



Chapter (non-refereed)

Maitland, P.S.. 1975 Loch Leven Symposium. In: *Annual Report of the Institute of Terrestrial Ecology* 1974. NERC/ITE, 62

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Multidisciplinary studies and surveys

As Section II explains, while the permanent organization of ITE is based on a series of Divisions and Subdivisions related to scientific disciplines, and the majority of the research projects summarized in these pages have been grouped under Subdivisional headings, ecological research is inevitably multidisciplinary and the Institute will retain project groups that bring together scientists from several Subdivisions. Because of the transitional stage in our re-organization, these project groups have not been defined in time for them to be described in this Report, but they will feature prominently in later years, and more and more research is likely to be summarized under Project Group rather than Subdivisional headings.

There are several activities in 1974 which can only be so treated. They have been brought together here. Two involve the synthesis of major components of the International Biological Programme summarized by P. S. Maitland and J. E. Satchell. Five are surveys – of British lakes and reservoirs; of the habitats of the Isle of Man; of the biology of Shetland; of the habitats and ecology of the Wash, in connection with Feasibility Studies for freshwater storage reservoirs; and of the Maplin area.

All these surveys were commissioned (at least in part); the first two by the Nature Conservancy Council who also supported part of the third, and the last two by the Central Water Planning Unit and the Department of the Environment respectively.

The New Agricultural Landscapes project sponsored by the Countryside Commission examined the changing landscape of lowland Britain arising from modern farming methods. M. J. Woodman reports on this project, for which he acted as ecological adviser. B. N. K. Davis has been recording the developing wildlife of pits and quarries as a basis for planning their future use.

INTERNATIONAL BIOLOGICAL PROGRAMME

Loch Leven Symposium

A three-day Symposium on the Loch Leven International Biological Programme Research Project was held at the University of Stirling from 11 to 13 June 1973, and sponsored by the Royal Society of Edinburgh. Papers presented at this meeting covered all major aspects of this project with special emphasis on a description of the ecosystem there, and the main energy flow from solar radiation through plants and invertebrates, to fish and ducks. All papers presented at the Symposium were published together as a single issue of the Proceedings of the Royal Society of Edinburgh in June 1974, edited by Dr P. S. Maitland. This volume contains twenty-five papers covering much of the work done during the IBP period and is available from the Secretary of the Royal Society of Edinburgh.

P. S. Maitland.

The Meathop Wood Project

The Meathop Wood Project, begun in 1965, involved the study of a small area of deciduous broad-leaved woodland in Lancashire, and an attempt has been made to obtain an energy budget for the community and to elucidate carbon and mineral cycling. Estimates have been made of the potential photosynthesis of the dominant tree and shrub species and their net primary production. The rate of litter fall, sub-divided into the various components such as leaves, branches and fruits; root increment and death; and the soil organic matter content were measured. The decomposition of dead wood in the canopy, of litter on the forest floor and of roots in the soil were followed, and the populations of soil animals, fungi and bacteria were examined. The mineral uptake by various plant species was calculated and the mineral content of the incoming rain, the trunk-flow and canopy throughfall, and the leaching of the litter and soil were assessed.

A preliminary account of the work was presented at a symposium of the British Ecological Society in 1974 and revealed a number of gaps in the data and the need for confirmation of experimental findings. This final data checking stage will be completed in 1975. In the last year, intensive effort has been devoted to bringing the decomposition data together into a 'Meathop Decomposition Model' and it is hoped that a volume presenting the results of the whole project will be at press shortly.

J. E. Satchell

INDEX OF BRITISH LAKES AND RESERVOIRS

A count has been made of all the lakes, reservoirs and other water bodies marked on 1:250000 maps, as an initial step in defining the nature and extent of the freshwater resources of Great Britain. The location, and physical features such as depth and area, have been tabulated and will be stored on a computer index. The index will make it possible to list all waters meeting specified conditions of location and physical characteristics. It will not only allow research and experimental work (including biological sampling) to be planned more efficiently, but also make more effective use of existing knowledge. Various tests of the adequacy of the count have been made. These indicate that the index will not normally include water bodies less than 5ha in area, and only accounts for 10% of all the waters marked on more detailed maps.