Book Reviews

A Field Guide to the Mammals of Britain and Europe by **F. H. van den Brink.** Collins, 30s.

This book is modelled on Peterson, Mountfort & Hollom's *Field Guide to the Birds of Britain & Europe* and has many of the virtues of that admirable publication. It has maps showing the distribution of each species together with short notes on Identification, Habitat and Habits, the whole for the 177 species described being contained in a small book of 215 pages which fits easily into a (man's) coat pocket. Inevitably a British field naturalist will disagree with some of the opinions of a European one e.g. that stoats live on wetter ground than weasels or that the long-tailed field mouse is rarely found in woods within the range of the yellow-necked mouse, though both these statements may well be true so far as the continent is concerned, and obviously the author must be confined to bold statements within the scope of one or two sentences on the habits of each species. Local patriotism forces me to criticise the map showing the absence of Natterer's bat from East Anglia, where it is in fact not uncommon, and surely he is wrong in saying that all European bats hibernate. Brosset found that, amongst Indian bats, only species of those genera which also contain other species that live in high latitudes and hibernate could resist cold by a fall in their body temperature; other genera, amongst them *Tadarida*, which includes *T. teniotis* the European free-tailed bat, could not. Nevertheless, in spite of a few mistakes, the letterpress of this book is excellent, an admirable feature being a note under each species of similar species with which it could be confused, and describing the diagnostic features that distinguish them.

I cannot, however, say the same of the illustrations. Every species, save for the whales and dolphins, is shown in colours which look very attractive but in most cases are so hopelessly inaccurate as to be useless as an aid to identification and laughable to anybody who has seen the animals in the flesh. The artist has moreover followed Peterson *et al.* in showing each species standing conventionally in profile, a form of portraiture appropriate to a bird which can be watched through field glasses until it puts itself into the desired position but not to many mammals. Save for a few diurnal species like water rats, marmots and some ungulates, all that most people see of mammals is e.g. the outline of a shrew, vole or polecat as it dashes across a road in the headlights of a car, or the backside of a deer as it bounds away through the forest. It is those that a Field Guide should help the relatively uninstructed naturalist to identify from his motor car or as he walks through the countryside at home or abroad, even if it can only enable him to do it down to genus in some cases. This book is not a Field Guide as so defined but it is a useful Handbook which is well worth buying.

CRANBROOK

Of Predation and Life, by **Paul L. Errington.** Iowa State University Press

Through his many scientific papers, popular writings, books and travels in Europe where he made many friends, Paul Errington became one of the best-known North American vertebrate ecologists. He was an unusual man, starting his career trapping muskrats and mink in the Iowa marshes, paying for his own education, and then accumulating through accurate observation, tenacity and sheer hard work a wealth of field data that is still unrivalled. He rose to a renown among American wildlife biologists equalled by few of his contemporaries. At his death in 1962, he was Professor of Zoology at Iowa State University.

This impeccably produced book, with interesting line drawings, was completed by his widow from unfinished manuscripts. It has three main topics: a general appraisal of the behaviour of certain vertebrate predators mainly in the United States, a general account of the facts accumulated by Errington in his life's work on quail and muskrats, and a series of reviews of other work on these and similar species and of selected aspects of predation. These accounts lead to the philosophy that wilderness should be conserved with predators and predation as a part of life. It is essentially a popular book and pleasant to read, presenting all information in essay form without tabulated data, presumably in an attempt to present information in a way acceptable to the sportsman and amateur naturalist.

Errington's credo is now well known. His conclusions emphasise that vertebrate predators do not control the numbers of their prey species, that they are essentially opportunists killing, for preference, vulnerable surplus prey as these become available to them and only tackling the relatively secure remainder under conditions of extreme food shortage. Most vertebrate ecologists will agree with these conclusions – will the sportsman also agree? If he is not already convinced, this book may not persuade him. Anecdote is insufficiently supported by documented fact. Assessment of facts presented depends too often on knowledge of the original papers. This is unfortunate and a serious criticism of the presentation. In addition the style is long-winded and simple facts are sometimes lost in a complicating wealth of words. This is doubly a pity since Errington was a pioneer in this field and the duration and continuity of his observations are unique. (He had data on quail from 1932 for over 20 years and on muskrats from 1932 to 1947 with additional information for subsequent years.) Unfortunately a clear, simple account of his data and their interpretation is still lacking, and this book does not adequately fill the gap. Its most interesting new items are chapters on the inter-relationships of different predator species and on predation on waterfowl; and these bring together some interesting data not widely known to European ecologists. The main achievement of Errington's work is that his ideas have contributed greatly to the thinking of his successors, and this book will be useful in widening interest in these ideas as they are developed, and in stimulating new research on predation.

DAVID JENKINS

Pesticides and Pollution by **Kenneth Mellanby.** Collins, New Naturalist, 30s.

This is a clearly written and well balanced book on a subject of wide importance. It illuminates by dispelling ignorance and avoiding alarmist views, although at the same time indicating by what a narrow margin this country has escaped the devastating damage to wild life which has occurred elsewhere, notably in the United States and Canada. Dr Mellanby covers all aspects of pollution: of air, including the effects of radiation, of fresh waters, of the sea, and the effects on terrestrial life of the wide array of herbicides, fungicides and, above all, insecticides which have been responsible – and we must be clear about this – for so much of the increase in agricultural productivity, despite reduced manpower, in recent years.

Some of the effects of chemicals are indirect; by the quite incidental elimination of a predator upon it, a minor pest may become a major pest. We shall never be able to forecast the full effect of any chemical until we can find our way through the intricacy of ecological relationships. But the persistent organo-chlorines are, as Dr Mellanby notes, the major villains. Continuous accumulation through the bodies of successive members of a food chain leads to mass destruction of spectacular predators such as golden eagles and peregrines. Fortunately preventive action has been taken just in time. Dr Mellanby is extremely well informed on this