

The Gulf of California: Biodiversity and Conservation edited by Richard C. Brusca The Gulf of California: Biodiversity and Conservation by Richard C. Brusca Review by: Kirsten Rowell *The Quarterly Review of Biology*, Vol. 87, No. 2 (June 2012), p. 151 Published by: The University of Chicago Press Stable URL: <u>http://www.jstor.org/stable/10.1086/665418</u> Accessed: 26/05/2012 18:12

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tial part of my library for this chapter alone. I found the chapter on climate projections (Garfin et al.) too broad to be of local conservation value. And one chapter on quantifying sample bias (Lauver et al.) appeared too narrow a topic for the intended audience. However, the eight fairly strong chapters on wildlife management make this an important contribution to regional conservation.

I found all of the chapters to be fairly well written and very well edited, with the exception of several figures with tiny fonts on the final formatted pages. The inclusion of many color figures and maps sets this volume apart from the others with which I am familiar. A minor issue I had with the book is that although it was published in 2010, the source material is from a symposium held in 2007. I found some of the information to be bit outdated, with some field data ending in 2005.

I continue to be impressed by the dedication of this team of authors to recognize the importance of "a sense of place" to bring about effective community conservation in the region. I imagine that every corner of the world wished it had nine volumes of science from dedicated professionals to help guide management decisions. I have always felt that science is best served by a series of stronger papers in top peer-reviewed journals. However, I would still recommend this publication for local land managers and the conservation-minded public as a reminder that science, in all its forms, can help you appreciate the beauty of the stars in a desert sky.

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THE GULF OF CALIFORNIA: BIODIVERSITY AND CONSERVATION. Arizona-Sonora Desert Museum Studies in Natural History.

Edited by Richard C. Brusca. Tucson (Arizona): University of Arizona Press and Arizona-Sonora Desert Museum. \$75.00. xiii + 354 p. + 8 pl.; ill.; index. ISBN: 978-0-8165-2739-7. 2010.

Over the past 80 years, the world's oceans and the biodiversity that they support have been deeply impacted by anthropogenic actions—from aggressive fishing practices and coastal development to pollution and climate change. The Gulf of California, while a relatively isolated sea, has not been immune to these threats. And like other marine ecosystems, scientists, managers, and conservation biologists struggle with documenting the biodiversity that exists, changes that have occurred, and the links between all of that information.

This edited volume represents an international effort to summarize the current scientific knowledge on the geology, physical oceanography, invertebrate and vertebrate diversity, and several

pressing conservation issues in the Gulf of California. It builds its description of species biodiversity on an evolutionary platform by diving into deep time describing the formation of the Gulf of California. It succinctly discusses the complexities of the physical oceanography that make the Gulf of California the wonderfully rich ecosystem that it is and suggests possible answers to why it supports such high numbers of endemics. This book's strength is that it gives a high-altitude view of the natural history of the Gulf of California, its biodiversity, and it also highlights a few cases studies of conservation and management efforts. It summarizes over a half century of research, including large comprehensive databases on the macroinvertebrates and fishes. Like the biogeography, the political and cultural landscapes in the Gulf of California are complex and diverse, which is discussed, including the political framework established to manage the Gulf and its resources, making it a valuable resource for audiences not familiar with the area. This book is an excellent primer for anyone broadly interested in the natural history, biodiversity or marine conservation, and artisanal fishery management.

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MARINE CONSERVATION ECOLOGY.

By John Roff and Mark Zacharias; with early contributions from Jon Day. London and Washington (DC): Earthscan. \$150.00 (hardcover); \$59.95 (paper). xx + 439 p. + 16 pl.; ill.; index. ISBN: 978-1-84407-883-7 (hc); 978-1-84407-884-4 (pb). 2011.

In their new book, the authors present an overview of the ecological principles and components needed for a science-based conservation of marine biodiversity. Their main focus is on the adequate evaluation of marine biodiversity at local to global scales and how to best represent and protect it with marine protected areas (MPAs). This focus clearly differs from other marine conservation textbooks and will be most useful for anyone interested in the planning and selection of MPAs based on fundamental patterns of species distribution and biodiversity in the ocean. Those interested in other aspects of marine conservation, such as the protection of threatened species, sustainable use of marine resources, or management of human impacts outside MPAs, should look for an alternative.

Covering different aspects of marine biodiversity, the volume begins with chapters on the physicochemical, biological, and ecological aspects of marine environments and representative areas at local, regional, and global scales. It continues to cover biodiversity patterns at the genetic and species level, including diversity hotspots and indicator species.