

book, if it is read with an appreciation of its discursiveness and the enthusiasm of the author. The pleasing anecdotes he tells carry the reader along at an easy pace.

The book is illustrated by pencil drawings by another "bird-gardener", Jean Armitage.

G. F.

**WILDLIFE IN ALASKA.** By A. STARKER LEOPOLD and F. FRASER DARLING. The Ronald Press, New York, \$2.75.

This is the report of an investigation into the past and present status of those land animals of Alaska which are of economic importance. It tells of the changes in animal populations which have occurred owing to man's ignorant interference and makes suggestions for enlightened wild life management in the future. The investigation was sponsored by the New York Zoological Society and the Conservation Foundation.

The title suggests a more popular appeal than the book can have. Half of it is devoted to the caribou and the introduced reindeer; the whole outlook is that of preservation for human benefit, economic, sporting, and æsthetic. Perhaps the only hope for the preservation of the larger animals now lies in this economic outlook, though I suspect that the preservation of the creatures for their own sakes was uppermost in the authors' minds.

Reindeer were introduced into Alaska from 1891 to 1902 to replace caribou and other wild animals upon which the Eskimo was dependent and which had been ruthlessly exploited.

The book tells of the prodigious growth of the reindeer population to 650,000 in 1932 and its catastrophic fall to 32,000 by 1948. It shows clearly that by far the most important factor in this decline, as well as in the later stages of the decline of the caribou, was destruction of the forests by fire and subsequent over-grazing of the reduced winter feed, the "reindeer lichens". Probably this is the most important result of these investigations, for predation by man and wolf had been blamed almost entirely; consequently conservation resources had been directed to restraint of hunting and wolf destruction. Such attempts to increase animal populations without regard to their food supply must fail, and may fail disastrously.

The authors consider also the moose population, and that of some other animals.

This is a very informative and easily read book. Clearly it has importance beyond Alaska and the particular animals which

have been studied there. It reflects the wisdom of the sponsors of the investigation in their choice of the two men needed for this vital work.

C. L. B.

**THE SEASIDE NATURE BOOK.** By E. F. DAGLISH. J. M. Dent and Sons, 15s.

This book claims to be a guide to the many kinds of life which may be found by the sea. Seaweeds are included and in a final chapter, there appear such diverse creatures as purse sponges and whales. No plants are mentioned.

I tested this book during a fortnight's holiday on Havergate Island and found that it established its claim very well, for I was able to identify, nearly enough, most seaweeds, shells, and other shore objects. Surprisingly, the book mentions neither the seamat, *Flustra foliacea*, nor the slipper limpet, *Crepidula fornicata*, both very common. The latter is a native of North America believed to have come here with the American oyster and said to be a threat to our native oyster beds.

It is questionable whether the inclusion of a chapter on seaside birds is an advantage, for anybody interested in birds will already own a good bird book. True, the author says he includes only birds that occur mainly or exclusively on beaches or in coastal waters, but how is the observer to know whether the bird he is watching has any business to be there or not? Among the ten ducks mentioned the mallard finds no place, nor is there a single passerine, not even the rock pipit.

The index is only fairly good. Barnacles, for instance, can be found under acorn shells, rock barnacles, and ship barnacles, but not under barnacles. The coloured plates are numbered under a different series from the black and white.

Not only is this book a good guide but it contains material for hours of interesting reading about the animals it describes. It has a faintly old-fashioned flavour and I was reminded of Sir Ray Lankaster's popular science articles, and even of Arabella Buckley's *Life and Her Children*. But it is none the worse for that. Take it with you to the seaside, for it will add greatly to your family's pleasure and to your own.

C. L. B.