

research community would dismiss as 'easy'—this essay highlights the fact that the complexities of interpreting falls in sea-level can be as difficult as interpreting rises.

Perhaps the great strength of the volume is in the number of 'peripheral' regions that are discussed. These include Turkey, Senegal and Mauritius, The Cook Islands, Indonesia, Sri Lanka and Arctic Russia. The latter work, although short, does provide a readable summary of one of the last great unexplored sea-level provinces of the World. The Pacific Island work, (and it is interesting to note the influence of the French and the Japanese, even in developed areas like New Zealand) is particularly important in trying to evaluate the niceties of

hydro-eustatic change under ocean basin tectonism. All-in-all these papers provide much food for thought.

This is a useful volume, which will inevitably be in most good libraries as a matter of course. However, the biggest danger is that it might itself become 'submerged' (especially as ours was displayed in early summer, and who reads journals issued in summer?) in the never-ending transgression of new issues of periodicals. Hopefully it will remain emerged.

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BOOKS RECEIVED

Applied Environmetrics Oceanographic Tables. by T. Beer, 1989. Applied Environmetrics, 118 Gordon Street, Baldwin, 3103 Victoria, Australia. 38pp + computer disk. US\$124.95 ISBN 0-9590809-2-9.

Sea of Cortez Marine Invertebrates. by A. Kerstitch, 1988. Sea Challengers, 4 Somerset Rise, Monterey, CA 93940. 120pp. US\$21.50 (+ \$2.35 postage). ISBN 0-931118-14-6.

"Greenhouse": The Impact of Sea-level Rise on Low Coral Islands in the South Pacific. by P. Roy and J. Connell, 1989. RIAP Occasional Paper No. 6, University of Sydney, Australia. 55pp. AUS\$8.00. No ISBN.

Catastrophic Coastal Storms: Hazard Mitigation and Development Management. by D.R. Godschalk; D.J. Brower, and T. Beatley, 1989. Duke University Policy Studies, Durham, North Carolina. 275pp. US\$47.50 (stg.£38.50). ISBN 0-8223-0855-X.

Ecological Impacts of the Oil Industry by B. Dicks, (Ed.), 1989. Wiley, Chichester. 316pp. stg.£80.00. ISBN 0-471-92193-9.

Field Studies on Sand Movement in the Coastal Zone by T. Basinski, 1989. Alma Press Zam 44/89/300 W-2, 296pp. (Available from Prof. S. Massel, Polska Akademia Nauk,

Instytut Budownictwa, Wodnego w Gdansk 80-953, ul Kosceirska 7, Poland. Copies free, but please send US\$15.00 for post and packing.)

Books received from the
U.S. Army Corps of Engineers,
P.O. Box 631, Vicksburg, MS
39181-0631.

Development of a Portable Sand Trap for Use in the Nearshore, by J.D. Rosati and N.C. Kraus, 1989. Technical Report CERC-89-11.

Stability of Toe Berm Armor Stone and Toe Buttressing Stone on Rubble-Mound Breakwaters and Jetties, by D.G. Markle, 1989. Technical Report REMR-CO-12.

Infragravity Energy and its Applications in Nearshore Sediment Transport and Sandbar Dynamics, by J. Oltman-Shay, 1989. Technical Report CERC-89-8.

Study of Breakwaters Constructed with One Layer of Armor Stone, Detroit District, by J.R. Wolf, 1989. Technical Report REMR-CO-10.

SBEACH: Numerical Model for Simulating Storm-Induced Beach Change, by M. Lar-

son and N.C. Kraus, 1989. Technical Report CERC-89-9.
Wave Dissipation on a Barred Beach: A

Method for Determining Sand Bar Morphology, by T.C. Lippmann and R.A. Holman, 1989. Contract Report CERC-89-1.



REPORTS OF MEETINGS

Symposium on Zonality of Coastal Geomorphology and Ecology

Westerland, Sylt, Germany (FRG), 30 August to 3 September 1989

A group of 15 coastal scientists gathered on the German North Sea island of Sylt for a Symposium prior to the Second International Conference on Geomorphology in Frankfurt. Their aim was to examine zonality of coastal geomorphology and ecology in relation to climatic environments. One of the convenors, Dieter Kelletat (University of Essen, German Federal Republic), opened the Symposium with a world-wide review of the problems of zonality in terms of rocky shores, including the contrasting effects of biotic processes in different climatic zones. Norbert Psuty (Rutgers University, U.S.A.) then dealt with zonal variations in the morphology of coastal dunes in relation to environmental parameters, and Ludwig Ellenberg (Technical University, Berlin) discussed variations in coastal processes around the Caribbean, stressing the effects of contrasts in the length of the humid season. David Hopley (James Cook University, Australia) then examined the concepts of zonality, zonation and gradation in terms of the global distribution of coral reefs, emphasizing the relevance of local factors such as the influence of terrestrial runoff and sediment yield, the nutrient status of shelf waters, wave energy, water temperature, and relative sea level histories, as modified by hydroisostatic warping. André Guilcher (University of Western Brittany, France) examined mangroves as indicators of coastal zonality, noting the anomaly of their southward protrusion into Australia and New Zealand, and stressing the influence of human activities on their detailed distribution. Roland Paskoff

(Lumière University, Lyon, France: also Chairman of the I.G.U. Commission on the Coastal Environment) discussed geomorphological zones along the coast of Chile, which has a marked transition from sub-tropical to sub-antarctic environments, and Olavi Granö (University of Turku, Finland) dealt with variations in coastal features in his seasonally cold archipelagic country, noting the effects of continuing isostatic uplift on vertical shore zonations. Jean-Claude Dionne (University of Laval, Canada) explained how frost and ice action have affected tidal marshlands, particularly in the St. Lawrence estuary, and Jim Hanson (University of Sheffield, U.K.) presented a paper compiled jointly with Bob Kirk (University of Canterbury, New Zealand) on the geomorphological role of ice in the inter-tidal zone of Antarctic coasts. Oguz Erol (University of Laval, Canada) explained how frost and ice action have affected tidal marshlands, particularly in the St. Lawrence estuary, and Jim Hanson (University of Sheffield, U.K.) presented a paper compiled jointly with Bob Kirk (University of Canterbury, New Zealand) on the geomorphological role of ice in the inter-tidal zone of Antarctic coasts. Oguz Erol (University of Istanbul, Turkey) and his colleague Ilhan Kayan (Ege University, Izmir, Turkey) then analysed coastal processes on the Black Sea and Mediterranean shores of Turkey, demonstrating contrasts related to local climatic variations. Finally, co-convenor Eric Bird (University of Melbourne, Australia) explored the distinctiveness of coastal landforms and asso-