halifax.

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STORAGE OF MOUNTED BIRDS AND MAMMALS (Bradford Museums)

The problems faced in Bradford in 1974 were:-

1. two museums' collections of mainly British mounted birds and mammals (nothing larger than a swan or fox) to be amalgamated and safely stored for future use. Many specimens were already uncased; others needed rescuing from cases in poor condition; and some were in better cases, sound or repairable and fit for future display.
2. storage space in various sized, irregularly shaped rooms on the first floor of a former workhouse, without a lift, and with many windows, poor insulation, bare floor-boards, and central heating pipes and radiators round most walls.
3. no written record or catalogue for many of the specimens.
4. a need for mounts to be readily available for temporary exhibitions in three museum buildings.
5. a need to sort through all existing material to determine its future.

- (a) for display in 'permanent' or 'temporary' exhibitions
- (b) for loans to schools (suitably boxed by the Museums Education Service)
- (c) for handling in classroom areas
- (d) for reference (e.g. local specimens of locally unusual or rare species, mounted and not of sufficient quality for future display).

6. Limited finance and staff time.

Bradford's solution was to store specimens in sound cases (fit for future display) in one room with the windows blacked out; and to create dust-proof boxes or storage units inside two of the rooms to take the already uncased material, material from damaged or poor cases, and unsound cases which one did not wish to dismantle or destroy for some reason (e.g. examples of work of local taxidermists; or a good setting). The bulk of sorting was done by curatorial staff with help in cataloguing from a vacation student. A card index was compiled, one card per specimen, with all the available information on the card and also on a new standard label fixed to the specimen, so that specimens dealt with could be readily identified as work progressed.

The curatorial specifications for these units were:-

- (a) as many uncased specimens as possible should be able to be stored in the two rooms available.
- (b) specimens should be mounted on bases suitable for storage and also for transporting in a van from the store to various museum buildings for display.
- (c) no daylight should be admitted to the units, but sufficient electric light to be available for staff to put in and take out specimens.
- (d) the units should be dust-proof - so that specimens do not require polythene or other covers which can bend feathers, etc - and so at least partially pest-proof, with fumigation with a Rentokil smoke generator (Lindane 10) to be carried out at regular intervals to guard against pests introduced with specimens and staff.
- (e) humidity should be kept down to acceptable levels (55-60 RH); and temperature control to be viewed from its effect on RH as staff were not expected to work for any length of time in the units, and previous recordings in the room showed that temperature did not rise to unacceptably high levels, whereas humidity did (70-80 RH).

- (f) there should be ready access to all specimens at all times for visual checks and removal for display.

The storage units were designed by J. Rogers (Conservation Assistant) and built by him, with the assistance of an attendant in the quieter winter months, from materials purchased with a 45% Area Service grant.

Each unit has a framework of 3" x 2" sawn timber, clad externally with foil-backed plasterboard and internally with 1" pegboard. The floors of the units are formed from hardboard pinned to the original floor-boards to prevent dust rising from the old floor.

The framework for each side was constructed separately and eventually the four sides were bolted together and screwed to the floor. The ceiling supports and internal shelving uprights were then added. Before the plasterboard cladding was fixed, felt strips were glued onto the framework to form a dust-proof seal where the boards butt-jointed.

After the cladding was completed light fittings and a Westair D50 dehumidifier were installed, the internal shelving finished, and the pegboard cladding fixed inside. The shelving (two tiers) comes up to the wall between the two doors and runs down the centre of the room, leaving a corridor at the end furthest from the doors, i. e. it forms an island in the centre of the unit, abutting onto the wall between the doors. This provides shelving for especially heavy or awkward specimens, and also for the cases needing repair to make them dust-proof. Three walls are thus completely clear for fixing specimens to the pegboard, and this can also be done above and to one side of each door. The two doors were fixed using draught excluder as a seal and ordinary draw bolts as fasteners.

Diagrams 1 and 3 indicate the size and timber structure. Sufficient space was left between the walls of the building, central heating pipes, etc. and the unit to allow free air circulation and staff to be able to get round the room for maintenance.

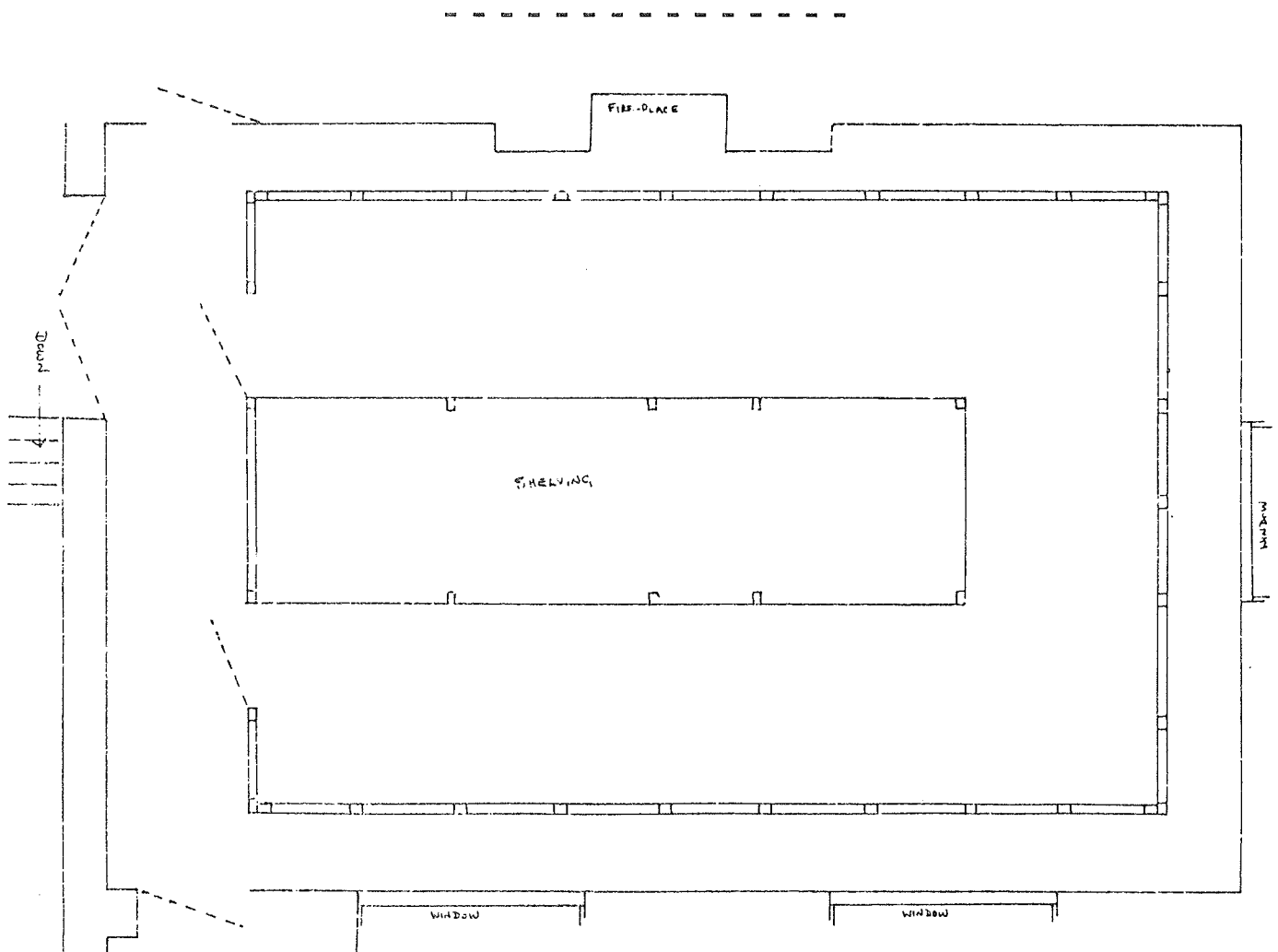
Specimens were prepared for the unit by a joiner (employed for a fixed number of hours per year through the Area Service with a 45% grant) guided, and assisted where the actual specimen was affected, by the Natural Sciences Technician (taxidermy). Specimens are fixed on a base - a rectangular or square piece of wood, blockboard, etc. (offcuts, scrap pieces, etc. have been successfully used to save cost) cut slightly larger than the specimen so that it does not come in contact with the pegboard when stored and a stable base is provided while the specimen is being transported, bases packing firmly on the floor one against the other without specimens coming in contact.

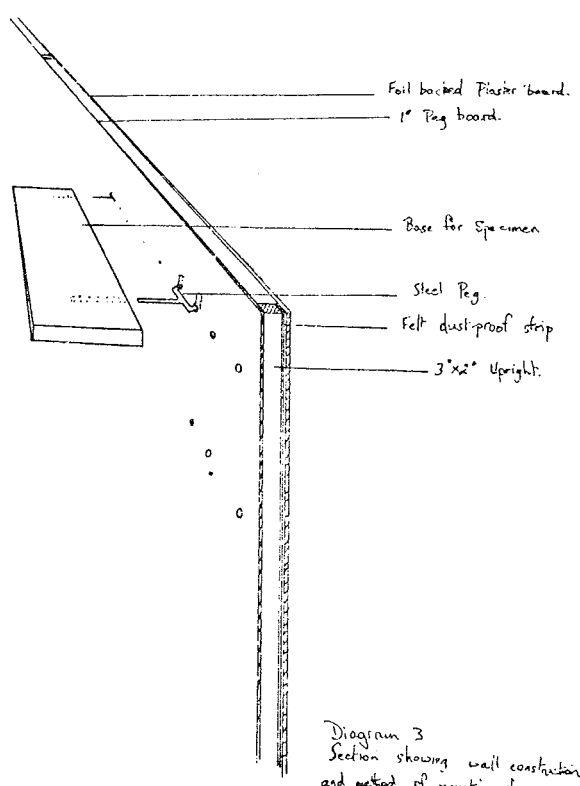
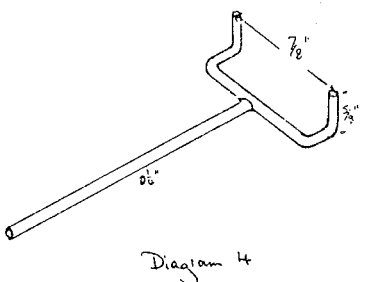
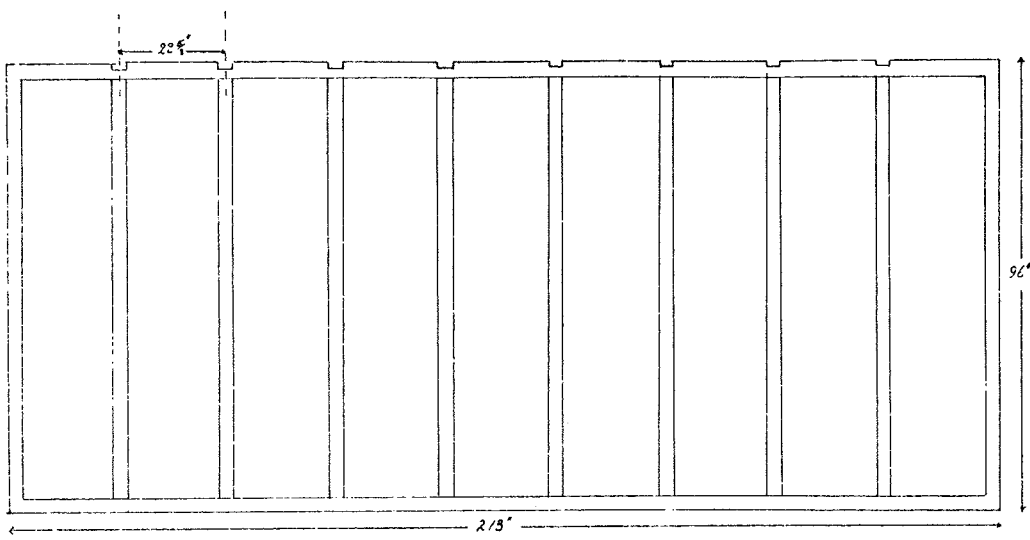
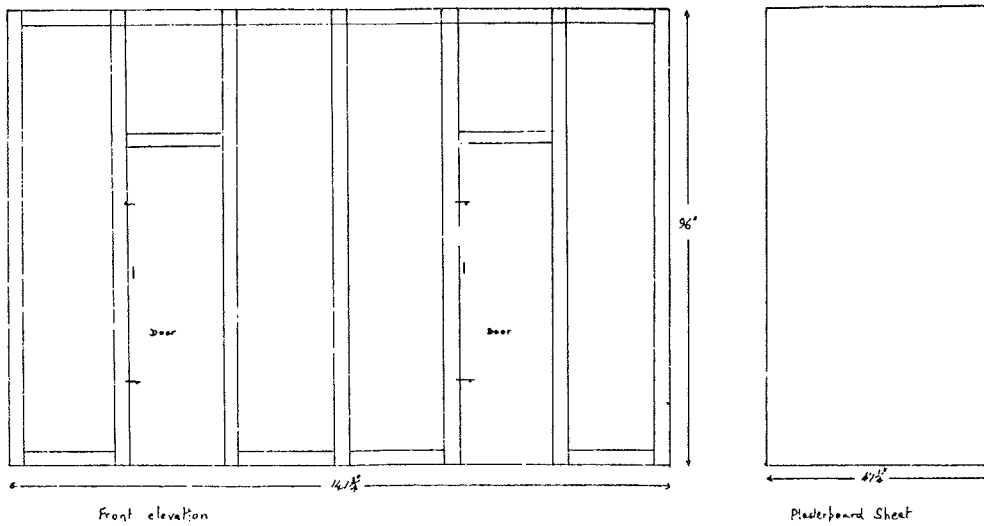
While these bases can be painted a standard colour and the specimens displayed on them, in Edmonds' cases for example, in practice we have found that the

specimens are often taken off and put in a more natural setting. Wherever possible a specimen on a twig, 'rock', or other setting is fastened onto the storage base by a couple of screws and can easily be unscrewed when put into a display. At least one straight edge is required on the storage base so it can be pushed right up against the pegboard, and four straight edges make packing for travel easiest. Holes are drilled in one long edge of the base to take the supporting pegs (Diagram 3).

The specimens are put in their storage position in the unit (we use roughly the BTO checklist order for birds) by hooking two pegs, made specially by a local firm for £95 per 2,000 (Diagram 4) in appropriate positions in the pegboard and sliding the specimen base, previously drilled with holes of the appropriate size, onto the shanks of pegs. A third, central peg is used for larger, heavier specimens (e.g. Buzzard), but ducks, owls, etc. have been held firmly by two pegs only. As a specimen can be moved in 1" units in any direction it is possible to pack a large number of variable-sized specimens easily into a relatively small space. At present there are 170 in one unit (Mammals, Divers to Pheasants) and 375 in the second (Rails to Crows). Space remains for more of the old material and any new mounts not required for immediate display. The first unit has now been operating for over eighteen months with no problems.

Margaret M. Hartley
J. Rogers





ON THE DISTRIBUTION AND STATUS OF THE SOUTH YORKSHIRE QUERY

Whether regarded as an irritating distraction, a way of giving rate payers value for money, or a means of keeping in touch with the outside world, dealing with enquiries provides a facility which people have come to expect of their local museum.

In recent years an increase in enquiries or perhaps an increase in staff dealing with enquiries has become particularly noticeable at Doncaster Museum. On occasions when several people have been called simultaneously to the enquiry desk to deal with an assortment of queries, matters have got out of hand, occasionally resulting in a rude defrocking of the museum's cloak of dignity and poise.

With three or four 'experts' talking at once, enquirers experience a certain measure of confusion. Sensing a bit of 'action', boredom-crazed attendants home in to add their comments (usually highly colourful, though irrelevant anecdotes) to the expert prognostications. Meanwhile counter staff continue to sell model dinosaurs, answer telephone calls and direct anxious visitors to the lavatories. The mounting chaos attracts museum visitors like children to a playground brawl as first one expert then another is forced to turn on the volume to make their respective clients hear. First roman coins are in the lead, then jurassic ammonites, finally both are drowned by a multi-decibel identification of a cabriole leg! The scene disintegrates into a lunatic, though highly academic shouting match, the assembled public watching as spectators watch a tightly fought match at Wimbledon. Meanwhile, during the pandemonium the specimen brought as the natural history enquiry has either escaped or been trodden on - more chaos!

Fortunately, through improved counter facilities, these spectacular 'happenings' - worthy of Arts Council support - no longer take place.

With natural history enquiries here at Doncaster seemingly developing into a growth industry it was decided that during 1978 the frequency and nature of queries would be recorded and where possible the distribution and type of enquiries monitored. Since 1st January an enquiry log book has been kept (if on a rather casual basis), the following being a preliminary review of natural history enquiries up to 31st August - hastily compiled in order to placate the B. C. G. newsletter editor who is evidently getting desperate for material.

Probably by comparison with the enquiry services of many local museums the 335 enquiries logged during the eight months so far monitored would seem like chicken feed. This figure, however, conceals a considerable amount of work. The scope of a single enquiry may range from, say, the identification of a single insect, to producing a report on a collection of several thousand insects or from compiling a site plant list to preparing a comprehensive ecological review for a local structure plan - the latter, apart from anything else, taking many evenings and weekends of field work.

Obviously a rather longer monitoring period is required, certainly not less than 12 months, for an analysis of data to produce meaningful results. However the exercise has been an eye opener in many respects, not least in demonstrating the scale and calibre of a service we had traditionally tended to underestimate.

ENQUIRY FREQUENCY

Peak query periods were noticeable at main holiday times - around New Year, Spring and Summer bank holidays. No doubt this is when people are free to use the museum services - in the past school closures caused by local government elections, power cuts and staff disputes have had the same effect. As anticipated the volume of single species identifications rose during the year as the months fostered and nurtured the plagues of pestilential insects and crops of weeds which form the staple enquiry desk fodder. Monthly frequency of enquiries was as follows January 44 (13.1%), February 16 (4.8%), March 27 (8.0%), April 41 (12.2%), May 42 (12.6%), June 37 (11%). July 53 (15.9%) and August 75 (22.4%). Unexpectedly January started with a bang, though admittedly the novelty of the scheme induced a hurried processing of an enquiry backlog. Also during the festive period people, desperate to escape from close contact with pogostick-bouncing and toy trumpet blowing kiddies and from the residues of endless coronary-inducing meals, brought almost anything for identification as an excuse to get out of the house. Interestingly, a major contribution to this early flurry of activity was enquiries from official bodies (see table 2), no doubt making a brisk start to 1978 under the influence of new year resolutions.

It will be interesting to follow which way enquiry frequency trends move during the latter part of the year and see if the pattern of enquiry subjects changes - stay tuned folks for a further thrilling instalment.

SUBJECT OF ENQUIRY

It was something of a revelation to see, for instance, by how much entomological enquiries outnumbered other categories (see table 1), that mammal enquiries represented the second most important category and that the minority sport of arachnology featured so prominently. Admittedly Doncaster Museum does have a strong (and colourful!) entomological tradition, and to come clean the findings in table 1 could merely reflect the known interests and expertise of staff members(?), the country recorders for diptera, mammals and arachnids all working within the department.

The demand for site data is perhaps a sign of the times, with the nature Conservancy Council and local authorities making greater use of data bank facilities, and with local school children and college students requesting help with site studies. Interestingly a burst of enquiries of the latter kind was noticeable just prior to exam time, when panic stricken students, their studies long overdue, had their theses all but drafted for them.

In glancing through the log book certain seasonal trends become apparent. The phenomenon of the urban bat - usually pipistrelles, which over the past ten years or so have hit on the idea of roosting behind the weather boarding of modern semis and bungalows - is now one of the most frequent mammal enquiries. The timing of enquiries/complaints exactly corresponds with the bats breeding season. Fertilized females, mated the previous autumn, gathering in 'nursery' colonies during mid May bring forth the first wave of human reaction - very useful in plotting bat distribution! A second wave of irate phone calls during the first week of June heralds the birth of a new crop of 'pips', increasing quantities of faeces produced by growing populations betraying a further batch of urban breeding colonies! A final and usually more emotional barrage of enquiries signals that the fleshy yearling batlets are fledging - often not too successfully - with some, unable to emulate the air-ace aerobatics of their elders, ineptly floundering through bathroom and bedroom windows throughout Doncaster's 'trendy young exec' belt.

Significantly the telephone pad of the local R. S. P. C. A. inspector (a rich and largely unquarried deposit of biological data) also monitors the May-August batting season.

The serpentine caterpillars of the large elephant hawk moth, also other beasts like Aeshna dragonflies and giant wood wasps, with their large size and spectacular appearance impress themselves on the attentions of these otherwise oblivious of the 'wild world', featured prominently in the August enquiries.

The category of enquiries entitled 'miscellaneous' cloaks matters ranging from requests to give talks to queries about local societies and finding altitude data for barometer settings - and there's not much in the way of altitude around Doncaster. Requests by the B. C. G. scandal rag editor for more copy did not count as legitimate enquiries, neither did the tea-break phone calls from local factory workers enquiring, in the interests of settling bets, about the subtleties of the sexual behaviour of anything from slugs to elephants.

ENQUIRERS

Just over half of the enquirers came from the general public, an unexpectedly low total averaging just over 21 per month. From the odd occasions when a note was made of the address of the enquirer, it became possible to plot the catchment area of museum users (see figs 1 and 2). Although the vast majority were from the Doncaster Metropolitan District the scatter of more distant enquirers was, inexplicably, to the north, though some of these were enquirers referred to us by other Yorkshire museums or data banks.

The small scatter of South Yorkshire enquirers from outside the Doncaster Metropolitan Borough, no doubt, a tribute to the efficiency of Rotherham

and Sheffield Museums, though the series of enquiries from the Barnsley area betrays the lack of natural history museum representation in that exotic part of the world.

Table 2 generally requires little further explanation. The number of enquirers from local authority departments seemed rather high (12.8% of total enquirers), though predictably the department which made most use of the museum was Environmental Health, their inspectors bringing for identification a fascinating succession of cockroaches from bread loaves, caterpillars from tinned tomatoes and spiders from a local knicker elastic factory.

Queries from other museums (26 from 9 museums in Britain and 4 from 3 foreign museums) formed a surprisingly high proportion (9%) of the total enquirers though 13 visits (probably a low estimate) by raiding parties from Rotherham Museum's Job Creation-backed data acquisition campaign (see B. C. G. Newsletter 9) artificially boosted this figure. An extract from the field note book of a survivor from one such sortie reads 'In they burst, the words 'Cutthroat Jake Ely Rules O. K.' embroidered across their Job Creation issue donkey jackets. We just watched, bound and gagged by the ethics of inter museum co-operation, as they pillaged the data bankthey go for the molluscs first you know!!!'

Colin Howes - said to be from Doncaster Museum

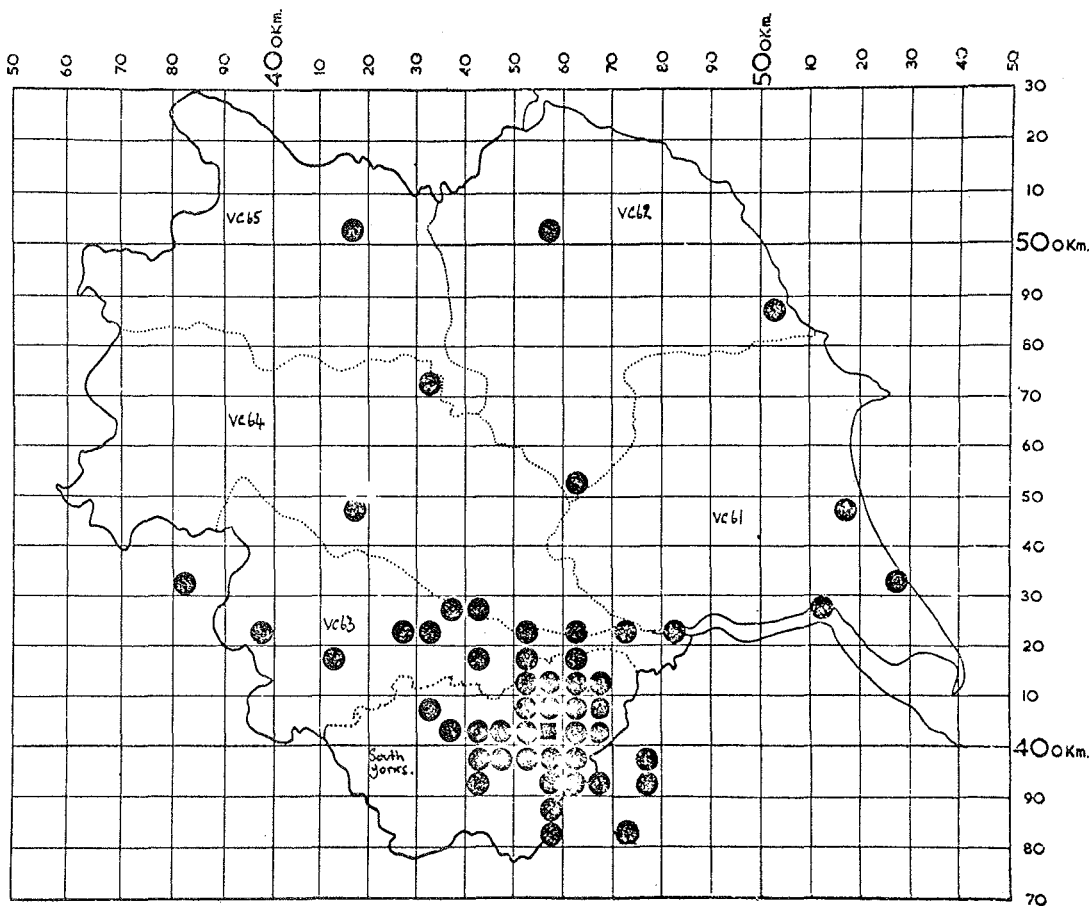


Fig. 1. The distribution of general public enquiries, Jan-Aug 1978
 ■ = Doncaster Museum

TABLE 1

Subject of Enquiry (January-August 1978)

Subject	Number	%
Entomology	101	30.1
Mammalogy	70	20.9
Ornithology	38	11.3
Habitats and sites	32	9.5
Botany	19	5.7
Arachnology	16	4.8
Conchology	14	4.2
Herpetology	6	1.8
Ichthyology	5	1.5
Marine Biology	2	.6
Fresh Water Biology	2	.6
Miscellaneous	<u>30</u>	<u>9.0</u>
	335	100.0

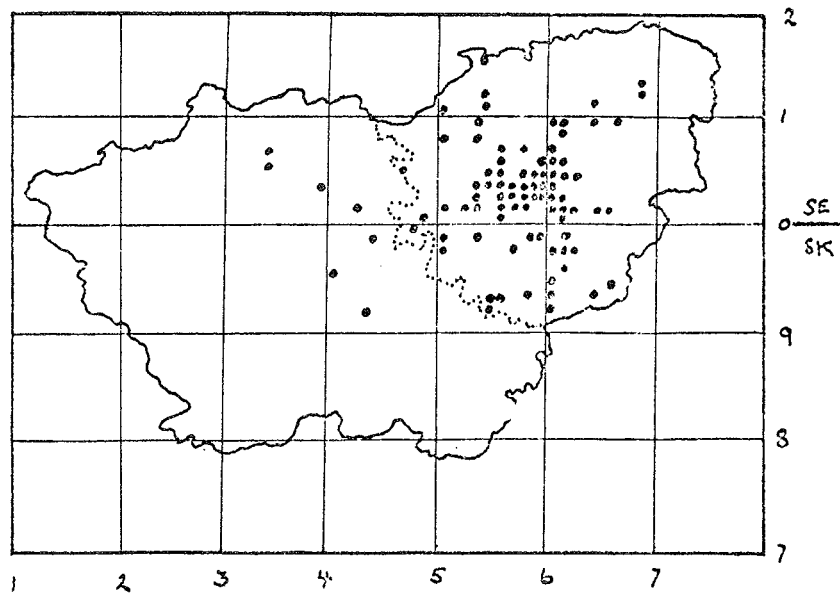


Fig. 2. Distribution of Enquirers (general public) within South Yorkshire County. Jan-Aug 1978. Right hand area = Doncaster Metropolitan Borough.

TABLE 2

Category of Enquirer

		Number	%
GENERAL PUBLIC		173	51.6
LOCAL AUTHORITY:-			
(Doncaster Metropolitan Borough Council))		
Environmental Health	17)		
Amenities and leisure	6)	30	
Planning	6)		
Education	1)	43	12.8
(South Yorkshire County Council))		
Environment	8)		
Recreation	3)	11	
(Humberside County Council))		
Planning	2)	2	
LOCAL SCHOOLS AND COLLEGES		30	9.0
UNIVERSITIES		4	1.2
OFFICIAL BODIES:-			
Nature Conservancy Council	7)		
Dept. of Environment	3)		
Inst. of Terrestrial Ecology	3)		
Ministry of Agriculture	2)		
Forestry Commission	2)		
Yorkshire Water Authority	2)	23	6.8
National Coal Board	1)		
British Rail	1)		
Central Office of Information	1)		
New Zealand Dept. of Scientific Research	1)		
VOLUNTARY BODIES:-			
R. S. P. C. A.	9)		
R. S. P. B.	4)	15	4.5
Northern Horticultural Soc.	1)		
Yorkshire Naturalists Trust	1)		
MUSEUMS:-			
Great Britain	26)	30	9.0
Foreign	4)		
NEWS MEDIA:-			
Press	12)		
Local Radio	3)		
B. B. C. Radio 4	1)	17	5.1
B. B. C. T. V.	1)		
		335	100.0

BIOLOGISTS ON THE BOTTLE

Colin Howes outlined, in a recent article (BCG Newsletter No. 9) some of the offbeat activities of 'punk' naturalists in Yorkshire museums to further research on the area's mammals. Whilst the extraction of delicacies from animal excrements and bird pellets has certain stomach-turning qualities, the investigation of discarded bottles and cans containing a variety of putrifying bodies must reign supreme in this class!

Discarded bottles and ring-pull cans which abound in the British countryside, often in remarkable localities, may act as lethal traps to small mammals. Having entered through the narrow neck of a bottle, unfortunate victims find difficulty in retracing their steps; and if the bottle has landed in a certain position, escape may be impossible. Death occurs some time later by drowning in accumulated rain-water, drink remains or decaying animal matter; or perhaps by starvation, hypothermia or shock. Skeletal remains can be extracted from the 'gravy' with forceps, and identified in the field. Basic requirements are a lens, glass tubes and a thick skin to overcome the ribald comments and stares from astonished onlookers.

'How' you may ask 'does this concern the museum curator?' Well! If you operate a Regional Biological Records Centre and your card index on mammals requires a boost, then this activity is for you. Morris and Harper (1965) showed that the contents of bottles can be an important source of mammal records. During a nationwide search in 1963/4 they found 510 specimens in 225 bottles, representing 11 different species. A situation existed in Sheffield at the start of the decade, when information on 'small' mammals, (mice, voles and shrews) was particularly sparse. However, a deliberate search for discarded bottles occupied many of my weekends during 1974-78, and proved very rewarding. 1033 individual specimens were found in 362 bottles and cans in the Sheffield area. (Whiteley 1978) Of these, shrews comprised 65% of the total and were found almost to the exclusion of other species in ring-pull cans, which have narrow, almost rodent-excluding entrances. (see Fig 1. reproduced from the Sorby Record).

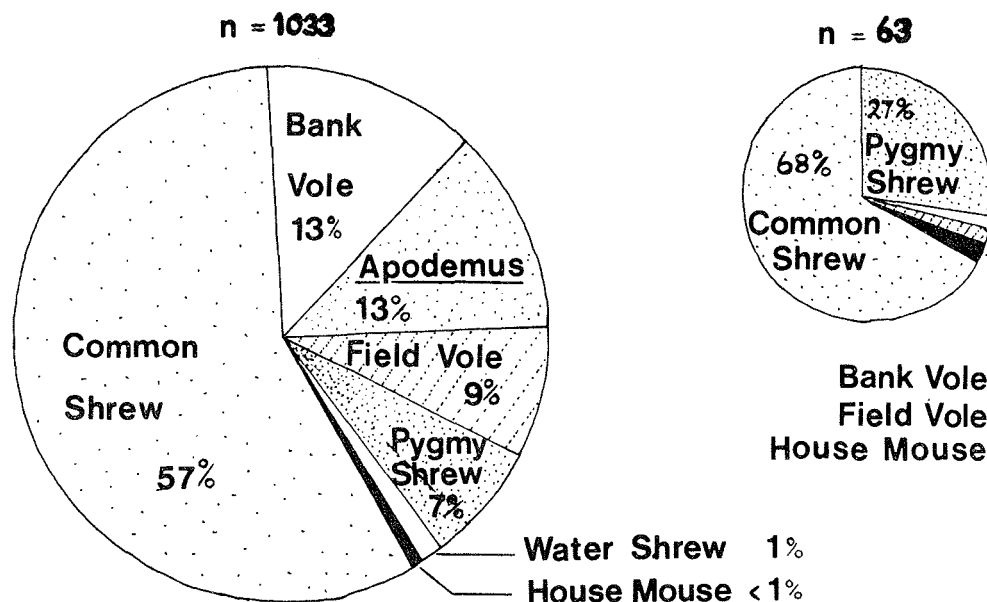


Fig.1 Species Frequencies (a) in all containers
(b) in ring-pull cans

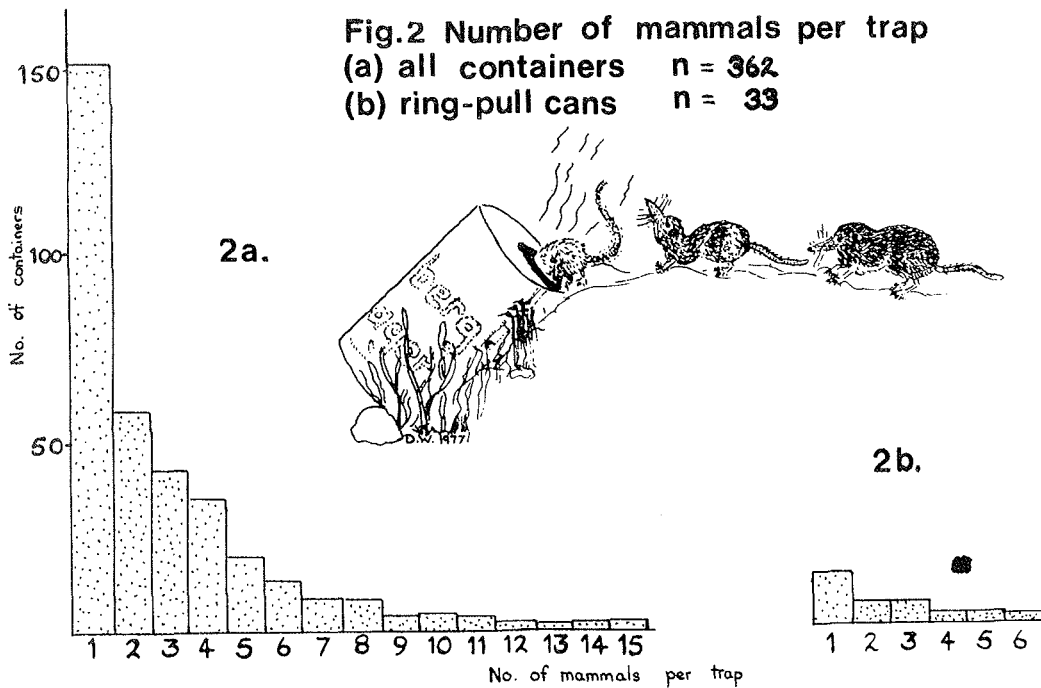


Fig 2. shows the number of mammals caught per trap. The maximum of 15 specimens came from a single pint milk bottle, although a quart bottle in Essex has been reported as holding no less than 28 individual small mammals. Ring-pull cans, owing to their smaller size tend to catch mammals in smaller numbers. Although an interesting study in itself, results from these analyses can be applied to mapping schemes, altitude distribution, habitat preference studies and site studies. Some sites, particularly roadside lay-bys, railway embankments and picnic sites, seem to have an endless supply of discarded bottles and produce high yields year after year.

Of course, this information can also be collected using traditional recording techniques. Longworth live-traps are useful, but have the disadvantage of requiring at least two visits to each locality to set and recover them. Owl pellets can provide masses of data from single roosts, but since owls may hunt over a wide variety of habitats and altitudes, it is impossible to say exactly where any particular prey item originated. On the other hand, each specimen found in a bottle can be given accurate grid reference, habitat and altitude details.

Examination of invertebrate contents may also prove interesting. Jeremy Lee (1977) found this technique useful for examining large numbers of nocturnal beetles, or species usually found in small numbers by traditional collection methods. Once again, useful data was collected for recording purposes, in this case the Sheffield Beetle Recording Scheme, and the national Carabidae mapping scheme. With a little practice, it is even possible to identify some millipedes, centipedes, woodlice, and molluscs from the same material.

Even the remains themselves can be put to good use. A comprehensive collection of local small mammals can be swiftly and readily accumulated. Skulls found in bottles are often complete, whereas in owl pellets they tend to be disfigured by the loss of the cranium and some teeth. They are easy to obtain, easy on the conscience (if like myself, you dislike killing mammals) and require little preparation. Such a reference collection serves as a useful aid to identifying bones from owl pellets, fox scats,

archaeological digs etc.etc. and a 'reserve' collection is a useful teaching tool, ever-popular with young naturalists. Some of the remains served as voucher specimens for 'rarer' members of the Sheffield fauna (Water Shrews, once considered to be uncommon around Sheffield are now known to be much more widespread using results from the 'bottling' project).

Finally, the whole subject lends itself well to a bizarre and entertaining, if not entirely conventional gallery display. Under the heading "Bottle Killers", skulls, whole mammals and invertebrates displayed in a realistic setting has proved to be popular with museum visitors, particularly school-children.

References

- Lee J. (1977) Some Beetle Species found in Discarded Bottles
Sorby Record No. 15 p.30-36
- Morris, P. A. and Harper, J. F. (1965) The occurrence of small mammals in discarded bottles. Proc. Zool. Soc. Lond. 145 p.148-153
- Whiteley D. (1978) Small Mammals in Discarded Litter in the Sheffield Area. Sorby Record No. 16 p.44-49.

Derek Whiteley
Sheffield Museums

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PLANTS IN A GALLERY

INTRODUCTION

Sheffield City Museums opened a newly-designed gallery in October 1976, devoted to the geological evolution of the planet Earth and of life. We had decided at an early stage to incorporate growing plants in the gallery, both for decorative effect and for comparison with fossil material. Our consultant designer for the project, Roger Simpson of Tideswell, accommodated this basic idea, and his design provided us with a plant trough 4.35 x 1.35 x 0.40 metres deep. It was sited immediately behind a low desk-case to house fossil plants, on a platform giving visibility from most parts of the gallery. The trough was lined with impervious, welded PVC sheet, particularly necessary as a small office is immediately below.

We had also decided that the plants would be un-enclosed for visual impact, which meant that they would have to tolerate room temperatures and low relative humidity. These factors have governed our choice of plants, as did our requirement for mainly evergreen species to give continuous display, and to minimize fallen leaves. Daylight reaches the plants through louvres from skylights situated above.

CULTIVATION

Most plants are grown in John Innes potting compost with the addition of sand or peat to suit particular requirements. Larger plants are potted in individual plastic pots, and smaller plants are grouped in plastic troughs. Both are plunged into Vermiculite, a moisture retentive material to absorb surplus water, and to generate a slightly moister micro-climate around the plants.

Watering and foliage spraying is usually done twice weekly, otherwise maintenance is limited to the removal of dying leaves, and to the occasional replacement of a plant. Insect pests have been few, although some ferns and cycads have been attacked by scale insects, no doubt encouraged by the dry atmosphere. In another, isolated instance a Royal Fern was rapidly devoured by moth larvae before the culprits, Bright-line Brown-eye, were discovered.

Vandalism has been a relatively slight but niggling problem bearing in mind the easy accessibility of the plants. On several occasions Vermiculite has been thrown generously around the gallery, and has proved awkward to remove from a carpeted floor. A low Perspex barrier is now being constructed for emplacement between public and plants to inhibit repetition. Recently however vandalism has taken a more subtle turn, marked by the sudden appearance of bean shoots in our plant pots. We are now on the look-out for a green-fingered Chinaman.

THE PLANTS

We have grown a wide variety of plants, to represent as far as possible the principal living groups, and to compare with particular fossil specimens such as cycads and Gingko. Below I have listed the majority of the kinds we have grown, with some indication of their success or failure in the gallery environment. Together they demonstrate the wide variety of plant groups, which with minimal maintenance can be grown in the generally unfavourable climatic conditions of the average museum gallery.

FUNGI

Penicillium and other moulds grown on stale bread are very effective for a few weeks before requiring replacement. Place on pot of moist peat.

LICHENS

Xanthoria on rock substrate appears to last indefinitely.

PSILOPHYTE

Psilotum nodum grows well.

FERNS

Generally not very successful - several failures include Asplenium nidus-avis, Didymochleana luneata, Lomaria gibba and Osmunda regalis. Relative successes include the tree fern Dicksonia antarctica, Microlepia speluncae, Pellaea rotundifolia, Platynerium sp. and Pteris umbrosa.

HORSETAILS

Several British horsetails have proved quite intractable, while the exotic Equisetum ramosissimum lasted only a month or two, but with more careful cultivation might do better. The dwarf Equisetum scirpiodes survives and grows slowly, however it is not a showy plant.

LYCOPODS

Selaginella kraussiana grows well in moist compost. S. cavlescens and helvetica have been less successful. After much searching we have recently acquired a Lycopodium (L. phyllanthum), which grows nicely in the humid atmosphere of a polythene bag, but which we are propagating before risking in the open gallery.

CYCADS

Cycas revoluta looks well, but has made no new growth for two years. Alternating plants between gallery and greenhouse might overcome this. Encephalartos villosus produces new fronds but has been prone to scale insects.

Ephedra

Surprisingly the xerphytic Ephedra gerardiana has so far failed, possibly because the plants were not well-established in pots.

Ginkgo

Ginkgo grows quite well, although there is a marked tendency for the dormant Winter buds to set hard and not open. Frequent spraying to some extent counteracts this.

CONIFERS

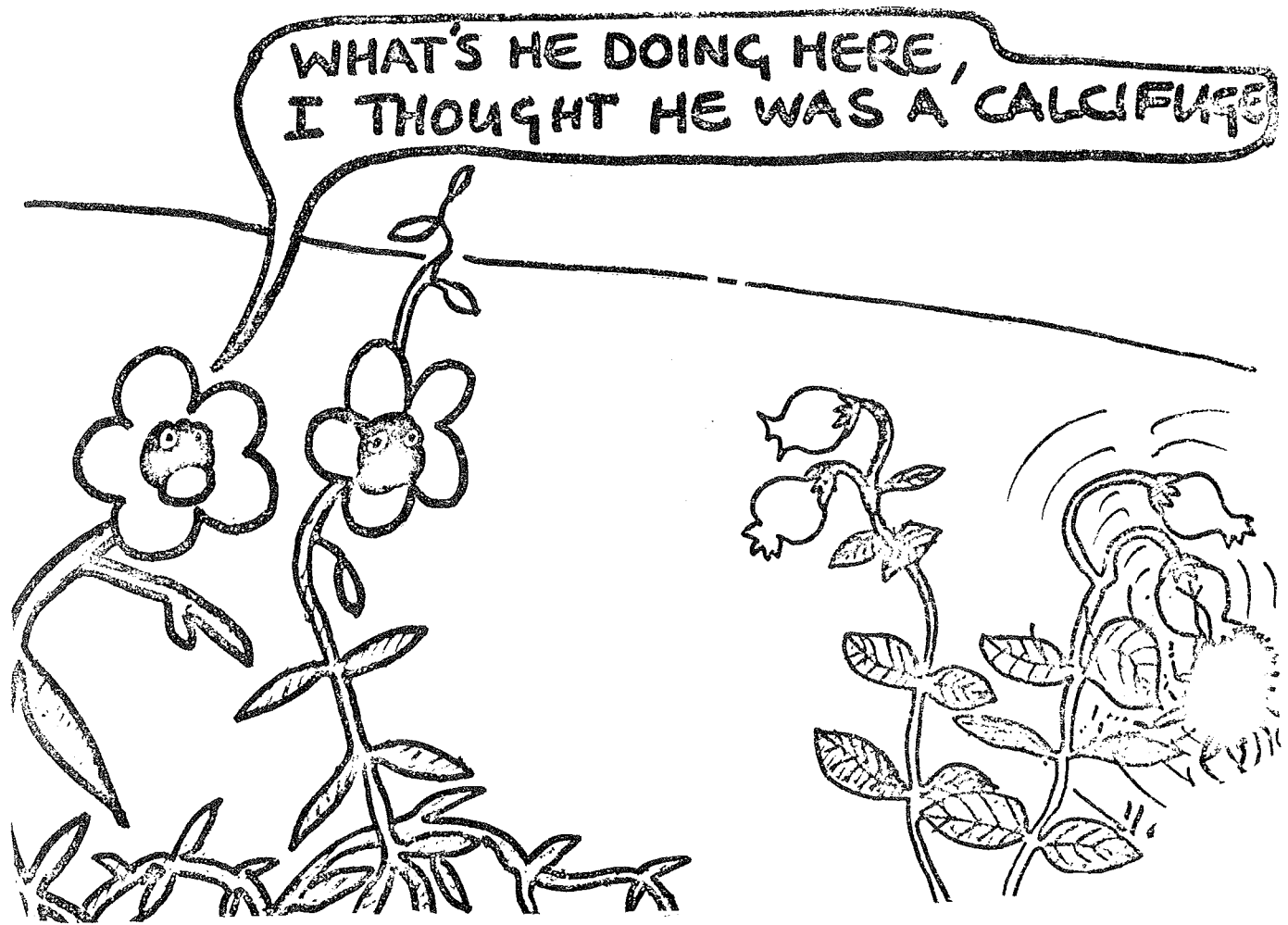
Aravcaria excelsa succeeds, as befits a popular house-plant. The other conifers tried, Athrotaxis cupressoides and Cryptomeria japonica have twice failed.

Spermatophytes

Various palms form the structural backbone of the plant display, although large specimens for immediate effect were rather difficult to find. Howea

belmoreana, Trachycarpus fortunei, Seaforthia elegans and Cocos weddelliana all make good growth.

Tim Riley
Sheffield City Museums



OAK HILL PARK MUSEUM, ACCRINGTON, 1900-1951

In 1855-6 a shop in Abbey Street, Accrington, Lancs., was converted into a museum under the care of Ormerod and William Chadwick, Henry Barben, Richard Fish and William Booth. The collections, mainly of mounted birds and a few antiquities, were soon transferred to a wooden building in what later became Milnshaw Park. Here the specimens apparently spoiled through lack of care. However, this inauspicious venture does not seem to have dampened the townspeople's enthusiasm and in 1900 Oak Hill Mansion was opened as a museum.

The house had been built by Thomas Hargreaves in 1815 on the site of an earlier structure and subsequently enlarged. During the latter part of the nineteenth century it remained vacant for some years and, after a local referendum to assess public support, Accrington Corporation obtained sanction to borrow the purchase money (£12,048) in 1892.

Right from the start the collections were mainly of natural history interest (though a large local history collection grew up). The Accrington Naturalists Society gave its collection, but the major donations came from Col. J. W. Rimington of Upper Norwood, Surrey (b.1832 d.1909) via his cousin, Mrs. Grace Robertson-Aikman, the grand-daughter of Thomas Hargreaves. Though she too lived in Upper Norwood, Mrs. Aikman maintained a very philanthropic attitude to her home town and paid for the construction of insect cases, a cabinet for the herbarium and other items out of her own pocket. After Col. Rimington's death she purchased his large insect collection, donated it to the museum and paid for a Mr. Rippon, an entomologist, to arrange the collection. The remainder of the collections were arranged by Dr. B. W. Gerland and his son, Dr. Conrad Gerland.

A rough estimate of the museum's natural history holdings, not including more than 2,000 fossils and 10,000 minerals, would be approximately 100,000 specimens.

The museum always had a full-time curator, these were:- Mr. Robert Wigglesworth 1900-1911; Wm. Eastwood 1911-1922; and Mr. A. Hanson 1922-47, and was administered by the Parks Committee.

During the 1930's the style and content of the committee minutes indicate a decline in interest in the museum and part of the downstairs area was converted for use as a cafe.

In 1942 both the museum and the Haworth Art Gallery, Accrington, were closed down for the duration and their respective curators given duties in other departments. The curator of the Art Gallery was fairly quickly restored to part-time curatorial duties after some damage to the collections had occurred. However, Mr. Hanson remained with the

Weights and Measures Department and the museum stayed closed. In May 1946 the post of Museum curator was struck off the establishment and in December 1947, after Mr. Hanson's retirement, a sub-committee recommended the permanent closure of the museum and the disposal of its exhibits. Despite some objections, this was later ratified by full Council. However, a letter from the Ministry of Education was received which stated that a museum "organised on modern lines" would undoubtedly be an asset to the Borough, and a special sub-committee was set up to look into the possibility of reopening the museum. This sub-committee corresponded with both Carnegie U.K. Trust and the Museums Association who arranged for Dr. D. A. Allen of the Royal Scottish Museum to visit the museum and prepare a report. This report which was considered by the sub-committee in July 1950 sheds no light on the importance of the collections and basically recommended the setting up of a properly staffed and financed museum service elsewhere in the Borough due to the poor state of repair of Oak Hill Mansion. The reorganisation scheme was immediately dropped and the collections were given away, sold or destroyed during 1951.

Major donors of natural history specimens:-

- Assheton - Two cabinets containing 238 nests, 1343 eggs. Given by Mrs. Assheton of Canterbury, formerly of Knowlmere Manor, Slaidburn, 12.10.1929.
- Bloor - Yorkshire lepidoptera (370 spms.). Given by Mrs. Bloor, 11.4.1929. Mr. Bloor was a "well known entomologist, breeder and collector".
- Bowles, Wm. - Unknown number of "ferns and plants", 5.7.1931.
- Rimington, Col. J. W. Herbarium. Probably the greater part of 15,000 "commercial and medicinal plants, ferns, seaweeds, mosses and lichens". (There are Rimington Herbarium specimens at Manchester Museum, but these are not from the Accrington collection).
Lepidoptera and coleoptera. Some donated during 1900-1908, the bulk (valued at £2,000) given by Mrs. Robertson-Aikman after his death in 1909. More than 50,000 specimens including 20,000 British among which were "many rare and extinct specimens".
Mollusca. Probably the bulk of 25,000 shells mentioned in the 1933 "Guide". Given by Mrs. Robertson-Aikman, 1911, "a valuable collection".
Minerals. A large collection (details to G. C. G.).
- Wigglesworth, R. - Added generally to the collections, but especially mollusca. Gave 6,000 shells, possibly the 6,000 fresh water shells mentioned in the 1933 "Guide".

There were also some 500 mounted birds from various donors and a smaller number of mammals and representatives of other animal groups.

In 1951 the exhibits were either offered back to their donors where known, destroyed, given to schools or finally sold with the display cases which contained them.

The fossils were dumped on a local tip and the herbarium was destroyed along with the majority of the mammals and mounted birds. The mineral collection was obtained for Reading University where it remains virtually untouched to date (details to G. C. G.). As many of the schools which asked for specimens as still exist were contacted, but all except one deny all knowledge of any existing material.

Persons or institutions which definitely obtained Accrington museum material are listed below:-

- | | |
|-------------------------------------|--|
| Bryce, Dr. D. | N. E. London Polytechnic. Purchased one cabinet and several storeboxes which contained microlepidoptera from Korea and S. E. Asia collected by Meek and Leach. These were passed on to the B.M. (N.H.) and were probably part of the Rimington collection. |
| Cook, J. M. | Burnley, Lancs. Mr. Cook's father obtained a 14-drawer cabinet of birds eggs and two 32-drawer insect cabinets. The eggs and contents of one insect cabinet were destroyed during an office break-in some years ago and Mr. Cook gave these cabinets to Towneley Hall Museum last year. The bottom drawer of the egg cabinet contains 100 tubes with mosses. Mr. Cook retained the remaining cabinet which contains exotic butterflies - part of the Rimington collection. |
| Hosie, G. Glasgow. | Purchased 2 insect cabinets of 16 and 20-drawers containing exotic lepidoptera. Retained one cabinet for own collection, the other sold empty (to Watkins & Doncaster ?). This was probably Rimington material. |
| Lee Royd Nursery School, Accrington | Obtained a few shells (no cabinets), a handful without labels or data remain. |
| Malham Tarn Field Centre. | 54-drawer cabinet originally purchased by Mr. Jopson of Nelson, Lancs., who later donated it to the Centre where it contains local insects. The original contents (foreign butterflies) are now at the Manchester Museum. |

This was probably Rimington material.

- Manchester Museum (per Mr. A. Brindle) Two 40-drawer cabinets, one held foreign Nymphalidae and Satyridae (now holds British butterflies), the other held foreign moths (now holds foreign hemiptera). This was almost certainly Rimington material.
- Reading University. Asked for and obtained bulk of mineral collection. Also some storeboxes of foreign butterflies (Rimington?) which are now at Manchester Museum, and some of the birds eggs which were used by Prof. Tyler in experiments into the porosity of egg shells.
- Thornton, J. Clayton-le-Moors, Lancs. Purchased one 40-drawer cabinet of British Lepidoptera which he sold "in London" some six years ago. Mr. Thornton retains a few specimens.
- Towneley Hall Museum, Burnley, Lancs. Purchased 34 display cases of exotic insects, mainly butterflies, in 1951. This is definitely Rimington material. Collectors' names on labels include Pratt, Moore, Chary, Lang and Meek, and dates cover the 1880's/90's. Also 618 British land and freshwater gastropods, some of which were part of Robt. Wigglesworth's collection donated recently by Mr. C. Gidman of Accrington.

I would like to thank the persons too numerous to list individually who have helped me to piece together the story of Oak Hill Park Museum and, in particular, Mr. B. Ashton (Accrington Library), Mr. A. Brindle (Manchester Museum) and Mr. C. Gidman (Accrington Naturalists Society), for their special help.

Photocopies of all relevant documents and the voluminous correspondence amassed during the search for surviving material are retained at Towneley Hall Art Gallery & Museums, Burnley.

Information on the collectors involved has been lodged in the files of the Northwest Collection Research Unit at Bolton and Manchester museums.

Sources:

- Accrington Corporation Minutes 1900-1952.
Jubilee Souvenir 1928.
Guide to Oak Hill Park Museum 1933.
Various inventories compiled before the closure.
List of applications for material from schools.
Typed accessions list 1909-1933 (very incomplete).
- Dr. D. A. Allen's Report on the Museum 1949. (Carnegie U.K. Trust copy now in Scottish Record Office)

Lancashire Naturalist's of note -

Mr. Robert Wigglesworth in Lancs Naturalist 1(3); 33-35 (1907)

M. A. Taylor,
Perth Museum and Art Gallery.

BOLTON'S THIRD SOURCE

Peter Skidmore's article "Tapping the Third Source" in BCG Newsletter No. 9 contains the excellent suggestion that we should analyse the data on specimens in our reference collections. This information on a geographical basis, may be of value to colleagues in other parts of the country who may be unaware that a fair proportion of material exists elsewhere of direct interest to their area. I resolved, therefore, to adopt a similar exercise and using the same parameters for a single "record" (which may be represented by considerably more than one specimen) sampled from the following areas:

1. The Locality Index. This was recently started as a parallel index when the IRGMA system was initiated into the accessioning procedure at Bolton. It contains all recent accessions, the whole of the mammal collection and part of a backlog from the molluscs. This provided 3,321 records.
2. Herbarium - the Cruciferae.
3. Oological collection - the families Sylvanidae and Turdidae.
4. Coleoptera - Carabidae (Cicindela - Loricera inclusive)
5. Hymenoptera - Formicidae.
6. Diptera - Tipulinae (Nephrotoma - Tipula)
7. Aves - genus Passer in the bird skin collections.

These provided a further 1818 records giving a total sample of 5139. What soon became obvious while sampling was that there is a considerable proportion of foreign material incorporated in the collections and indices.

It was decided to include these in the analysis which in gross terms gives the following breakdown.

English records	comprise about 65% of the total sample
Scottish	7%
Welsh	5.2%
Irish	1.6%
Island (Channel, Scilly, Man)	1.2%
European	9%
Other Foreign	11%

There is a preponderance of non-British records in the mollusc, bird egg and plant elements of the sample which is common to the whole of these collections. Surprisingly, 49 out of the 148 records from the ant collections were from South America. Undoubtedly, one learns of the potentials and shortfalls of the collections during this sort of project.

The percentage of British records given below is based on the total number of records, including foreign.

ENGLAND

Bolton Metropolitan District	13.6
Greater Manchester County (excl. Bolton)	3.4
Lancashire/Merseyside	8.85
Devon/Cornwall	6.00
Yorkshire	5.5
Cumbria	3.75
Derbyshire; Somerset/Gloucs.	3.00
Kent	2.9
Leics/Notts; Hants (inc. I.o. Wight); Essex	2.00
Cheshire; Surrey; Greater London area;	
Lincs; Sussex, Cambridge/Hunts;	1-1.99
Shrops/Staffs; Wilts; Herts; Norfolk;	
Suffolk; Worcs/Warwicks;	0.5-0.99
Oxford; Northumberland/Durham;	
Northants; Bucks/Berks;	0.01-0.49

SCOTLAND

Lowlands	1.8
Outer and Inner Hebrides	0.3
Perths/Fife	2.8

Inverness/Sutherland/Ross	1.3
Orkneys	0.2
Shetlands	0.5
WALES	
North	4.00
South	1.2
Scilly Isles	0.05
Channel Islands	1.1
Isle of Man	0.16

The number of specimens without data is considerable but they have nil record value. In the extensive coleoptera collection which contains a high proportion of historically interesting specimens as well as considerable primary type material, the number of specimens without data was 692. This is typical of naturalists' collections up to about 1870. Those specimens with data are doubly interesting therefore. For example:

Carabus convexus Fabr. Winstanley Park, Lancs. A. Matthews, Sept. 1836
This species is not in current checklists and Fowler gives this record as "doubtful" for inclusion as indigenous to Britain. It appears to be the only British taken specimen.

Carabus auratus Linn. Battle Field, Hastings, A. Matthews (no date); Deptford, E. C. Rye, May 1872; in a country lane near Derby, E. Chadfield, 1850.

Another species doubtfully indigenous to the British Isles, although these and other records occasionally indicate it may be or have been native.

Carabus cancellatus Ill. Doncaster, A. Matthews, no date; Sandgate, F. le B., April 1865.
Again the British status of this species is in doubt at the present time.

The high percentage of Devon/Cornwall records is the result of long-standing connections with correspondents in that area as well as collecting by staff on holiday! Other idiosyncrasies in the collection can be seen by reference to the previously published accounts of the contents of the collections in BCG Newsletters 3 and 4. For example the C. O. Groom (alias Prince of Mantua and Montserrat) herbarium, contains many Essex records, and the series of British Macrolepidoptera of George E. Hyde's is from the Doncaster area.

I think it took a little more than four hours to count and analyse the figures, one can never tell with all the interruptions. However, the

time taken is well worth the results because although you may think you know your collections, a fresh examination from a slightly different viewpoint is quite interesting and sometimes enlightening. Who would have thought that at Bolton there are 13 White-toothed Shrews from St. Mary, Scillies, 10 of which were killed by the same cat between 1963 and 1972!

E. Geoffrey Hancock,
Bolton Museum and Art Gallery.

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REVIEWS

The identification of remains in Owl Pellets by D. W. Yalden Occasional Publication of the Mammal Society

This little booklet deals admirably with the problems met by the biologist in identifying bones dissected from owl pellets, and includes a key to the identification of skulls, and notes on limb bones and other miscellaneous features often encountered. A must for ornithologists, mammalogists and museums educational staff. Price is 25p plus postage with reductions (10-15 copies 15p; over 50 copies 10p) for bulk orders. Available from Mrs. Norma Chapman, Publications Sales Agent, Larkmead, Barton Mills, Bury St. Edmunds, Suffolk IP28 6AA. The first title in the series - 'Otter Spraint analysis' was published last year and is available from the same address at 60p plus postage.

Manchester University Museum Computer-aided Cataloguing Project. A Report by Charles Pettitt.

In November 1977 Manchester Museum began a project to document the Spence shell collection and produce a catalogue. This was carried out using the powerful computing facilities available to the Museum at the University of Manchester Regional Computing Centre, and Charles Pettitt's report outlines the methods and procedures involved. The report is accompanied by a number of examples of print out of various indexes produced using this technique. Copies of the report are available free of charge from Charles Pettitt at Manchester Museum (n.b. Essential reading for all members intending to attend the one day seminar in Manchester!)

A COLLECTION RESCUE OPERATION IN THE NORTH WEST

The first stage, necessary before 'rescue', is the gathering and processing of information concerning the collections. This information is essential knowledge in order to act and prevent the destruction, dispersion or further deterioration of natural history museum material. It is obvious that as the survey progresses (along the lines given in the Museums Journal, 77(4); 188) a number of museums exist without either qualified zoological, botanical or geological curators, or no curatorial staff whatsoever, which possess collections requiring some form of action to prevent them from disappearing altogether. Information on collections is obtained in several basic ways.

1. Locating museums and related institutions. This may seem rather obvious and facile but many museums closed decades ago or have been amalgamated. They are not all in public ownership. Other institutions to possess collections can be libraries, societies, schools, colleges and universities. These are more difficult to survey for reasons such as difficulty of access and the general lack of knowledge concerning the presence of such material within their organisation. Dispersion of collections, especially when it occurred outside living memory, causes problems and creates ramifications, a classic example of which is the Royal Institution in Liverpool.
2. By collectors' name. The initial approaches in this direction usually involve literature searches. Obituaries, bibliographies and local natural history society journals can be very productive regarding the contents and destinations of individual naturalists' collections.
3. Site visits. The follow up to the basic work is a visit to the institution last purported to be the curator of a named collection. This can often be frustrating and not only for the reason that the collections are no longer there (some custodians of such material are remarkably reticent about allowing anyone to look at it). Alternatively, such visits can be most productive in the most unlikely places and valuable collections can come to light which were previously totally unknown. This is the element of luck which accompanies much work of this kind. Sometimes, not only is the collection still in existence where it is supposed to be but it is also in excellent condition and there are manuscript catalogues present, previously unsuspected. This illustrates the concept that a total lack of curation can be better than misguided but well-meaning reorganisation or amalgamation which has caused the loss of identity of large numbers of one-time distinct and historically interesting collections.

On a site visit it is important to gain access to all the nooks and crannies for often the staff do not themselves know the value of the material and will simply dismiss further search as fruitless whereas this is not always the case.

4. Assessment. Having found a collection its 'value' has to be assessed.

This will often be the most involved part of the work and therefore time-consuming, but is obviously the most important. A collection has to be known and proved to be of value, as well as in some danger, before a rescue need be effected. Although the members of the Northwest Collection Research Unit include a cross-section of disciplinary interest, and have recently been joined by the geologists, outside help has to be solicited from other specialists. Involvement with biographical, historical, handwriting analysis, taxonomic and other related topics arises. The single most important reason for action being taken regarding a collection will be the presence of primary type material. This is usually defined as holotype, neotype, lectotype or syntypic series. Naturally, the presence of other type categories will have some importance. Otherwise, collections containing specimens with full data, determined or not, could find a home in any reference collection and older material may have an historical value which can be equally important.

It can be said that the NWCRU are already rescuing collections- from obscurity. The physical rescue, i. e. removal to a better place, of some collections is currently being considered and the best means of achieving this investigated.

E. G. Hancock
July 1978

(The commentary on the various 35mm slides which accompanied the various headings as examples is not included here).

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THE TYPE-CONCEPT: STEADY STATE OR BIG BANG?

Understanding of the term "type" has been confused by its use in two opposing, though related, concepts. Both are derived from the pre-Darwinian beliefs that each genus represented a separate act of creation within which one species more fully expressed the "essence" of that genus than the others grouped around it. This central "ideal" species was the type, but could be displaced if a more "typical" species was discovered. Likewise within a species the type was subject to successive replacement by specimens which more perfectly "typified" the species than did the original specimen.

From these early practices arose on the one hand (the "steady state") the nomenclatural concept of the type as an unchanging and unique reference point governing the application of the name of a taxon and objectively defining it, and on the other hand (the "big bang") an ever-expanding galaxy of "types" radiating out from the primary type, through the type-series, to topotypes, specimens named by the author of the species name, specimens subsequently compared with the primary type, voucher reference sets, and so on. This stemmed from a reluctance to base the taxonomic concept of a taxon on a single, and possibly atypical (in the statistical sense) unit.

To reconcile these two extremes the concept of nominal taxa was introduced for the concept denoted by the name and objectively defined by the unique type,

with which the remainder of the taxonomic concept denoted by the same name is subjectively associated. The type thus represents the static component of the dynamic state which is limited taxonomically only by the requirement that the static type component must be contained somewhere within its limits.

A comprehensive summary of the history of the type-concept and the categories now recognised has been written by Robert Nash and Helena Ross and republished in the BCG Newsletter No. 9.

David Heppell

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Unfortunately it has not been possible to obtain the text of the remaining lectures from the Edinburgh Conference in time for publication in this issue. It is hoped to reproduce these in the December Newsletter, but meanwhile below is the Report prepared by Geoff Stansfield and published in Museums Journal, September 1978, which some members may not have seen.

REPORT OF THE BIOLOGY CURATORS GROUP SPECIALIST SESSION

Over 40 members attended the Biology Curators Group specialist session on 4th July, more than half of whom had travelled to Edinburgh especially for the meeting. The morning visits to the herbarium of the Royal Botanic Garden and the collection stores of the Royal Scottish Museum provided a valuable opportunity for the exchange of information and demonstration of techniques for the practical management of botanical and zoological collections. Both institutions were complimented on the high standards achieved.

The afternoon session was devoted to four short papers followed by a general discussion. Phillip Ashmole of the University of Edinburgh considered the usefulness of museums for research. Geoff Hancock of Bolton Museum gave an illustrated account of the collection rescue operation in the North West, David Heppell of the Royal Scottish Museum discussed the 'Type concept' in zoology and E. C. Pelham-Clinton, also of the Royal Scottish Museum, considered the special problems of insect collections. In the main these papers were concerned with matters of interest only to biologists. They will be printed in a future issue of the BCG Newsletter. There are however a number of matters arising from the general discussion which are of interest to the general membership.

As a preamble it should be noted that the BCG now has a membership approaching 200 and that the Newsletter, now in its ninth issue has become an important medium for the publication of papers describing important historic collections and matters concerning the maintenance and use of collections. A great deal of the work of the Group has been centred on research into the history of collections in order to locate and identify important historical material. In addition to the survey of collections carried out to provide evidence for the Standing Commission (to be published in 1978),

a number of new initiatives have arisen from the very successful Liverpool Seminar on the function of Local Natural History Collections held in September 1977, including the North West Collection Rescue Unit referred to above. During the year in co-operation with the Biological Records Centre of the Institute of Terrestrial Ecology an interim Handbook for Biological Record Centres has been produced (authors S. W. Flood and F. H. Perring), available from the Biological Records Centre at Monks Wood. In co-operation with the Society for the Bibliography of Natural History and the Geological Curators Group, an inter-national seminar on the History of Museums and Collections in Natural History is being organised to take place in London from 4th to 6th April 1979.

From the general discussions, two recommendations were made which are pertinent to the general conference:

The Group recommends that museum authorities and such organisations as the Area Museum Services, make resources available in terms of staff and finance, to locate and safeguard those natural history collections not at present administered by professional curators. In this context the Group would wish to reiterate its support for the concept of peripatetic curators who are specialists in particular groups of animals and plants, a concept which has already been supported in principle by the British Museum (Natural History) but which has not yet been implemented.

The second recommendation arises through concern for the dissemination about the location of 'type specimens':

It is recommended that museums give priority to the preparation and publication of lists of type specimens in their collections with the aim of producing a National Type Register.

The Group very much appreciates the provision of facilities for specialist sessions at the Annual Conference. It feels that the activities of the BCG which bring together curatorial staff from Local Authority, National and University Museums is a valuable and complementary activity to that of the Association.

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