

Bordoni & Valensise present a paper regarding the deformation of an Italian marine terrace. Again, the paper is useful and informative, but it has a table detailing 121 locations which spans pages 74–89. Although the data is useful, having to flick from page 73 to 90 to finish a sentence does interrupt the reading. The table might have been better placed at the end of the text as an appendix. The maps are black and white, and would have benefitted from a small amount of colour as some of the lettering is over dark shading, making the text difficult to read (this is particularly bad on figure 3). Having said that the text benefits from the use of the maps.

Flemming seeks to prove archaeological evidence can allow the identification of previous relative sea levels to an accuracy of 20–50 cm. Table one has a useful record of all known submarine human occupation sites globally that is well referenced for each country and provides a very useful data source in itself. This is a fascinating paper outlining the role of archaeology in relative sea level and tectonic history reconstruction. It is very well written and exceptionally well referenced. In another archaeologically based paper Galili & Sharvit use rock cut installations to identify tectonic movement in Israel. A review of rock cut installations takes place from north to south, concluding that the Israeli coast has been tectonically stable over the last 2500 years. Their diagrams are clear, effective and relevant. The paper concludes with closing comments for coastal planners and decision makers on the effects and causes of marine erosion and differential settlement and the implications for the noted archaeological sites.

The paper by Orme considers Californian coastal tectonics. Text is clear with excellent pictures illustrating the landscape of relative sea level change. Figure 5 is a particularly good example showing relict sea stacks, sea cliffs and shore platforms. Murray-Wallace *et al.* describe a section of Australian coastal plain at the boundary between South Australia and Victoria. "This site is one of few sites where 800ka of on-land Quaternary sea level highstands can be delineated unambiguously by morphostratigraphy." This is a fascinating paper of an outstanding field site.

Bezerra *et al.* make the point, often overlooked by those of us working in previously glaciated regions, that non-glaciated regions have also undergone tectonic movements related to glaciation: as water is reintroduced to the oceans, their bottoms subside, displacing the material below to underneath the adjacent coastal areas, their example being Brazil. They compare global sea level graphs with the observed field evidence and dating. The only real complaint concerning this paper is the lack of field site names noted on the location map (figure 1). It should carry more of the names noted in the text: as it stands the reader is left wondering where some of the locations are which is unfortunate and weakens an otherwise strong paper.

McNeill *et al.* consider coseismic strain release briefly. This concept should be of interest to coastal managers, decision makers and natural hazard assessors in relevant locations around the globe. Goff *et al.* have produced an interesting paper considering potential tsunami deposits in New Zealand. Table 1 is a particularly useful research tool. It lists diagnostic characteristics of tsunami deposits. These range

from obvious sources to some of the more obscure and appear comprehensive, generally referencing at least two sources for each diagnostic characteristic.

In an interesting, well written paper, Domney-Howes *et al.* note that in Falasarna (western Crete), sedimentological and morphological investigation evidence give opposing sea level histories (one showing subsidence, the other uplift). This highlights the need to back up studies with both morphological and sedimentological evidence, to avoid misinterpretation.

This book will be of great use to academics: although it is well written, I do not believe it is effective in presenting information to coastal development and protection professionals, which is disappointing given the blurb. A paper summarising the important applied concepts from this volume would probably be more useful to coastal developers, planners and managers. There is no doubt that coastal actors should be aware of the tectonic setting of their coast before taking decisions. However, this is not the book to educate them unless they already have a good grasp of coastal geomorphology and understand tectonics. Only a handful of papers note coastal management issues (Galili & Sharvit and McNeill *et al.*, being the most pertinent). The rates of relative sea level movement presented (and the way they are presented in particular) will not interest coastal developers. It is often difficult to get coastal developers to consider anything beyond the next Spring tide, let alone rates of tectonic induced relative sea level change in the region of 1–5mm/yr. The editors and publishers may wish coastal protection officers to purchase the book, but I do not envisage many purchasing a text which will be too advanced and academic for their needs. Overall, this is an exceptionally well written text, each chapter is interesting and a useful contribution to coastal tectonics as a science. It would make an excellent addition to any reference library or academic bookshelf where there is an interest in tectonics or coastal evolution.

LITERATURE CITED

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- LAIJOIE, K.R. 1986. Coastal Tectonics. In: Robert & Wallace (eds.) *Active Tectonics*. Studies in Geophysics Research Forum. Washington, D.C., National Academy Press, pp. 95–124.

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Leatherman, S.P., 1998. **America's Best Beaches**. Miami: SP Leatherman, 112p. Paper, \$17.95. ISBN 0-9663451-0-X.

It is always a pleasure to review a book designed to enlighten and foster more enjoyable use of America's better beaches. Beaches are tourism's number one destination in North America and Europe, and there are good reasons for it: beaches bring forth images of play, relaxation, freedom,

warmth, mystery, danger, and even, thanks to Hollywood, romance. No other part of our earth can give us all that in one place!

The problem for tourists is which beach provides what. It was the problem I encountered when bringing my new European family to Florida where I had just accepted a position as director of coastal studies. I didn't know which beach was best for us, much less for tourists! (Out of this quandary was born a guidebook to "Florida's Sandy Beaches" published in 1985 and reviewed in this journal.)

As Dr. Leatherman correctly points out, the famous beaches are not the best beaches. Indeed, any beach heavily promoted through advertising would never be a "best beach" because hotels are the reason behind the promotion and not the beach. Dr. Leatherman's response to this lack of good beach information is this book. He uses a rating system of 50 criteria on a sliding scale of 1 to 5 to select the best beaches in six regions of the U.S. for eight beach categories: swimming, walking, wilderness, sports, city, novelty, surfing, and best overall. These beaches are then described in a folksy, personal manner that only partially seems to rely on his selection criteria. Thus, his touted "objectivity" of beach selection is submerged and not self-evident from his descriptions of the various beaches. Nevertheless, this book is a handy, easy to use guide to some of America's better beaches. However, it is necessary to supplement this book with local maps and parking information. Fortunately, addresses of state tourism offices are included to attempt to get this necessary information to use the beaches described. A section on beach safety is a welcome and informative part of the book, as is the section on beachcombing.

The rating system presumably employed in his selections is generally complete and simple to understand and apply. The only missing element I could see was the criterion of "type of beach use" with a sliding scale from family use to nudist use. This element is of great importance in selecting any beach! From the eight categories of beach included it is not evident which beach would be the best family beach. Indeed, all 50 criteria are of equal value in his system, meaning that "longshore current" is equal in value to "amenities." The score for best beach is the simple sum of the 50 rated criteria. If he weighted these ratings in some way to select for his eight categories such is not evident or even discussed in this book.

Any book by definition is incomplete and contains errors. In any future edition Dr. Leatherman should consider adding detailed maps and parking information for the beaches he selects as "best" in order to make the book more self-contained and useful. (In fact, one of his regional maps shows Pensacola in the wrong place.) Definitions of his eight categories would be useful, as well as more "objective" descriptions of the beaches selected. Replacing some of the slightly out of focus photos would help too, including adding a photo of seashells in his beachcombing section. Highlighting the topics under beach safety would be useful too. A section on beach use policy problems to keep the beaches "best" might be useful to add. Including a note about others rating beaches annually such as the NRDF's beach pollution and the EU's

blue flag beaches would be useful. Finally, the word questionnaire has two "n's."

My final comment is my surprise at Dr. Leatherman's self-promotion as "Dr. Beach." I think of so many beach scientists more deserving of such a mantle to include Per Brun, Orrin Pilkey, Paul Komar, Orville Magoon, *etc.*, to name only a few. Any sense of objectivity would seem to go against adopting such a title for oneself!

Nevertheless, buy the book as it delivers on what it promises. We need all the books we can get to encourage a more informed use of beaches by the public. This book may also push local governments into improving their beaches and facilities in order to become candidates for "best beach."

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Blondel, P. and Murton, B.J., 1997. **Handbook of Seafloor Sonar Imagery**. Eastergate, Chichester, West Sussex, England: Praxis Publishing Ltd. Hardcover, 75 Sterling. ISBN 0-471-96217-1.

With the tremendous improvements made in undersea imaging systems during the past decade, it should come as no surprise to marine scientists that a book has attempted to encapsulate recent advances in the technology and geological results of seafloor mapping. The Handbook of Seafloor Sonar Imagery is an early effort aimed at describing the hardware and software utilized in imaging the seabed, along with some of the geological results from the late 1980's into the early and middle 1990's. For their effort at bringing "seafloor science" to a broad readership, the authors, Philippe Blondel and Bramley Murton, are to be commended. The penalty for being a pioneer in a rapidly expanding field, however, is equally rapid aging of information. Thus, this book provides a broad and accurate overview of acoustic imagery, but one which is in jeopardy of becoming out of date within a few years of publication.

The book begins with almost 50 pages dedicated to sonar data acquisition and processing. The following 176 pages, most of the book, sequentially cover underwater geological settings: deep-sea trenches, mid-ocean ridges, abyssal plains, continental margins, and coastal environments. The final 50 pages deal with sonar anomalies and computer-assisted interpretation followed by a 24 page bibliography. There are also abbreviated bibliographies following each chapter and a very small glossary.

The material on how systems work is well written, although more diagrams and examples would have helped. This will not tell an expert much of value, but will introduce the in-depth treatment. There is an excellent four page table listing most of the common imaging systems and their specifications. Mathematics and engineering principles are kept to a minimum in this section and there is an illustration on each page.