

NEWSLETTER

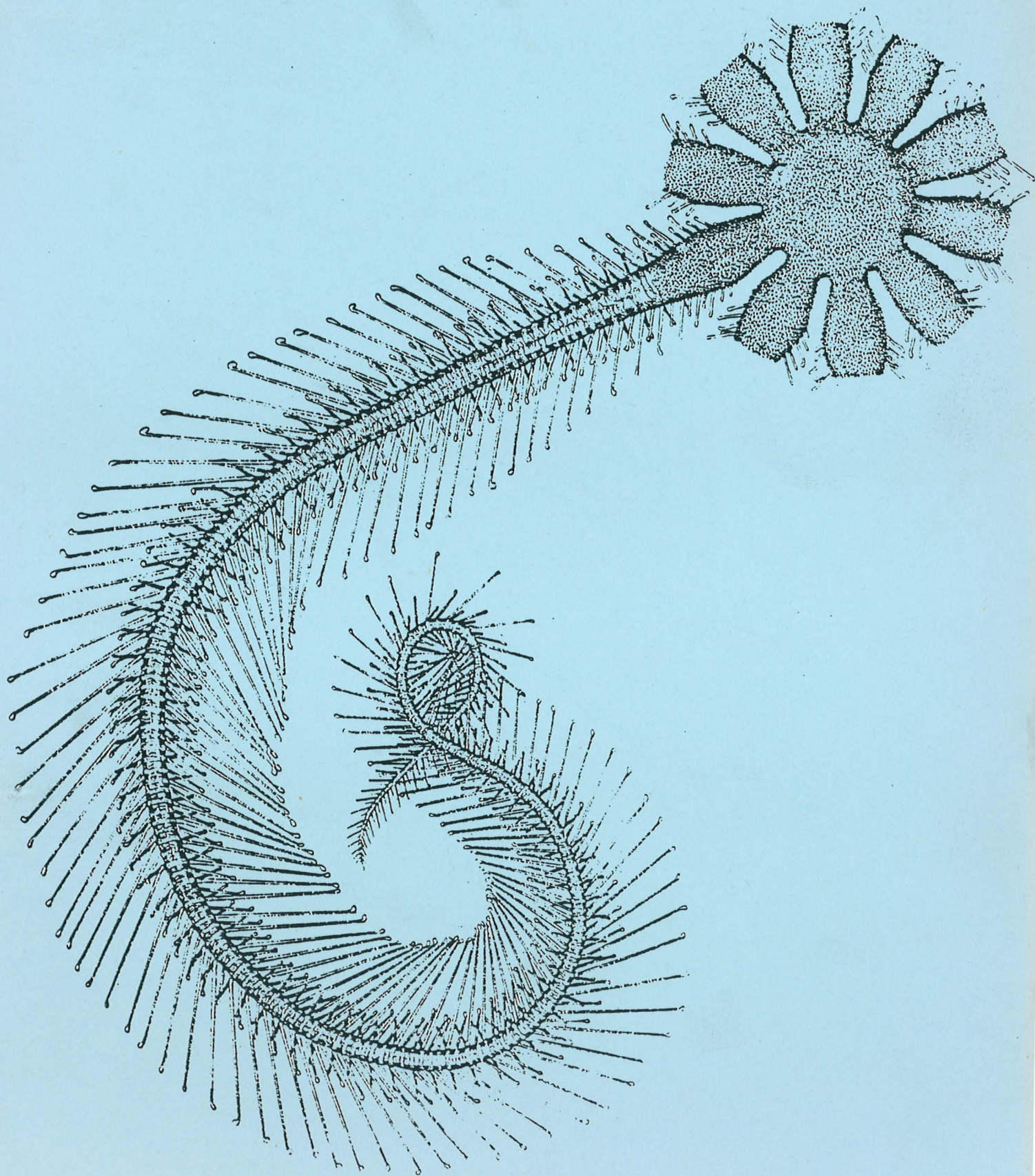
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1982

Biology Curators' Group



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Editorial

Your Editors are now settling into the job and are definitely no longer panicking! This issue is a fairly balanced one and we hope that all of it will be found useful. We would like to thank all contributors, especially those who worked hard to meet our deadline.

However, we still require copy from yourselves, be it factual, humorous, controversial or whatever. The "Notes for Diploma Students" section has been filled admirably this time by Jim Bateman, but we would like to hear from anyone else who can summarise a suitable topic for the next issue. In addition we would welcome any letters from current students who have ideas or problems which we could try to help with by approaching various authors for articles.

We would also like to see an increase in articles which provoke discussion by other members through the newsletter. Everyone must have their own views of certain problems. Should we display birds' eggs or discourage collecting by hiding them? What are the roles of and justifications for various types of provincial museum collections? (a question raised in this edition). Are provincial museum galleries becoming stereotyped? (We think so, do you agree?) These are just a few of the burning issues of the day which could spark off a lively correspondence column.

Finally, the "Featured Institution" is not dead and a few of you will be hearing from us (or will have heard) shortly. This is a very useful section, which keeps the rest of us in touch with developments in your museum, and incidentally, the published article can be used as a very convenient summary to slip to the odd director, trustee, councillor, and enquiring member of the public etc. For example here at Sheffield we use the edition (Vol. 3, No. 2) as a one-off guide to the Museum Natural Science section's functions, day-to-day work, collections and history.

Looking forward very much to hearing from you,

S. P. Garland & D. Whiteley

Steve Derek

Minutes of the BCG Committee meeting held at the offices of the Museums Association on Tuesday, 10th August 1982

Members present Eric Greenwood (chair), G.Stansfield, E. Mendel, P.Morgan, G.Hancock, P.Davis, R.Cleeveley.

1 Apologies were received from Janet Chamberlain, S.Garland and J.Mathias.

2 Minutes of the meeting held on 20th April were approved and signed.

3 Matters arising

- a) Tax allowance This was being taken up by John Mathias.
- b) Conservation of Natural History Collections It was noted that Mr Howie had offered an article for the Newsletter.
- c) CoEnCo Membership It was agreed to suggest to the Museums Association that the Association and the Group should each pay £25.
- d) Wildlife and Countryside Act Seminar The Secretary reported that he was waiting for a contribution from Peter Morgan. It was agreed that the Group should publish the report as a special paper.
- e) H.M.Customs In the absence of Mike Hounsome there was nothing to report although it was noted that some of the points were covered in his paper to the Wildlife and Countryside Act Seminar.
- f) Collections survey deferred to item 6b.
- g) Chester Museum Geoff Hancock reported that together with Tristram Besterman a report had been prepared for the Museums Association but that no action appeared to have been taken. Mr Moore had accepted most of the recommendations relating to the disposal of collections. The problem of collections of local interest remained.
- h) Burton on Trent Museum In the absence of John Mathias this item was deferred until the next meeting.
- i) Consultations with NERC There was nothing further to report. An article would be appearing in NERC News.

4 Cardiff Conference It was felt by those members who had attended that the meeting had gone well. It was noted that two informal groups had been set up to continue discussions in the fields of Zoological and Botanical collections, and it was hoped that these would report to a further meeting in two years time. Peter Morgan reported that he hoped to have the proceedings published by Christmas. It was noted that the transcript of the discussions would need to be circulated.

5 Future programme

- a) Museums Association Conference No special meeting had been arranged for members of the BCG although Brian Playle had indicated that something informal might still be possible. The two speakers on Natural History Collections in the main session would be Eric Greenwood and Howard Brunton, with Geoff Tresise as Chairman.
- b) Meeting at the Harrison Museum It was agreed to accept the invitation to meet at the Harrison Museum on Saturday 25th June 1983 and to invite an article about the museum for the Newsletter.
- c) ICOM 1983 Peter Davis gave details of a tentative programme but reported that he had received no reaction from Chris Hill or Dr Engstrom. It was agreed that Peter Davis should proceed with the programme. It was noted that details would need to be sent out with the second ICOM circular.
- d) AGM 1983 Mr Palmar had written to say that a meeting in Glasgow would be better deferred until 1984. Peter Davis agreed to look into the possibility of holding the meeting in Newcastle upon Tyne.

6 Museums Association matters

- a) Manual of Curatorship. It was noted that this was going ahead but that the Manual did not meet the needs of Natural History Curators. It was agreed that the Group should take its own initiative on the lines of the G.G.
- b) Working Party on Natural Science Collection Resources The questionnaire was now ready and had been tested with a variety of museums. No grant had been forthcoming. A meeting was to take place with the MDA with regard to the processing of data. A room was available in Cardiff.
- c) Proposals for a Natural Science Diploma Course The working party had met and proposals for a short course discussed at the Professional Consultative Committee. Geoff Stansfield had prepared a document setting out learning goals and it was proposed that a further meeting of the working party should take place in Leicester.
- d) Professional Consultative Committee No further meetings had taken place.

7 Officers Reports In the absence of the Treasurer and the Editor there were no reports.

8 A.O.B.

- a) The Secretary drew attention to the bibliography prepared by Reg Harris on preparation techniques. It was agreed that this would be appropriate for a BCG publication and that the matter be pursued.
- b) New members A number of staff of National museums had indicated that they were prepared to join the Group. It was agreed that they would be very welcome.
- c) National Butterfly Museum Geoff Hancock reported that Tristram Besterman had suggested that the Group might wish to take up the matter of the title and functions of this museum. It was agreed that with the information available, no action be taken.
- d) Meeting of U.K.I.C. Howard Mendel reported that the entire meeting had been concerned with finance and the conservation of natural history collections had not been discussed.

9 Date and place of next meeting The next meeting was arranged for Tuesday November 30th at the British Museum (Natural History).

G.Stansfield
Honorary Secretary
Department of Museum Studies
105 Princess Road East
Leicester LE1 7LG
Tel (0533) 553560

11.0 The Evolution of Darwin. Professor John Maynard Smith of Sussex University delivers an illustrated talk on Darwin and Heredity, in which he explains how modern research into genetics — about which Darwin knew nothing — has faithfully supported his theories. Prof. Smith speaks before an invited audience at the Linnean Society in London, where Darwin read his first paper on evolution in 1858.

EVINGING ARGUS 30/11/82

David G Erwin, Ulster Museum.

For this contribution there seemed little purpose in producing a resumé of the content of the presented papers as these will shortly appear in print. Hence the following is a personal view of a participant with deeply held feelings on systematic collections and a sincere hope that at some time in the future a rationalisation in the form of a national plan will emerge.

The conference in Cardiff was extremely informative on aspects of systematic collections held by various institutions in Britain and further afield. Unfortunately however most of the papers appeared as prepared statements outlining the work and policies of the represented bodies. By my recollection only two speakers were prepared to set their notes aside and speak "from the shoulder". This produced an effect of relative sterility on the actual conference floor. However I should not in any way wish to suggest that the conference was a failure. It was in fact a great success in that, people from a very wide range of institutions were brought together and actually talked. People working in small municipal museums saw that senior staff from the British Museum do not actually have horns and a forked tail and vice versa.

A great deal of discussion in groups took place off the conference floor and it was here that true feelings began to become evident. People did have views on national plans and from these discussions I now wish to attempt a synthesis of at least some of the ideas put forward, ideas stimulated by the papers but not drawing on any one in particular.

1. The totality of all systematic collections held within the U.K. should be seen as a single entity and managed as such in the ideal situation.
2. There seem to be three basic functions for systematic collections; vis
 - a. As a permanent and unassailable taxonomic resource on a world wide basis.

- b. As a permanent and unassailable faunistic and floristic resource, principally for the British Isles.
 - c. As an educational resource in the broadest sense.
3. To manage the totality of collections as a single resource involves decisions, accommodations and agreements on the commitment and allocation of finance, from whatever source, to an agreed balance of these three in each 'member' institution.
 4. A formula for this might be as follows:-
 - a. The British Museum (NH) is and should remain THE Major INTERNATIONAL Taxonomic institute. It must then be asked, should other institutions hold type material or should all types reside in the BM? The only arguments heard against this are all variations on the "all the eggs in one basket" theme, and to me do not outweigh the major benefits of having all type material, at least within a taxon, on one site. Major accommodations would of course have to be made with other current large holders of type material like Kew, Manchester and to a lesser extent Edinburgh Cardiff and Brighton. Some movement towards decentralisation on the Tring pattern may have within it the germ of a solution to this problem.

The BM would then act as a first tier resource serving as its top priority the taxonomic needs of Science and acting as an advisory body and taxonomic resource for lower tiers in the system.
 - b. The "mini" Nationals should have as a prime responsibility the building and servicing of collections for the country or region in which they are sited. For example, the Ulster Museum should be a resource in terms of data and specimens for the geographical area of Northern Ireland principally and should only commit financial and staff resources to other aspects where they have a direct bearing on Northern Ireland, for historical comparative or educational reasons. The Royal Scottish Museum and the National Museum of Wales would also occupy this role acting as

a link to the international taxonomic resource and servicing more localised tiers in the network. Unfortunately England does not have at present a "National" museum in this sense although it is well served by museums carrying out the same function on a smaller geographical scale - the County and Municipal museums.

- c. The county, municipal and university museums have a wide range of commitment, staffing and available resources. They are all however united, or should be united, on one aspect of their work - the commitment to maintain and service their collections to the best of their ability.

The major 'provincials' differ from the mini-nationals only in the geographical region for which they are responsible and in England in many cases they fulfill an identical role for major areas of the country. If resources are managed within the limitations imposed and their position within the system is coordinated we start to see rationalisation emerging.

- d. The small and very small institutions would also be incorporated by accepting their limitations and only attempting to do what they can do well - servicing the area for which they are responsible. Problems and even collections can be fed up through the system. Help, advice and even finance would come down through the system. There will be no need for someone to feel isolated simply because he appears to be out on a limb and does not personally have the expertise to deal with collections for which he is responsible.
- e. Some degree of specialisation will eventually become necessary if and when funding again becomes available. The major institutions outside the BM should, after achieving their "basic" coverage, specialise in terms of where they devote any further resources. Logically this should be done on taxonomic lines with, for example, one institution being appointed as the "Mollusc centre". This would not entail this body holding all mollusc material but it would be responsible

knowing
for where that material was, to advising other bodies on the
curation of that material and to being the primary centre for
direction of mollusc enquiries.

- f. The final realisation of this "plan" can only start to emerge when we can begin to relinquish territoriality regarding our collections. The argument, "Try to convince my Trustees/Councillors", will start to break down when they realise that they are part of a bigger system. A local museum will NOT only have to rely on its own collections for its displays but will be able to call on material from further up (?) the system. Councillors will take an interest when they see a display in "their" museum exhibiting prime material from their area, which up until then was "inaccessible" in the "National".

The plan as outlined is extremely 'raw', and is simply the gleanings and distillations from conversation. However it does start to suggest that a "National Plan" might be possible. Even within the present system there are enough benefits both "up" and "down" the network to make people examine what can be done. Cardiff represented a major first step in this movement but a great deal more talking MUST be done. We should stop referring to the National Museums and start pushing for the concept of the NATIONAL COLLECTIONS. We shall then be moving towards our target. Tangible next steps are now being taken in that a cabal of National Museum Directors with an interest in systematic collections is being put together and in the very near future a conference of Keepers of Nationals and major provincials is to be set up. It is our duty to ensure that the spirit of the Cardiff conference is not permitted to become quiescent.

A National Plan for Systematic Collections -
Dr. Ian D. Wallace, Merseyside County Museums

My initial fears that the conference would be only a succession of lectures about the history of peoples institutions or collections was immediately dispelled upon reading the extensive abstracts issued at registration. The conference was intended and I think may have taken, the first few tentative steps towards a national plan for systematic collections by looking for common ground among the diversity of types of collection holders and their users. Working in a provincial museum you might get a rather restricted idea of what constitutes a systematic collection so it was stimulating to hear representatives from the National Culture Collections and the Welsh Plant Breeding Institute, describing their living collections. It was also salutary to discover that even in these days of the forthcoming biotechnology revolution and the continuing green revolution, that these bodies already had or foresaw financial problems in carrying out their vital work. What chances of finance for my little-used historical collections I thought. Yet finding a useful role for traditional systematic collections, such as the Oxfam funded search in the Kew herbarium for plants which might be suitable crops for arid lands, was the optimistic note struck by Mr. Lucas of the Kew Herbarium. (If there had been a clappometer he would have been the winning speaker.)

The over-riding impression I got from the conference was an emphasis upon roles. The British Museum staff saw theirs quite correctly as workers in the national centre for taxonomic research - a role clearly defined for them by the Advisory Board for the Research Councils. It was also interesting to have their frank admission that a lot of their collections are no longer of use in fulfilling that role. Are ours fulfilling our role? I feel that it is about time we in provincial museums faced up to the fact that people do not flock to use the reserve collections not just because they do not know about them but principally because they are irrelevant. Bearing in mind this dubious scientific value of much of our collections, there was talk about what to do with material resulting from modern ecological research projects, and what uses such material would have in the future. It was interesting in this respect to hear that the extensive ecological samples collected many years ago by the 'Discovery' voyages to the Antarctic had been retained. It has obviously always been easy to justify this because of the enormous expense and time involved in repeating the work. Yet, as Alan Stubbs of the Nature Conservancy Council pointed out, many of our own neighbourhood unique habitats and sites are disappearing, making it as impossible to have samples from them for the future as to repeat the 'Discovery' voyages. A clear role for local museums to rescue samples being collected locally by universities and government research bodies - and a goal for our own field work.

Provincial museums were asked several times to define their roles more clearly and to emphasise what they did well and if necessary abandon what they did badly. This inevitably led to the thorny problem of rationalisation of collections, and transfer of material between institutions. We could see this

as the "all types to the B.M. call" and admittedly for convenience in taxonomic research that might be no bad thing but what would we get in return? For if, as was clearly stated but not defined, there was a role in the national scientific community for provincial museums, and their staff and collections, then there must be material currently in the British Museum which would be most appropriate in the provinces.

There certainly does seem to be a need for us to carve ourselves a niche in the scientific scene and in these difficult times show that we are serving a useful purpose and avoiding duplication of effort and waste of resources. The Natural Environment Research Council clearly sees the waste of material from its funded research projects as a bad thing but there are feelings that the University Grants Council do not think it appropriate to finance the long-term storage of material in university departments or even university museums. Perhaps there is a crucial role for provincial museums and universities to co-operate over the curation of research generated specimens. Certainly the only long-term hope for our collections seems to lie in us convincing a funding agency that they have a well-defined national role.

The conference did give us a chance to think of each others political and financial restraints but I wonder if there was real understanding. The informal and friendly discussions in the evenings and at mealtimes did provide opportunities to exchange experiences and problems. Perhaps I was wrong but there did seem a reluctance for British Museum and provincial curators to meet. You do not often get a chance to talk to British Museum Keepers and their deputies, and although we are clearly doing very different jobs it was gratifying to find that they do seem to think some of what we do worthwhile. I did feel that the provincial nationals - Cardiff, Edinburgh and Belfast were much more on our wavelength and they would seem to have a crucial role in bridging the B.M. / provincials gap.

It was indeed very interesting to hear the views of people involved in policy making in important organisations. I would like to have heard the director of the British Museum (Nat. Hist.) but he was unable to attend. The scientific director of the Natural Environment Research Council considered it worth four days of his time to devote to the future of systematic collections. Disappointing therefore, that the Museums Association considered the subject of insufficient importance to sponsor a delegate or submit a statement.

Inevitably it was agreed that the dialogue would continue, and another meeting convened in a few years time. In the meantime perhaps more effort should go into role definition and establishing 'Morton' type agreements - this is the agreement which defines areas of responsibility between the botany department of the British Museum and Kew Gardens Herbarium. The conference proceedings will be published and on the basis of what I heard, I think they will make thought provoking reading for all curators.



National Museum of Wales
Cathays Park, Cardiff

Life in the Lias sea which covered much of southern and eastern Britain between 195-176 million years ago is the subject of a new full-colour print published by the Museum. The water-colour reconstruction, based on fossils found in rocks dating from that period, is by geologist Henry Thomas De la Beche (1796-1855) and it shows the sea infested by ichthyosaurs, fish-like reptiles and the long-necked plesiosaurs while pterodactyls fly above.

The water-colour was the basis of a lithograph distributed by Professor William Buckland to his geology classes at Oxford in the 1830s, and is one of a number of sketches and cartoons through which De la Beche commented on current ideas in geological science. Much of De la Beche's correspondence and his diaries are in the collections of the Department of Geology of the National Museum of Wales.

The colour print costs £1 (£1.50 by post from the National Museum).

(Last year the Museum published a booklet, *Ichthyosaurs: a history of fossil 'sea-dragons'*. It is by S.R. Howe, T. Sharpe and H.S. Torrens and costs 90p (£1.20 by post). Further information on De la Beche is obtained in Paul J. McCartney's *Henry De la Beche: observations on an observer*, published by the Friends of the National Museum of Wales in 1977. Price £3.00 (£4.00 by post).)

Report on the Fifth Meeting of FENSCORE, the Federation for
Natural Sciences Research.

FENSCORE Committee met on 17th July 1982 at Manchester
University.

The Secretary reported that information exchange was
in progress between the FENSCORE database and the authors
revising the BSBI volume on British Herbaria.

At the beginning of July the collection Register
database contained 5731 records, made up of contributions
from Midlands CRU (663), North East CRU (84), North West
CRU (1247), South East CRU (266), South West CRU (1388),
Scottish CRU (91) and Yorks and Humberside CRU (1987) -
about 2000 more records are currently being processed.
Some records in the database were considered to be too
detailed, and a degree of data compression is to be
exercised on these records. It was agreed the aim of the
FENSCORE database is to provide only a signposting service
which will permit researchers to establish the location of
aggregations of material possibly of interest to them, but
expecting them to contact the holding institution(s) so
identified for more detailed information. For economy of
resources and efficiency in use the information about
material held by an institution should be compressed into
the minimum convenient number of records concomittant with
the inclusion of all the primary level information
necessary to permit retrieval by any of the primary routes,
i.e. name of collector, geographic origin, taxonomic
classification or geological era.

The reports from each of the CRU's indicated a
generally high level of activity. The South West CRU are
exploring the establishment of a detailed regional
collections database at Bristol Museum, from which the
summary records would be sent to Manchester. The Yorks and
Humberside CRU have almost completed the main input and are
planning to produce a Register of Collections for their
region in 1983. The Council for Museums in Scotland had
obtained a grant of £15,000 from the Wolfson Trust to
assist the work of the Scottish CRU for two years. The
Midlands CRU have already recorded many more 'living'
private collectors than any other CRU, and documents
outlining their approach have been distributed to the other
CRU's.

The second report of the FENSCORE working party on a
Provisional Register of Type and Figured Specimens present
in collections in the British Isles was discussed and
confirmed. The pilot study made by the North West CRU,
covering a total of 1358 specimens from eight NW
institutions, has shown that the compilation of a Register
is feasible. The data gathering will be done on a regional
basis via the established CRU network, and the Working
Party is to reconvene to prepare a programme for
implementing their proposals.

The next meeting of FENSCORE will be on 11th Nov. 1982
at Manchester University.

Charles Pettitt,
Secretary.

The continuing debate on the function of museums I now discover is redundant : the answer, like many things, had been found by our forebears, albeit Americans! Nestling on the shelves of the British Library is a journal, published in Providence, Rhode Island at the turn of the century. It is entitled " The Ladies Monthly Museum or Polite repository of amusement and instruction, being an assemblage of whatever can please the fancy, interest the mind or exhalt the character of the British Fair! This quaint but in many ways viable definition of a museum is unfortunately not supported by the contents, the chief redeeming feature of which is the charming hand coloured plates depicting the ladies' fashions of the time.

PARACELsus.

European Conservation Convention Ratified

On 1 June the UK became the tenth country to ratify the Convention on the Conservation of European Wildlife and Natural Habitats which was signed by 19 member Council of Europe States, Finland and the EEC in 1979. Under the Convention, the contracting parties undertake to ensure strict protection of 119 plant species at present in danger of disappearing from Europe and to take active steps to safeguard their biotopes. The same undertaking applies to 400 species of fauna and their environments. The Wildlife and Countryside Act 1981 together with a proposed Order-in-Council for Northern Ireland, which it is hoped to introduce later this year, enables the UK to ratify this Convention.

Habitat (CoEnCo)
Vol. 18 No. 6
July 1982



Curator AM Tynan BSc FMA
Deputy Curator PS Davis BSc MSc MIBiol AMA FLS

Ref.7.3.

22nd July 1982

The Editor
Mr. S. Garland
Biology Curators' Group
Sheffield City Museum
Weston Park
Sheffield S10 2TP.

Dear Sir,

Is She My Type?

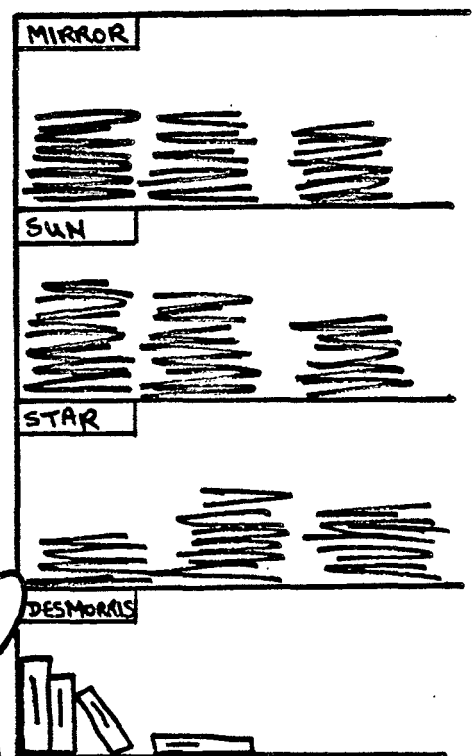
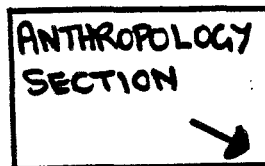
May I refer to the letter in the current BCG Newsletter (Vol 3 pt.3 p. 134)?

I can find no reference in the literature available here to a Homo spaiens (sic). Would I be correct in thinking that Mr. Cooter was proposing a new species? If this is so, then in the absence of any description or figure, surely this must be a nomen nudum - if you follow my meaning. Could the sub-committee, if it be established make a start by an analysis of (usually) the third page of a number of daily "tabloid" publications which I understand are known by a fairly large proportion of the population as 'newspapers'.

Here they will find the female of the species regularly figured and described.

Yours faithfully,

A.M. Tynan
Curator



Why collect Hoverflies?*

There is no doubt that Syrphidology is one of Britain's fastest growing hobbies. It has been estimated that Hoverfly freaks are even beginning to catch up with coleopterists, and that they will actually outnumber the total number of British species by 1985. Even in Sheffield, the number of enthusiasts has grown from one in 1976 to 26 at the time of writing. In 1981 the mind-boggling total of 22 adult students attended a University day school on "Hoverfly Identification" held at Sheffield Museum (and paid for the privilege!). Good news indeed!

Apart from their intrinsic beauty, Hoverflies are one of the most useful groups of insects to handle, collect or study. Biology curators with an interest in building up new collections, or adding to existing collections, or just involved in recording their regional fauna and flora, might consider looking at Hoverflies for next year's field project. In particular, the group is most suitable for desk-bound curators who rely on volunteer assistants, M.S.C. staff, local naturalists or assistant keepers to do the field-work. The skills involved in capturing, finding and preserving these beasties can be quickly acquired by novices.

Field Techniques

Reference should be made to the relevant chapters of the Dipterist's Handbook by Stubbs and Chandler (1978), but the following notes should serve as an initial guide to collecting.

- Season. Late March to September, with several species around well into November. May and June seem to be the most productive months and should not be missed.
- Sweeping. A large net is useful to sweep through grass, tall aquatic marginal vegetation, foliage, flower meadows, hedgerows, bogs etc. Try to visit and sweep as many different vegetation communities as possible. Extract flies with a pooter. Kill, if required, using ethyl acetate and pin the same day or store in laurel tubes.
- Hand netting. A smaller net is useful for picking individuals off flowers, rotting trees, old stumps, foliage. Remember to visit as many flowers as possible, not only umbellifers but smaller plants such as Tormentil and bedstraws can be very good.
- Passive collecting. Water traps and Malaise traps (see the Handbook) are very good for catching hoverflies.

* with apologies to Peter Skidmore

Preservation.

Direct pinning through one side of the thorax. Most dipterists now prefer to use stainless steel headless micropins, and pin insects directly onto Plastazote-lined perspex boxes. Wings are held at right angles with further micropins. After sorting and identification, specimens intended for permanent storage are mounted onto Plastazote or Polyporus stages and labelled. With a little practice the initial process takes a matter of seconds per specimen.

Identification.

A number of keys have been used, mainly out of print or out of date, but 1983 will see an end to all our difficulties, when Hoverflies will be the subject of a new book by Alan Stubbs, including identification keys, colour plates and notes on ecology, distribution etc. (it seems likely that the British Entomological & Natural History Society will be the publishers).

Uses.

- a) Reference Collection - as already mentioned a useful museum reference collection can be quickly acquired simply from field collecting. For example, the bulk of the Sheffield Museum collection was donated by Mr. Austin Brackenbury, a railway signalman with no previous experience of Diptera, who has now found 102 species in an area of eleven metres square. In addition, a number of expert dipterists are always happy to deal out one or two spare unusual "goodies" to good homes. So, now would be a good time to sort out your collection. Be prepared for the onslaught of the amateur syrphidologists!
- b) Education. Some of the larger species make very attractive display material for exhibition, or boxed sets for school loans, either on their own or as fine examples of Batesian Mimicry. In fact you can play around all day matching up different species of hoverfly with various Social Wasps, Sphecids, Bumble Bees, Sawflies and even Hymenoptera Parasitica.....yuk!
- c) Site Assessment. Because of the great diversity of larval behaviour within the compass of quite a small group of species (n 250) they make a conveniently handled ecological indicator group. For example several species are first rate indicators of old woodland, others of good wetlands etc. At Sheffield we have used this group,

together with various families of wood-boring beetles to assess the comparative merits of a number of local woodlands and parklands.

The national Hoverfly Recording Scheme

A scheme has been operating for several years, but "records of even the commonest species are genuinely still required, especially for the less populated areas of the country". A selection of very provisional distribution maps has been kindly supplied by the scheme organiser, Philip Entwistle, and some are reproduced here. Not all are fully up to date, but at least they give a fairly accurate picture of the species concerned. If you have a museum collection with data applicable to (a) 10 km. square(s) please contact Philip in the near future, and/or extract the information using the standard record card.

Scheme Organiser:- Dr. P. F. Entwistle, Institute of Virology,
Mansfield Road, Oxford OX1 3SR

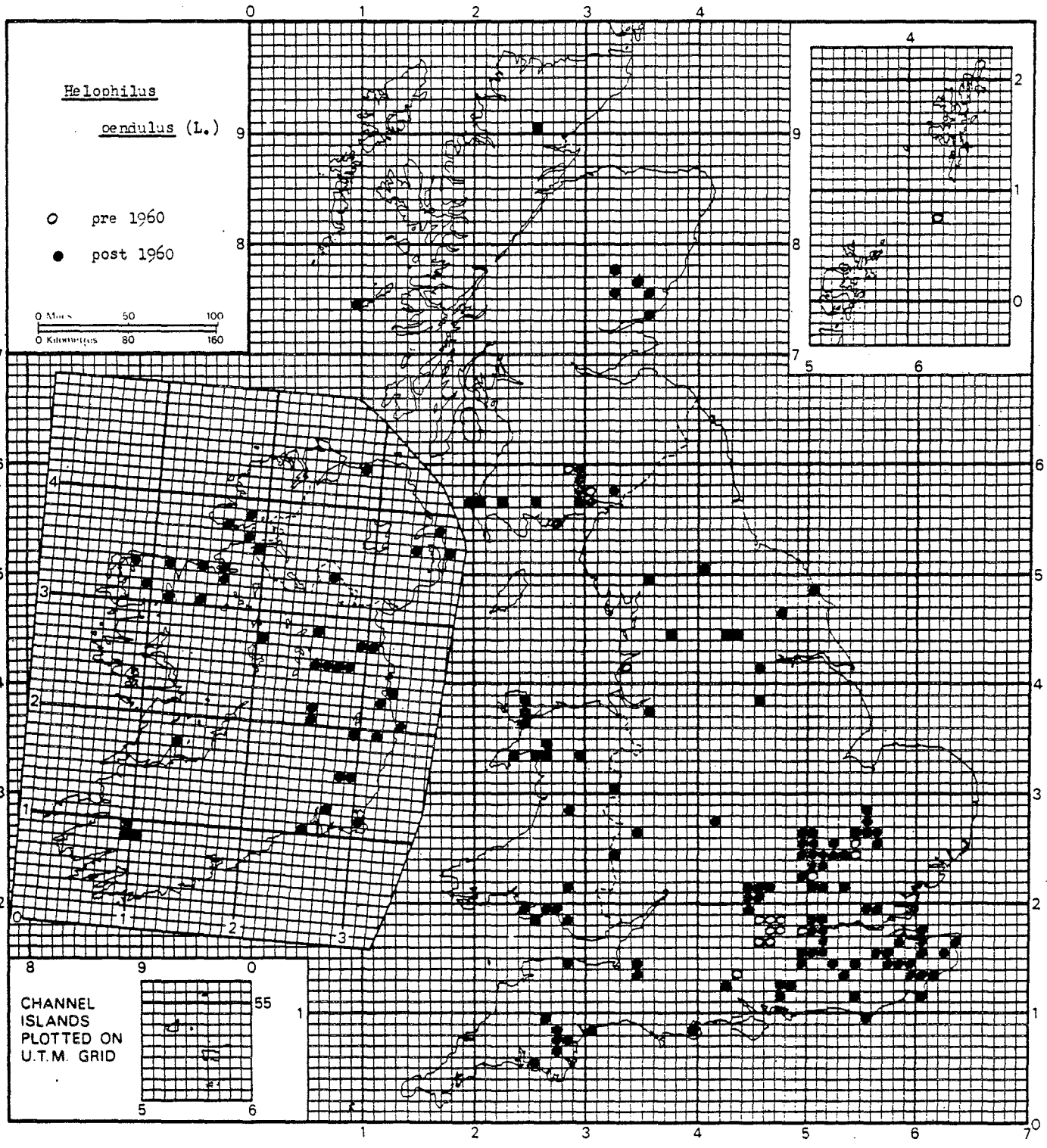
If you feel that your collection requires checking, it may be possible for a local enthusiast to visit your museum. If you write to me, I shall attempt to play cupid! (No promises though!)(D.W.)

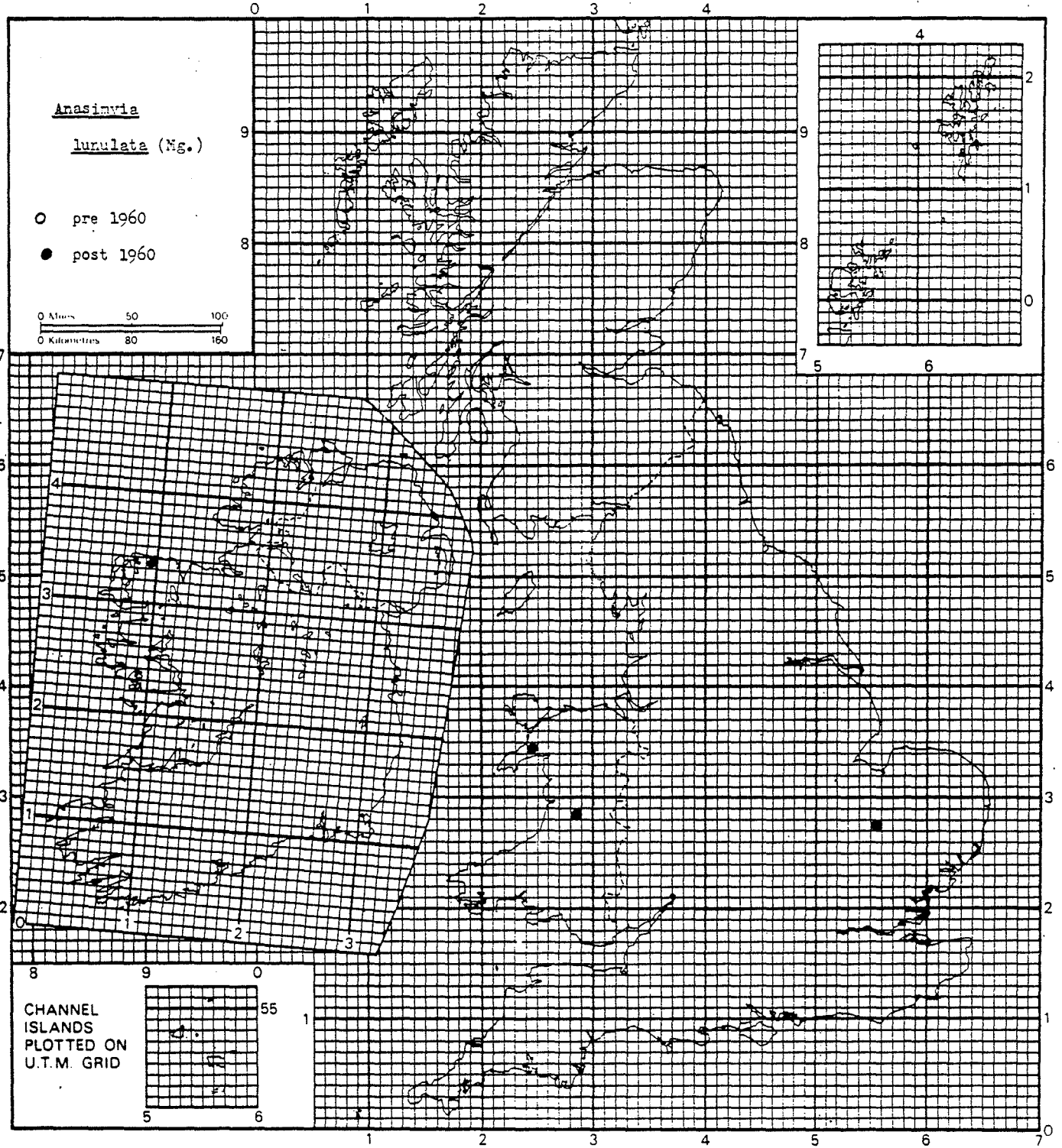
Reference

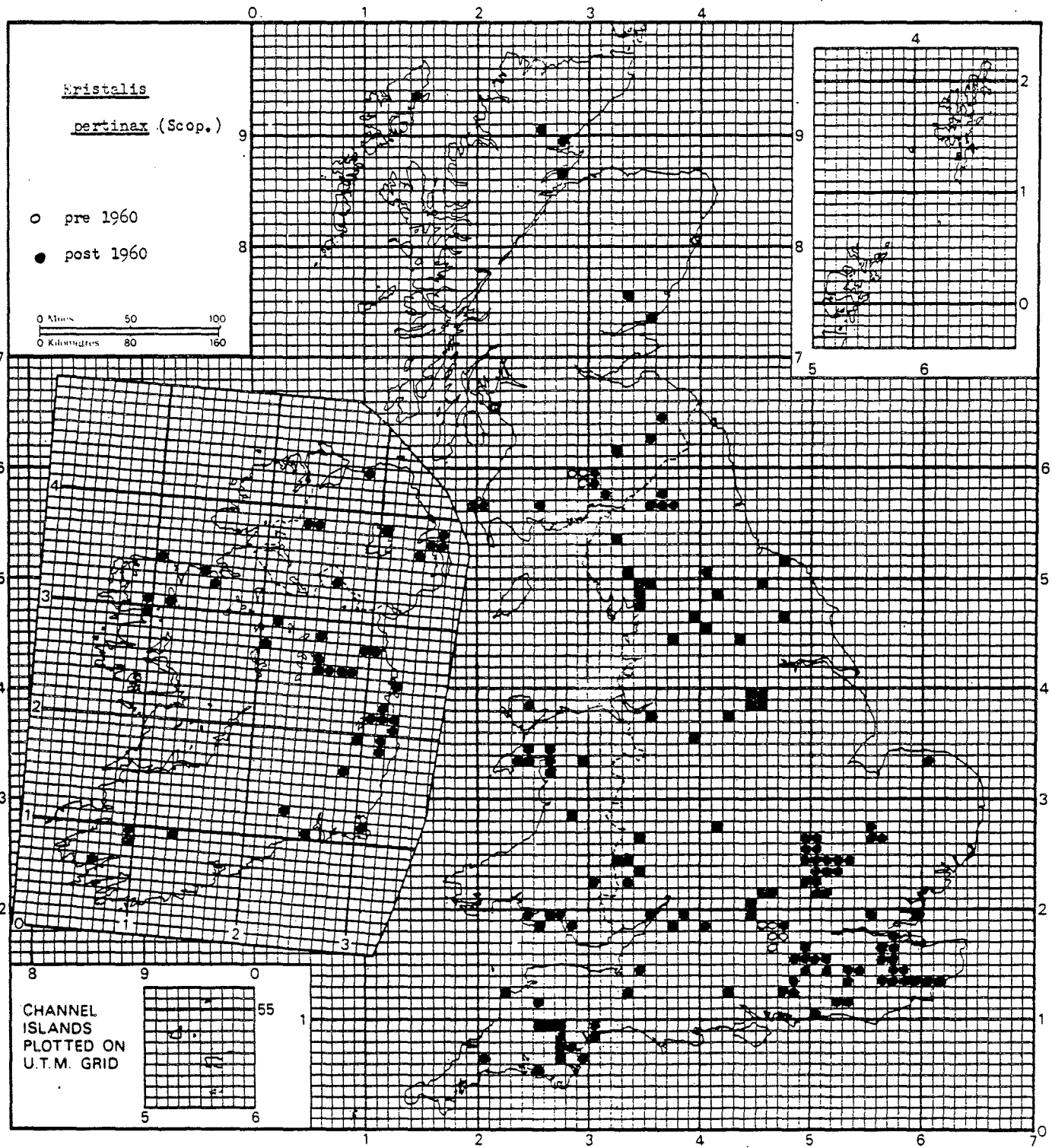
Stubbs A. E. and Chandler P. (eds.) 1978 A Dipterist's
Handbook. Amateur
Entomological Society.

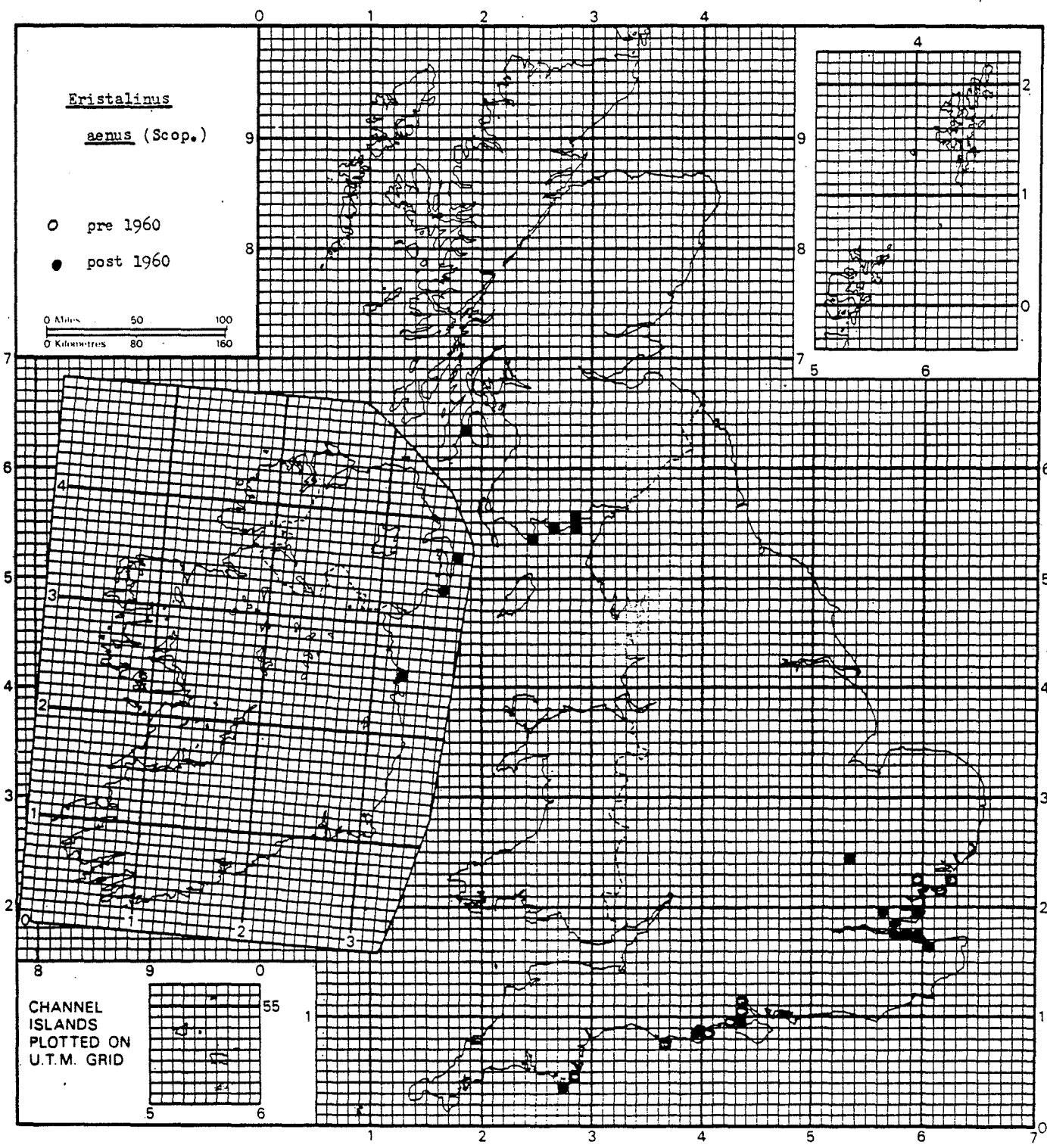
(An excellent handbook and invaluable reference - warmly recommended to all museums with an interest in entomology)

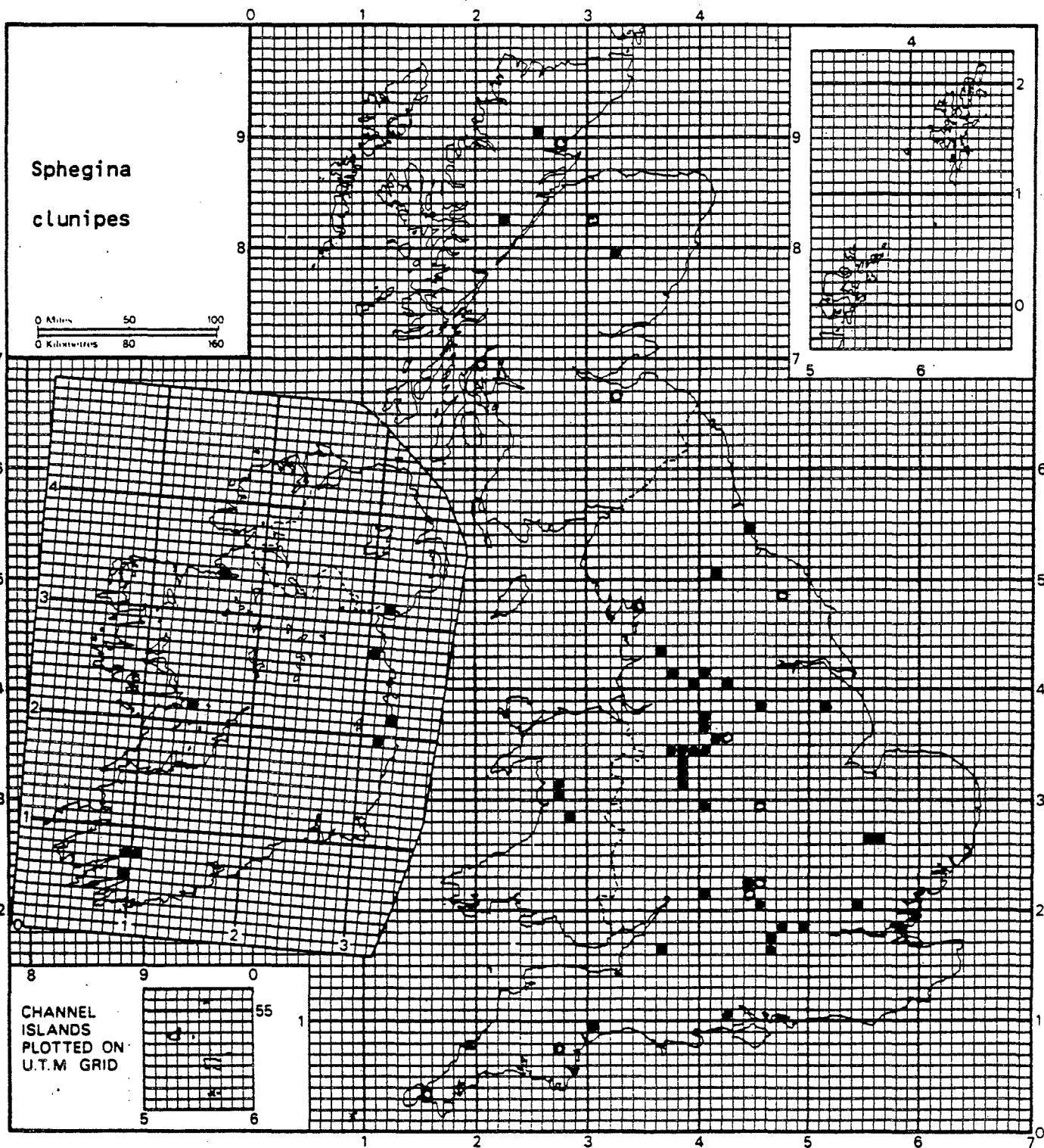
Derek Whiteley

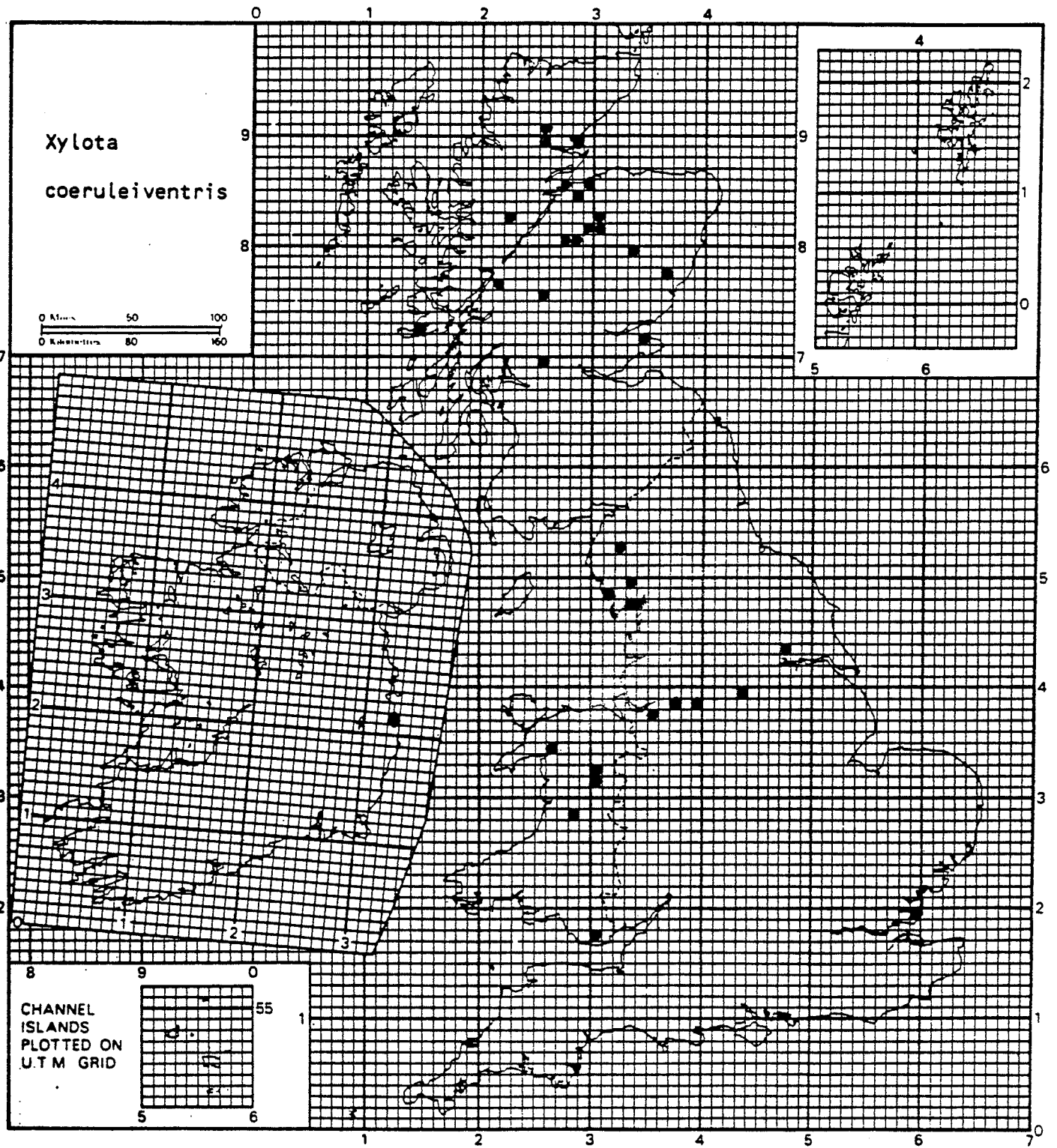


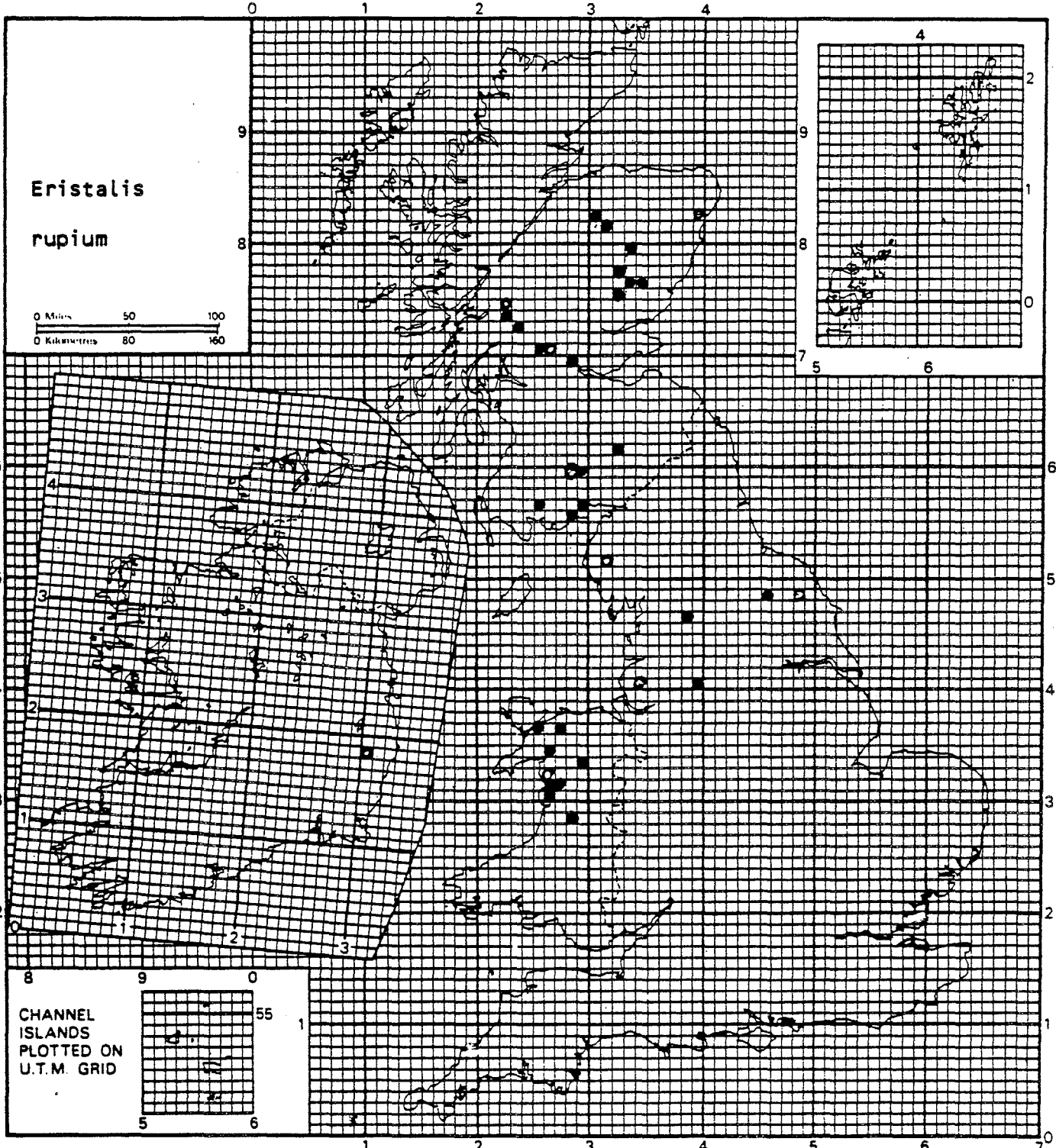


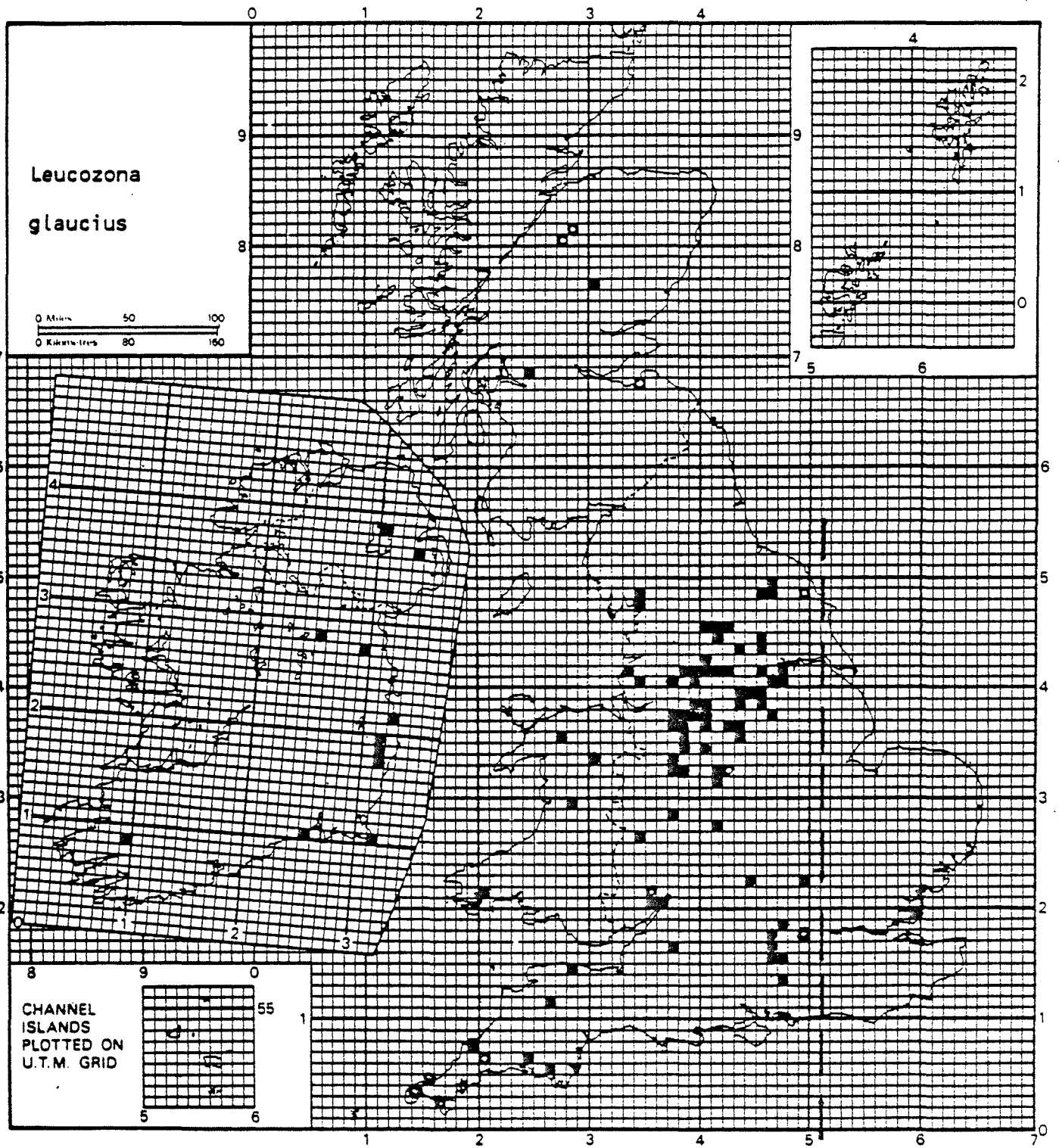


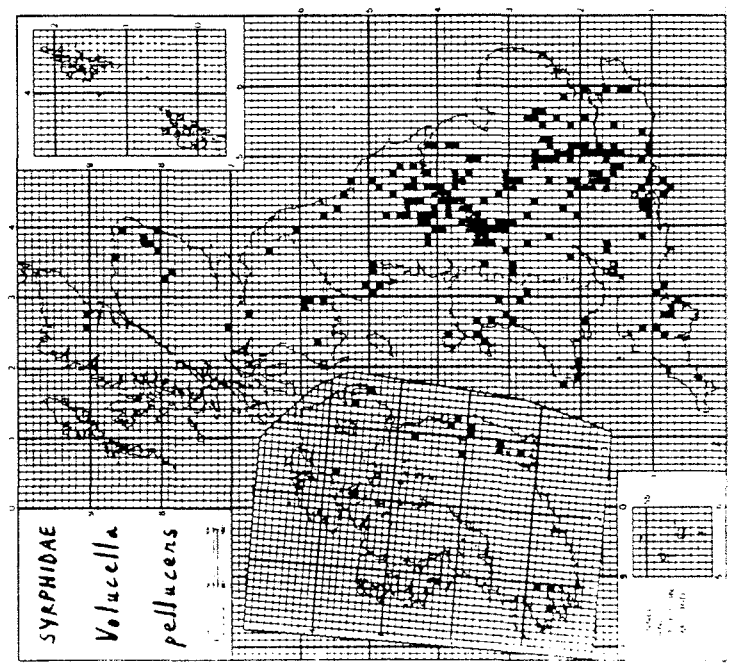
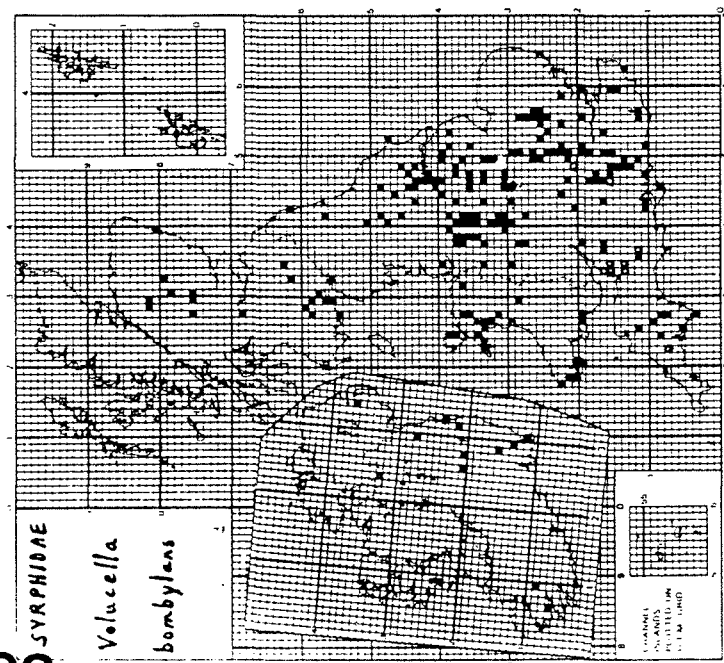
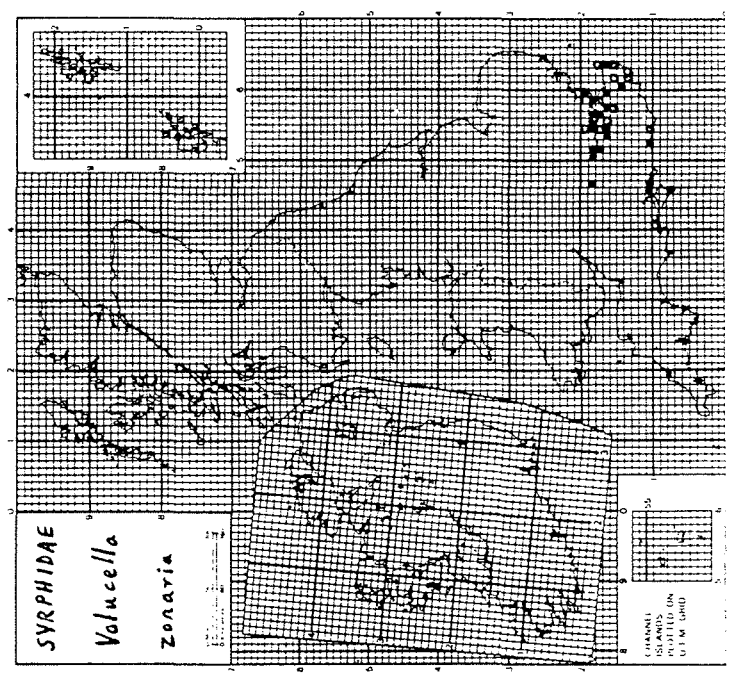
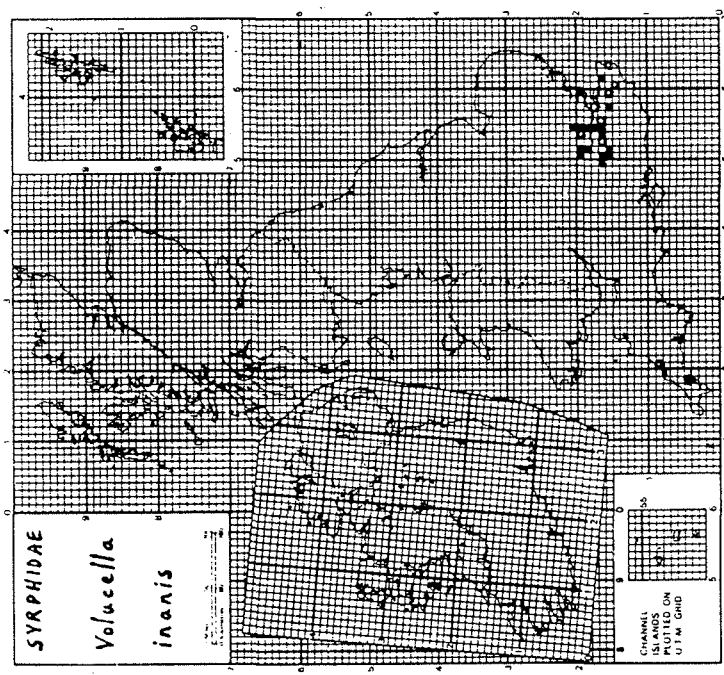
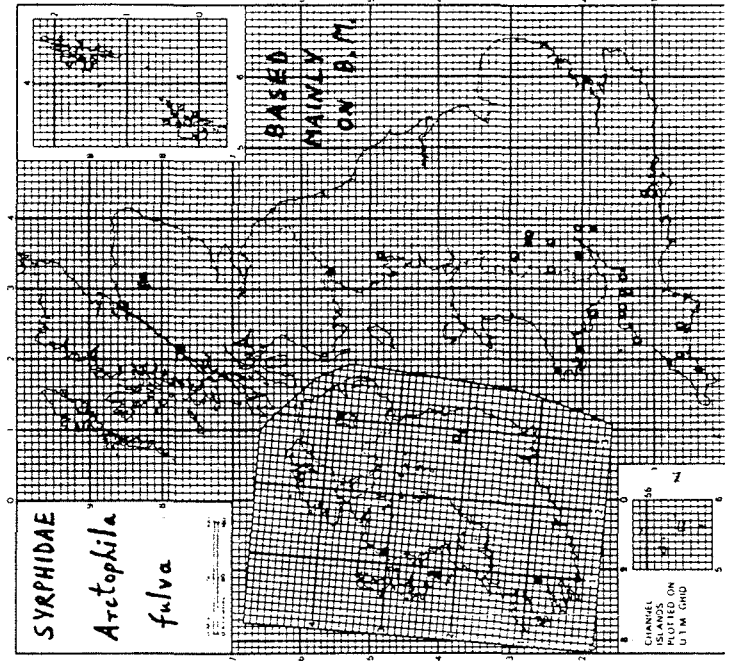
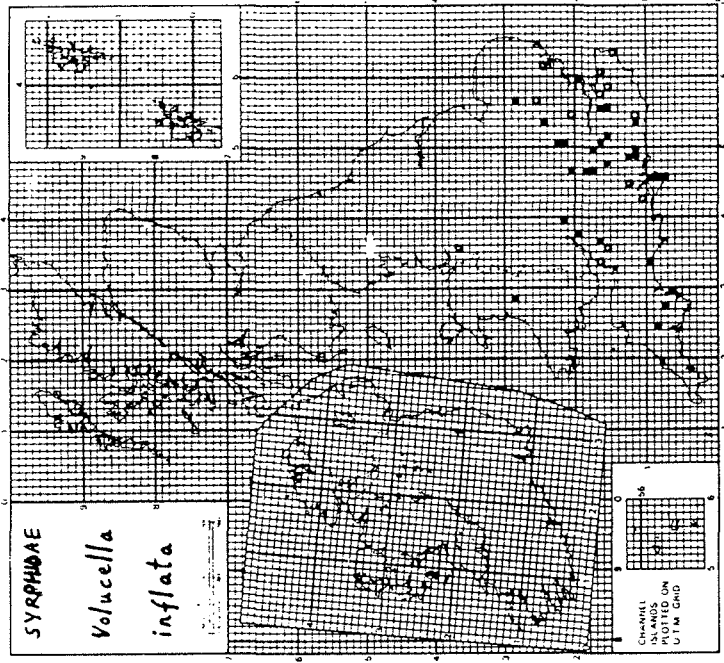












NATURE CONSERVANCY COUNCIL
INFORMATION AND LIBRARY SERVICES

WILDLIFE AND COUNTRYSIDE ACT 1981
A SUMMARY OF THE MAIN PROVISIONS

The Wildlife and Countryside Act 1981, which received the Royal Assent on October 30 1981 improves protection and conservation over a wide range of wildlife and natural habitats.

The Act falls into three main parts, concerning: protection of wild birds, animals and plants; conservation of the countryside, including the natural habitats of wildlife; and public rights of way in the countryside.

WILDLIFE

Part I updates protection of birds legislation, partly to take account of EEC Directive 79/409 on the conservation of wild birds. The schedules of birds which may be killed, sold or kept in captivity are amended; new controls are introduced on certain methods of killing and on falconry, aviculture and taxidermy, together with revised procedures for the establishment of bird sanctuaries and new licensing arrangements in general. A wider range of wild animals and plants is protected and new controls are introduced on certain methods of killing animals, protected and otherwise, and on the release into the wild of exotic species which might harm native flora and fauna. Existing controls on international trade in endangered species are extended to cover domestic trade in especially endangered species and their parts and derivatives.

Penalties are generally raised and enforcement improved; the Nature Conservancy Council is empowered to assist and advise enforcement agencies.

Restrictions are imposed on dogs in fields containing sheep and the Ground Game Act is amended to allow occupiers of land to shoot ground game at night.

COUNTRYSIDE

Part II introduces extensive new provisions concerning areas of special scientific interest. These are areas of geological or wildlife interest - at present just under 4,000 in number - which the Nature Conservancy Council (NCC) has notified to local planning authorities. The NCC is required to notify owners and occupiers of the existence of such areas and specify operations which might harm the features of interest; owners and occupiers will in turn have to give three months' notice of any intention to carry out such operations. Before any new areas are notified, the NCC must publicise its intention and allow at least three months for any objections or representations.

Under the Act the Secretary of State may make orders requiring harmful operations to be delayed for a longer period on selected very important sites whilst the NCC seeks a satisfactory conclusion by agreement or, as a last resort, by using its power of compulsory purchase.

Compensation may be claimed for losses caused by these orders. Ministers will publish a code of practice to promote proper management of areas of special scientific interest, which is subject to approval by both Houses of Parliament.

Other provisions in Part II include:-

- a power for county planning authorities or the Secretary of State to make limestone pavement orders, prohibiting removal of stone from such pavements unless planning permission has been obtained;
- a power for the Secretary of State to establish marine nature reserves extending from high-water mark to the limit of territorial waters;
- wider powers for the NCC to make grants and new power to make loans;
- a power for all local planning authorities in England and Wales to enter into management agreements with owners and occupiers of land to conserve the countryside;
- the "Sandford" provisions, which extend the advisory duties of the Agricultural Development and Advisory Service (ADAS) of MAFF and provide an important new procedure for dealing with applications for MAFF farm capital improvement grants in National Parks and areas of special scientific interest;
- a power for Ministers to make orders requiring advance notification where moorland in National Parks is threatened by agricultural or forestry proposals;
- a duty on all National Park Authorities to draw up and publish maps of moor and heathland which they consider particularly merit conservation and to review these annually;
- a power for National Park Authorities to make grants and loans;
- a change in the statutory membership of National Park Authorities to provide for district council representation;
- a change in the status of the Countryside Commission to a grant-in-aid body;
- a duty on water authorities and internal drainage boards to further the interests of conservation in carrying out their functions; and
- an extended power for local authorities to appoint wardens over land to which the public has access.

RIGHTS OF WAY

Part III contains new procedures for the review of definitive maps and statements of public rights of way in the countryside and for making orders creating, extinguishing or diverting rights of way. Byelaws controlling bulls in fields crossed by public paths are replaced by a general ban with limited exceptions. Provisions are made concerning signposting, wardening and restoration of footpaths after ploughing.

Explanatory Note

Many of the provisions in Parts II and III came into force at the end of November 1981. All other Sections except S32, S41 and S63-S64 had been brought into force by September 28th 1982.

PUBLICATIONS ON THE WILDLIFE AND COUNTRYSIDE ACT 1981

1. Legal Publications

The Wildlife and Countryside Act chap. 69 1981 is published by HMSO at £6.35. Copies can be bought direct from the Government bookshops in seven major cities throughout the United Kingdom or through local booksellers.

The Department of the Environment and the Welsh Office have issued to local authorities in England and Wales a joint circular on those provisions of the Act which came into effect automatically by virtue of the terms of the Act on 30 November 1981. Entitled Wildlife and Countryside Act 1981 (DoE Circular 32/81. Welsh Office Circular 50/81), this document was published by HMSO at £1.20 and can be obtained from the same sources as the Act itself. The Scottish Development Department issued Circular 3/1982 on 8th January 1982 briefly describing those provisions in Part II of the Act concerning nature conservation and the countryside, and the miscellaneous and general provisions in Part IV, which have a Scottish application and which came into effect on 30th November 1981. Part I will be covered in a separate circular to be issued by the Scottish Home and Health Department. Part III does not apply in Scotland.

2. Information Publications

Single copies of many of the following publications are free of charge, but ALL orders for such items must be accompanied by a stamped self-addressed envelope of the size specified. Orders without a SAE or accompanied by too small an envelope cannot be met. Bulk orders for the leaflets must be negotiated with the supplier.

The Nature Conservancy Council has published a booklet, sponsored by Shell, explaining more about the Part I provisions and entitled Wildlife, the law and you. Single copies are available free in exchange for a stamped self-addressed A5 envelope (9" x 6") from the NCC at Attingham Park, Shrewsbury, Shropshire SY4 4TW. A poster with the same title illustrating in full colour some of the species of fauna and flora, both British and foreign, protected by the Act and summarising some of the Act's key provisions is available from the same address for £1.00 + 75p. postage and packing.

The Nature Conservancy Council has also published a booklet entitled Focus on bats: their conservation and the law which outlines the ecology of bats, practical measures which can be taken to conserve them and the provisions in the 1981 Act concerning their protection. Single copies of the booklet are available free in exchange for a stamped self-addressed A5 envelope (9" x 6") from the NCC at Attingham Park, Shrewsbury, Shropshire SY4 4TW. If you order the two booklets Wildlife, the law and you and Focus on bats together, your reply envelope should bear a 16½p stamp.

The Fauna and Flora Preservation Society (FFPS) is selling a bat sticker featuring a black bat bearing the legend "I love bats". Copies of the sticker are available from the FFPS (c/o Zoological Society of London, Regent's Park, London NW1 4RY) for 70p each (inc. p. & p.).

The Council for Environmental Conservation (CoEnCo) are issuing a series of leaflets collectively entitled Wildlife and the law to explain the provisions of Part I of the Act. Each leaflet has been prepared in conjunction with the relevant specialist body and with the Royal Society for Nature Conservation and has been financially supported by the Nature Conservancy Council and the World Wildlife

Fund - UK. The first two leaflets in the series are: no. 1 Wild plants (published in conjunction with the Botanical Society of the British Isles) and no. 2 Reptiles and amphibians (published in conjunction with the British Herpetological Society). CoEnCo have also issued together with the Botanical Society of the British Isles a new edition of the BSBI's Code of conduct for the conservation of wild plants, which incorporates the provisions on plant protection contained in the 1981 Act. The three leaflets are available free of charge in exchange for a stamped self-addressed 9" x 6" envelope from CoEnCo (Zoological Gardens, Regent's Park, London NW1 4RY).

The Royal Society for Nature Conservation and the Botanical Society of the British Isles have prepared, with financial support from the Nature Conservancy Council and the World Wildlife Fund - UK, two posters depicting the plants specially protected under the Act. Entitled These endangered plants are protected by law nos. 1 and 2, the posters are available from the RSNC (The Green, Nettleham, Lincoln LN2 2NR) for £1.00 each or £1.50 for the two, post free.

The Royal Society for the Protection of Birds has issued a leaflet entitled Bird photography and the law explaining the provisions of the Act regulating the disturbance of those rare breeding species listed in Schedule 1. The leaflet also advises bird photographers on aspects of conduct which they should bear in mind. Single copies of the leaflet are available free in exchange for a 9" x 6" SAE from the RSPB (The Lodge, Sandy, Bedfordshire SG19 2DL).

The Nature Conservancy Council has issued a consultative leaflet to explain the provisions for Marine Nature Reserves contained in the Act and to outline the way in which the NCC intends to use them. Entitled Marine Nature Reserves, the leaflet is available free of charge in exchange for a stamped self-addressed A5 envelope (9" x 6") from Policy and Operations Division I, NCC, 19/20 Belgrave Square, London SW1X 8PY.

Other publications on the Act are planned. This information sheet will be continuously updated to record those titles concerned with the nature conservation aspects of the Act.

September 1982

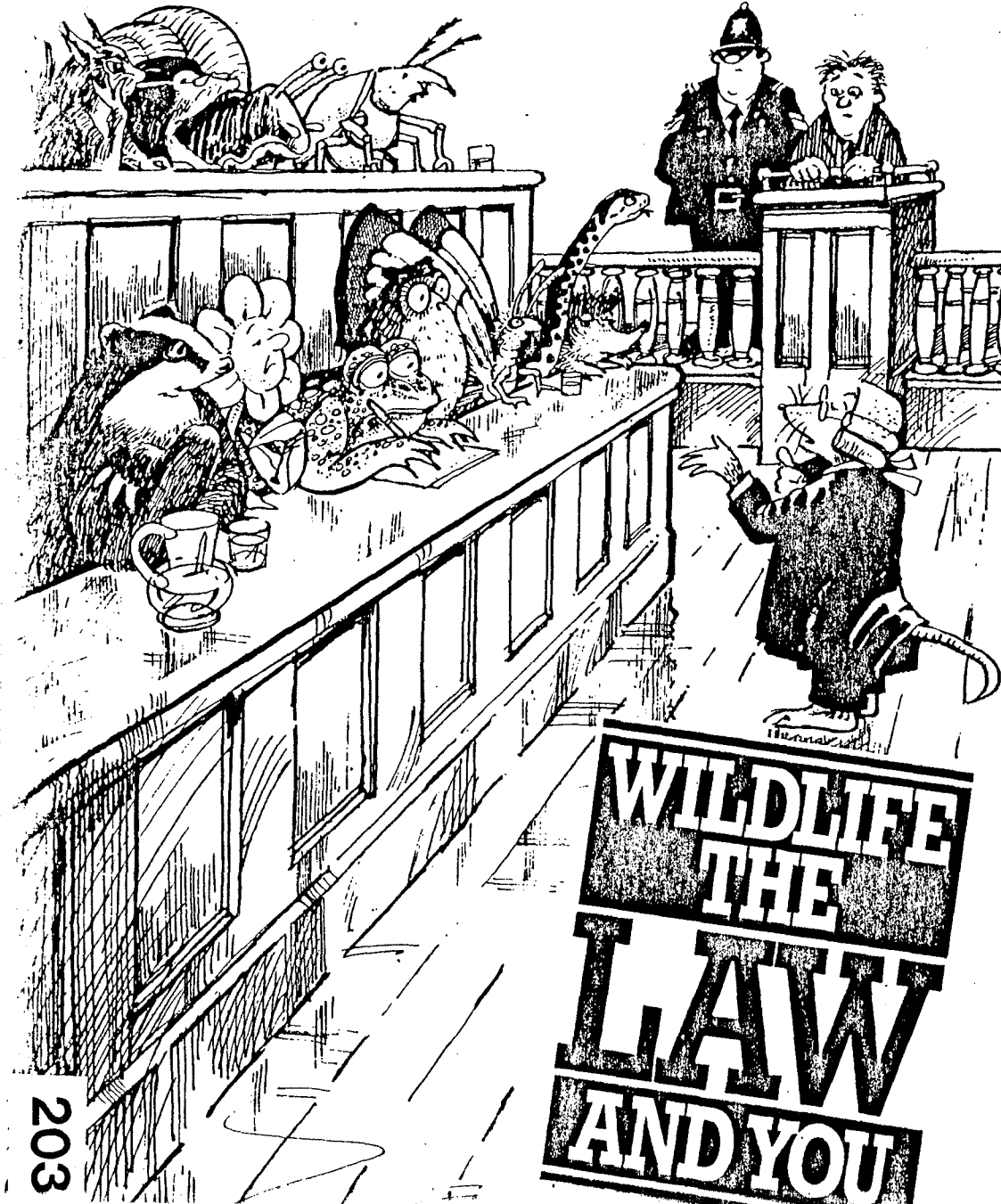
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- disturbing ther places of sheilt



INFORMATION

The voluntary organisations working for wildlife conservation on your behalf need volunteers and financial support. The addresses of some of the major organisations you can join are given below. If you are interested in a particular aspect of wildlife conservation, you can obtain a list of specialist bodies from the NCC Library, Calthorpe House, Calthorpe Street, Banbury, Oxfordshire OX16 8EX. (Please enclose a stamped addressed envelope.)

British Trust for Conservation Volunteers
36 St Mary's Street, Wallingford, Oxon OX10 0EU

National Trust
42 Queen Anne's Gate, London SW1H 9AS

National Trust for Scotland
5 Charlotte Square, Edinburgh EH2 4DU

Royal Society for Nature Conservation
The Green, Nettleham, Lincoln LN2 2NR (for the address of the Nature Conservation Trust for your area)

Royal Society for the Prevention of Cruelty to Animals
The Causeway, Horsham, Sussex RH12 1HG

Royal Society for the Protection of Birds
The Lodge, Sandy, Beds SG19 2DL

World Wildlife Fund
Panda House, 11-13 Ockford Road, Godalming, Surrey GU7 1QU

Youth organisations

Watch
The Green, Nettleham, Lincoln LN2 2NR

Young Ornithologists' Club
The Lodge, Sandy, Beds SG19 2DL

Other publications

Wild Birds and the Law
obtainable from RSPB (address above)

Wildlife and the Law
Number 1 - Wild Plants
Number 2 - Reptiles and Amphibians
Free from CoEnCo, Zoological Gardens, Regent's Park, London NW1 4RY on receipt of a 9" by 6" stamped addressed envelope.

Wildlife, the Law and You
An A1 wallchart obtainable from NCC, Attingham Park, Shrewsbury SY4 4TW: £1.75 including post and packing.

Two posters illustrating the 62 specially protected wild plants are obtainable from RSNC (address above: £1 each or £1.50 for the two, post free).



NOTES FOR DIPLOMA STUDENTS



The Diploma Practical Examination and the Biologist

This information is not appearing because biologists have greater problems than candidates in other disciplines, or because they have a pass rate any different from that of other colleagues. It simply happens that I have been afforded an opportunity to offer advice and help through the medium of the B.C.G. Newsletter and this I am happy to do.

The biologist does have one potential problem, since the examination is not for natural historians, but natural scientists, hence whether you are a zoologist or a botanist or both, you also have to be something of a geologist as well. As the practical examination is structured at present, though you can reduce the possible geological questions to one, you cannot escape the subject altogether. But, if we are expecting the museum natural historian also to have some facility for dealing with geological material, and few can get away without this need, then we should expect some evidence of an ability to deal intelligently with the minerals, rocks and fossils which can turn up in a museum.

It is important to establish from the beginning that the practical examination for the Museums Association Diploma is concerned almost exclusively with museum specimens. They may be specimens of high quality and beautifully preserved, but they may be fresh biological items needing preservation treatment or, perhaps worse, museum items which are of poor quality either through intrinsic faults or poor conservation work. There is no attempt to deceive when other than perfect material is presented, it is included explicitly to test a candidate's knowledge of imperfection either in materials or techniques. Probably the first thing a candidate will wish to know is what kind of material should he or she expect to find at the practical examination. Generally speaking it is worth remembering that the examination is not always in a museum of natural history and that many of the specimens will have been taken by the examiner, so it is not likely that there will be anything very large. This, of course, leaves a tremendous range still and there really isn't anything one might not expect to see. Taking the subjects in turn, it is unlikely that there will be live zoological material, hence specimens will have been suitable for preservation. They might be mounted for display purposes or could be study specimens, such as insects prepared for cabinet storage, or mounted in a life-like pose; there could be study skins of birds and mammals or, again, set-up specimens for

display purposes. There are often fluid-preserved specimens, especially invertebrates without chitinous or calcareous exo-skeletons.

There will usually be a spread of material to cover vertebrate and invertebrate specimens and microscopic material is not excluded, indeed some basic knowledge of histology and cytology is assumed and may be tested. Sometimes macroscopic specimens may be parts of whole animals, thus skeletal material frequently appears and candidates should not only be able to recognise individual bones, but have some competence in comparative osteology, especially as indicators of locomotory habit, dominant sensory apparatus and brain developments.

Plant material will frequently include fresh specimens and the use of a key for identification is often tested. A word of warning here. The examination at present takes place in January and is unlikely to be moved to a part of the year when flowering plants are in profusion and in bloom, hence there must be a limitation to plants with overwintering aerial structures which can be tracked down with a key, including of course aquatic plants. While clearly this limits the range of specimens likely to be available, it also means a more difficult exercise for candidates other than experienced botanists, who are extremely familiar with, and competent users of, botanical keys. I have seen reasonably experienced botanists come quite unstuck in using keys, partly of course because the available time does not allow for familiarisation with an unknown key. On balance, if a candidate has no great experience in the techniques of using keys, they would be advised to steer clear of these questions - but of course the botanical examiner has a right to put this kind of question to a candidate !

Otherwise, the botanical questions will often include reference to herbarium specimens, especially in connection with the techniques for preparing herbarium mounts. Fluid mounted specimens may be included and also microscopic preparations, either of the histological features of Cryptogams or whole mounts of some lower orders.

In the manner that biological material may be used in questions having an ecological slant, so geological material, in addition to forming a basis for testing powers of identification, may also require a knowledge of geographical distribution and relationship to terrestrial chronology.

Rocks, mineral-bearing rocks, pure minerals and fossils may be on the examination bench. Fossils may have been removed from their surrounding matrix or could be intact.

The examiner will obviously be pleased if a candidate recognises a geological specimen, but remember that few marks are awarded for getting the name right. Deductive reasoning which leads to an identification will earn more marks and prove to an examiner that even a correct identification was not a good guess or pure fluke. Commonly the geological examiner will be very interested in problems relating to specimens, especially involving storage and conservation.

For all material, be it zoological, botanical or geological, a knowledge of relevant techniques is required. In the case of rocks and minerals, the use of physical and chemical tests as an aid to identification is looked for, although actual testing, other than the use of simple qualities such as colour, hardness, relative density and taste, is not required. Methods of detaching a fossil from its matrix may be sought and the appropriateness of particular methods for specific fossils and matrices expected. The most common techniques associated with all three types of material, which are questioned, are those associated with preservation and conservation. Candidates should expect to be able to give step-by-step procedures for converting a fresh biological specimen into a museum specimen, using techniques such as dehydration, freeze-drying, fluid impregnation and conventional taxidermy. An ability to deal with the killing and fixation of living material is often tested.

Techniques for special preparations used in display may be requested, including such processes as maceration and cleaning for skeletal material and injection techniques to display systemic features

The conservation of stored material is an important area, which is seldom absent from a practical examination. This includes the proper choice of storage cabinets, particularly the material from which they are made, and the avoidance of acids found in certain timbers and many forms of paper products. The use of safe insecticides and fungicides is a difficult area at a time when we are finding new health hazards in many of the traditionally used chemicals; so an up-to-date knowledge of the medical implications of using certain biocides is required.

The Conduct of the Examination

Armed with an adequate background knowledge of museum natural science, what should the candidate expect to face up to in the examination room ?

The examiners' job is to make every endeavour to put a candidate at ease. Examination nerves are not exceptional, rather the reverse. The most

hardened and well-prepared examinee has some doubts - doubts that they really know enough, and doubts that the questions will be fair, doubts that the examiners may be setting 'catch' questions and certainly a doubt that they will have enough time to do justice to themselves.

With the best will in the world, examiners sometimes run late and candidates may be kept waiting beyond the time of appointment for their individual examination. Don't panic! Come prepared with something to read - something light and relaxing. When you enter the examination room the supervising examiner will check your number to ensure that you are the person they are expecting. The examiners will then be introduced to you in turn and usually you will be told their area of specialisation - you may of course know them, we are a small profession.

It is likely that you will be asked a few questions about your portfolio or thesis, although this is unlikely to occupy very much time. The examiners will have marked these previously, but may wish to clear up any points of misunderstanding or fill in any gaps. They would also welcome a knowledge of any special fields in which you claim to have an expertise.

You will of course see all the specimens on the table. Usually they will be arranged in separate subject sections and the appropriate examiner will sit behind his own material. The questions must be written, either on cards placed next to the relevant objects, or all the questions may be on one piece of paper and refer to numbered or lettered objects. There must be a minimum of fifteen objects, or groups of objects, that is five each for zoology, botany and geology.

You will be asked to choose any three questions, but instructed that you may not choose more than two from any single section, thus you may choose two zoological questions and one botanical, vice versa, or one from each subject area. They can be answered in any order. You will have between five and seven minutes to answer each question and this is not long. Answer the questions asked. A single question may require a series of separate answers or an answer relating a step-by-step analysis or technical procedure.

When you have completed the questions you have chosen, or if you have been slow, when the examiner tells you that time is up, you will be given one question to answer by each examiner from material in their own subject section. You could therefore finish up having answered three zoological and two botanical questions and one geological question or any other combination which adds up to six.

There can also be penalty marks deducted for candidates who have given a laboured and pedestrian performance and who have over-run their time allowance. Alternatively, there are often bonus marks for impressive performances.

Remember that you can handle the objects, but also remember that you may lose marks for incorrect handling and not having regard to the delicacy of museum specimens. If instruments are needed for handling specimens they will generally be provided, therefore if you see instruments on the bench, take it that they are necessary, at least for some questions. If hand magnifiers are needed they should be provided, but there is nothing to prevent you using one of your own. The same applies to reference works, especially identification keys. You will not require any writing or drawing instruments as the whole examination is an oral one, but a watch would be useful. Above all, try to adopt a confident attitude, face the examiners squarely, look at them, not down at your boots. Speak as clearly as you can. Do not rely upon an indistinct answer being given the benefit of the doubt. We usually reckon that we can assess pass or fail potential within a couple of minutes after a candidate has entered the examination room !

The Questions

It is the job of the examiners to set questions which can be clearly understood and are devoid of ambiguity. A question may be a single one, for example:-

"Identify specimens A, B and C."

The answer must be direct, but should explain why you have arrived at your decision, based upon diagnostic features that you have recognised and which you associate with the characteristics of particular taxonomic groups. If you cannot pin-point a specimen accurately, indicate the sources of reference you would consult. Some questions may seek information additional to identification, for example you might be asked to indicate reference sources, including taxonomic works, museum collections and specialist colleagues for consultation.

Not every question will rely upon identification, although without knowing what the specimens are, you would be in some difficulty in providing the information sought. You could be asked about displaying specimens, including the context in which they could be used, the information you would

supply and the conservation measures you would observe. Similarly, there is usually some reference to storage, including the documentation belonging to stored specimens. Field collecting techniques are sometimes asked for, especially in dealing with living materials which must be given some treatment before removing them to the museum. The educational uses of natural science material may be included as part of a question, which could be phrased "A small boy brings specimen X to your museum. What would you tell him about it and how would you explain to him that he has contravened a nature conservation regulation?"

In asking questions on conservation and preservation techniques, you may find that the examiner has presented a perfectly prepared museum specimen and merely wishes to know how this has been achieved. Less simple are the occasions when specimens have deteriorated through imperfect original conservation and then you need to be able to explain what went wrong and often if the deterioration can be halted. Occasionally you may be given something which has undergone partial treatment and you need to be able to suggest how the process could be completed.

Final Advice

Basic knowledge is essential and while you cannot possibly waffle your way through, you can get a long way by using common sense. Try to be logical in assessing specimens, look at their characteristics and if in an examination you make a mental note of every feature it is very likely that some bells will begin to ring. The examiners will not answer the questions for you, but they will try to correct you when you are chasing a false hare and they will ask you leading supplementary questions to urge you along the right pathway.

It is worth reflecting that the candidate who needs no prodding and who races through six questions without a falter is a pretty rare bird - I don't think I recollect one in the last ten years. Yet the pass rate is not all that low !

and North West
The South-East/Area Councils arrange mock practicals, others may follow - try to get to one.

JIM BATEMAN
CHAIRMAN OF EXAMINERS
FORMER EXAMINER IN NATURAL SCIENCES

BOOK NEWS
AND REVIEWS



THE GUINNESS BOOK OF MAMMALS - John A. Burton

Guinness Superlatives Ltd. ISBN 0-85112-305-8

This book contains 160pp and is intended to cover fifty species of British Mammals. Each species is represented by a colour photograph. These are generally very good. The accompanying notes contain relevant information - size, description, behaviour food etc. , but is confused by line drawings often of different though related species. I feel it would have been better to either confine this book to the photographed species or to more distinctly separate those included.

The line drawings do not do justice to the quality of the book which is a pity. Generally, however, this book contains much useful information for beginners (particularly the concept of nomenclature) and would make a worthwhile present for young, enthusiastic amateurs.

At £4.50 this book would make a useful addition to a museum library where identification on an educational basis is required.

K.Berry, Bolton Museum

freeFree copies of Linnean Society Synopses of British Fauna

The Linnean Society recently decided to dispose of the remaining copies of their Old Series of the Synopses of the British Fauna, because they need the space for the New Series. They very kindly decided to GIVE the Old Series Synopses to any recipient who could use them, and would agree to take them away swiftly. The Horniman Museum has collected the Synopses on behalf of BCG, and David Allen, the Horniman's Librarian has agreed to act as a distributor for BCG members.

The following five titles are available in LARGE quantities:

- No. 6 Lumbricidae (Annelida), with
Keys and descriptions.
By B.M. Gerard, 1964
- No. 8 Slugs (Mollusca) (Testacellidae,
Arionidae, Limacidae)
By H.E. Quick, MB, BSc, FRCP,
1949.
- No. 9 British Woodlice, with a Key
to the Species.
By E.B. Edney, 1954.
- No. 13 British Freshwater Bivalve Molluscs,
with Keys and Notes for the Identification
of the Species.
By A.E. Ellis, 1962.
- No. 14 British Barnacles. With Keys
and Notes for the Identification
of the Species.
By R. Bassindale. 1962.

We suggest that the easiest way to distribute these useful publications is to offer them in sets containing one of each title. Anyone wishing to receive a set (or sets, we have lots to distribute) should send the appropriate post and packing charge plus a self addressed label to the Horniman Museum at the address below. Cheques should be made payable to the Horniman Museum.

Address for requests:

BCG Offer,
c/o David Allen,
Librarian,
Horniman Museum and Library,
London Road,
Forest Hill,
London, SE23 3PQ.

Post and packing charges:

One set	=	£1.50
2 - 3 sets	=	£2.00
4 - 5 sets	=	£2.50
6 - 7 sets	=	£3.00
8 - 10 sets	=	£3.50

Charges for larger quantities by negotiation, contact Penny Wheatcroft at the Horniman Museum. If you are passing through South London, call in and collect some copies from the Museum, and save postage!

Bonus for early orders

We have a very few copies of the following titles, and propose to add these as a bonus to the first orders that we receive.

No. 2 Caprellidea (Amphipoda, Crustacea)
By R.J. Harrison BA, ALS, 1944.

No. 12 British Echiurids, Sipunculids and Priapulids
By A.C. Stephen 1960.



Mr. "WHERE DO ANIMALS GO WHEN THEY DIE?"
SAs. "ALL GOOD ANIMALS GO TO HEAVEN, BUT THE BAD ONES GO TO THE NATURAL HISTORY MUSEUM."

Fig. 23. A theological discussion (drawing by E.H. Shepard in *Punch*, 10 April 1929).

The Natural History Museum at South Kensington. A history of the British Museum (Natural History) 1753-1980. By William T. Stearn, 1981. Published by Heinemann in association with the British Museum (Natural History), £15.

The Natural History Museum has indeed been fortunate in having the services of Professor Stearn to write this authoritative history in celebration of its centenary in South Kensington. From a wealth of published and unpublished sources, memoranda and memories, he has knitted diverse strands together into a highly readable account of the development of the museum and its collections.

The framework of the book is essentially chronological, beginning with the Bloomsbury years (not apparent from the short title), and documenting the impressive growth in specimens and staff up to the present day.

"the entomological staff....has now risen to over ninety....sixteen persons work on Coleoptera..."

The passage of curators, their achievements and foibles, is detailed throughout in numerous, entwined biographies, which make compulsive and often entertaining reading, much in the manner of Sherborn's Where is the — collection? Stearn writes of J. E. Gray and Oldfield Thomas, "managed to live comfortably on Museum salaries and had money to spare by marrying wealthy women..."

There is much also in this book of relevance to other museums, not least in approaches to administrative practice, where inventive curators have independently found common solutions to common problems. Students of evolutionary convergence please note.

"..he saw bruised and broken specimens being collected in a basket for burial in the Museum garden..."

"..the Trustees gave him an attendant...who had had little education and no experience of mineralogy but he proved nevertheless very intellegent, diligent and quick to learn."

It is tempting to quote at length from this delightful work, which is both a source of reference and a pleasure to read in quiet moments. Better however that you discover them for yourself, and eagerly await, as I, a companion volume for the next one hundred years.

Tim Riley

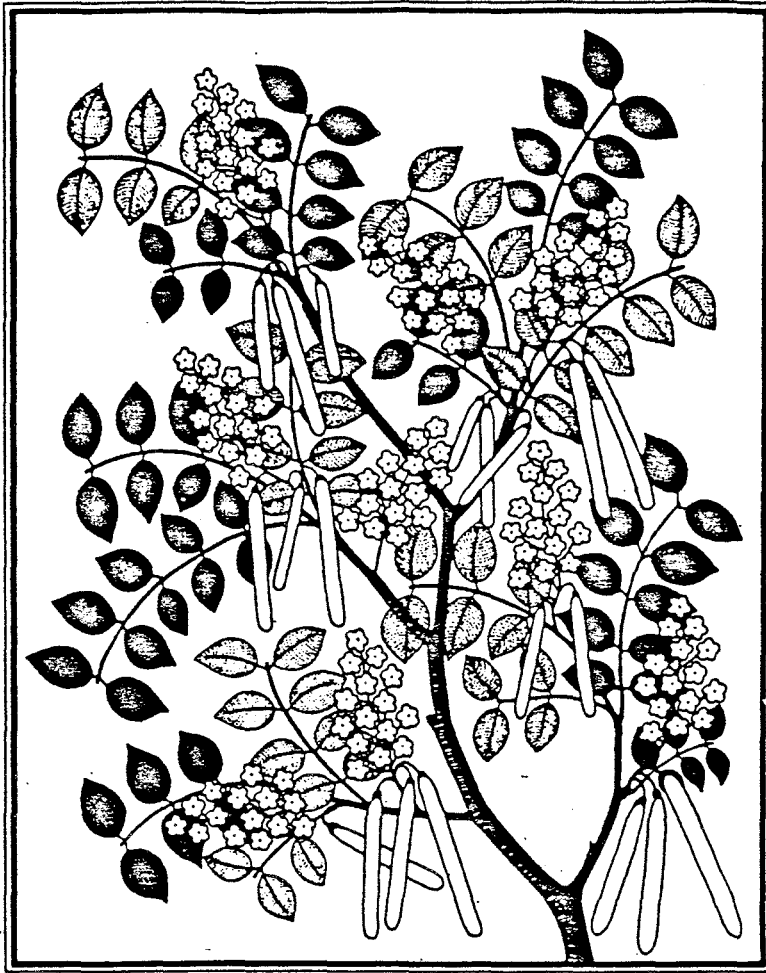


Fig. 28. Indian Laburnum, Golden-shower Senna or Purging Cassia, *Cassia fistula*, a beautiful tree of India, Burma and Sri Lanka, with yellow flowers and long pods with laxative properties, as portrayed on the panelled ceiling of the Museum's main hall.

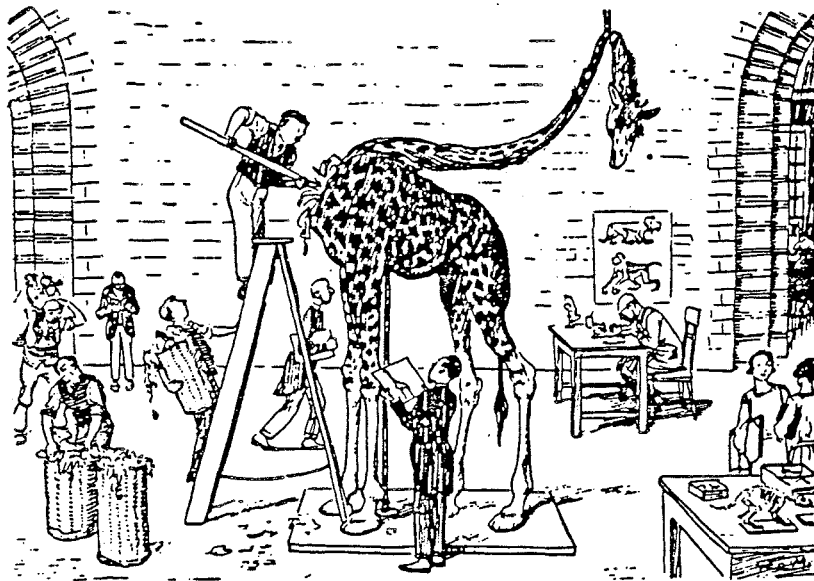


Fig. 24. Stuffing a giraffe as imagined by a *Punch* artist (from *Punch*, 21 July 1926).

Oxfordshire Museums Occasional Papers

- No. 1. An Atlas of Oxfordshire Mammals by R. Surch
& J. M. Campbell
No. 2. An Atlas of Oxfordshire Butterflies by R. Knight
& J. M. Campbell

Hot on the heels of Staffordshire, Sheffield, Essex, Kent etc. Museum Services with the production of local atlases, are Oxfordshire County Museums, who have just launched their new series, which aims to provide information for the public concerning the history, natural history and culture of Oxfordshire.

Mammals

It is good to see the first issue of a new series on the subject of mammals. They really are under-worked in many areas. Oxfordshire was no exception; only one account pre-dates this current publication (Victoria County History 1939). 'An Atlas of Oxfordshire Mammals' has at last set the record straight, and provided a firm basis, and hopefully lots of incentive for further work. Most species are mapped at the tetrad level, some at the 10Km² level for security reasons. Rarities and extinct species are mentioned briefly in the text. Some species are quite obviously under-recorded particularly the "small mammals", and a good bout of "bottling" (see B.C.G. Newsletter No. 10) would do this atlas a power of good! On the other hand, coverage for many other species is very good (Fox, Mole, Rabbit, Brown Hare, in particular) and some distribution trends are already beginning to emerge. For example there is a fairly good correlation between Pipistrelle (p. 11), and the map of 'Urban Areas' (p. 3). 'Woodlands' have been included as another environmental map for comparisons, and personally I would have found altitude and solid geology maps quite useful too. (The next issue maybe?)

However, this booklet is a good example of the sort of provisional county atlas that we should all aim for. It will be of interest to naturalists working in or visiting Oxfordshire, and to all mammalogists interested in field recording. At such a reasonable price too!

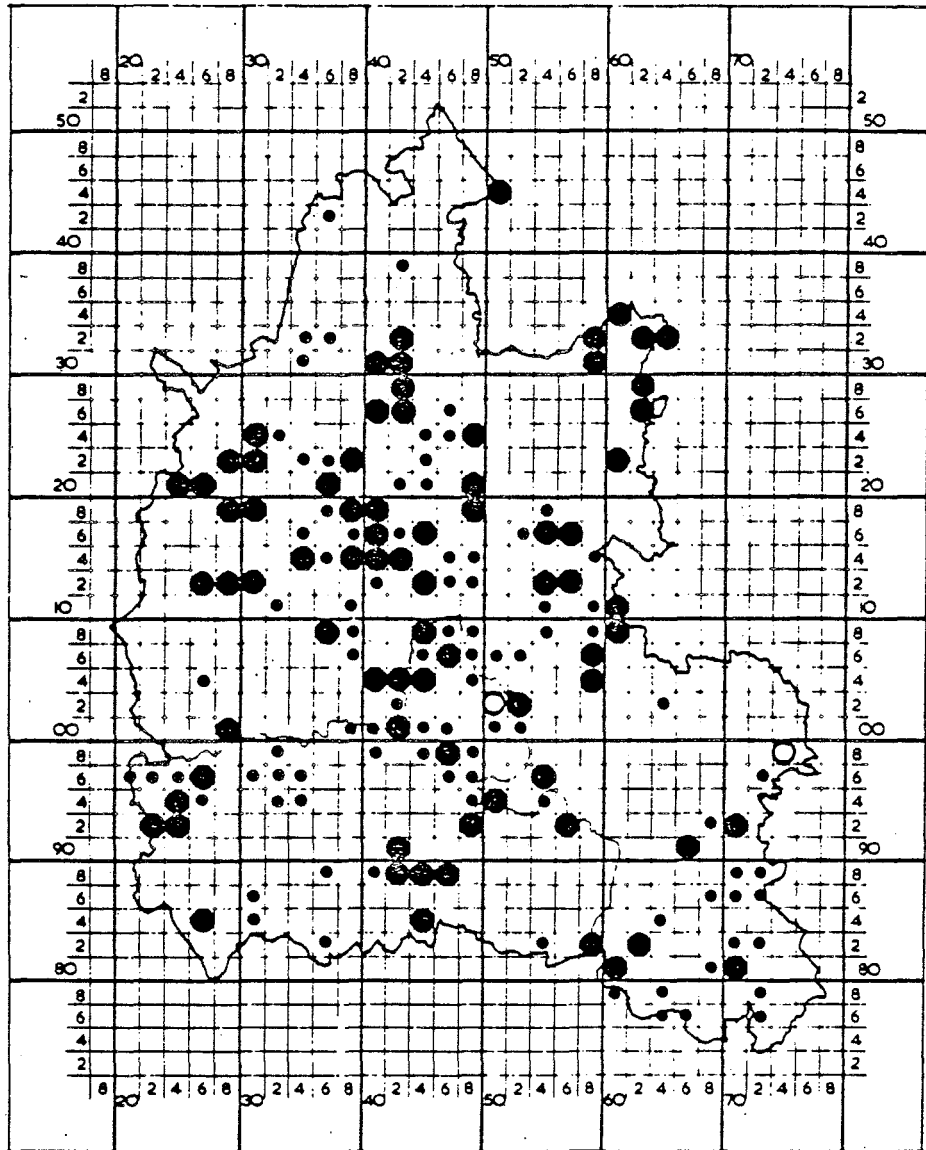
(D.W.)

SPECKLED WOOD

Parage aegeria (Linn.)

○ Pre.1960 ● 1960-79 ● Post 1979

BIOLOGICAL RECORDING SCHEME - OCC. DEPT MUS SER
OXFORDSHIRE



M16

Bretherton 1939 describes it as very scarce, but Emmet 1947 considered it to be common. This species has continued to increase and today is widespread and common, being found along large hedges, around quite small patches of scrub and gardens.

Butterflies -

This booklet contains tetrad distribution maps of all but the rarest of Oxfordshire butterflies. The rarities are either no longer present or are not mapped for security reasons. The maps are clearly produced and separate three recording periods; pre 1960, 1960-79 and post 1979. Here I have one small criticism in that the black disc is obvious to all as the most recent class, but I always think of a circle next and finally a dot, so my "interpretation at a glance" has problems. I may be odd in this respect! As far as its uses and purposes (and price) are concerned I think that all is explained well by John Campbell in this extract from his letter.

"May I make one or two observations about the Oxfordshire Atlases. Apart from the ornithologists, there is now no county natural history publication. One or two local societies produce varying newsletters for their own patches. So we are filling a gap by publishing what are really base lines for the future.

The atlases are produced as cheaply as possible. One way has been to have a bulk supply of covers which can be used for future productions. Also we will improve the clarity in future atlases. It is hoped to do Odonata and Reptiles and Amphibians this winter.

We produced only 100 copies of each atlas and most have now gone. They went on sale at Easter. Cost is 70p each plus 26p for p & p (each). They are fulfilling their chief objectives in that some people are becoming more active in recording and others are plugging the gaps. Several people are annotating their atlases and have promised them to us for the winter when we can abstract the new records. One chap has made his own copies onto card and keeps them in his car so that they are immediately available."

In summary, a publication of great value to Oxfordshire naturalists, the Oxfordshire Biological Recording Scheme and to people in other areas of the country interested in the 'state of play' in other counties.

(S.P.G.)

Cheques and P.O.'s payable to the O.C.C. Department of Museum Services and crossed. Available from Oxfordshire County Council Department of Museum Services, Oxfordshire County Museum, Fletcher's House, Woodstock, OX7 1SN.

Blandford Mammal Society Series

- The Harvest Mouse by Stephen Harris
- The Red Deer by Brian Staines
- The Common Dormouse by Elaine Hurrell
- The Greater Horseshoe Bat by Roger Ransome
- The Wild Rabbit by David Cowan
- The Red Squirrel by Andrew Tittensor

A most useful series of hardback books, originally published in 1980 and aimed at the younger reader. However, each volume is written by a specialist in the Mammal Society, and the information presented is clear, concise, detailed and accurate, which should be appreciated by older readers too! The books are lavishly illustrated (some colour photographs are superb) and also include line drawings showing skeletal structure and diagnostic anatomical details. The contents are arranged under headings so that it is easy to find and extract any particular piece of information.

Museum curators involved with writing labels, articles, lecturing or educational activities will find this series an invaluable aid - and such good value for money too!

The Mammal Society have acquired the remaining stock from Blandfords and are selling at £1.46 each or £7 a set (incl. post) from Pat Edwards, Harvest House, Reading RG1 5AS.

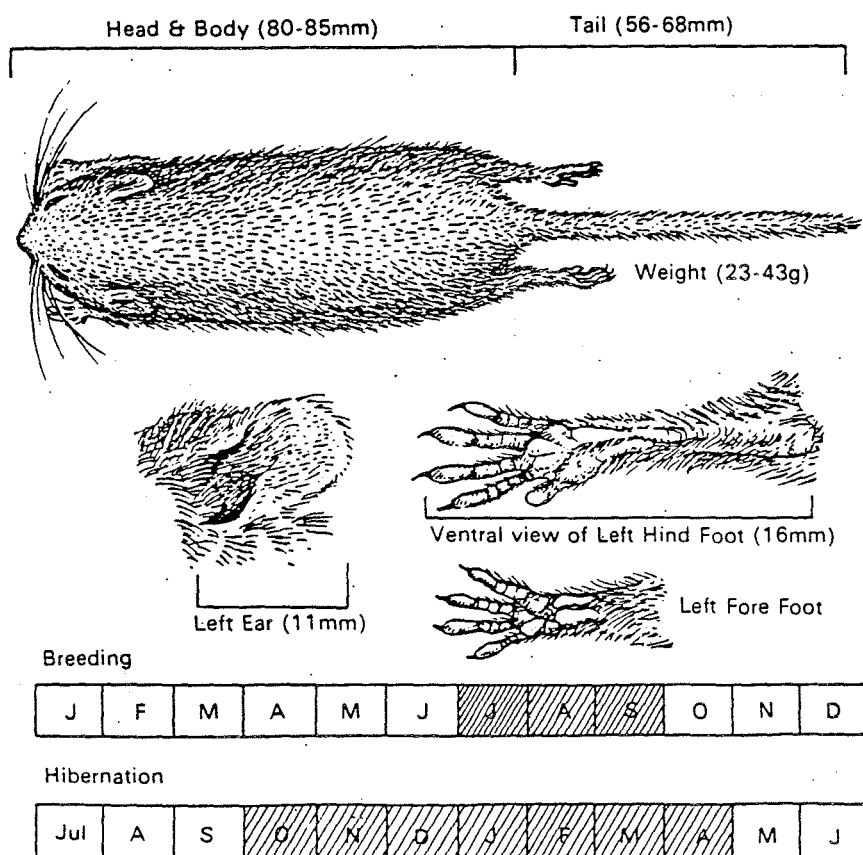
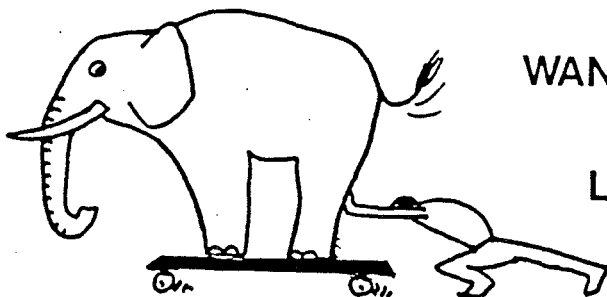


Fig.1 Measurements and breeding season for the British Common Dormouse population.

known as 'dory-mouse' and 'dozing mouse' respectively; in many counties it is known as the 'sleeper', the 'seven sleeper', or 'sleep-mouse'. Its attractive appearance has a fairy-tale charm and other delightful local names include 'chestle-crum' and 'derry-mouse'.



WANTS, EXCHANGES,

LOST & FOUND



Wanted - for skeletonization
Marsh Tit, Willow Tit, Twite, Ring Ouzel (again), Red Squirrel,
Mink. Go on, have a look in your deep freeze for spares
(legally taken of course) with tatty skins. We can exchange
the odd road casualty T.B. free Badger, or English Mountain
Hare if required.

Nat. Sciences Dept. City Museum, Sheffield

Species Recording Cards, Sheets, Forms etc.

A big 'thank-you' to the folks from Tyne & Wear, Merseyside
(Botany and Vertebrate Zoology), Stoke, and Sheffield for
examples of various recording formats used to record
observations of species. Now! if I could receive a few more
from other local B.R.C.'s I shall attempt to collate some sort
of review article for the next B.C.G. Newsletter. If possible
cards, maps etc. should be filled in or COMPLETED please as
examples of data input. A few of the above named have even
provided short articles about their species recording
activities - again these are warmly welcomed.

Please forward to Derek Whiteley (Asst. Editor)

THE SHEALS FAMILY - TAXIDERMISTS - A REQUEST FOR INFORMATION.

Have you heard the one about the Irish taxidermist? Well if you have I would like to know. The Ulster Museum is planning a major exhibition on the life and work of James Sheals and his two sons Alfred and Thomas - taxidermists of 'The Old Shop' Corporation Street in Belfast. Information on Sheals specimens in British museums is urgently required. The family was in business from around 1860-1930 and during that time they mounted material for museums all over the world. Even the great Rothschild himself sent material to Belfast to be mounted for his museum at Tring.

Their work is of a remarkably high quality comparing favourably with the other great Victorian taxidermists such as Ward and Gunn. The 'Inside Story' exhibition featured examples of their work including a magnificently mounted Lammergeier attacking a Wild cat; artistic licence perhaps but it works well.

The Sheals family are perhaps little known outside Ireland. The exhibition in 1983 may change the situation. In the meantime do you possess Sheals' mounts? They are easily identified by the signature or stamp on the bottom of the base. The exhibition is to feature aspects of historical taxidermy and its development during the Victorian era. Any information or offer of material would be gratefully received.

An Irish taxidermist - it has all the ingredients of a good joke. The quality of the taxidermy however will ensure the Sheals have the last laugh!

Marshall McKee
Assistant Keeper-Vertebrate Zoology

Ulster Museum
Botanic Gardens Belfast
Belfast BT9 5AB. 0232/6682515

THE CATHEDRAL
MANCHESTER M3 1SX

Telephone - - - 061-834 7503

1st August, 1982

EXHIBITION OF FLOWER PAINTINGS AND BOTANICAL DRAWINGS

to be held in the Summer of 1983 at the Cathedral.

Dear Sir,

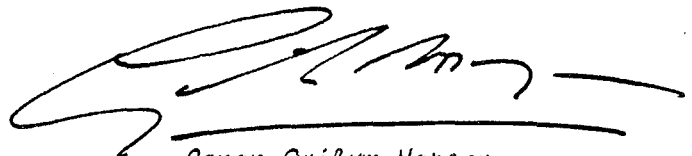
From time to time we hold Exhibitions in the Cathedral, and, in recent years these have included David Jones, John Nash, the War Artists of the Second World War, John Piper, and most recently Ceri Richards.

We have been loaned pictures from many of the national galleries, and have been able to satisfy them concerning all matters relating to security, transport, handling, mounting, etc. The whole Cathedral is covered by an alarm system, and the Regimental Chapel, where the Exhibitions are mounted, has special detector devices.

We are contemplating an EXHIBITION OF FLOWER PAINTINGS AND BOTANICAL DRAWINGS. Such names as John Nash, Matthew Smith, Norman Adams, Winifred Nicholson, David Jones, Christopher Wood, Cedric Morris, John and Charles Raven, and Henry Hunt, have been mentioned, and we have been thinking that it might be possible to draw together a representative exhibition from public and private sources here in the North West. We managed to do this very successfully for our David Jones Exhibition. If we were to include items from the galleries locally this could be a means, as well, of bringing to Manchester a great array of the treasures held by the galleries in the North-West. We would be most interested to hear what flower studies or drawings you possess, and whether or not it might be possible for us to select and borrow some.

It might possibly assist you if I name some of the members of the Panel who are active in the mounting and putting together of our Exhibitions. Lady Joan Worthington, Mr. Francis Hawcroft, Mr. Allen Freer, Mrs. Jan Green, Mr. George Spafford, Mr. Ian Wolfendon, and Mrs. Wendy Parr.

Yours sincerely,



Canon Gwilym Morgan

Sub-Dean, and Chairman of Arts Committee.

BARBER'S FLUID: the answer to a Dipterist's prayer

If you are having trouble with rigor mortis in your flies, especially if you are experiencing difficulties in attaining relaxed genitalia, then Barber's fluid is for you(!) A mixture of easily obtainable chemicals - recipe below - Barber's fluid can be made up in the home and stored without problem, so long as it's left out of the reach of children. One dab with a small brush on the offending parts induces their relaxation in about 5 minutes, such that they may be manipulated with ease and without damage to the rest of the abdomen. Total immersion (for c.10 minutes) of dried out and even quite aged specimens renders them sufficiently pliable to be remounted or set in new positions. The Barber's Fluid subsequently evaporates, leaving specimens seemingly unaffected by the wetting.

The male genitalia of many Diptera are not normally adequately visible to enable their use in determination, yet their morphology is frequently used in keys etc. to help distinguish species one from another. Laborious preparation methods or lengthy relaxation procedures inhibit many Dipterists from undertaking genitalic examinations. The ease with which fly genitalia can be manipulated and examined so soon after application of Barber's Fluid could well dispel these inhibitions, making determination of many "critical" species a much more certain and less onerous undertaking.

Ingredients of Barber's Fluid (to make up 900cc.): 95% alcohol, 330cc.; distilled water, 300cc.; ethyl acetate, 150cc.; ether, 120cc.; acetic acid, 10-20 drops.

The beneficial properties of Barber's Fluid were brought to my attention by Loic Matile earlier this year. I have now used this "magic potion" extensively myself and find it extremely reliable.

Martin C D Speight

Bulletin of the Diptera Recording Schemes No.12

February 1982

And finally..

One small item, lifted without shame from the latest edition of M.P.G.'s "Museum 3000" column....

Computer Nature Reserve

The Minister for Conservation has announced the creation of a Local Nature Reserve in the central processor of the Cambridge IBXL36K computer. Recent work by electro-ecological experts has shown the existence of a population of Demestes nineohmtwowattii hitherto thought to be extinct in this country. Biologists will recall that Demestes is one of many resistor mimics that were discovered to be living in electronic devices in the mid 24th century. It has been suggested that many of the failures of earlier machines were due to the replacement of real components by these mimics which perform in every way like the real thing - except that they are capable of movement. So far over 9,000 species of insects and arachnids mimicking resistors, diodes, transistors and silicon chips have been described.

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The aims of the Biology Curators' Group are:-

- i) to facilitate the exchange of information between individuals concerned with the management of biological collections and records, their research, conservation and interpretation.
- ii) to present the view of curators of biological collections.

Copy dates for future issues based on three copies per year:

31 August for October issue

31 December for February issue

30 April for June issue

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

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