

grained bedforms come under the scrutiny of Mantz who used a small flume to observe bedform development and sediment transport associated with silt and fine sand. The structures produced by equally small bedforms are observed in the field by Wright who box-cored ridge and runnel topography in a macro-tidal environment, finding substantial spatial and temporal variability across the tidal flats. Also at a micro scale, Hartnell monitored the effect of salt marsh vegetation and location relative to tidal creeks on marsh sedimentation finding distinct spatial, seasonal and annual patterns.

The remaining two full papers are from exotic locations. Clark *et al.*, working in the Canadian Archipelago, attempts to estimate arctic coastal sediment budgets using sequential aerial photographs and bed drifters. Pye presents the best and most comprehensive paper in the volume. Field data from N.E. Australia is used to evaluate four models of transgressive dune evolution, with the rising sea level model getting the nod, something workers outside Australia may find surprising.

The three summaries cover nesses, shingle armouring of barrier crests and ords, an interesting rhythmic beach feature.

As a perspective into U.K. coastal research the theme is diverse with no theme or direction apparent. The lack of an index perhaps reflects this feeling. It is unfortunate for this volume that it appeared at the same time as edited volumes on Australian coastal work (Thom) and U.S. barrier research (Leatherman and Oertel). It all but fades into insignificance by comparison. The U.K. has a varied and fascinating coast which needs to be re-evaluated in light of modern research capabilities. The present volume does little in this direction.

I would find it difficult to recommend this book even in the U.K. except for a mandatory place on the library shelf.

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Global Fisheries: Perspective for the 1980s, edited by Brian J. Rothschild, 1983, Springer-Verlag, New York, 289p. \$US23.90, ISBN 0-387-97772-6.

Fishery managers are like lion tamers: the best of them can expect to get chewed up from time to time. The history and practice of fishery management have been mixed to terrible and the current "do nothing" policy exacerbates the problem. Things

are likely to get much, much worse unless dimensions wider than the traditional applied ecology are incorporated in management. These are a few of the ideas from a pithily written chapter by G.D. Brewer in this useful new book about fisheries management.

The book contains 12 chapters following an extended introduction by the editor in which he argues the case for a multidisciplinary review of fisheries policy. Important changes to the law of the seas and our understanding of the failures of classical management tools both took place, somewhat traumatically, in the 1970s. Rothschild sets out his views on the multidisciplinary remedy in full chapter later in the book. Most of the other chapters in the book convey a similar message: in a brief review I have space only to highlight some of them.

Larkin, on the basis of his extensive experience in fisheries, tackles the question of how much research and management effort are appropriate in relation to resources and knowledge of the stocks: his chapter is entitled "How much is enough?" He neatly categorizes four levels of management: for example, at the primary level, a three-person team covers all resource assessment and management, at the secondary level, a 30-person team is required; while at the other extreme, quaternary level research and management may cost 20% of the landed value of the catch. Catalytic "fifth level" support provided by small international organizations like FAO is praised, and the author takes a hard but approving look at the policy of "contracting out" fishery appraisal work to organizations independent of government. Larkin clearly puts understanding of the biology of the stock first and I found his pragmatic article stimulating and refreshing.

Kesteven stresses the need for developing countries to become self-sufficient in fisheries research so that management details are known before exploitation begins. Although this is not the pattern of exploitation of fisheries with which the developed world is familiar, there is hope that this happy situation will become more common. In an appendix to his chapter, Kesteven gives some helpful advice for fishery workers starting out in developing countries.

Cushing, the doyen of this field, reviews the outlook for the study of the population dynamics of fish over the next decade. After a well-composed review of cohort analysis as a management tool, a brief history of quota enforcement and a sense of regret that the recruitment problem is still unsolved, I found Cushing's forecast of little overall change for the next ten years rather uninspiring. Four main needs are envisaged: stock estimation independent from

catch; a method of dealing with multispecies fisheries; an understanding of the role of predation; and, of course, further insight of recruitment. While few would dispute that these are key areas for further research, there is no mention of the profound understanding which the new theoretical framework of evolutionary ecology can bring to fisheries.

The book belongs to a series which aims to bring "harmony to the relationship between nature and man . . . and nurture an environment that is both stable and productive." Laudable aims indeed! I could not help feeling, however, that a few of the contributors were not, like the rest of us, on the side of the angels. L.G. Anderson, an American economist, in a chapter which should be required reading for all fishery students, advances the view that pure economics should decide fishery policy. Fisheries should be left entirely to market forces and financial interest rates while the biology, Anderson avers, is almost irrelevant for management. This strategy ignores the value of employment, the delicate social and political problems of artisanal fisheries, and exposes the biology of the fish stocks to the whims of both the international money markets and capricious changes in domestic politics.

Other chapters discuss problems of managing the highly-migratory tuna (Joseph), New England fisheries (McHugh), African fisheries (Troade), Mexican fisheries (Szekely), the law of the sea (Burke) and general management advice (Gulland).

The book appears well edited, free from errors and has a good index. It is, unfortunately, too expensive for most students to purchase, but I have no hesitation in recommending it for the library of any institution concerned with research or teaching in resource management.

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Les Littoraux: Impact des Aménagements sur leur Évolution, by Roland Paskoff, 1985, Masson (Collection Géographie), Paris, 189p. FF125.00, ISBN 2-225-80462-1.

Since 1976, first the International Geographical Union (IGU) Working Party on Shoreline Dynamics and subsequently its successor, the Commission on Coastal Environment (CCE) have brought together scientists from all continents with a common interest in coastal changes and their management.

Initially concerned with the geomorphology of coastal change, the Corresponding Members of the Commission have developed a common interest in the human processes of coastal modification under the growing pressures of industrial development, urbanization and increased leisure. This book by the current Chairman of the CCE is a product of this international cooperation.

The aim of the book is said by the author to be description of specific coastal systems, analysis of the natural processes bringing about their development and a demonstration of the ways in which Man (sic) has become both deliberately and accidentally an important agent of coastal modification. Approaches to "a more rational management of coasts will be formulated." The text is divided into eight chapters, mainly distinguishing major coastal forms, namely, beaches, coastal dunes, marshes and lagoons, estuaries, deltas and cliffs, and is introduced by a discussion of variations in sea level and their relationships to changes in shorelines. The chapters describe the main features of each coastal type, discuss particular issues and gaps in existing knowledge and use more detailed examples to emphasize or elucidate specific problems. References follow each chapter and are predominantly from French and English-language sources.

There are a small number of typographical errors, e.g. 'biodépositon' for 'biodéposition,' 'notablent' for 'notablement,' and 'Hamsphire' for 'Hampshire.' More troublesome are the substantial number of authors who are cited (especially in association with diagrams) but for which bibliographic references are absent. Some of the diagrams are oversimple, for example, in Figure 64, p. 124, is the stippling necessary? It is more likely to distract than to aid the reader.

Not as rigorous in its approach to processes as many recent English-speaking texts, *Les Littoraux* provides a global review which is not widely available in French. Its easy style will make it accessible to non-specialists and especially to managers and planners concerned with coastal problems. For them it demonstrates the universal nature of these problems and in enlightening them should reduce the sometimes excessively parochial viewpoint which has been adopted. For many potential readers in the English-speaking world, its language will, perhaps provide an unwarranted excuse for not adding this book to their libraries. Its use of non-English sources makes it a valuable addition to a growing coastal literature, and Paskoff serves his