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Nota di contenuto	Contents Introduction to the Application of Palaeoecological Techniques in Estuaries -- Part I Estuaries and their Management -- Estuary Form and Function: Implications for Palaeoecological Studies -- Geology and Sedimentary History of Modern Estuaries -- Palaeoecological Evidence for Variability and Change in Estuaries: Insights for Management -- Part II Coring and Dating of Estuarine Sediments -- Sediment Sampling in Estuaries – Site Selection and Sampling Techniques -- Some Practical Considerations Regarding the Application of 210Pb and 137Cs Dating to Estuarine Sediments -- Radiocarbon Dating in Estuarine Environments -- Part III Techniques for Palaeoenvironmental Reconstructions in Estuaries -- Lipid Biomarkers as Organic Geochemical Proxies for the Paleoenvironmental Reconstruction of Estuarine Environments -- C/N ratios and Carbon Isotope Composition of Organic Matter in Estuarine Environments --

Physical and Chemical Factors to Consider when Studying Historical Contamination and Pollution in Estuaries -- Diatoms as Indicators of Environmental Change in Estuaries -- Dinoflagellate Cysts as Proxies for Holocene Environmental Change in Estuaries: Diversity, Abundance and Morphology -- Applications of Foraminifera, Testate Amoebae and Tintinnids in Estuarine Palaeoecology -- Ostracods as Recorders of Palaeoenvironmental Change in Estuaries -- Application of Molluscan Analyses to the Reconstruction of Past Environmental Conditions in Estuaries -- Corals in Estuarine Environments: Their Response to Environmental Changes and Application in Reconstructing Past Environmental Variability -- Inferring Environmental Change in Estuaries from Plant Macrofossils -- Applications of Pollen Analysis in Estuarine Systems -- Part IV Case Studies -- Palaeo-Environmental Approaches to Reconstructing Sea Level Changes in Estuaries -- Paleoecology Studies in Chesapeake Bay: A Model System for Understanding Interactions between Climate, Anthropogenic Activities and the Environment -- Paleosalinity Changes in the Río de la Plata Estuary and on the Adjacent Uruguayan Continental Shelf over the Past 1,200 Years: An Approach Using Diatoms as a Proxy -- Application of Paleoecology to Ecosystem Restoration: A Case Study from South Florida’s Estuaries -- Paleolimnological History of The Coorong: Identifying the Natural Ecological Character of a Ramsar Wetland in Crisis -- Palaeoenvironmental History of the Baltic Sea – One of the Largest Brackish-water Ecosystems in the World .

Sommario/riassunto

The aim of this edited volume is to introduce the scientific community to paleoenvironmental studies of estuaries, to highlight the types of information that can be obtained from such studies, and to promote the use of paleoenvironmental studies in estuarine management. Readers will learn about the the application of different paleoecological approaches used in estuaries that develop our understanding of their response to natural and human influences. Particular attention is given to the essential steps required for undertaking a paleoecological study, in particular with regard to site selection, core extraction and chronological techniques, followed by the range of indicators that can be used. A series of case studies are discussed in the book to demonstrate how paleoecological studies can be used to address key questions, and to sustainably manage these important coastal environments in the future. This book will appeal to professional scientists interested in estuarine studies and/or paleoenvironmental research, as well as estuarine managers who are interested in the incorporation of paleoenvironmental research into their management programs.