

Life History, Ecology, and Status of Fur Seals and Sea Lions of Australia and New Zealand

FUR SEALS AND SEA LIONS. By Roger Kirkwood and Simon Goldsworthy.
Collingwood, Australia: CSIRO Publishing. 2013. 151 pp., \$39.95 (paper).
ISBN: 9780643096929

Caleb D. Phillips

Published online: 11 March 2015
© Springer Science+Business Media New York 2015

Otariids as a group are of broad scientific and public interest owing to their unique and charismatic life histories. The large number of scientific publications about the biology of fur seals and sea lions reflect their numerous evolutionary adaptations to a semi-aquatic existence, the enigma of their evolutionary origin, their broad global distribution, the generally negative and extreme effects human interactions have had on population sizes, and conservation efforts, among others. In *Fur Seals and Sea Lions*, Roger Kirkwood and Simon Goldsworthy provide a well-rounded and concise text about these major aspects of otariid biology and more, focusing specifically on the otariids of Australia and New Zealand (Australian Fur Seals, Australian Sea Lions, and New Zealand Fur Seals). The relevant scientific literature is well cited in the chapters of this book (Evolution and recent history; Morphology and physiology: Adaptations to marine life; Seals in Southern Australia; Reproductive biology; Foraging ecology; Population biology; and Conservation and management) and a variety of color plates, figures, and tables are included to illustrate the subject matter and guide the reader. These materials, along with the well-organized chapter structure of *Fur Seals and Sea Lions*, make for quick referencing of summary data, especially for ecological and population topics.

The text summarizes current understanding of the lives of fur seals and sea lions across a variety of biological sub-disciplines. Throughout chapters, these authors often provide biological descriptions of other otariids (and

phocids) in addition to detailed descriptions of the focal endemic taxa. This information serves not only to describe the biology of species periodically observed around Australia and New Zealand and others closely related to these forms, but is also relevant for accentuating unique adaptations and life history characteristics of the focal taxa. Given the gross morphological similarity of many otariids, it is common, especially to the untrained observer, to fail to recognize the distinct life and evolutionary histories of individual otariid species. In each chapter of this volume, the unique characteristics of the Australian and New Zealand species are clearly described, and conclusions regarding the relevant biology are supported by quantitative data. For example, focus is given to the distinctive, albeit not fully understood, reproductive characteristics of Australian Sea Lions, as well as the marked differences in diving capability and foraging durations among these largely sympatric species. The biology summarized throughout the book is based upon a variety of scientific techniques, including field observations, various telemetry methods, genetic data, and dietary analysis, and details of specialized methods are often provided. The current understanding of otariid biology is a result of the synthesis of many studies using a variety of scientific methods. This book summarizes our emergent biological consensus, and provides a synopsis of an extensive and interesting scientific body of literature. Overall, *Fur Seals and Sea Lions* should serve not only as a concise reference to the known biology of Australian and New Zealand fur seals and sea lions, but should also serve well as a thorough introduction to the biology of otariids for the interested student.

C. D. Phillips (✉)
Natural Science Research Laboratory, Museum of Texas Tech
University, Lubbock, TX 79409, USA
e-mail: genotyper@gmail.com