

population). It does not cover interactions such as herbivory, topics in population biology class. Species interactions with invasive species influence methods. This book seems timely. It is a valuable approach involving multiple disciplines. I recommend this book to ecologists. —Johanne B. Pascarella, Oregon State University

**Islands of Green in a Desert.** Cambridge University Press, 1998. 345 pages. This book covers an area (southern California) with temperate climate and temperate natural disturbance. I hope to learn what the question is. In the future, we will have to look at the floristics and ecology. Instead, this book does not have been developed for a forest in Australia. The authors, the main part of the book, are examining the data that the man sets up the first part of the book in order to support these ideas. The chapters include the effects of sclerophyllous, the soil phosphorus or the soil phosphorus or that rain forest is a forest including water. The book is arguing that some of the reasons for the reduction of rain forest are various reasons. The book discusses the role of fire in the distribution of the species. The chapters include a discussion of the interaction of fire and climate, the use of fire in agriculture and the evolution of fire. Fire is important in the ecology of rain forests. Bowman is the main element of Australian fire ecology. Bowman began to use fire in agriculture that our understanding of fire ecology is still unsettled. In Australia, knowledge of fire ecology is crucial. I found myself as to remind myself of the mountain ranges, and I am interested in learning

that Australians have a much broader use of the term "rain forest". In addition to the tropical, subtropical, and temperate rain forests that are recognized in the Americas, Australians place what Americans would call "tropical dry forest" as a type of "rain forest" called "dry rainforest or dry monsoon forest".

In conclusion, this book should be of interest to researchers, graduate students, and land managers in Australia and elsewhere in the world where fire is an important natural disturbance. Besides being well-written and referenced, the book is packed with figures and tables from the review of the literature that summarize many of the observational and experimental studies that have examined these hypotheses. I would recommend this book, along with another excellent book from Australia, *The Ecology of Fire* by Robert Whelan (Cambridge University Press, 1995), as good texts for a course on fire ecology. —Dr. John B. Pascarella, Dept. Biology, Valdosta State University, Valdosta, GA 31698

**Halophyte Uses in Different Climates I. Ecological and Ecophysiological Studies.** H. Leith, M. Moschenko, M. Lohmann, H.-W. Koyro, and A. Hamdy (eds.). 1999. ISBN 90-5782-038-2 (softcover 150 Netherland Guilders (definitive); approx. US\$75.00). xii + 258 pp. **Halophyte Uses in Different Climates II. Halophyte Crop Development: Pilot Studies.** A. Hamdy, H. Lieth, M. Todorovi, and M. Moschenko (eds.). 1999. ISBN 90-5782-025-0 (softcover NLG 85 (definitive); approx. US\$42.50). ix + 144 pp. Both published by Backhuys Publishers, PO Box 321, 2300 AH Leiden, The Netherlands. E-mail: info@backhuys.com. — In the last several decades, as agricultural lands have been degraded by overuse of fertilizers, salt-water intrusion, loss of topsoil, and desertification, scientists and agronomists have focused research attention on using salt-tolerant plants (halophytes) in agricultural systems. One prime driver of this research has been the European Commission, which supports a Concerted Action program in the utilization of halophytes. These two volumes are the first synoptic presentation of the results of this research program; the included papers were presented at the 1998 International Congress of Ecology (INTÉCOL) in Florence.

Volume 1 primarily covers ecophysiology and basic ecology of a relatively small number of halophytes being considered for saline agriculture: *Beta vulgaris* ssp. *maritima*, *Suaeda fruticosa*, *Spartina maritima*, *Halimione portulacoides*, *Arthrocnemum fruticosum*, and *Laguncularia racemosa*. These plants are being examined for use as sugar, oil, and forage crops, or for agro-forestry. The eleven contributions in this volume, span a diversity of continents: Europe, Africa, the Middle East, and North America, but most share a common methodology. The responses of individual species to different levels of salt stress, normally in the greenhouse, but occasionally in the field, are reported, and implications for their use in agriculture is discussed. Volume 2 presents the

case-studies: attempts at reclaiming degraded lands for saline agriculture and agroforestry in Italy and the Middle East. Some of the case-studies are actual examples, whereas others are basic reports similar to those presented in Volume 1.

The quality of the papers in these volumes is highly variable. Although all papers are written in English, for all but one of the papers across both volumes, English is not the primary language of the authors. The manuscripts clearly were not edited by a native English speaker, and so reading the papers can be slow and confusing for native English speakers. The figures and tables are generally clear, though, so the main message of each paper is apparent.

To me, the most valuable aspects of these two volumes are two review chapters. In volume 1, Menzel and Leith present version 2.0 of their halophyte database. This database of over 2600 species, complete with synonyms (from Index Kewensis), their salt tolerance, and references to the literature (incomplete, but a complete internet-based list is promised for the future) is a gold-mine for individuals interested in determining what plants might be suitable for saline agriculture and agroforestry. In volume 2, the same authors tabulate the published uses of 69 halophytes (24 of which are species of *Atriplex*), along with their origin, region of cultivation, salinity tolerance, and photosynthetic type (C3 or C4). Finally, there is a one-page table (Annex [or Appendix] 3 in Volume 1) that gives conversions for commonly-used salinity measurements. In one place, I can now look up the relationship between parts-per-million, dS/m, mmhos, meq/L, mol/m<sup>3</sup>, μS/cm, and nmol/kg of NaCl. This conversion table will allow one to make some sense of the myriad units used for salinity in the vast literature on halophytes, as there is no established SI standard unit for salinity. Climate diagrams are provided for all study sites referred to in both volumes.

These volumes are aimed at a narrow audience: individuals interested in saline agriculture. The price seems quite high, given that many potential buyers are in developing countries, or at state agricultural universities facing declining library acquisition budgets. The papers are of archival value, but the on-line database (no URL is provided) will be of more long-term utility. —Aaron Ellison, Dept. Biology, Mount Holyoke College, South Hadley, MA 01075.

**Savannas, Barrens, and Rock Outcrop Communities of North America.** Anderson, R., J. Fralish, and J. Baskin, (eds.) 1999. ISBN 0-521-57322-X (hardbound) Cambridge University Press. — The three ecologists serving as editors of this treatise on savannas and related communities have provided an excellent, multi-authored summary of a voluminous and scattered literature. This compilation of 26 papers is an outgrowth of the North American Conference on savannas and barrens held at Illinois State University in 1994; it emphasizes regional areas in the United States and Canada (east/southeast; central/midwest; western/southwest; northern), but includes communities as diverse as oak savannas, jack pine woodlands, alvars, and serpentine

barrens. This seminar on grassland managers interested for use as the prose content a will find faculty with the

This review discusses the usefulness of sections in geology to discuss the treatment and summary (see introduction) to restrict the endemic species being under a refugial area. A remarkable are being enthuasias of the historical little as 1

The book, probably ambiguous geograph applied to the community. Yet the book the reduction, "sa including these concepts provide. since science some are were clear have been more clear

Volume 1 covers a representative number of chapters in the 18) provocations: Gibson's outcrops are a very Kuchler. Volume 2 includes: c (Archib