

ter contains data on flowering and fruiting times, reproductive units, propagule dispersal and plant establishment, of mangroves. There is a lot of useful information but the criticism of Rabinowitz (1978b) on page 44 may not be justified on the basis of data in Table 5. The authors say, "The mortality rates from Queensland (Table 5) show trends different from those reported by Rabinowitz (1978b) who found that mortality rate was inversely correlated with initial propagule weight." Table 5 does not present any data on relationship between propagule weight and percent mortality.

Chapter 3 presents information on relationship between mangroves and their environment. Three types of interaction have been presented: the effect of physical factors, *e.g.* temperature isolation, wind, drainage, salinity, watertable, soil type, proximity to freshwater; plant-plant interactions, *e.g.* parasitism, antagonism, mutualism, competition; plant-animal interaction, *e.g.* sediment turnover, grazing and trampling; interactions expressed as structure, *e.g.* parallel shoreline zonation, longitudinal upriver zonation, and unifying both zonation types and lastly classification of mangrove communities on the bases of structural, physiographic and structural and geomorphological attributes. This is the longest (84 pages) chapter in this book and packed full of data even though a large proportion of graphs and tables are either from unpublished data or the source is not given. I have nothing against unpublished data but in many cases the reader is left wondering about the methods used in obtaining the results. There are several typographical errors. In Chapter 4 the authors present a basic taxonomic and ecological outline of various associated plant groups such as bacteria, fungi, algae, lichens, epiphytes, mistletoes, salt marsh plants and vascular plants at the margins of mangroves.

The fauna of mangroves and their adaptations to live in this habitat are given in Chapters 5 and 6. The chapters are well written and contain valuable information on the composition, distribution and adaptations of vertebrate and invertebrate fauna of terrestrial, marine and freshwater habitats, within the mangrove communities. The conclusions are amply supported by tables and graphs from the literature. Each table and graph is referenced and few typographical errors are present.

Ecologists interested in primary production and energy flow in ecosystems may find Chapters 7 and 8 useful. Most of the data comes from studies done in southern Florida where only four mangrove species are found. The authors have cautioned, and rightly so, that extrapolation to Australian conditions may be risky but the material presented here may form a useful introduction to students for starting studies on primary production of mangroves in Australia. A basic detritus cycle, decomposition of leaf litter, total litter fall and nitrogen content are presented along with life cycles of some commercially important animals.

The authors as expressed in the preface have many years research experience in taxonomy, ecology, conservation and environmental biology of mangrove communities. I found the last chapter extremely valuable because it clearly points out the specific problems of mangrove ecosystems in Australia. These problems are not unique to Australia. The exploitation, conversion, management, and drainage of mangrove communities continues at an unprecedented rate in the developing world. Without proper planning, legislation and management, the increase in human populations and our insatiable desire for better quality of life would destroy another diverse ecosystem. The authors emphasize the need for more research, and greater protection of mangrove communities in Australia.

The text is well illustrated with diagrams and plates of 43 photographs, and contains numerous tables, a glossary and a large reference list. The price of the book is within reach and should be of general interest to graduate students, biology teachers and mangrove specialists particularly in Australia.

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Les Littoraux: Journées en l'honneur d'Andre Guilcher, Bulletin No. 36, 1989. Centre National de la Recherche Scientifique, Centre de Géomorphologie de Caen. No Price, No ISBN, 262p.

This publication in honour of France's most eminent coastal geomorphologist Andre

Guilcher, contains 57 short contributions covering a range of topics from process dynamics to Pleistocene sea-level history. The book is divided into 5 'chapters' and shows the very extensive research currently being undertaken not only in France, but throughout the world from Arctic Canada to tropical Africa and South America. Each contribution is little more than an extended summary, but often refers to longer papers published elsewhere. There is a short English abstract with each paper. This is a useful volume inasmuch as it does encompass almost the whole range of French coastal work.

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L'Amenagement du Littoral, Jean-Marie Becet, 1987. Press Universitaires de France, Paris, 125p, FF30.—ISBN 2-13-0400442.

This is an inexpensive (about US\$4.50) volume in the "Que Sais-je?" series which runs to

well over 2,500 titles covering all subjects. The book is written by a lawyer with an interest in coastal law and planning ("l'amenagement" equals "planning" not "management"). The book provides a potted history of French coastal planning covering the 277 coastal "contons," particularly since the fundamental changes brought about by the creation of the Conservatoire l'Espace Littoral in 1975 and the enactment of coastal protection legislation in 1979. Recently France has defined "Communes Littorales," which oversee many coastal activities and services. The book deals with many well-known problems, including accessibility and erosion, but also more esoteric ones like concession stands, driving on the beach and valuing the coast.

An interesting book, of most interest to students of comparative coastal planning strategies.

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