

The Mammals of Arabia, Volume 2 by David L. Harrison. Benn, £7 7s.

The second of three volumes on the mammals of Arabia, this covers Carnivores-Hyraxes and Ungulates; the first, published in 1964 but not unfortunately reviewed in *ORYX*, dealt with the Insectivores and Bats. They are obviously intended to be regarded as one work – the pagination runs on from volume to volume – but this method of publication unfortunately means that the specialist worker, needing to use perhaps only one of the later volumes, has to refer back to the first for the interpretation of the abbreviations used and for a map of the area. However, this is a minor criticism of a work which will undoubtedly be a standard reference book for the next generation or so, not only for the systematist but also for the general naturalist interested in the habits and distribution of the region's mammals. It has come just at the right time to be useful as the countries in the region open up with the development of oil and all that goes with it. The author is probably the most competent amateur systematist in this country working on mammals; it is fortunate that he is also a keen field naturalist.

This volume deals with all the larger mammals of the peninsula, many of which are fast disappearing. In the past a number of subspecies have been described on what today would be looked upon as wholly inadequate material, and the author points out that the acquisition of more is not only difficult but undesirable bearing in mind the status of the animals concerned. It is much to be hoped that these volumes will bring home to the authorities concerned their responsibility for the preservation of the wealth of interesting species described.

The distribution maps for each species and the three dozen admirable text figures drawn by the author, showing such diagnostic features as teeth, skull and the like, are all very useful, but with the photographs the author has been badly let down by his publisher: many of them are so evilly reproduced as to do little more than add to the cost of this admirable and desirable book which is so expensive as to be out of the reach of most private purchasers. It is difficult to see how black and white photographs of museum skins can be of any use to either systematist or field naturalist.

CRANBROOK

Animal Life of Europe by Jakob Graf. Warne, 75s.

Having just returned from the Continent with half-a-dozen praying mantids I eagerly opened this book hoping to find some useful information about one of the most conspicuous, common and widespread insects in southern Europe. I was disappointed to find no mention of any of the several species which occur in France and elsewhere in Europe. Likewise a number of well-known species of snail such as *Otala* sp. – often eaten in the South of France – are accorded no space. The enormous number of Clausiliidae – a typical central European family of snails is represented only by *Laciniaria buplicata* 'especially where there is chalk' – which is meant to be limestone, a rather different thing! The snail *Helicella itala* is indicated as not occurring in Britain, where in fact it is local but sometimes abundant. Spot-sampling amongst the other invertebrates we find the millipede *Glomeris pustulata* shown as occurring in Britain which it does not, yet *G. annulata*, a common southern European species is not mentioned. Again in the Lepidoptera the Bee Hawk *Hemaris fuciformis* is given as absent from Britain, and the harvest-mite does not suck blood. These are a few of the too many errors which permeate the sections on the invertebrates. The information given about many species is often sketchy, frequently little idea is given about distribution and the different groups receive very unequal treatment. Perhaps this is inevitable when trying to cover such a wide field. It might have been better to omit

the section on birds and mammals about which groups good books in English already exist. These sections appear to be the most reliable and better parts of this book.

The colour plates of birds, 1-4, are fair; those of beetles, 5 and 6, are poor; those of butterflies and moths, 7-9, are fair; plate 10 depicts 36 Lepidoptera larvae, some readily recognisable. The 14 dragonflies on plate 13 are passable. Plate 14 of various Hymenoptera and Diptera is almost useless. No reference is given to the page opposite which each plate occurs, thus making it irritatingly difficult to locate a plate. The figures of the invertebrates are of variable quality but many could be much better.

As stated in the foreword this book 'will help the amateur to recognise any wild animals, birds and insects which he may encounter'. But it will also mislead, and it will certainly not be of much use to the advanced student. The translation is quite good.



JOHN SANKEY

The drawing, one of many in the book, is of a beech marten.

The Oxford Book of Insects by John Burton. Oxford University Press, 50s.

This book has been designed as an introduction to the insect life of the British Isles, with colour illustrations of some 780 different species. It is true that this is a small percentage of the 20,000 or more insects so far recorded in this country, but the vast majority of these are never likely to be seen by the layman. The species illustrated have been very well selected and provide representative examples from all the insect groups found in Britain. The quality of the illustrations is exceedingly high, particularly in the case of the butterflies and moths which of course lend themselves to this treatment. Most of the pictures are life size, but where this is not so, great care has been taken to indicate the actual size.

Opposite each colour plate there are well-written notes on each species illustrated, providing a great deal of information on distribution, general habits and breeding biology. This is particularly useful in the case of the lesser-known groups such as bristle-tails, thrips, spring-tails and stoneflies, which are difficult to find out about unless one has access to specialist journals.

The publication of this single volume covering the Insecta is indeed welcome as this is undoubtedly the best way of conveying to the amateur naturalist an idea of the wealth of form and adaptation presented by this vast group of animals.

H. G. VEVERS

Ecological Adaptations for Breeding in Birds by David Lack. Methuen, 84s. New York, Barnes & Nobel.

Over the last few years naturalists whose interests embrace both ecology and ethology have gradually become aware of something that now seems almost too obvious to be worth mentioning – that all aspects of the natural history of a species are interrelated; none can be fully understood in isolation. How these interrelations work is beginning to be understood in some vertebrate species, especially in birds, because more people have studied them than the other