

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,

Beluga Days should be of interest to readers of this journal.

Beluga hunting and eating can be traced back at least a thousand years, to the days of Cook Inlet's earliest human occupation. As Chapter 1 tells us, the trinity of salmon, belugas, and people have a common history in Cook Inlet. Over a long period of time, the interactions between the members of this trinity were not hazardous in the sense that no member was threatened with extinction. However, in the 1990s, this tranquil state of affairs began to change. Nancy Lord used to see hundreds of belugas swim by her summer camp but, with the passage of time, she saw fewer and fewer belugas. Indeed, it was now no longer possible to hunt belugas for fun.

Are belugas really imperiled because of overzealous hunting by humans? If yes, is there any validity to the notion of subsistence hunting? These questions are addressed in Chapter 2. As the author rightly points out, these 2 questions take on considerable salience because of 2 reasons. First, no one seems to know how many belugas live in Cook Inlet. Second, it appears as though the belugas of Cook Inlet are genetically distinct. In other words, if "something happened to the inlet's belugas, they wouldn't be replaced from elsewhere" (p. 19). In search of answers to the above 2 questions, the author met with officials from environmental groups, the National Marine Fisheries Service, native leaders, and she read the pertinent literature on beluga whales. Her efforts did not produce a definitive answer. It certainly seemed as though in Cook Inlet, there "was a small population rapidly getting smaller...a population that had reduced its range to the very area where it was most vulnerable to hunting" (p. 31). However, this did not appear to justify the imposition of draconian control measures. What about Alaska's natives who had hunted belugas for hundreds of years, primarily for subsistence? Surely one could not fairly say to these people that they could not hunt belugas anymore. As these issues suggest, the future of the Cook Inlet belugas appears to be caught between the competing interests of environmentalists and conservationists on the one hand and native Alaskans and economic developers on the other.

Chapter 4 discusses the outcome of Nancy Lord's beluga whale watching trips to the Shedd Aquarium in Chicago and the aquarium in Vancouver. The author helpfully points out that even though right until the 1960s, whales were conceptual-

ized largely in terms of hunting, food, and as a scourge to fishermen, suddenly something changed. Quite abruptly, people across the world and Americans in particular "decided that whales were different. Whales—whether blue, gray, killer, humpback, minke, beluga, or any other species—were *special*" (p. 79, italics in original). This special designation gave rise to a certain kind of sentimentality and an intense desire, at least on the part of some groups, to severely proscribe the human use of whales for either consumptive or recreational purposes. Why do people find it difficult to comprehend that demands for conservation must also take into account a whole of host of other things, not the least of which is the desire of some people to maintain a way of life that they have known for generations? This is the important question that the author asks us to ponder in this chapter.

What implications do human and beluga interactions in Canada's St. Lawrence river have for belugas in Cook Inlet? This query is explored in Chapter 6. One distinction between these 2 kinds of belugas, we are told, is that unlike the Cook Inlet belugas, the "St. Lawrence belugas live in waters contaminated by industrial chemicals..." (p. 117). The key implication however is the need to adhere to the so called precautionary principle. In other words, when one does not have access to good data about a particular renewable resource, "the responsible track to take is to be conservative, prudent" (p. 133).

How important are belugas to Alaskan villages bordering Cook Inlet? Second, would villagers be able to exert any degree of local control over hunting decisions via the new tool called co-management? Third, what is traditional ecological knowledge or TEK and does this notion have any relevance in the management of renewable resources in contemporary times? These questions are taken up in Chapter 8. From interviews conducted by the author in the village of Tyonek, we learn that the tradition of beluga hunting is significant because it is a part of the village's "way of living" (p. 168). Further, Alaskan natives are keen to co-manage renewable resources as long as this kind of management involves "equal sharing of management decisions" (p. 171, italics in original). This notion of equal sharing is crucial because in the past, federal and state regulatory agencies have taken an attitude of "we manage and you cooperate" (p. 171). Finally, we learn that the idea behind TEK is that "close observation over long periods of time provides a valu-

able way of understanding not just the *behaviors* of observed species or natural phenomena...but of ecological *relationships*..." (p. 172, italics in original). In addition, TEK is pertinent in contemporary resource management because it brings with it "a host of positive contributions—not just rich ecological insight, but ways for Nature and local people to participate in the development of sounder and more equitable policies" (p. 177).

In sum, this book is, on occasion, somewhat long on description and short on *analysis*. In addition, the author does not say a whole lot about *concrete* steps that natives and federal and/or state regulators might take to make co-management a truly meaningful and ultimately successful idea. Even so, there is no gainsaying the fact that this book contains an unsentimental and thoughtful account of renewable resource management issues with implications well beyond Alaska. The concluding message of Nancy Lord's book is that if humans cannot save the beluga whale, what chance have they, in the final analysis, of saving themselves?—*Amitrajeet A. Batabyal*, Rochester Institute of Technology, Rochester, New York.

Strangely Like War. The Global Assault on Forests. By Derrick Jensen and George Draffan. 2003. Chelsea Green Publishing Company, White River Junction, Vermont. 185 p. US\$15.00 paper. ISBN 1-931498-45-8.

War causes damage. An abandoned battlefield is a barren and forsaken place. In Derrick Jensen's and George Draffan's book, *Strangely Like War*, forestry is compared to an all-out offensive on forests. "We would never buy paper made from dead bears, otter, salmon and birds, from ruined native cultures, from destroyed species and destroyed lives, from ancient forests reduced to stumps and mud; but that's what we're buying when we buy paper made from old growth clear-cut trees." The authors employ this quote from Margaret Atwood as an introductory quotation to one of their chapters. It effectively summarizes the concerns of Jensen and Draffan and others trying to save the world's forests. The authors feel that these issues are often brushed aside by foresters. The foresters' justifications for cutting trees, e.g. increasing forest health, and spreading "civilization," are portrayed by the authors as the simple-minded explanations of those seeking to turn the forests into a quick fortune. *Strangely Like War* does away with all rationalizations, leaving the reasons for deforestation standing alone and uncovered in a "forest of lies."