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Beaches and Coasts, by Richard A. Davis, Jr. & Duncan M. Fitzgerald, 2003. Blackwell Publishing Ltd, 108 Cowley Road, Oxford, OX4 1JF, United Kingdom. Hardbound, 419 pages. Price GBP 35.00. ISBN 0-632-04308-3.

The book “Beaches and Coasts” is one of the most complete, clearly written and up-to-date publications on the topic I read recently. It is organized in a simple, functional and direct form that allows easy access to information. The book is very well documented with both B&W photographs (there are no colour plates) and easy-to-follow, very illustrative diagrams. It consists of 21 chapters and 419 pages.

The first 6 chapters, plus chapters 11 and 16 (1—Coastline variability and functions in the global environment; 2—The Earth’s mobile crust; 3—Sediments and rocks: materials of coastal environments; 4—Sea-level change and coastal environments; 5—Weather systems: extratropical storms, and hurricanes; 6—Waves and the coast; 11—Tides of the ocean; 16—River deltas: the source of most of our coastal sediments) are dedicated to factors that control the variability of the various types of the world’s beaches and coasts. Highlight of the first six chapters of the book is the extensive (Chapter 2, 36 pages) review of the influence of plate tectonics on the diversity of coastlines.

Chapter 7 introduces the reader to ‘Beach and nearshore environments’, and provides a conceptual framework for the next chapters of the book, with definitions of the main environments and subenvironments, sedimentary structures, and processes that occur in these settings. Chapters 8–9 (8—Barrier systems; 9—Coastal dunes; 10—Coastal lagoons; 12—Tidal inlets; 13—Intertidal flats; 14—Coastal wetlands; 15—Estuaries; 17—Glaciated coasts; 18—Rocky coasts; 19—Reef coasts) provide a very rich, well illustrated description of the main types of the world’s coastlines. In this part of the book I found particularly important the great detail in which tide-dominated coasts are described and documented (chapters 12, 13, 14, and 15). Chapter 15 in particular, is, however, surprisingly short (10 pages only), considering the complexity of this environment.

The last two chapters of the book are, to a certain extent, devoted to the application of the knowledge on beaches and coasts presented in the earlier chapters (20—Coastal erosion; 21—Human interaction with coastal dynamic). Particularly interesting in this final part of the book is the last chapter on human interactions with coastal environments, which provides an overview of common problems related to construction, dredging, mining, and water quality in such environments.

At the end of the book there is a nine-page glossary and a precise word index, which permits rapid access to selected topics.

“Beaches and Coasts” is a book that deserves a wide readership, as it is not only interesting for professionals in the field of geology, but also for those working in engineering, geography, palaeontology, and biology. Its didactic form and simple (though not superficial) language makes the book excellent for teaching. It is important to mention that the book does not focus on the stratigraphic record of beaches and coasts, but on Recent deposits only. Finally, my impression is that ‘Beaches and Coasts’ is worth its price and will become a classical textbook in the subject.

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