

life organizations are financed entirely by licence fees from hunting and fishing—a solution often put forward for all the financial troubles of wild life preservation. He points out a serious disadvantage—wild life administrators are under constant pressure to provide more and more animals of the particular kind which sportsmen want to kill. It is very difficult for those administrators to follow constructive conservation programmes including conservation of fur-bearing predators—foxes, wild cats, pumas, and bears. Another disadvantage of this policy is that when wild life becomes scarce and most money is needed to preserve it, least is likely to be available.

Finally Dr. Gabrielson describes America's huge Federal marsh and lake restoration programme. Twenty thousand square miles is the minimum which is contemplated, and half this is completed or under way. This brings to mind the fight that failed to prevent the draining of Malheur Lake in Oregon so that T. Gilbert Pearson could write in his autobiography *Adventures in Bird Protection*, "No wild life was left. The earth was baked and cracked and burnt; in the alkali dust curled the whitened forms of fish, and the horns and heads of long dead bison came to view. Malheur the Wonderful had become Gehenna, the Place of Death. Now and then a wandering gull flew by with a discordant cry. The greatest area for water birds in all our vast Western country was no more." But in 1934 restoration began and Dr. Gabrielson tells us that Malheur's wide expanses soon attracted back every species of bird known to nest there before the destruction when "the friends of the birds were too few to withstand the combined attacks of politics and commercialism."

C. L. B.

THE KINGDOM OF THE OCTOPUS: THE LIFE HISTORY OF THE CEPHALOPODA. By FRANK W. LANE. Jarrolds, London, 1957, 30s.: Sheridan House, New York, 1960, \$7.50.

This is the first popular book to appear on this subject since Henry Lee wrote his delightful *The Octopus or the "devil-fish" of fact and of fiction* in 1875. This is a worthy successor which takes note of the tremendous advances since those days when the gigantic squids of the North Atlantic were only just beginning to attract the attention of scientists and the seas were also beginning to yield rich collections of cephalopods of all kinds to the great expeditions.

Mr. Lane has gone a long way towards satisfying popular

demand for a fascinating account of these bizarre creatures. The more informed will also be grateful to him, for bringing together not only the salient features of cephalopod biology, but also for many curious out-of-the-way descriptions of encounters by divers and others with these denizens of the deep. There is no doubt that he has cast his net widely for strange tales of meetings with octopuses and giant squids—and good journalist that he is—has Mr. Lane perhaps conveyed the impression that some of these creatures are a shade more dangerous than they really are?

The author begins with a general description of cephalopod morphology and this is supplemented with some excellent diagrams of the main anatomical features of *Octopus*, *Sepia* and *Loligo*. Later chapters are devoted to food, enemies, locomotion, behaviour, colour, luminescence, reproduction, fishing and economic importance. In compiling these chapters Mr. Lane has been in touch with a large number of scientists and laymen so the information is varied both in content and sometimes in quality, but, all in all, he has been very successful, and it should be noted that the book is illustrated with a splendid series of photographs. They range from a photograph taken in 1873 by Moses Harvey of the first giant squid to be made available for scientific study, to modern colour pictures of deep-water species.

Apart from the anatomical drawings already mentioned, other appendixes include a classified list of the species noted in the text, a glossary and an excellent bibliography of 30 pages of selected references.

There are two editions of this book, British and American; the former published in 1957 contained some minor errors, but these have, however, been rectified in the 1960 American edition which has been enlarged to 300 pages.

W. J. R.

WIDEAWAKE ISLAND. The Story of the British Ornithological Union's Centenary Expedition to Ascension. By BERNARD STONEHOUSE. Hutchinson. 35s.

Expeditions to remote islands have a strong appeal, and the story of this one, in 1957–59, is well and informally written and will be enjoyed by many people besides expert ornithologists.

Ascension Island, 40 square miles in mid-south Atlantic, has had a varied history from its discovery on Ascension Day, 1501, to its present day use as a cable station and as a post connected with the United States guided missile range. It is also of great