

terms as practicable with such a full treatment; it should be well within the understanding of the ordinary non-specialist reader or intelligent young person who has done some school biology.

The illustrations – more than a thousand in all – are outstanding: excellent diagrams, mostly in colour, and a lavish and well-chosen selection of some of the finest examples of modern colour photography, mostly of animals in their native surroundings, and all shown to the best advantage on the large demy 4to pages. Unfortunately, far too many have no indication of scale either in the captions or text, which may confuse readers not familiar with some of the less well-known groups of invertebrates. An extensive glossary and good index complete a splendid reference book suitable for library, school or home use, and at current prices good value for money.

JOHN CLEGG

**An Irish Beast Book: a natural history of Ireland's furred wildlife, by J. S. Fairley.** Blackstaff Press, Belfast, £1.95 (hard back £4.95).

Those who follow the literature of Irish natural history are aware that J. S. Fairley is the most prolific author of notes and papers on Irish mammals. Now he has followed up his bibliography with an excellent book, the first ever to be devoted solely to the subject. Ireland's fauna is a greatly impoverished sample of the Palaearctic fauna as a whole, but this only makes it the more worth studying. The book will be welcomed not only by mammalogists everywhere, but by teachers and all who are interested, or seek to interest others, in the wildlife of the whole island. Animals and plants have never recognised the man-made borders of Ireland, nor, thankfully, have naturalists.

RICHARD FITTER

**Man and Wild Life, by L. Harrison Matthews.** Groom-Helm, £4.95.

**Man and Natural Resources, by Sir Cedric Stanton Hicks.** Groom-Helm, £5.25.

Dr Harrison Matthews's basic premise is that man has set himself above his environment, and the natural ecosystem it supports, in a dominant role in which he may have the will, but not always the means, to control. His treatment deals largely with man's relationship to particular groups of animals, and within this restricted field, he presents a scholarly, well documented and highly readable account. Mammal and bird examples are used to illustrate the effects of man's depredations on wild populations; other examples, mainly from invertebrates, indicate how lack of control can lead to pest situations, frequently beyond the wit of man to solve.

Consideration of several groups of animals leads from an historical review of man's interaction with the group to an appraisal of the present situation. All too many of the cases considered can be seen as an indictment of man's lack of sensitivity and forethought. The dangers of unwise use both to exploiter and exploited species are clearly reinforced, and the author emphasises that man's apparent dominion over nature is not substantiated by the known facts. The reader may infer from the evidence that human society has rendered itself unfit for its environment and hence, like ill-adapted animal species, is at risk of extinction. The author offers little by way of practical solutions, and the reader is left with the feeling that any action taken for the joint protection of man and wildlife will be too little and too late.

The second author presents a miscellany of views about what is wrong with man's past and present use of natural resources based on a similar premise: that man has divorced himself from his functional place in natural ecosystems. Well known problems such as pollution by industrial effluents, misuse of the soil and the population explosion are examined in a repetitious manner, often unsupported by

proper references. While no informed person would dispute the relevance or sincerity of the author's concern, the reader may justifiably feel that what we now need are realistic solutions and not yet more admonishment. My fourteen-year-old son was exaggerating no more than is normal in the young in observing, 'There is nothing here we haven't known about for a hundred years; but what shall we do about it?'

F. B. O'CONNOR

**The Lives of Bats**, by D. W. Yalden and P. A. Morris. David and Charles, £6.50.

'Of all the known species of mammal, one in five is a bat. Yet far from being everyday animals bats remain creatures of mystery, the subject of more prejudice and misinformation than almost any other group of animals.' These are the authors' opening words. The mystery has undoubtedly been due to the secretive habits of bats, preventing naturalists from making observations, so that relatively few publications have appeared in the past century, and successive generations, lacking basic information, have overlooked this fascinating group. It was only in the late 1930s that a number of people in Europe and the USA began studying bat natural history. Research gained momentum in the 1950s, but the results were published in scientific journals and general readers were still without an authoritative work.

Recognising the gap, Yalden and Morris set about the task of reviewing and digesting all bat literature and regurgitating the information in this ordered and highly readable book. They cover all aspects of bat natural history – structure and evolution, diverse food and feeding habits, mechanics of flight, hibernation, specialised reproduction and behaviour, population studies and migrations. Even the most difficult aspects to make readable and understandable, the echo-location mechanisms that bats use for navigation and feeding, are presented in a form that anyone can follow. The penultimate chapter adequately covers the interactions of bats and man, both beneficial and detrimental aspects, and describes the conservation problems facing the temperate bats particularly. Finally the established 17 families of bats are described and illustrated, and the newly discovered 18th family, described in 1974, is mentioned. Bats are predominantly tropical animals' but, as this book shows, most information has been gathered about temperate species. Every year new species are being discovered and probably many species have died or will die out without our knowing about them, particularly in tropical forest.

Fascinating bedside reading as well as a work of reference, this book will be of interest to all types of reader from children, amateur naturalists, university students to professional bat workers.

R. E. STEBBINGS

**The Chemical Capture of Animals**, by A. M. Harthoorn. Baillière Tindall, £9.50.

Dr Harthoorn's second book on this subject, unlike his first *The Flying Syringe*, is primarily for the technician, and it is as up-to-date as is possible in a review work of this size. Although he refers to published data on the handling of captive animals, the most useful and detailed information is given in the sections on work carried out in East and South Africa by his colleagues and himself. He gives sound advice on fieldcraft in approaching animals, and there is a chapter on basic anatomy and physiology. In addition to comprehensive notes on the dose rates of drugs both in the text and in an appendix, he provides chapters on emergency treatment of the animal where necessary, and of the handler in the event of accidental injection or ingestion of the drug.

The information on syringes and projectiles appears to have been drawn largely from the manufacturers' literature, and it might have been preferable if, with his