

# Book reviews

**Seals of the World** 2nd edition  
Judith E. King  
Oxford University Press and British  
Museum (Natural History), 1983,  
£12.50

A generation of seal biologists has grown up using the first edition of Judith King's *Seals of the World* as their standard handbook. Now, 19 years later, we are glad to have the second edition. In fact, it is not so much a second edition as a completely new book with much new material and a more attractive format. It provides a thoroughly readable account which will be of interest to expert and layman alike.

After an informative introduction, entertainingly decorated by antique drawings of seals, the first section of the book deals with the diversity of pinnipeds. Although seals, sea-lions and walrus are no longer held to constitute the order Pinnipedia in their own right (because of the convincing demonstration of their origin from two distinct stocks of carnivores) they have sufficient features in common to be treated as a natural group. Judith King discusses this in a chapter on fossils and evolutionary relationships. But the bulk of this section is made up of a chapter in which each living species is described and an account of its natural history and distribution given. For nearly all species there is a colour photograph (many by the author), which alone would justify the book.

The second section deals with pinniped biology. Judith King is an anatomist and much of this section demonstrates her interest in the anatomy of seals. Perhaps this approach is not much favoured nowadays, but a work like this shows how well the workings of an animal can be explained by a study of its structure.

A final section of appendices includes explanations of the scientific names of seals, geographical and general indexes and an extensive bibliography of some 700 titles.

Some people will be disappointed that the more recent work on, for example, the social structure of seal breeding systems, or the energetics of seals, have not been included. I myself would have liked to see more about the relationships between man and seals. But it is captious to

complain at these omissions. Within its chosen scope this book is admirably put together. It is excellent value and should be on the bookshelf of all those who want or need to know the facts about seals.

*Nigel Bonner*  
*British Antarctic Survey*

**The Ecology of Whales and Dolphins**  
D.E. Gaskin  
Heinemann, 1982, £25.00

This book is one which all scientists having a broad interest in cetaceans will wish to possess. The general reader will, however, need to balance its high price against its undoubted flaws. The most serious of these is the book's unevenness. For example, the chapters on Metabolic rate and energy budget, on Evolution and on Zoo-geography are detailed and highly technical, so much so, indeed, that many of the diagrams are virtually incomprehensible to the reader that does not already know the subject, and the text is correspondingly opaque.

On the other hand the chapter on Social structure and social behaviour is simple and readable. Within this chapter the discussion of communication and intelligence is superficial and consciously biased. The author has decided to debunk the common assumptions about the high mental abilities of some cetaceans, but in doing so has really not done justice to this important subject. Thus evidence from studies of brain size, structure and function is completely ignored. The discussion of Management is adequate and thought-provoking. It is the author's misfortune that soon after his literature search cut-off date (January 1980) important innovations in the management of whaling took place. Even events in 1979 are not mentioned, so there is no reference to the intense debates about the participation of non-whaling Third World countries in the IWC, the creation of the Indian Ocean Sanctuary, partial moratoria as management tools, the attempts to revise the New Management Procedure adopted in 1974, and the very controversial question of the management of so-called aboriginal/subsistence whaling as distinct from industrial commercial whaling. In this chapter the account of

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management problems other than the control of hunting is more satisfactory. Dr Gaskin's account of methods for the analysis of cetacean populations is a useful elementary introduction to the methods used to estimate the numbers of whales and dolphins and their rates of reproduction and mortality. Even here, however, there are some important gaps. The greatest attention in the past decade has been given to the methods of counting by planned sightings surveys, but slight attention is given to such work in this book.

The above listing of many of the chapters will indicate that the word 'ecology' in the title is interpreted extremely broadly by the author. Other chapters are on distribution, on diet and feeding behaviour, and on Conceptual views of species and speciation, and recognition of degrees of polytypy. A chapter on Environmental contaminants and trace elements: their occurrence and possible significance, appears to have been added to the end of the book as an afterthought; it is well-documented. The author's conclusion is that we do not know if cetaceans are adversely affected by what we call pollutants, but that if they are there is nothing we can do about it. He agrees with K. Mellanby that 'we have to learn to live with pesticides', with the implication that the whales and dolphins will have to learn to live with them too, as well as with many other human-caused changes in the marine environment, or perish.

I regret not being able to recommend this book more whole-heartedly. The highly technical chapters that I have mentioned appear to be authoritative, and appear to reflect the author's personal involvement in those particular areas of research; it is a pity he does not succeed in conveying his expertise to the non-specialist reader in comprehensible language. Clear diagrams would have been helpful in many places. Elsewhere important omissions prevent the book from being a good guide to all aspects of modern research on the ecology of cetaceans. There is virtually nothing about the analysis of the 'songs' of humpback and other baleen whales, which is in my view of immense scientific interest as well as of cultural significance. The methods of visual identification of individual animals are described, but little is said about the ecological results of applying them. The book is said to have grown from a 1976

review paper by the author, on the evolution and zoogeography of the cetacea. It shows all the signs of having grown in a rather haphazard way.

Sidney Holt  
*International League for  
The Protection of Cetaceans*

## Lords of the Arctic

Richard C. Davids. Photography by Dan Guravich

Macmillan (New York) and Sidgwick and Jackson (London), 1983, £12.95

'The polar bear to most people symbolizes the Arctic, and, though they may never expect to see one in the wild, they want to know that polar bears are there and are being properly conserved.' So writes Ian Stirling, an eminent polar bear biologist, in the foreword to this book. The same sentiment applies to the lion, tiger, elephant, and wolf. Yet, when you are in truly wild country where large mammals are still Lords, and there is no escaping them, you may find yourself feeling relieved that they are not so common as they once were!

The polar bear has been a success story for conservation. At one time its situation was alarming. Numbers were dropping everywhere through overhunting. Then, in 1973, the five nations with polar bears in their territories signed an agreement on conservation. Since then, the downward trend has been reversed and *Lords of the Arctic* tells us that polar bears are still living a truly natural life in the wilderness, not confined to a few reserves and refuges like so many of our largest and most spectacular fauna. The threat now is not so much to the species as to its environment. Without proper checks, the future exploitation of the Arctic for oil and minerals could destroy the fragile structure of its ecosystem, and we would no longer have the pleasure of knowing that polar bears were there.

Having stayed in polar bear country and had the excitement of watching them, it has been a pleasure to read this account by two men who have spent five years following and photographing them. Richard Davids' text is a mixture of personal adventures and reporting of the latest researches by the handful of zoologists who are