

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 Micropterigidae 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

standard of colour work is needed if subsequent volumes are to merit the high cost asked for this first contribution in an otherwise admirable project.

BRIAN BAKER

White Gold: the story of African ivory, by Derek Wilson and Peter Ayers. Heinemann, £4.50.

My main criticism of this book is its sub-title. If you go to it with an interest in ivory and current poaching problems it will probably disappoint you; but I can thoroughly recommend it as the story of the ivory hunters. I found the chapter concerning the activities of the infamous Arab slave and ivory trader, Tippu Tip, particularly absorbing, and it is obvious that the nineteenth and early twentieth century is the period which interested the authors most. This was the hey-day of the 'big white hunters', and extensive well-chosen first-hand and contemporary quotations add considerably to the book's usefulness as a work of reference. Unfortunately recent developments are dealt with rather briefly and simplistically.

Two serious faults in a book of this nature are that it lacks an index (no doubt due to penny-pinching by the publishers), and the authors do not give sources for much of the information. I would like to know the source of 'Tanzania sends almost her whole domestic production (of ivory) to the People's Republic of China . . .' Statements of this kind need to be backed up with the source; if there is none, it should be made clear that it is hearsay. Nevertheless, I would recommend *White Gold* to anyone with the remotest interest in the future or history of Africa's elephants.

JOHN A. BURTON

The Order of Wolves, by Richard Fiennes. Hamish Hamilton, £5.25.

Most of the large carnivores hold an ambivalent place in human esteem – admired for their beauty and strength on the one hand, feared as predators and destroyers of stock on the other. Attitudes to wolves are further complicated by their role as the ancestors of domestic dogs, which might appear to give dog-owners a head start in understanding their ways; but the advantage, alas, is often negated by a hopelessly canicentric attitude to the natural world. This volume avoids the worst excesses of this approach and provides a popular account of many aspects of the lives of wolves, with a wealth of illustrations. Most chapters, however, go off on so many irrelevant tangents that one begins to despair of getting any solid information, and even the tangential information is of very dubious validity – the taiga forest is said to support susliks, marmots, rats, moles and polecats, none of which are characteristic of taiga; the classical confusion between European and American 'elk' is perpetuated; the South American maned wolf is described as a 'forest wolf' – in fact it lives on the pampas – and as a close relative of the northern wolf when in fact these are amongst the most dissimilar species in the dog family.

There is a need for good comprehensive popular accounts of species such as the wolf, which has been the subject of so many excellent specialised studies, but this is not such an account. Conservationists will for example find no useful information on present distribution or status. There are several first hand accounts of wolves that combine accurate observation and sound interpretation with a good exciting read, such as *The Wolf* by L. D. Mech (Natural History Press, New York, 1970). One of the best popular accounts remains the chapter on the wolf in *Wild Dogs of the World* by Lois E. Bueler (Constable, 1974).

G. B. CORBET

Wildlife Utilization and Game Ranching (IUCN Occasional Paper No. 17, \$4), by Dr Sue Lee Mossman and Dr Archie S. Mossman, describes the authors' return visit to southern African wildlife ranches where they once worked, reporting on progress, explaining the need for such projects and advising on wild-animal farming.