

sonar in fisheries science, and on the use of ocean-acoustic waveguide remote sensing in continental shelf environments. Considering the prolific literature produced by scientists around the world, the authors have judiciously selected 770 references as the key introductory texts, in order to offer an essential book of theory and practice to the reader.

*Patrice A. J-P. Brehmer*

Centre de Recherche Halieutique Méditerranéenne et  
Tropicale, (IRD, Ifremer, University of Montpellier II),  
Montpellier, France.

E-mail: [pbrehmer@ifremer.fr](mailto:pbrehmer@ifremer.fr)

### **Marine Ecology. Process, Systems, and Impacts**

*Edited by Michael Kaiser, Martin Attrill, Simon Jennings, David N. Thomas, David Barnes, Andrew Brierley, Nicholas Polunin, David Raffaelli and Peter B. Williams Oxford University Press, Oxford, 2005*  
ISBN 978 019 9249756; GBP 27.99 (Paperback)  
580 pages, 455 colour illus. On-line resources –  
hyperlinked bibliography and figures for each  
chapter available on the web.

Oxford University Press have just published an excellent textbook entitled 'Marine Ecology: Processes, Systems and Impacts'. The nine UK-based authors are each at the forefront of their respective research topics and specialize in subjects as diverse as microbiology, climate change, fisheries and polar life. Their range of cutting-edge expertise shines through in the text providing a global perspective on marine issues. The book flows well, giving a clear and concise account of the underlying science interwoven with bang up-to-date case histories. An appealing aspect of the book is that it introduces processes that are fundamental to an understanding of marine ecology then regularly revisits these underlying principles as the authors introduce you to the wealth and diversity of the marine realm.

The fundamentals of algal production and microbial ecology are dealt with in detail and right up front in the logical sequence of the text, which is good to see given their critical roles in the functioning of our planet. There are comprehensive chapters on estuaries, intertidal areas, pelagic ecosystems, shelf seas, the deep sea, mangrove and seagrass habitats, tropical coral reefs and polar regions, although the deep-sea section is, to my mind, rather short. A second edition might see improvements to the photographic plates (replacing a few fuzzy images and adding scale bars where necessary). The drawings, however, are highly informative and enhance the overall coherence of the book. I am pleased to see that some of my pet research topics are well covered (e.g. data from satellite tracking fishing vessels and from maerl habitats) and I would thoroughly recommend the text to fellow marine scientists and educators as it provided me with some much needed revision of subjects I had picked up incorrectly in the past.

A major strength of this work, and one that sets it apart from the approach adopted by older marine ecology textbooks, is the emphasis on human-induced impacts to the marine realm. Marine scientists are called upon more and more to provide society with the scientific basis for improved management of our shared resources. The book introduces huge topics such as the implications of climate change and shifting policy in relation to marine socioeconomics. It provides an excellent set of contemporary weblinks and reading lists to help the reader quickly find the best sources of more detailed information. This book will be of use to current practitioners and inform a new generation of marine scientists about major ways in which we are influencing the ecology of our seas.

*Jason Hall-Spencer*

Marine Institute, University of Plymouth, Plymouth,  
UK.

E-mail: [jhall-spencer@plymouth.ac.uk](mailto:jhall-spencer@plymouth.ac.uk)