

Salt marshes and mangrove forests, the intertidal wetlands of the world's coastlines, provide key ecological services to all areas of the globe, and are vital sinks and sources in carbon budgets. They are crucial indicators of both modern-day anthropogenic impacts on climate and ecosystems, and paleoecological changes during much of Earth's history.

This cutting-edge, richly illustrated book introduces the essential elements of coastal wetlands and their applications. It unites geological and oceanographic approaches in an accessible way, providing scientific names for key plant and animal species. The book opens by introducing coastal oceanography, the physical features of wetlands, their ecology and human impacts upon them, giving students from all fields the necessary background for wetlands studies. It then presents detailed case studies from all areas of the world with extensive illustrations, presenting students with a broad, global-scale picture of wetlands geomorphology and biodiversity. The final chapters discuss some unique applications of coastal wetlands, including geological monitoring, uses in biotechnology and agriculture and various experimental mesocosms.

This is ideal as supplementary reading to support students on a wide range of Earth and Life science courses, from environmental science, ecology and paleoecology to geomorphology and geography. Providing citations to a variety of more specialist articles, it will also be a valuable interdisciplinary reference for researchers.

'This is a major new contribution to the study of salt marshes and mangroves forests. Uniquely comprehensive, the book provides extraordinary coverage of coastal wetlands from the Arctic to the tropics with superb case study examples from Africa, Europe, Asia, and both Americas.

Importantly, this innovative volume covers not only the physical, ecological and human interventions controlling the development, loss and future of coastal wetlands but also provides the reader with modern approaches to geological monitoring, conservation of plant biodiversity, and experimental methods. The readability of the book, with supporting graphics and informative photographs, makes it accessible to readers at all levels.'

Professor Curtis J. Richardson, Director, Duke University Wetland Center

Cover illustration: Alaskan wetlands, photo by Petra J. Mudie.



Online Resources
www.cambridge.org/coastalwetlands

► Colour versions of all figures from the book

CAMBRIDGE
UNIVERSITY PRESS
www.cambridge.org

ISBN 978-1-107-62825-0



9 781107 628250 >

Cover designed by Hart McLeod Ltd