

The first chapter (The Brain: Evolution, Structure, and Function), for example, is written to be accessible to a wide audience. It covers the current state of knowledge on the dolphin brain, but not in great detail. I would feel comfortable assigning this chapter to undergraduates who have not taken extensive biology or neuroscience coursework. However, Chapter 2 (Sound Production and Sound Reception in Delphinoids) seems to be written for a much more sophisticated audience. I would only recommend this chapter to those with at least a graduate-level understanding of biology and even then, only to those with extensive experience with acoustic terminology and dolphin anatomy.

Because of this unevenness, the volume is not really useful as a textbook for a specific class. Potentially, one could assign specific chapters for class reading—taking into account the varying level of audience expertise required. For example, appropriate chapters for undergraduates include the aforementioned brain chapter (Chapter 1). This chapter gives good information about the basic structures of the dolphin brain and some comparisons with other species. Limitations are the focus on bottlenose dolphins (due to the lack of suitable data on other species) and the paucity of visual aids. The chapter on dolphin societies (Chapter 4) and experimental studies on the cognitive abilities of dolphins (Chapter 7) are also written for a wider audience and cover specific information that is likely to be useful for undergraduate-level learners. Chapter 4, in particular, is a very good introduction to dolphin social behavior—covering a range of dolphin species and using comparisons to terrestrial animals and visual aids for the benefit of the learner. A slightly more advanced student and one who is interested in entering the field of acoustic analysis would find Chapter 5 (on analyzing acoustic signaling) a superb introduction. Therefore, individual chapters may be excellent classroom readings, even though the volume as a whole is disappointing as a potential textbook.

HEIDI LYN, *Psychology, University of South Alabama, Mobile, Alabama*

DEEP THINKERS: INSIDE THE MINDS OF WHALES, DOLPHINS, AND PORPOISES.

By Janet Mann (editor), Camilla Butti, Heidi E. Harley, Patrick Hof, Vincent Janik, Eric Patterson, Andrew Read, Luke Rendell, Laela Sayigh, and Hal Whitehead. Chicago (Illinois): University of Chicago Press. \$35.00. 192 p.; ill.; index. ISBN: 978-0-226-38747-5 (hc); 978-0-226-38750-5 (eb). 2017.

This is a fascinating and informative book written mostly for the general public. It brings together a list of top-notch scientists and experts in the marine mammal field to explain what it basically means “to

be a cetacean.” It covers cetacean brain and cognition, communication and tool use, social life, culture, and current issues facing these animals, exploring investigations both in the field and captivity (perhaps with a bias toward the latter). Mann’s nine coauthors do a good job of providing up-to-date information on the thinking ability of several species of dolphins and whales, and the eight chapters—together with the case studies—offer an interesting window into the minds of these remarkable creatures.

Overall, no prior knowledge is required to read *Deep Thinkers* and the technical/scientific language is kept under control. There are chapters of the book, however, that may require some adaptation to appeal to a general audience. For instance, Chapter 2 (The Cetacean Brain) deals with anatomical terminology that may be difficult for nonspecialists to understand and follow.

The close-up color composites by Bryant Austin are stunning, and probably deserve more space. Color drawings and diagrams are well done and clear, and help in explaining parts of the text. The idea of introducing “case study” pages is particularly fitting for this type of book.

The lack of references and background readings was a disappointment. Suggestions for other readings are critical, especially for a volume such as *Deep Thinkers* that deals with many complex topics.

The Resources page toward the end of the book (p. 188) is poorly done and incomplete; only three other books are cited and the section Papers & Periodicals includes—for the most part—the authors of this volume. There are many great and interesting readings on the topics of marine mammal social behavior, intelligence, culture, and communication, but the editor has decided not to cite them. This is a missed chance to help readers learn—and therefore care—more about these animals by delving deeper into their lives. A minor remark: the typography of this book could have been chosen more carefully. The font is ultra-light and difficult to read.

Overall, this is an interesting primer on the current state of understanding of these intelligent species and a valuable contribution for people who care about whales, dolphins, and porpoises, as well as their future.

MADDALENA BEARZI, *Ocean Conservation Society, Marina Del Rey, California*