

but too much has been asked of him when only two of the contributors have English as their mother tongue. Despite this, for the well-informed reader prepared to put in time and effort, there is much that is useful and fascinating on history, anthropology, geology, climate, lichens, fungi, native and introduced higher plants, reptiles and amphibians, beetles and birds – unfortunately the chapter on birds is in Spanish, but the lists and tables in it are very helpful.

In summary, this book gives a rather incomplete and patchy account of the islands' flora, fauna and people. At its rather frightening price (over 7p per printed page) few outside specialist libraries will be able to afford it. For the scientist working in the islands, it will of course be an essential reference book.

S. R. J. WOODSELL

Flora Europaea Vol. 4, edited by **T. G. Tutin** and others.* Cambridge University Press, £25.

Volume IV of *Flora Europaea* is the largest yet, over 500 pages at nearly 5p a page, and it continues the high standard set by its predecessors. The bulk of this volume is taken up by the enormous family *Compositae*, containing such terrifying genera as *Centaurea*, with 221 species recognised in Europe, and *Hieracium* with 260. Of course with a genus like *Hieracium* the actual number is a matter of personal taste, and it is nice to see that the authors of *Taraxacum* have reduced the genus to 30 main species, each with a constellation of 20 or more associated species which most of us can reasonably ignore. Nomenclatural changes are refreshingly few, though *Gnaphalium* and *Filago* have been split up into some rather unpleasant sounding new genera, and *Pilosella*, which most of us had got used to separating from *Hieracium*, has been sunk again at the behest of the editors.

There is no doubt that when in 1978 Volume V, the final volume of *Flora Europaea* appears, it will be a major biological event. To have a standard work on an area as large and diverse as Europe will be of incomparable value to all field biologists. All who have already bought the first three volumes will want Volume IV, although in view of the way prices have increased since the first volume in 1964 – Vol 2 in 1968 cost seven guineas – they may look forward to Volume V with some trepidation.

A. H. FITTER

* The other editors are V. H. Heywood, N. A. Burges, D. M. Moore, D. H. Valentine, S. M. Walters, and D. A. Webb.

Pathway to the Wild, by **William Condry**. Faber and Faber, £5.50.
Birds of the Air, by **Eric Simms**. Hutchinson, £4.50.

I found as much pleasure in getting to know the author of *Pathway to the Wild* as in the subject matter. William Condry is a champion of wild places wherever they be, a critic of the inadequate protection afforded to land designated 'national park', and an enemy of exploiters, developers and big business setting their sights on the world's dwindling wilderness areas. He tells us that he was paid the compliment of having aroused the wrath of Rio Tinto Zinc after writing in *The Guardian* of their proposals for open-cast mining and other horrors in the Snowdonia National Park. Yet we may be sure his comments were temperate, accurate and timely. On the other hand he is not indifferent to people, and as the warden of the RSPB bird reserve of Ynys-hir in mid-Wales, he speculates on whether such reserves may not in the long run prove more beneficial to the human visitors than the wild inmates: which seems to push the argument too far after reading of so many pressures on the countryside from so many quarters.

Three chapters describe short visits paid to the Burren in Co. Clare, the Swiss National Park and the Arusha National Park in Tanzania, where he and his wife stayed several months. Other more discursive chapters, which suffer from compres-

sion, describe a tour of national nature reserves in northern Scotland and an imaginary itinerary through 'Wider Wales'; both would be useful to anyone planning a flying visit to either country. Last and best, are the accounts of man and nature in the Dyfi estuary, first introduced as the site of a dilapidated farmhouse, Ynys Edwin, where he made his home and planted a garden which over the years became populated with such desirable birds as redstart, pied flycatcher, tree pipit and garden warbler. Now it is an RSPB reserve of which he is the warden, and the final pages discuss reserve management in a simple and clear way.

Eric Simms through countless radio and television programmes has obviously done an enormous amount to promote interest in and awareness of the world of nature and thus, without necessarily plugging conservation, has helped make conservationists of us all. *Birds of the Air* is the autobiography of a man able to work in his chosen sphere and relish it; in agreeable prose he skims the surface of events. Both books are illustrated with black and white photographs.

G. DES FORGES

The Moths and Butterflies of Great Britain and Ireland Vol. 1. Micropterigidae – Heliozelidae, edited by **John Heath**. Blackwell Scientific Publications and Curwen Press, £17.50.

One has to go back to 1928 to find a work which sets out to describe all the species of our Lepidoptera. Now John Heath and his associate editors, A. M. Emmet, D. S. Fletcher, E. C. Pelham-Clinton and W. G. Tremewan, have embarked upon this all-embracing and ambitious 11-volume project which, with the assistance of various specialist authors, will not be completed until at least 1982.

The first section of this consists of a valuable series of topics related to Lepidoptera which most earlier works have omitted altogether or given only superficial treatment: Morphology (J. Heath); Parasites (M. R. Shaw and R. R. Askew); Diseases (C. F. Rivers); Pest Species (C. R. Baker); Habitats (J. Heath); Conservation and the Collector (M. G. Morris) and Techniques (J. Reid). Each chapter is accompanied by an impressive list of references. The bibliographic section contains a useful compilation of county lists of Lepidoptera and a list of works useful for the study of British Lepidoptera.

The second or systematic section, following the arrangement of Kloet and Hincks, 1972, covers the families Micropterygidae to Incurvariidae. Keys are provided for the identification of all species within a family, and line drawings of genitalia to assist identification of 'difficult species'. Individual species are described according to a standardised format (Ovum, Larva, Mine, Pupa, Life History and Distribution) and accorded a distribution map based either on the vice-counties of Great Britain and Ireland or related to the 10-kilometre squares of the national grid. It is in this section that so much new information on British Lepidoptera will become available to the general reader for the first time, for, with the exception of the family Hepialidae (the Swift moths), all species described have only received mention in works relating to that artificial grouping, the Microlepidoptera. The major contribution in this section has been made by A. M. Emmet and special mention must be made of his masterly 96-page contribution on the Nepticulidae. Emmet is one of the leading European authorities on leaf-mining Lepidoptera and in this impressive contribution assembles the results of his researches of recent years upon this family of minute moths.

In this first volume the monochrome plates and line drawings of Brian Hargreaves and Maureen Lane are neatly executed, but the reproduction of the monochrome photographs is poor. In some instances there is an almost total lack of contrast in a print, resulting in the intended helpful indicator arrows becoming practically invisible. The colour plates, particularly those of the Nepticulidae, are on too small a scale and blurred in appearance, and the reproduction is disappointing. A higher