

Book Reviews

Mangrove Ecology, Silviculture and Conservation. By Peter Saenger. 2002. Kluwer Academic Publishers. Dordrecht, Netherlands. 360 p. US\$143.00 hardbound. ISBN 1-4020-0686-1.

Whether on a coastline between water and humid rainforest, subtropical savanna, wetland graminoid flats, or the driest of deserts, mangroves are the dominant plants of communities of sheltered, inter-tidal coastlines of the tropics and subtropics. Compared with many other communities, mangrove communities were largely ignored in the ecological literature until the past 3 decades or so. Recently, increased appreciation of the productivity and diverse ecological values of these communities, along with increased realization of their threatened status, have resulted in increased scientific interest in these communities. *Mangrove Ecology, Silviculture and Conservation* by Australian Peter Saenger is a significant and detailed contribution on the subject of mangroves.

The 9 chapters of Dr. Saenger's book begin with a discussion of the *mangrove environment* and the *mangrove flora* in Chapters 1 and 2, respectively. Chapter 2 describes the diversity of mangrove species, which includes not only the species of the well-known family *Rhizophoraceae*, but also representatives of about 25 other families that contribute to the mangrove flora. These introductory chapters have a global rather than regional flavor, and are excellent background for the reader who is not completely familiar with mangroves; they are interesting reading for the scientist or interested amateur botanist.

Chapters 3–6 explore the ecophysiology and community ecology of mangrove communities. In a number of subchapters of Chapter 3, the water relations and water management of mangroves in relation to their growth and reproduction are examined. Temperature, light, and soil in relation to mangroves are the subject of Chapter 4. Plant-plant and plant-animal interactions are examined in Chapter 5. In Chapter 6, the phytosociological classification of mangrove communities, including such topics as plant associations and shoreline zonation, are discussed.

In *The Value of Mangroves*, the topic of Chapter 7, Dr. Saenger details the components, functions, and attributes of mangroves that make them important for ecological values, ecosystem productivity,

and valuable products. This chapter is especially important for those who are relatively unfamiliar with mangroves in that it shows the value of these communities that have long been undervalued by the wider public.

The 40 pages of Chapter 8 and the 20 of Chapter 9 provide a solid discussion of mangrove silviculture and restoration, and mangrove conservation and management, respectively. Deforestation of large areas of mangroves in recent years for diverse human activities such as prawn farming and waterfront housing acutely threaten mangrove communities at a time when they are just beginning to be widely appreciated. In these chapters, Dr. Saenger explores the importance of managing mangrove communities for their many values, and of restoring them in places where they have been unwisely removed. The final subchapter of Chapter 9 explains how under-appreciation of mangrove communities by the public has led to unwise destruction of mangrove communities by the joint activities of developers and legislators. The future of mangrove communities, and their diverse values and uses in ecological processes (e.g., carbon sequestration) are summarized in this concluding section. While Dr. Saenger's view of mangrove communities might be described as more *conservationist* than *preservationist*, he notes and deplores the mindless human destruction that has visited many mangrove communities.

Mangrove Ecology, Silviculture and Conservation is notably effective in several respects. The book is artfully written and produced. Well-researched technical science is presented with minimal jargon, in an historical context, with a continual, unforced flavoring of international and photographic features. The historical quotations, descriptions, and other references, in particular, that Dr. Saenger includes in every chapter, greatly enhance the text. They allow the reader to appreciate mangroves in an enriched context. The black and white photographs, while only moderate in number, are well chosen, and also enhance the presentation. The text and overall presentation benefit from Dr. Saenger's lengthy history of diverse research on mangroves, much of it cited in the book's extensive list of references. In an era when books increasingly have numerous co-authors, or numerous contributors to edited volumes, Dr. Saenger's

book is an understated testament that a single author can produce an effective, comprehensive treatment of a complex topic such as mangroves.

Reading *Mangrove Ecology, Silviculture and Conservation*, which is a surprisingly pleasant experience despite (and because of) the book's significant technical content, will certainly give any reader an excellent understanding of mangrove communities. The volume would seem to be a must as reading and as a reference for ecologists interested in coastal ecosystems that involve mangroves. Also, amateur naturalists and conservation-minded individuals interested in these ecosystems will find the book informative, interesting reading. The book can be complemented by *Mangrove – the Forgotten Habitat*, by Jeremy Stafford Deitsch (reviewed, *J. Range Manage.*, 1997, 50:557.), a much more popularized, more photographic treatment of mangrove communities. But Dr. Saenger's book, by itself, is not only technically complete, but is artistically complete as well. *Mangrove Ecology, Silviculture and Conservation* is a beautifully written, effectively presented, technically impressive contribution.—*David L. Scarneccchia*, Washington State University, Pullman, Washington.

Beluga Days: Tracking a White Whale's Truths. By Nancy Lord. 2004. Counterpoint, New York, NY. 242p. US\$25.00 hardback. ISBN 1-58243-151-5.

Beluga whales resemble "poorly rolled cigars" (p. xvii). They bulge and appear skeletal in odd places. They have small round heads and rather unimpressive petal shaped flippers. They cannot swim swiftly—and hence they periodically fall prey to killer whales—but they can swim in shallow water. As far as whales go, belugas are not particularly distinguished creatures. Even so, the belugas of Cook Inlet in Alaska are now threatened with extinction. How did this unfortunate state of affairs come about? In this interesting new book, Nancy Lord explores the many facets of this question. This book raises a number of issues in renewable resource management that apply generally. In addition, this book provides some discussion of the ways in which natural resource policy might be set when the (occasionally competing) interests of multiple stakeholders have to be dealt with. Therefore,