

## PENGUINS



Four views of the emperor penguin (*Aptenodytes forsteri*) from *Birds of the Antarctic*, by Edward Wilson and edited by Brian B. Roberts (Blandford Press; 105s.). Wilson took part in Scott's two Antarctic expeditions, and this book contains more than three hundred of the paintings and drawings which he made, together with notes about Wilson and his work and extracts from his journals.

philic bacteria by R. Morita describes metabolic studies that have been made on a group that thrive in conditions of temperature such as exist in the deeper parts of the oceans. The review by R. Scagel on the Phaeophyceae catalogues the extensive literature on this group but suffers from the lack of personal interpretation of the material presented.

Two articles have a palaeontological bias; that by R. H. Benson describing recent marine ostracods deals with living representatives of this order which is commonly preserved as fossils. The paper by H. B. Fell on ancient echinoderms in modern seas is a review of the author's own interpretation of echinoderm phylogeny, which, it should be pointed out, has not found universal acceptance among workers in this group.

Four papers dealing with aspects of animal behaviour are by J. A. Allen on rhythms and population dynamics of decapod crustacea; by E. W. Knight Jones and E. Morgan on responses to hydrostatic pressure; and by P. M. J. Woodhead, who examines the behaviour of fish in relation to light in the sea. He shows that in diurnal patterns of behaviour light has an important influence on feeding, sound production, spawning and schooling, and thus on the successful fishing of many commercial species. Lastly, J. Thompson discusses the biology of the grey mullets, and one is bound to comment on the poor quality of his Fig. 2 (page 306), which should not have escaped the vigilance of the editor.

The littoral ecology of tropical West Africa is reviewed by G. W. Lawson, who has wide experience in this field. Following Lewis's classification he has produced a guide to the flora and fauna of the principal ecosystems along the coast. Although his fauna list is by no means complete, it in no way detracts from this valuable synthesis which will stimulate further and more detailed studies.

The book is adequately provided with maps, figures and tables, but the references do not contain the titles of the publications, which are often required when requesting them on inter-library loan schemes. DEREK DORSETT

or for the undergraduate. But Dr R. E. Blackwelder states in the preface to his new book, *Taxonomy*, that "It is specifically planned to be used as a textbook in two courses: a beginning course on the nature and practice of taxonomy and an advanced one, on the theory and technicalities . . .". Then again, also in the preface, he says, "It is a book about taxonomy for taxonomists", while the subtitle of the book claims that it is both a text and a work of reference.

Presenting the intricacies of taxonomy at length to satisfy so diverse a public and to fulfil such diversity of need is a near impossible task and it is not surprising that the attempt has resulted in a relatively expensive work not fully suited to the student purse or mind, or to the taxonomist. This is a pity, for there is a need for a comprehensive book on this subject that would encourage students with a leaning toward taxonomy to enter this field—Dr Blackwelder's book might achieve the reverse. Nevertheless, it contains a very great deal of information not easy to find elsewhere and much opinion and advice arising from his long experience as a leading taxonomist that others will wish to note. For a subject which is heavily determined by its history, however, it is surprising that the historical component receives scant attention in a couple of pages or so of the introduction. In consequence it is not always clear why things are now done the way they are and much of the sense of continuity of taxonomy through time is lost.

It is not easy to follow the theme of this book, for it can be opened and read almost anywhere (albeit with profit) and it does not seem to matter very much what has gone before or what comes after. Moreover, the text is badly interrupted by lists such as universities of the United States offering courses in taxonomy, societies concerned with taxonomy, and museums, which could have been relegated to an appendix. The student thus gains little sense of order and no stimulus to read further, and for this reason the book is unsatisfactory as a student text. J. E. WEBB

## TEXT ON TAXONOMY

## Taxonomy

A Text and Reference Book. By R. E. Blackwelder. Pp. xiv + 698. (New York and London: John Wiley and Sons, 1967.) 150s.

NEARLY seven hundred pages about taxonomy cannot be expected to be easy reading, either for the specialist

## SEAWEED POLYSACCHARIDES

## Chemistry and Enzymology of Marine Algal Polysaccharides

By Elizabeth Percival and Richard H. McDowell. Pp. xii + 219. (London: Academic Press, Inc. (London), Ltd.; New York: Academic Press, Inc., 1967.) 60s.; \$12.

THE general nature of the polysaccharides of seaweeds, forming in the main the cell walls and storage products,