



BOOK REVIEWS

Shorelines and Isostasy, edited by D.E. Smith and A.G. Dawson, 1983. Institute of British Geographers Special Publication Number 16, Academic Press, 387p. US\$ 55.00, ISBN 0-12-652960-4.

This collection of fifteen research and review papers deals with various aspects of ancient shoreline deposits. The dominant theme is the use of preserved shore deposits for developing models of isostatic change.

The papers are grouped into four major sections: aspects of shoreline development, methodologies and techniques, shorelines and glacio-isostasy, and shorelines and hydro-isostasy. Topics in the first section include reviews on barrier sequences in the US and Australia by Hails, Arctic shore processes by Taylor and McCann, and shore platforms by Trenhaile.

The two papers in the methodology and techniques section were of particular interest. Gray presents a "how to" paper on raised shorelines. He discusses exactly what, why, and how a shoreline position is recorded and described. The article is based in Scotland, where raised shoreline records are precise, as the area is small and field logistics are simpler than in many more remote areas. Sutherland reviews and evaluates the various methods that have been employed for dating ancient shoreline deposits.

The largest section (7 papers) of this volume consists of a series of papers on sea level changes and shore positions in Norway (Hafsten), Finland (Eronen), Scotland (Sissons), Ireland (Devoy), England and Wales (Shennan), Hudson Bay (Peltier and Andrews), and British Columbia (Clague). These papers demonstrate the range of complexity, and range of states-of-the-art of interpreting ancient shorelines in these areas. They serve as good sources on these regions. The lone paper in the hydro-isostasy section by Hopley on deformation of the North Queensland continental shelf attempts to use a carbonate shelf setting to delineate subsidence due to the changing water levels.

An introductory review on isostasy and eustasy by Fairbridge and concluding "retrospect and

prospect" by the editors complete the book.

I found that the shore deposits described in the glacio-isostasy section didn't encompass the realm of shore forms described in the shoreline development section. Preserved lake and marine shorelines that do not seem to be barriers or platforms are mentioned frequently. This leads me to wonder exactly what they are, or what portions of a shoreline deposit are preserved in these areas.

This volume very thoroughly explores one particular aspect of deciphering isostatic changes: preserved raised shoreline deposits. It serves as a useful handbook on the techniques and experience in this area.

Peter Rosen
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The World's Coastline, edited by Eric C. Bird and Maurice L. Schwartz, 1985. Van Nostrand Reinhold, New York, 1071p. \$US 97.50, ISBN 0-442-21116-3.

The editors have divided shore zones of the world into 135 coastline sectors. The round-the-world sequence begins with Alaska and proceeds counter-clockwise around the major landmasses. World maps are provided on the end covers for easy geographic reference; each descriptive section is thus located by its numbered coastline sector, viz. "65. EASTERN BLACK SEA, USSR." Although this system is logical, it is sometimes somewhat less than convenient because it is the only geographic reference system in the book. Place names and general locations are not given in the index. As might be expected, the treatment and coverage of coastline segments is variable and of uneven quality. The 129 contributors to this compendium offer contrasts in ideas, perceptions, and interpretations. The variability of available maps and documentation also contribute to uneven coverage. In spite of these shortcomings, all coastline segments are represented and at least minimal coverage is assured for even the remotest places. From this point of view, the book is a treasure trove and will prove useful to

students, professional researchers, and interested parties in general. The editors are to be commended for putting together a comprehensive reference work that will serve the profession for many years to come. When combined with the *Encyclopedia of Beaches and Coastal Environments*, edited by M.L. Schwartz (1982) [Stroudsburg, PA: Hutchinson Ross Publishing Company. 940p], researchers have a wealth of collected coastal information at their disposal that was heretofore unavailable.

The composition and layout of the book is somewhat disappointing. The large 8½ x 11 inch format lends itself well to oversize illustrations. It is unfortunate that the publishers did not make use of turnpage illustrations as many photographs could have benefitted from larger display. By limiting photos to page width, many pages were left blank. The large number of completely blank pages, which came at the ends of articles but could have been filled by maps or photos, is unfortunate in a book that carries an impressive price tag. An author citation index and general subject (topical) index are provided at the end of the book.

All those interested in coastal environments are enjoined to participate in this feast of information. Even though each individual section is but an apophoreta for that geographic region, the collected works provide a truly unique and comprehensive treatment of an important subject area. Serious coastal researchers will find themselves turning to this reference book again and again.

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The Times Atlas of the Oceans, edited by A.D. Couper, 1983. Van Nostrand Reinhold, 272p. US\$ 90.50, ISBN 0-442-21661-0.

There is something reassuringly English about a *Times* Atlas. One feels one can trust the quality, the objectivity, and the purposefulness that comes from years of running an empire. The very solidity of the product conjures a vision of English breeding, church bells, and following the hounds. It comes therefore as a surprise, nay a shock, to discover that, like the muffin, little of the English connection remains. The Atlas is the brainchild of a Scottish editor working in Wales, printed in Italy with Danish help, and published by an American company.

However, it is gratifying that the 'english' tradition lives on. This is in fact an excellent production,

270 pages packed with information on coasts and oceans.

The book is divided into four sections — environments, resources, trade and management. Within each section are a series of sub-sections, usually spread over 2 or 4 pages, covering topics like deep-sea drilling, Atlantic fisheries, shipping accidents and casualties, and the Law of the Sea, to name but a few at random. Each comprises a map or maps, together with explanatory diagrams and text (usually 1000-2000 words). Coverage is comprehensive, the sources many — and thankfully well-cited — and the style clear and entertaining.

The quality of the maps, on which an atlas stands or falls, is good. Various projections and styles of presentation are used, although particular choices appear arbitrary. The Times Projection is employed extensively. Sadly, this is a flat, rectangular projection, which has been justly criticized in the past for gross exaggeration of polar regions relative to equatorial regions. In this case many maps are left with blank tops and bottoms and rather crowded middles. All the maps are in colour, often rather garish blues and greens, although this does not detract from their clarity.

The quality of information is often hard to gauge. Almost all the maps are drawn from secondary sources, some dating back 20 years or more and/or from perhaps crude and speculative originals. To have some of these ideas enshrined in this expensive publication may not be fully justified.

Notwithstanding, the Atlas is a remarkable compilation, and is certainly destined to become a major reference book for many years to come. I would imagine that most professional libraries will need a copy.

R.W.G. Carter
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Sub-Littoral Ecology: The Ecology of the Shallow Sublittoral Benthos, edited by R. Earll and D.G. Erwin, 1983. Oxford University Press, 277p. US\$ 35.00, ISBN 0-19-854573-8.

The Underwater Association for Scientific Research was the first organized science diving group. For the past seventeen years it has held annual meetings which provide a unique forum for communicating the results of scientific work carried out with the aid of diving. The theme of the 1981 symposium was "Underwater Biology of the British Isles" and this book is the outcome.