

## Book Review

*ENCYCLOPEDIA OF MARINE MAMMALS*.  
Editors: William F. Perrin, Bernd Würsig, J. G. M. Thewissen. Academic Press, 2001. ISBN 0-12-551340-2, 1414 pp, hardback price: \$139.95 (US).

The *Encyclopedia of Marine Mammals* gives testimony to the extremely rapid growth in the study of aquatic mammals around the world. It is a large book. Organized and edited by three prominent marine mammal scientists, the encyclopedia is actually made-up of contributions from more than 250 experts in a variety of fields of marine mammalogy from over twenty countries. Contributions of these individuals were peer-reviewed for accuracy. The result is a 1414 page volume that makes for very interesting reading.

The overall layout of the book is particularly impressive. It is very easy to use, contains a very clear interpretive summary of phylogenetic relationships, useful tables of contents, a guide to using the encyclopedia, a helpful list of contributors and their institutions, a useful list of marine mammal species, a nice summary of biographies of recent important marine mammal scientists, and a thorough index. There are 283 separate articles listed in alphabetical order according to their subject title.

Given the large number of authors and the large number of contributions, one might expect to see variability in the quality of the contributions. Given the large number of articles only limited examples can be provided here. I found the summaries by LeDuc (p.1152) on Speciation and by Perrin (p.1155) on Species to be particularly interesting and valuable. These short summaries provided a clear look at current thinking on the topic of speciation with current examples intertwining genetics and other factors being very informative in describing the processes of the determination of species.

I found more variability when looking at the separate topics having to do with sensory systems. The article on Vision by Supin and Mass nicely covers the variety of types of marine mammals, the performance of animals on visual tasks, the anatomy of the visual systems, and even includes the projection areas on the cortex for cetaceans and pinnipeds. The Hearing section by Thewissen, on the other hand, primarily focuses on the anatomy of the earbones and the ears of cetaceans and demonstrates a lack of sophistication in the under-

standing of psychophysics and the literature associated with functional hearing in marine mammals.

The articles associated with the topic of conservation are particularly strong and well done. The article on Endangered Species and Populations by Reynolds, DeMaster and Silber focuses on the groups of marine mammals that currently require protection in order to survive. Reeves, writing about Conservation Efforts, strongly advocates for the conservation of marine species and provides a helpful listing of the current international conservation conventions and institutions, along with a list of the 20 most threatened marine mammal taxa. There is a general conservation theme, throughout the book, reflecting the authors' feelings about the critical necessity for the conservation of marine mammals.

While Corkeron provides a balanced approach within his article on the topic of Captivity, Bekoff's article on Ethics and Marine Mammals reads a bit like a pamphlet from an animal right's organization. Unchallenged and unsubstantiated statements like ... "Rarely do wild individuals benefit from work done on their captive relatives" (p.402) are not substantiated and fail to recognize the large contribution of scientists working with captive animals or those strongly involved in stranding networks around the world. The book would have been strengthened with a more balanced approach.

One of the principal advantages of this book is that it can be used to open the door to a topic area in which one is not an expert. An excellent introduction to the marine mammal Brain is provided by Oelschlaeger and Oelschlaeger, Energetics is nicely covered by Costa, Swimming is well done by Williams, with Skeletal Anatomy well-presented by Rommel and Reynolds. Individual animal groups are also nicely introduced. Kastelein provides a nice introduction to the Walrus, Stirling writes a nice introduction to the Polar Bear, while Ford introduces the Killer Whale. Overall, the *Encyclopedia of Marine Mammals*, provides a great starting place for a person interested in some particular topic in this rapidly expanding field. One can readily find a short summary of a topic area followed by a number of key references for further examination. It is likely to become a standard reference book in many libraries.

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