

1. Record Nr.	UNINA9910786488603321
Titolo	Tidal marsh restoration [[electronic resource] ] : a synthesis of science and management // edited by Charles T. Roman and David M. Burdick
Pubbl/distr/stampa	Washington, : Island Press, c2012
ISBN	1-61091-229-2
Edizione	[1st ed. 2012.]
Descrizione fisica	1 online resource (428 pages)
Collana	The science and practice of ecological restoration
Classificazione	SCI026000NAT038000NAT011000SCI081000
Altri autori (Persone)	RomanCharles T (Charles True) BurdickDavid M
Disciplina	578.769
Soggetti	Salt marsh restoration Salt marsh ecology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. A Synthesis of Research and Practice on Restoring Tides to Salt Marshes -- 2. Predicting the Hydrologic Response of Salt Marshes to Tidal Restoration: The Science and Practice of Hydraulic Modeling -- 3. Biogeochemical Responses to Tidal Restoration -- 4. Vegetation Responses to Tidal Restoration -- 5. Ecology of Phragmites australis and Responses to Tidal Restoration -- 6. A Meta-analysis of Nekton Responses to Restoration of Tide-Restricted New England Salt Marshes -- 7. Avian Community Responses to Tidal Restoration along the North Atlantic Coast of North America -- 8. Restoration of Tidal Flow to Degraded TidalWetlands in Connecticut -- 9. Salt Marsh Restoration in Rhode Island -- 10. Restoration of Tidal Flow to Salt Marshes: The Massachusetts Experience -- 11. Restoration of Tidal Flow to Salt Marshes: The New Hampshire Experience -- 12. Restoration of Tidal Flow to Salt Marshes: The Maine Experience -- 13. Salt Marsh Tidal Restoration in Canada's Maritime Provinces -- 14. Adaptive Management and Monitoring as Fundamental Tools to Effective Salt Marsh Restoration -- 15. Recovering Salt Marsh Ecosystem Services through Tidal Restoration -- 16. Role of Simulation Models in Understanding the Salt Marsh Restoration Process -- 17. Incorporating Innovative Engineering Solutions into Tidal Restoration Studies -- 18. Salt Marsh Restoration at Cape Cod National Seashore, Massachusetts: The Role of Science in Addressing Societal Concerns -- 19. Drakes

Island Tidal Restoration: Science, Community, and Compromise -- 20. Role of Science and Partnerships in Salt Marsh Restoration at the Galilee Bird Sanctuary, Narragansett, Rhode Island -- 21. Restoration of Tidally Restricted Salt Marshes at Rumney Marsh, Massachusetts: Balancing Flood Protection with Restoration by Use of Self-Regulating Tide Gates -- 22. Salt Marsh Responses to Tidal Restriction and Restoration: A Summary of Experiences.

---

Sommario/riassunto

Many coastal tidal marshes have been significantly degraded by roadways and other projects that restrict tidal flows, limiting their ability to provide vital ecosystem services including support of fish and wildlife populations, flood protection, water quality maintenance, and open space. Tidal Marsh Restoration provides the scientific foundation and practical guidance necessary for coastal zone stewards to initiate salt marsh tidal restoration programs. The book compiles, synthesizes, and interprets the current state of knowledge on the science and practice of salt marsh restoration, bringing together leaders across a range of disciplines in the sciences (hydrology, soils, vegetation, zoology), engineering (hydraulics, modeling), and public policy, with coastal managers who offer an abundance of practical insight and guidance on the development of programs. The work presents in-depth information from New England and Atlantic Canada, where the practice of restoring tidal flow to salt marshes has been ongoing for decades, and shows how that experience can inform restoration efforts around the world. Students and researchers involved in restoration science will find the technical syntheses, presentation of new concepts, and identification of research needs to be especially useful as they formulate research and monitoring questions, and interpret research findings. Tidal Marsh Restoration is an essential work for managers, planners, regulators, environmental and engineering consultants, and others engaged in planning, designing, and implementing projects or programs aimed at restoring tidal flow to tide-restricted or diked salt marshes.

---