

## Book Review

ENCYCLOPEDIA OF MARINE MAMMALS (2NDEDITION). Editors: William F. Perrin, Bernd Würsig, J. G. M. Thewissen. Academic Press, San Diego, California, USA, 2009. ISBN987-0-12-375-553-9, 1,352 pp.

The new, colorful, big (almost 10 pounds, 9 × 11 × 2.5 inches) *Encyclopedia of Marine Mammals* (2nd ed.), with its Daniel J. McSweeney photograph of a false killer whale with a large mahi mahi crosswise in its mouth, as one of the prominent cover shots, certainly catches the eye of anyone passing by. The whole second edition is enlivened by color photos inside and the handy use of colored alphabetized tabs on the page edges. The second edition is therefore more fun to browse through, and easier to use, than its primarily black and white predecessor.

The overall layout of the book remains particularly useful. Its prominent table of contents, contents by subject area, list of excellent contributors, and easy guide to its use ensures that the reader will have an enjoyable browsing experience. The volume is edited by three prominent marine mammal scientists with contributions from over 250 others. The glossary and index are very helpful, and the summary list of individual biographies is very interesting. The diagrams inside both the front and back covers accompanying the article on "Marine Mammal Evolution" allow easy access to comparative evolutionary paths.

In some places, the *Encyclopedia* is more than an update of the old contributions found in the first edition. The first apparent update to the new edition is a contribution on "Aerial Behavior" by Bernd Würsig and Hal Whitehead that is particularly interesting to read. Who hasn't thought about the puzzle of spinner dolphins and why they spin? That corresponds to another fascinating Würsig contribution concluding that dolphins bow ride because they are playing and it is fun. The entry on coloration by Perrin is, not surprisingly, significantly enhanced by the introduction of color to the second edition. The book is filled with solid presentations, based on the first edition, of basic information by established and recognized experts like the excellent presentation of "Age Estimation," primarily through tooth analysis, by Hohn. I, however, while thinking about an encyclopedia and all those high school students and undergraduates likely to be using

this one, kept looking for something new and specific in the index about global warming or climate change and its likely effects on marine mammals. Unfortunately, I didn't find anything specifically labeled that way.

With 250 experts involved, there is likely to be variability in the content of an edited encyclopedia. Some things have changed; many have not. The strength of many expert presentations may also be a bit of the weakness. An author writing on the subject of hearing may have emphasized the physics and missed the main paths and some of the current literature on the overall processes of marine mammal hearing. An article on the ethics of marine mammal captivity may have done little to update and change the article from its initial contribution in the first edition. An author expert on dolphin language learning may have missed the counter-arguments of another expert on the basic underlying processes of pinniped language learning. These observations may have more to do with individual choices and points of view than with the encyclopedic knowledge presented. They may simply be a natural limitation of the format of any edited volume or encyclopedia drawn with contributions by a great variety of individual experts with particular points of view. Overall, however, I found the *Encyclopedia* to be filled with many examples of valuable and balanced contributions.

One of the principal advantages of the first edition of the *Encyclopedia of Marine Mammals* was that it could be used to open the door to a topic area in which one was not an expert. The second edition has only enhanced that advantage by making the experience easier. Many will find the basic sections on the brain by Oelschlager & Oelschlager, cetacean prenatal development by Reidenberg & Laitman, and the circulatory system by Ponganis to be extremely helpful as a fine introduction to the functional anatomy of marine mammals. "Conservation Efforts," particularly in the light of the extinction of the Baiji, will be well-read from the work by Reeves, while Merrick, Silber, DeMaster, & Reynolds' contribution on "Endangered Species" will follow well from Reeves' "Conservation Efforts" work. Kooyman's brief presentation on "Diving Physiology" will open new doors to work recently revisited due to assumptions about decompression sickness and beaked whales. Costa's "Osmoregulation" demonstrates the physiological mechanisms and

common solutions to maintaining an ambient internal environment during the environmental stresses encountered by diving mammals. As was true in the first edition, one can find topics of interest based on a general function or on a particular animal or species group. New ones have been added like the Australian snubfin dolphin by Robertson & Arnold along with all the familiar ones from the first edition: beluga whales by O'Corry-Crowe, leopard seals by Rogers, hour-glass dolphins by Goodall, blue whales by Sears & Perrin, hooded seals by Kovacks, Clymene dolphins by Jefferson, dugongs by Marsh, harbor porpoises by Bjorge & Tolley, humpback whales by Clapham, and, of course many, many others. Each of these provides a quick glimpse of the animals in both words and pictures.

The second edition of the *Encyclopedia of Marine Mammals*, like the first edition, provides a good starting place for any person interested in some particular topic in this rapidly expanding field of the study of marine mammals. Its ease of use and interesting look will assure that it is a handy, and well-used, reference book for scientists in the field as well as for students looking for interesting topics for term papers. The second edition's new colorful look expands its consumer base and makes it an excellent choice for high school and undergraduate university libraries.

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