



BOOK REVIEWS

Living with the New Jersey Shore, by K.F. Nordstrom; P.A. Gares; N.P. Psuty; O.H. Pilkey, Jr.; W.J. Neal; and O.H. Pilkey, Sr., 1986. Duke University Press, Durham, North Carolina, 191p. US \$12.95 ISBN 0-8223-0543-7; 0-8223-0698-0 (pbk.)

This volume is another in the valuable series which examines the US shoreline from the perspective of the coastal user in the guise of the property owner or more realistically the potential property owner who is ready to part with a not so inconsiderable sum to gain a slot on the ever-increasingly crowded shoreline. (In the early '80s there were only c. 200 oceanfront housing lots left along the 125 miles of New Jersey coastline, each retailing at $> \$2 \times 10^5$.)

There must be few coastal investigators who are not aware of the explicit purpose of this series, although to a non-US audience the relevance of such a series may be limited. This latter view point is unwise, in that any volume in this series should be read by any coastal specialist who ever considers practising what he/she sometimes preaches. If you need to give realistic, down to earth examples of the right way to approach living on the coast (that non-specialist coastal dwellers can understand), then present them with the contents and wisdom distilled in this book. The regional perspective as well as the specific dominant coastal issue of man's urban/recreational development of the US coastline means, at first perusal, that this series has idiosyncratic elements which are

not necessarily the meat and drink of every coastal specialist. Yet this volume (if not this series), has a message for all coastal planners and managers and more importantly for all coastal dwellers, for it shows how the failure of coastal real-estate owners in New Jersey, to recognise the implications of *caveat emptor* has left the governmental authorities with an ever growing problem of defending a dynamic coastline by constructing, *via* piece-meal, massive protection schemes, a static shoreline of such difference from the natural state that one can recognise a new superimposed *cultural* shoreline.

New Jersey has that special coastline whose engineered status leaves coastal specialists in a non-neutral state. Hate it or love it, in the light of accelerating sea-level change, you can not ignore the message of "Newjerseyization" and its implications for all shorelines as we approach the twenty-first century. The best way to experience this message is to fly by light aircraft along the heavily developed barrier islands of the middle and northern sections of the New Jersey coastline and then go by road to see the problems posed by urban fringe development of the tidal passes in the south of the state. Failing that actual first hand experience, I recommend the tour laid out in this volume, organised by the local expert authors (from Rutgers University) who page by page take you along the coast and reflect on the sense and insensibility of generations of coastal dwellers. Albeit a second-hand approach, this volume gives the reader exceptional value in its portrayal of twentieth century sequential coastal development that has left a mish-mash inheritance of high and low cost engineering structures stemming from private, county, state and federal intervention that makes any future coherent, and effective planning something of a nightmare to consider. Reading this volume may not give you all the answers to coastal management but it more than ably portrays the range and variety of problems that New Jersey has to face. In most cases they are problems stemming from the ignorance on the part of coastal inhabitants who are not familiar with the dynamics of the shoreline. It is nearly forty years since the last hurricane hit the New Jersey shoreline and coastal memories are notoriously short-term, so that the disruption and devastation caused by these big blows are not

even imagined by the majority of summertime coastal dwellers who inevitably lust after their own coastal residence. It is as if the messages to be drawn from dramatic television pictures of hurricanes like Gilbert apply to another world!

If people insist on buying property on the coast then they had better be able to look after it. In some ways the information in this book is useless in that for a developed coastline where the houses are already built, there is little value in knowing about good storm-proof construction. However given the high turn-over in real estate there is great value in potential owners knowing the right questions to ask about house construction on barrier islands, in which case this is the book to read before house viewing. Can you visualise the impact of such knowledge on the realtor during your viewing afternoon?

What then of the contents? A number of the chapters in this book are common to the series while the themes covered reflect likewise the general nature of the series. Chapter 1 is a brief introduction to how the NJ coast is used and the main problems presented by such use. Chapter 2 examines shoreline dynamics focusing on barrier island processes in a micro-tidal environment. Emphasis on sea-level rise, longshore drift, the need for dunes and the role of tidal passes is given. Chapter 3 looks at man's effects on the shoreline and the inherent temporary status of the changes he has induced. This is the crucial chapter in which the use and value of coastal engineering to the problems of coastal erosion are presented. Given that parts of the New Jersey coast have been as much abused as have been saved by the presence of engineered solutions, it is prudent, if not essential, to give householders some specific evaluation of what can and can not be expected of these forms of coastal defence. Given the astronomical costs and dubious benefits involved in 'concrete solutions,' it is important that householders be given some idea of the pitfalls of these approaches.

Chapter 4 represents a quarter of the book and covers the selection of a location for a coastal residence. This is the guts of the book and offers basic do's and don'ts about location. It is based round a series of coastal hazard maps covering the whole New Jersey coast. (There does appear to be a large number of high-hazard

zones along this coast!). Selection of a site is gauged in specific terms of: stay away from inlets; build behind a dune, failing that, build a dune; go for the widest beach possible; watch for tap water quality and sewage disposal problems; avoid finger canal locations which are great for boat berthing, but on a micro-tidal barrier could be transformed into a tidal pass by the next major storm; and finally check out your nearest (often the only) evacuation / escape route off the barrier for when the next storm comes. It most surely will! Chapter 5 covers the State and Federal legislation which can affect construction and occupancy. Be assured, more legislation is yet to come! Chapter 6 recognises that as people will still want to build at a shoreline position they might as well learn how to minimise the risks by means of sound construction methods, for example, pole construction, and tying and bracing techniques. Finally four appendices give information on; (A) essential equipment and things to do in case of hurricanes, (B) a guide to federal, state and local agencies involved in coastal development, (C) references cited and (D) possible field trips. While I can recommend (D), I have no wish to experience the vicissitudes of hurricanes in order to give a personal recommendation on (A).

I have only one caveat as such. My concern is the strange nature of the book size. This book should have been of pocket size, in order to be manageable in the field. Its irritating size (9.25" x 6") means that it will never fit into a pocket nor onto a standard bookshelf, though that might be a marketing ploy in that if the book is never on a shelf it must be lying around on a table, one step nearer to the next casual reader.

All in all, after reading about the pitfalls and problems of New Jersey coastal locations from this volume, one would probably sink one's savings into more stable terrestrial environments elsewhere! If only a few more people do so, after reading this volume, then in a way its success would be more assured than by all the citations coastal specialists could give it.

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Ecological Impacts of the Oil Industry, edited by Brian Dicks, 1989. John Wiley and Sons, London, 316p, £80.00 ISBN 0-471-92193-9.

Before we start, let us narrow down the subject matter of this book. It is not about 'Ecological Impacts of the Oil Industry' but about 'Ecological Impacts of the Oil Industry in the Marine Environment.' Further, it is centered on one organisation, the Oil Pollution Research Unit (OPRU) of the British Field Studies Council. Indeed, it is essentially a celebration of 20 years work by the OPRU into the environmental consequences of marine oil spills. The Unit was formed just before the wreck of the *Torrey Canyon* in 1967, and since then regular accidental spillages of oil have provided almost continuous interest and funding. Clearly, objectives have changed, moving on from clean-up tactics to broad based impact assessments and general contingency planning. Much of the funding for OPRU has come from oil companies and tanker owners and it is interesting to note that several of the Unit's staff have gone from 'poacher to gamekeeper,' transferring to oil company environmental groups.

The book covers a series of papers (each self-contained from Abstract to References) covering the range of OPRU activities from experimental studies with dispersants, to surveys and sensitivity mapping. The approach is mainly ecological, although sedimentology is considered and geomorphology merits a few lines. A little more on the physical environment might have been welcome, especially to demonstrate applicability of the ecological procedures. Most of the Authors are OPRU employees or ex-employees, and the basic feedstock of their papers is the huge resource of unpublished reports compiled over the years. This in itself is useful, because access to this material is not always possible, and even if it is, then it is not easy for non-participants to extract the essential information readily. Also the cross-correlation of material is much easier in this format.

When the OPRU started it faced many problems, not least the general paucity of baseline information with which to compare oil damaged areas and to monitor progress towards recovery. Baseline data mean consistent survey techniques, and although some research had been conducted, the OPRU had to 'write the manual'