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DORSET COUNTY MUSEUM NATURAL HISTORY RESERVE COLLECTIONS

Introduction

The natural history collections of the DCM date back to the opening of the Dorchester Museum in 1846. What if anything is still extant from these earliest days is difficult to assess. However, current work on the collections should give a much clearer indication before too long. Large collections have been donated and in some cases purchased. The range of material is considerable and several important collections are held e.g. Nelson Richardson's Collection of British Lepidoptera (types included), Mansel-Pleydell herbarium. It has been pointed out that type specimens may be present in this large collection.

Late in 1978 the opportunity for a dramatic reorganisation of the storage of the collections presented itself. After a month of intensive removals the bulk of the natural history reserve collections were housed in one room.

Three main projects are currently in hand and the following notes have been provided by those involved.

Dorset County Museum Ornithological Collection

The Dorset County Museum ornithological collection was begun in the mid nineteenth century. Most of the birds in the collection belong to the latter half of that century, and include specimens collected by Alfred Russel Wallace in the Malay Archipelago.

The complete collection consists of mounted specimens, study skin collection, wing preparations, an osteology collection, birds eggs and a small pellet collection. The expansion of the Museum's stores enabled the bulk of the various collections to be brought together in one room, where the mounted specimens had been hitherto stored on Dexion racking.

Prior to 1978 the collection of mounted birds had been partially catalogued. Unfortunately there was no clear record of how far this had gone. A card index was generated for the skin collection in the late summer of 1978.

At the beginning of 1979 it was decided to completely recatalogue the mounted collection and to store the birds, in polythene bags, in dust proof boxes. At the same time a complete typescript of all the bird specimens which have been accessioned has been produced, so that it should be possible to assess more readily the value of particular specimens.

The mounted bird and skin collections consists of approximately 400-500 specimens. These are now being classified into species using as a guide the recently published "List of Recent Holartic Bird Species" by K. H. Voos, published 1977.

Individual cards for each bird are being prepared to take all known information. Donor, year of donation, locality, whether adult or immature, sex, plumage and general condition. In addition to this the current status of the bird in Dorset will be noted, using the "Check List of Birds in Dorset" by J. V. Boys.

When this project is complete, those wishing to study the ornithology of Dorset and historical association of Victorian and other collectors with the collections of the Dorset County Museum will be able to do so more readily than before. In addition to this, the Museum will be better placed to formulate a coherent collecting policy, and encourage research into areas where our knowledge is poor.

E. F. C. Coetzee

The Dorset Underwater Survey Collection at the Dorset County Museum - Dorchester

Three underwater surveys were carried out between November 1976 and December 1978, covering the Dorset coast between Studland Bay and Lyme Regis.

These projects were financed by the Manpower Services Commission, The Nature Conservancy Council and Dorset County Council and supervised by a Committee representing Dorset County Council (Heritage Coast Project), Nature Conservancy Council and Dorset Naturalists' Trust.

The intention was to survey the highly varied sublittoral ecology at predetermined sites, to produce a description of topography and substrate and to build up a species list.

SURVEY I took place between November 1976 and May 1977.

Three divers were employed to do a detailed survey of the sea area at Kimmeridge. The Survey area chosen, between Worbarrow Tout and Clavell's Tower, includes Brandy Bay and Hobarrow Bay (protected from human pressure by the Army) and the widely used Kimmeridge Bay. This was the most detailed survey as it concentrated on a relatively small area. The area has since become part of the Purbeck Marine Wildlife Reserve, a voluntary reserve sponsored by the Dorset Naturalists' Trust.

SURVEY II took place between July 1977 and March 1978.

Four divers were employed to survey the sea area from Studland Bay to Ringstead Bay. Sites were chosen at regular intervals and transect lines were 'drawn' out from the coast to approximately 20m depth. Dives were carried out along these lines.

SURVEY III took place between July 1978 and December 1978.

Four divers were employed to survey the sea area between Portland Bill and Lyme Regis. They dived at predetermined sites within three areas:- Chesil Cove, Chesil Bank - Burton Bradstock, and Burton Bradstock - Lyme Regis.

In all three surveys some organisms were identified in the field and not collected i. e. highly mobile animals such as fish. Most, however, were collected and identified in the laboratory using published keys. Dive logs and dive site records were kept giving details of dive conditions, site topography and species identifications. Record cards were completed providing a condensed version of this information in a readily accessible form. These cards were on a format suitable for inclusion in the Dorset Environmental Records Centre. In most cases identifications were made by experts.

Where possible, a specimen of each species identified was preserved and labelled. Preservation techniques varied in detail between Taxa but generally 70% alcohol was used for animals and 5% Neutral Formalin for Algae. Some sea weeds were also dried and pressed. In addition to preservation, narcotisation and fixation techniques were also employed in certain soft bodied animals to prevent distortion prior to preservation.

The Dorset County Museum, Dorchester, were given the collection of preserved specimens, records, transparencies and reports in December 1978.

Those from Survey III arrived at a later date as many identifications were still being verified by experts. The preserved specimens are stored in press top glass vials and screw top jars. They are labelled giving details of species name, date, site number, grid reference, habitat, depth corrected to chart datum, preservative, collector and determiner's initials.

Since the arrival of the collection, the specimens have been sorted into Phyla and the appropriate records underlined on the card index when specimens are present. A list of specimens has also been compiled. As many as 286 different species of animals, 178 species of preserved algae and 98 pressed algae have been listed from Surveys I & II. There is, as yet, no card index for Survey III but this will be compiled from the data given in the dive records. Once this is done the specimens can be sorted.

Full information on the specimens collected from all three surveys will also be transferred to MDA record cards as part of a policy of more thorough cataloguing of Museum collections. It is important that information from such a survey is made accessible for inclusion into national recording schemes. The presence of the records and collection in the Dorset County Museum ensures that anyone with a specific interest in Dorset will readily find the data.

The collection and records will give valuable information to anyone carrying out similar or comparative studies. It will also give valuable information in the future when assessing the effect on the ecology of the Dorset coast of

threats such as sewage, fishing, collecting and the alien Japanese sea weed (Sargassum muticum). The latter was only recorded as a few drift plants during the survey but has since become established at Chapman's Pool and Kimmeridge.

It is hoped that this fine collection and its associated data will be seen and used by as many people as possible in the future.

Sarah A. H. Welton

References

Report of the First Dorset Underwater Survey June 1977 (revised April 1978) (not available)

Report of the Second Dorset Underwater Survey (March 1978)

Report of the Third Dorset Underwater Survey - preliminary report only (not available)

Copies of Report No. 2 can be obtained from : County Planning Department, County Hall, Dorchester, at a cost of £1.50 plus 25p postage and packing.

Mansel-Pleydell Herbarium

J. C. Mansel-Pleydell was President of the Dorset Natural History and Antiquarian Field Club from 1875 - 1902. He published the 1st edition of his 'Flora of Dorsetshire' in 1874, and the 2nd edition in 1895.

The Herbarium formed by him was bequeathed to the Dorset County Museum in 1902.

The collection was arranged according to Nyman's *Conspectus Flora Europaeae*. It was stored in open wooden boxes which were in turn housed in cupboards, and the specimens at some stage became infested by microlepidoptera.

In 1975, curation of the collection was initiated by Bill Grange who was then Assistant Curator. The sheets of Dorset material have been extracted, the debris removed, then replaced in new paper covers and stored in cardboard boxes. The present arrangement and numbering of families and genera is based on Clapham, Tutin & Warburg, *Flora of the British Isles*, first edition reprinted 1958, so that the material is readily located. Although the state of preservation of the specimens varies considerably, the information on the labels is especially valuable for date of collection and locality. The conservation of the Dorset material is now very near completion.

The remainder of the Herbarium is still in the original folders and boxes, 88 in all; this consists of specimens from certain areas mainly in Western Europe, and some of these specimens were provided by local collectors. This material has now to be conserved.

M. A. Smith