
An Ecological Profile of the Narragansett Bay National Estuarine Research Reserve

Edited by Kenneth B. Raposa and Malia L. Schwartz









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Additional copies of this publication are available on CD from the Narragansett Bay National Estuarine Research Reserve, P.O. Box 151, Prudence Island, RI 02872, or may be downloaded at www.nbnerr.org.

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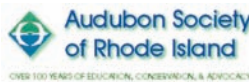
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Preface

The National Estuarine Research Reserve (NERR) System is composed of 27 reserves in multiple biogeographic regions along the coastal United States that are dedicated to providing natural sites for conducting research and monitoring to address important coastal management issues. The NERR System incorporates research and monitoring data from these projects into education and coastal training programs to improve coastal management, stewardship, and public awareness. The Narragansett Bay National Estuarine Research Reserve (NBNERR or Reserve) is one of these sites. It is located in the state of Rhode Island and administered by the R.I. Department of Environmental Management in partnership with the Audubon Society of Rhode Island.

As part of the NERR national long-term monitoring program, a comprehensive ecological overview, officially known as the Site Profile, is required for each site. The NBNERR Site Profile, which is presented here, compiles and summarizes relevant literature and data pertaining to the terrestrial, freshwater, and estuarine ecosystems in and around the Reserve in one comprehensive document. It also provides background on the role and history of the NERR System, discusses the chronology, organization, and infrastructure of the NBNERR, and summarizes the human and cultural history of the Reserve. The latter was considered an essential component of this document since it would be difficult to fully understand the ecology of the NBNERR without also knowing the history of human impacts that have previously affected it.

This Site Profile is organized into four sections: an introduction to the NERR and NBNERR, an overview of the ecology of terrestrial and freshwater systems, an overview of the ecology of estuarine systems, and a summary of research and monitoring in the NBNERR. Chapters in the terrestrial section deal with the terrestrial and freshwater habitats found on Prudence, Patience, Hope, and Dyer islands, which are the islands that comprise the Reserve. Even though the Reserve only contains approximately 1,840 acres of Bay waters around these islands, chapters in the estuarine section cover all of Narragansett Bay. This approach was taken to promote a full understanding of the ecology of the estuary, which would not be possible when only

considering the waters that fall within the arbitrary 18-foot depth contour that defines the estuarine extent of the Reserve. A true overview and understanding of the physical, chemical, and biological process at work in the Reserve and Narragansett Bay can only be attained from a Bay-wide perspective.

This document was developed with the goal of providing a valuable resource for anyone interested in working in the NBNERR, including students, researchers, government agencies, coastal managers and decision makers, educators, and the general public. However, it contains information on Narragansett Bay and on estuarine and coastal ecology that may be of interest to a wider audience. The intent of the profile is to provide a general, yet thorough, overview of the ecology of the Reserve and Narragansett Bay, while also providing relevant literature sources for those readers who are interested in pursuing subjects in more detail. Additional information on any topic covered in the Site Profile is also available by contacting the Reserve staff directly (visit www.nbnerr.org for contact information).



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