

ing population—9.2 billion projected by 2050—will rely ever more on so-called ecosystem services, human interactions with other biological entities will have more and more impact. This volume takes an original and endlessly fascinating approach, offering up life histories of a variety of organisms, manifestly taking into account how humans have shaped the populations of our fellow species from squids to sugar cane to salmon. A representative chapter considers the oak tree, taking as its touchstone an episode with “haycorns” from *Winnie the Pooh*. Deftly weaving the central historic role of the oak in the rise of the British Navy, the taxonomic mystery of its latitudinal preference (flourishing in a distinctly middle belt around the globe), and the impacts of its reproductive patterns on rodents, ungulates, insects, and birds, the book provides a minibiography of this iconic species. Other subjects include honey bees, bracken, barnacles, and legumes. The concluding chapter on the wolf provides a definitive coda on the book’s central thesis, which is that human perception and manipulation of species have impacted their welfare in a profound way.

If we are to help biodiversity stay vibrant, it is incumbent upon us to understand not just the nuts and bolts of traditional species interactions, but our own historic and present involvement in their fates. This volume is a cross-disciplinary dream come true and effortlessly invokes the long time frame of evolution.

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**SUSTAINABLE FISHERIES: MULTI-LEVEL APPROACHES TO A GLOBAL PROBLEM.**

*Edited by William W. Taylor, Abigail J. Lynch, and Michael G. Schechter. Bethesda (Maryland): American Fisheries Society. \$79.00 (paper). xxvi + 399 p.; ill.; index. ISBN: 978-1-934874-21-9. 2011.*

This volume is the product of a symposium held in 2009 at the annual meeting of the American Fisheries Society. It consists of 14 contributions organized into two major sections: Biological Cases of Fisheries Sustainability and Institutional Approaches to Sustainable Global Fisheries. There is a nice balance between chapters defining the problems and solutions, and a balance between capture fisheries and aquaculture, as well as the various disciplines involved in fisheries. The scale ranges from a chapter on small scale freshwater fisheries in Cambodia to the large industrial tuna fisheries of the Eastern Pacific.

An introductory chapter, Sustainable Fisheries: The Importance of the Bigger Picture, does an excellent job of both defining the problem and

realistically addressing solutions. An overriding theme of the chapters is that fisheries can be sustainably managed and we do have the tools to do so, but that the appropriate tools differ from fishery to fishery and country to country. There are no silver bullets.

There is a well-justified repeated emphasis on the importance of institutional arrangements and governance as indicated by the structure and the second section. The intimate connection between communities, management systems, and natural ecological systems also runs through most of the chapters. This is not really a book to be read from cover to cover, but more a resource in which chapters would be chosen selectively. Many chapters would serve as excellent case studies for advanced undergraduate or graduate courses. Overall, this is a collection of papers that are realistic yet optimistic about the future and proposes positive solutions to the many problems of current fisheries.

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**ECOLOGY AND CONSERVATION OF THE SIRENIA: DUGONGS AND MANATEES. *Conservation Biology, Volume 18.***

*By Helene Marsh, Thomas J. O’Shea, and John E. Reynolds III. Cambridge and New York: Cambridge University Press. \$135.00 (hardcover); \$65.00 (paper). xvi + 521 p. + 4 pl.; ill.; index. ISBN: 978-0-521-88828-8 (hc); 978-0-521-71643-7 (pb). 2012.*

In the bestiary of charismatic megafauna, dugongs and manatees (sirenians) are the ugly cousins of whales. Both groups share equally long geologic histories, but whereas whales are acrobatic, engaging, and trophic gourmands, sirenians are docile, slow, and obligate herbivores. The oceans and rivers are littered with species of whales, while sirenians comprise only four extant species, most of which are highly threatened by human activities. Given these traits, do sirenians offer important questions for cutting-edge integrative biology? Is there anything still to be learned about their ecology and conservation? The authors of this thorough, well-rounded, and excellent volume offer resounding affirmatives to both questions. Their writing is crisp and fluid, with a structured narrative within each chapter that moves in a logical way across topics that historically would have been discussed more rigidly and less synthetically. Almost every chapter opens with a comparative frame (oftentimes using the closest terrestrial relatives of sirenians), an approach that offers even specialist readers with an important context for understanding sirenian feeding, life history, and habitat use. The text offers a pleasant mix of foundational and