

the island during the Holocene: an inexorable rise between 0.6 and 1.6 mm/yr in the south and the southwest, though at a rate decreasing in the last 2500 years, and a wide oscillation, probably isostatically-controlled, in the north, decreasing in amplitude from east to west.

On the North Norfolk coast, Funnel and Pearson have recognized in bore hole samples, from comparisons with the present intertidal deposits in the same area, nine distinct sedimentary environments.

In Scotland, buried and surface fossil beaches, reported by Fifth and Haggard in the Moray Firth area, are interpreted with the help of published data and used to construct a new band of relative sea-level change. Fossil marine deposits may however correspond also to short-lived events, like those corresponding to two tidal surges, 8800 and 8500 years ago, recognized by Cullingford *et al.* in the Lower Strathearn, or to a tsunami, identified from a sand layer 7000 years old by Long *et al.* in eastern Scotland. The fourth paper on Scotland is devoted to a comparison by Haggart of the patterns and rates of isostatic uplift indicated by various sea-level curves and methodologies.

Last but not least, Shennan uses over 400 sea-level index points to update the rates of crustal movements in Great Britain since 8800 yr BP. These are summarized in Figure 1 (see below), which has been constructed with the help of many members of the UK working group and will certainly be useful for comparisons with the present trends of relative sea-level change and for the refinement of global isostatic models.

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Coastal Management, Proceedings of a Conference organized by the Maritime Engineering Board of the Institution of Civil Engineers. Thomas Telford, London, 1989, 307 p., UK£52.00, ISBN 0-7277-1502-X.

Coastal management clearly means different things to different people. For some it means exercising as much control over the shoreline as

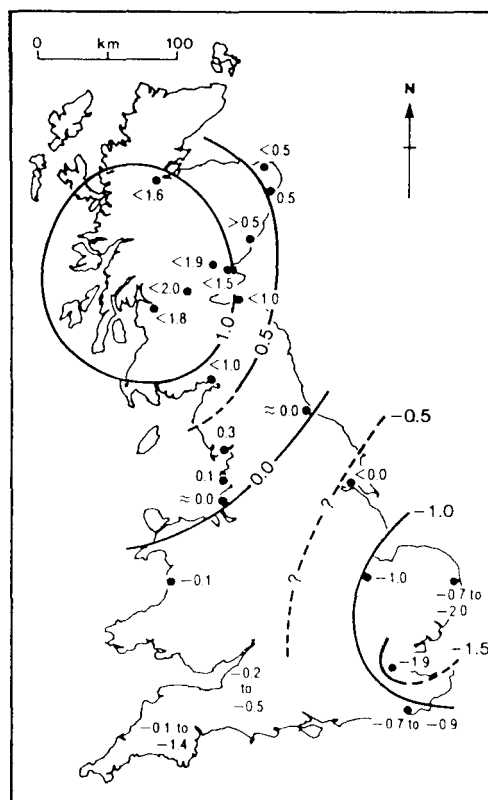


Figure 1. Map of estimated current rates (mm/yr) of crustal movement in Great Britain, according to Shennan (1989, Figure 9).

possible. For others it means trying to adjust and live within the constraints of coastal change. This book is largely concerned with the former, but there are examples of the latter, epitomising how engineers in Britain are prepared to embrace 'softer' ecological solutions, if and when it is expedient to do so.

Some browsers will be disappointed immediately. The book is overwhelmingly based on the UK experience and the material in many of the chapters (despite general titles) is parochial. Thus "Beach Management," far from being an indepth survey of global managerial approaches to clastic shorelines is an unreferenced tour of a few beaches in East Sussex and Kent. Similarly "Marine Resources" is actually a slight essay on the ownership and legislative framework pertaining in the United Kingdom. Many professionals will find the almost anecdotal

total presentation of facts irritating—I feel certain the Authors could have made an effort to reveal their sources. Other contributions have strangely meaningless titles—“Technical Overview” (of what?), “A Regional Strategy” (of where?) and “Scheme Worthwhileness” (of what, when and where?) which is not only silly, but actually obscures some rather interesting material, particularly in the case of the last-mentioned.

Yet, in and out there are some good things. For all students of the British coast, Bell's contribution on 'A county council's approach' is down to earth, and actually reveals many of the frustrations and pressures that understaffed and underfunded local authorities find themselves in when faced with unstoppable coastal developments. This chapter, incidentally, includes the seminal photograph (Fig. 2) of unaesthetic coastal defences. There are two excellent papers. One, by Penning-Rowse *et al.*, on the 'value' of the coast, both in basic economic terms and by adding values to visitors. The other important paper is that dealing with the history of sea defenses at Bournemouth by Lelliot, who has provided a case study itemizing some 30 odd attempts to stabilize one piece of shore. However, the Author might have provided a more critical commentary, at one point "D Jones Esq" is chastised for producing an inconvenient storm that destroyed some experiments with artificial seawalls! There is virtually no explanation as to why one site could have constantly needed new sea defenses, but nonetheless it is a good example of what seawalls and groynes can do, given the opportunity (I wish I could share the Author's optimism!).

Many of the papers are brief resumes of complex topics; climatic change, wave hydraulics and so forth are all dealt with superficially. Many of the references are to virtually unobtainable Reports.

Sitting back to reflect, I must question whether or not this sort of book is really worthwhile. I would guess that a lot of the meaning has been lost in translation from the lecture hall to the page. It is very easy to talk about well-known examples to a local audience, yet when these are presented to a wider audience they seem to lack vitality and interest (especially if they are not placed in context). The overall impression of this book is that coastal management in Britain is struggling to find an

identity, somewhere between the unacceptable pouring of concrete and the unprofitable advocacy of the 'do-nothing' school of thought. The repeated failure of many schemes must be a matter of concern, and it is difficult to find much cause for hope in this volume. It may be that the organizational framework is at fault, but this is never really questioned explicitly, beyond the universal call for better cooperation between scientists and engineers and more 'consistency' in approach.

Finally, while I was reading the book an intriguing story appeared in *The Guardian* (a national daily paper). It seems that Kevin, a self-styled wizard has been selling spells to halt shoreline erosion at £200 a time to communities on the south coast of England. Kevin has a lot going for him; he's cheap, he's environment friendly, and above all he seems to have as much chance of success as many of the solutions put forward in this, and other, books. Perhaps we need a new marketing strategy, designed by a wizard.

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Sea of Cortez Marine Invertebrates: a Guide for the Pacific Coast, Mexico to Ecuador, Alex Kerstitch, 1989, Sea Challengers, 4 Somerset Rise, Monterey, CA 114p. US\$21.50 (+ \$2.35 postage). ISBN 0-930118-14-6 (soft-cover).

This book is written in the form of a pictorial field guide with the interested amateur naturalist (fisherman, diver, beachcomber) in mind. The major goal of the book is to acquaint people with the conspicuous invertebrates of the Sea of Cortez and aspects of their biology in order to encourage recognition of the uniqueness of the region and its conservation.

The book begins with brief summaries of the principal characteristics of the invertebrate phyla, followed by a pictorial key to the phyla. I like the idea of putting the fairly substantial glossary at this point, where a non-expert can be readily introduced to the terminology, rather than its being hidden at the end of the book.

The body of the book consists of excellent full color photographs side-by-side with descriptions for the species illustrated; 283 species rep-