

## Book Review

MARINE MAMMAL ECOLOGY AND CONSERVATION: A HANDBOOK OF TECHNIQUES. Editors: Ian L. Boyd, W. Don Bowen, & Sara J. Iverson. Oxford University Press, 2010. ISBN 978-0-19-921657-4 (Pbk), 450 pp.

Studying marine mammals is by no means easy, and it presents the researcher with a number of unique obstacles to overcome. This handbook provides an excellent overview of current methodological approaches to studying marine mammal biology, including areas such as telemetry, spatial and population modelling, diet, population genetics, and foraging behaviour to name just a few. It also provides insight into some of the long-term studies on a number of species from around the world; the past, present and future management of marine mammals; and the role of conservation biology which relies upon many of the areas covered in the book. Importantly, it encourages the researcher to think first about their research objectives and study design before undertaking such studies, setting the scene at the start of the handbook with a chapter on ethics.

Both the editors and an additional 46 contributors to this handbook are some of the leading experts and professionals in the fields of marine mammal biology. Although the book chapters are presented as a series of papers, these are integrated, complement each other, and follow a logical format. The last chapter is a thought-provoking chapter on conservation, which brings together many of the areas of work discussed in previous chapters. Complicated subjects are thoughtfully presented, and there is helpful guidance when comparing the various methods for a particular research area. There are also useful glossaries, definitions, and best practice guidance for certain techniques.

The consequence of providing a “general overview,” such as this handbook, is that research areas are not dealt with in great detail. However, providing such detail would result in a substantially larger piece of work, which was not the intention of the editors. Neither was it intended to provide a step-by-step manual to assist the researcher but, rather, an accurate overview of the most recent advances in marine mammal research so that researchers are able to determine which methodological approach is most suitable for their needs. It also encourages innovation and new ways of exploring research questions.

The handbook recognises it has a number of shortcomings and omissions such as recent technological advances (e.g., use of digital imagery in aerial surveys) and the importance of study design. In most rapidly evolving research areas, it will always be the case that publications describing methodologies will quickly be outdated. The handbook acknowledges this and, because it provides an overview rather than detailed descriptions, will ensure a long shelf life. A chapter focusing on survey design would have been useful and could have addressed some of the recurring problems such as sample size, bias, and observational error.

Anthropological pressure on the marine environment is likely to increase in the future, resulting in a greater need to understand marine mammals and the environment in which they live. This handbook provides an essential guide for marine mammal research, but it will be of great interest to those studying ecology and conservation biology as well.

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