The Blue Jay Bookshelf

ENNING HABITS OF THE POLAR EAR (Ursus maritimus Phipps). C. Richard Harington. 1968. Cana-an Wildlife Service report series, . 5. Queen's Printer, Ottawa. 50 nts.

This is not only a good factual port on denning, the result of udies in the Canadian Arctic by the thor between 1961 and 1964, but so a mine of further information in gard to polar bears; and finally, a nsible, objective, and moderate plea r their preservation.

These interesting and romantic ani-als have been known to man for a ng time, certainly for many years fore the Romans wrote of them in B.C. Many legends grew up in rthern Europe and Asia in regard their supposed ferocity, and prob-ly to Stone Age Man they did ap-ar pretty formidable. However, this oklet shows the animals in a rather fferent light.

Polar bears are the largest carni-res which are truly circumpolar in stribution, and for this alone they e unique. The brown bear of Russia d its counterpart in our own north *Ursus arctos)* hardly occupy such an broken chain, besides which they e terrestrial, whereas the polar ar may be found far from land, en on occasion denning in pack ice. therefore follows that the govern-nts of not only Canada, but Green-nd, Norway, Russia and the State Alaska are all concerned with the lar bear's survival, and to this end, eetings have been held between ese governments which are already elding fruit.

As early as 1939 Norway estab-hed a polar bear sanctuary on ng Karls Land near Spitzbergen; hile this report tells us that the viet Union now affords complete otection for her polar bears. We e also told that the world popula-n is about 10,000, of which 6,000 e in Canada, which puts us very much on the spot. In 1964 the world kill was 1,300 and the Canadian kill 600, so we appear to have taken a fairly modest quota. Actually, we do take polar bears on a quota system, and in the Northwest Territories only Indians and Eskimos (with a few exceptions) are permitted to hunt these animals.

Mr. Harington has presented a carefully planned and systematic account with maps, graphs, and some excellent explanatory drawings of densites. From these we learn that Banks Island, Simpson Peninsula and Southampton Island (all in the North-west Territories) are among the most important denning and therefore cub-bing areas for polar bears.

Mr. Harington mentions that most dens are to leeward of prevailing winds and tend to face south or south-east. In this respect they would seem to differ from what I know of black bears *(Ursus americanus)*, for both sexes of this species seem to prefer a den-mouth to face north or, espec-ially in heavy bush, northeast. Within their range winter thaws commonly occur, in which case the drifted-in den-mouth might well become frozen and too hard to break through. It would seem that all bears on occa-sion take advantage of milder weather or the early spring strengthening of the sun to leave the den and sun themselves. In the case of polar bears then, they would have to go no far-ther than the "front porch."

There are fascinating notes on the movements of polar bears which are well worth following on the maps. It appears that many bears come south in fall on drift-ice. This bears out older writers, such as the master of the ship "Fox" when on the search for Franklin, as well as many others who met with bears far out to sea on floes and pack-ice. Certainly Mr. Harington mentions that at times polar bears have had no choice but to den in this maritime environment.

It would be a shame to quote to you any more from a book which is a gift at fifty cents and a six-cent stamp. But I must mention the excellent and beautiful photographs, which depict this great animal in such a way as to make us proud of harbouring their great number in our Northwest. The Department of Indian Affairs and Northern Development is to be congratulated on this publication.—*R. D. Symons*, Silton.

SAMSON'S LONG RIDE. By Kerry Wood. 1968. Collins, Don Mills, Ontario. $3.50.

Samson's Long Ride, by the famous Alberta naturalist, Kerry Wood, is a well-bound book, beautifully illustrated in black and white, and suitable for a gift for the ten-year-olds to the teens. It is a stimulating tale of the daring and courage of ten year-old Samson Beaver, son of Joby Beaver, "The Trail Maker", chief of the Stony Indian band.

Samson, left early in September at the Indian residential school established at Morley by the Rev. John McDougal, was outwardly docile but inwardly grieving for the freedom of the open trail. He managed to remain for a month, then quietly slipped away on the back of his pony, taking only one loaf of bread tucked in his shirt, determined to find his family.

Samson knew only that his family had headed north into the mountains and that his father's "Big Horse" had a split hoof. Expecting to overtake his family in a day or two, he was a whole month alone on the trail, suffering the pangs of hunger, cold and the danger from wild animals. His endurance and ingenuity delight the reader.

The first interest of this tale is that it is a true story. In addition, it has the power by its picturesque language of taking one right into those vast mountains and making one feel the biting winds and fear of wild animals. The black-and-white line drawings by Audrey Teather are powerful and authentic. Perhaps a map of the area would have added the authenticity, and a few footnot defining such words as "kinnikinick and "soapalallie" would increase t knowledge of the young natural for whom the book is intended.

One feels that this little tale co be lengthened to a full biograph The postscript tantalizes us with glimpse of a very fine leader, and brave and noble gentleman, maki us feel that we would like to kn more of his life.—*Dorothy Rhod* Moose Jaw.

OF PREDATION AND LIFE. Paul L. Errington. 1967. Iowa Sta University Press, Ames, Iowa. $6.9 U.S.

Within his lifetime, the late P E. Errington developed his intere in natural history and the outdoo into a major contribution to o understanding of the relationships b tween predators and their prey. Th his last book, summarizes some thir years of investigation into the int action of predator and prey.

Dr. Errington devoted most of h research to the study of two pr species, the bobwhite quail and t muskrat, and their predators. In bo cases, predation is difficult to stu because several predator species a involved. The list includes sever kinds of raptors and mammalian ca nivores, differing greatly in behavio and the ease with which they can observed. Consequently, any dir measure of the numbers of prey kill by predators was impossible and i direct measures, such as the fr quency of prey remains in predat droppings and the abundance predators, had to be used. Despi these difficulties, it is impossible deny the importance of Dr. Errin ton's work. Few ecologists spend many years and so many field hou studying one ecological system as d Dr. Errington in the case of mi predation on muskrats.

The work summarized in this bo has formed the basis for much of t

rrent research into predator - prey teractions. Dr. Errington's most portant contribution has been, in y view, the discovery that some edators exist mainly on the surplus mbers of their prey and do not ually reduce prey numbers below ose levels that can be maintained by e food and cover of the environ- nt. He stresses the importance of od and cover in maintaining healthy ey populations. When these are ficient, predators can more easily l the weakened animals. Removal this surplus by the predators tually reduces competition among e remaining prey and increases the elihood of their survival. It remains be seen how widely this principle plies in the natural world but has rmed the basis of an enlightened edator in many places.

The author's approach to biology s essentially descriptive rather an experimental. Admittedly, ex- riments under natural conditions e difficult when large, freely-moving imals are involved, but the purely scriptive approach has certain limi- tions. Whenever any natural change the environment occurs (an excep- nally cold winter, for example), it difficult to record all resulting logical changes with accuracy. so, because such changes occur er large areas, usually no control pulation is available for compara- e study. One wonders if certain anipulative experiments, such as anging the population density of edator or prey or altering the ount of prey food or cover might t have provided convincing evidence rtaining to the regulation of prey mbers. As they stand, after thirty ars of descriptive work, Dr. Erring- n's conclusions about the import- ce of predators in controlling the mbers of their prey are still intui- e to some extent. Nevertheless, ey provide a solid base for future perimentation.

In content, the book is informative d a valuable addition to the library anyone interested in predation. Unfortunately, only the first draft had been completed at the time of Dr. Errington's death. The book, edited posthumously, contains considerable repetition and lapses at time into scientific jargon. As a result, it is, in many places, too technical and tedious for a lay audience and not sufficiently precise for a scientific audience. The book contains no tables or graphs but a few simple bar or line graphs might have provided a clearer illustration of population fluctuation than description alone. A selection of good photographs to supplement the drawings would also have made the book attractive to a wider audience. These criticisms may seem petty in the light of the tremendous scientific contribution of Dr. Errington but it is just these things that will, in my opinion, prevent the book from becoming widely read. This is unfortunate because of the importance of the subject to natural history, ecology, and conservation and the wide experience of its author.

The book concludes with a plea for conservation of predators. Too many individuals and governments still espouse the goal of complete predator eradication when, in fact, predators are vital elements in maintaining some balance and stability in our increasing agrarian countryside. These same predators have the potential to prevent rodents and insects from reaching pest proportions. We should aim for reduction in predator numbers only when they interfere directly with man. — *Dr. D. H. Sheppard*, Regina.

NATURE'S WORLD

CBC-TV has a series of School Broadcasts every Monday from 10:00 to 10:30 a.m., March 1 to March 31. The third one (March 17) is about the Prairie Dogs at Val Marie where the Chandlers will host the Summer Meet this year. The fourth, on woodlands, was taken mostly in the Maurice G. Street Wildlife Sanctuary. The fifth, on the prairie, was made north of Swift Current and includes the sand dunes.