including exceedingly gory photographs of some of the victims—the history of shark attacks on bathers in South African waters and the steps taken to deal with them. In absolute terms shark attacks are very rare; over the past twenty years in Natal an average of fewer than one person a year has been killed by sharks compared with 175 deaths on Natal roads in four months of 1963 (though a more interesting comparison would be with bathing fatalities from other causes). However, an outbreak of attacks in 1957, including two fatalities, drove many visitors away from the south coast of Natal, and caused serious economic recession in this area, which is greatly dependent on tourism.

The most effective of a range of measures against sharks has been netting off the bathing beaches. These nets do not form an impenetrable barrier, but they do catch the sharks as they move along the shore, and, judging by the catch records, greatly reduce the population of sharks in the area. A more fundamental solution may in future be obtained from the work of the research institutions including the Anti-shark Research Association set up under the South African Association for Marine Biological Research, of which Dr. Davies is Director; their activities are briefly described in an appendix to this interesting book.

J. A. GULLAND.

The Insects, by **Peter Farb; The Fishes,** by **F. D. Ommanney; The Birds,** by **Roger Tory Peterson; The Mammals,** by **Richard Carrington.** Life Nature Library, Time-Life International, 32s. 6d. each.

These four books, all superbly illustrated, well indexed and with good bibliographies, continue the *Life* Nature Library of which eight volumes have already been briefly reviewed in ORYX. The danger in this series is that because each subject is too vast to be dealt with adequately, even in outline, in the space available, the wonderful illustrations will completely dominate the excellent essays. Consequently the book lies around, genuinely admired but only cursorily studied, until it takes a place on the bookshelf from which it descends only temporarily to interest some young visitor.

But these fine books have a higher function than passing entertainment and occasional reference. Their true use is to arouse and maintain interest in the marvellous panorama of nature, an interest which exists in nearly every person, but too often remains too long dormant. So, give a volume, or the whole series to someone, child or adult, whose love of nature you would kindle or encourage. You will surely be rewarded by his reaction.

C. L. BOYLE.

Dictionary of Herpetology, by **James A. Peters.** Hafner, New York, 92s.

Anyone actively involved with herpetological research will automatically require a copy of James Peters's new dictionary. As a specialised reference work it will be of value for many years to come. Peters is well qualified to produce this collection of terms and definitions, having been active in the field of herpetology for over twenty years. He has collected reptiles and amphibians in India, Africa, and throughout the Americas, and is at present the Secretary of the American Society of Ichthyologists and Herpetologists. Over the years he has built up an elaborate card index system of technical terms and words and has scanned over 10,000 papers and books in a brave attempt to achieve as comprehensive a compilation as possible. Inevitably there will be a few missing terms, but the general herpetologist will find little to quibble with. Altogether there are over 3,000 definitions, in most cases with the original reference, where the

word was first used in the herpetological literature. Most of the terms are naturally concerned with reptilian anatomy, but he has also delved deep into the spheres of behaviour, physiology and other relevant fields to provide us with this efficient and helpful book.

RAMONA MORRIS.

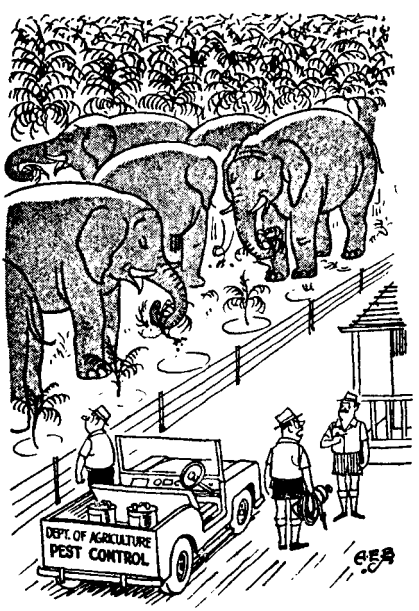
Grazing in Terrestrial and Marine Environments, edited by **D. J. Crisp, British Ecological Society Symposium Number 4.** Blackwell, 63s.

Grazing is generally used to describe the feeding activities of all kinds of terrestrial herbivores, but in this collection of 22 papers, grazing has been interpreted in its broadest sense and includes marine as well as terrestrial environments. Part I discusses energy flow in ecosystems; and provides both a background and a connecting link between Parts II and III which deal with grazing in terrestrial and marine environments. By using six well-chosen examples of ecosystems in which energy relationships have been described, Macfadyen is able to show that terrestrial ecosystems are characterised by a large amount of standing crop in relation to energy flow and by the high proportion of primary production passing not directly to herbivores, but into plant detritus which is slowly attacked by the decomposers. In contrast, marine environments have a relatively small standing crop of phytoplankton and the bulk of primary production is consumed directly by herbivores.

The inter-relationship between a grazing animal and its pasture is discussed by Arnold who shows how the relationship between yield and sheep density is complicated by the animals' behaviour, while Hunter discusses the relevance of home range behaviour among hill sheep to hill sheep management in Scotland. The palatability and selection of forage plants by hill sheep in Wales are considered by Hughes in the light of recent work on the chemical composition and nutritional value of the plants, and Martin shows how the analysis of faecal samples may be used to study the food preferences of sheep. The effect of man's activities and his grazing animals on natural grasslands in North America is discussed by Dix; Costello, Marr, Flook and Carr describe different aspects of range management in Canada and America. The eight papers on grazing in the marine environment illustrate the great variety of food relationships in benthic and littoral environments, many of the papers emphasising the difficulties which the marine ecologist faces in the study of planktonic organisms.

This is a stimulating and readable volume which helps to bridge the gap between several disciplines.

T. C. E. WELLS.



"Dammit, man, you MIGHT have been more specific."

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