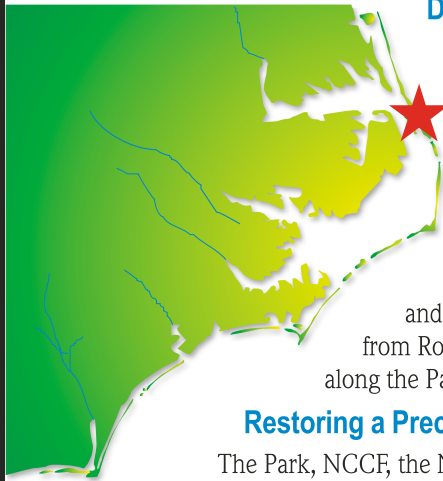


NC COASTAL FEDERATION RESTORATION & PROTECTION PROJECT

# JOCKEY'S RIDGE STATE PARK

## A Special Place

As one of the tallest natural dune systems on the Atlantic Coast, Jockey's Ridge is recognized as a National Natural Landmark. The dunes, maritime forest and estuarine shoreline at the park form a prime example of the complex ecosystem found on barrier islands. The park's estuarine waters support over 75 species of fish, as well as many invertebrates and shorebirds.



## Damage to the Dunes

Before its establishment, the northern area of what is now Jockey's Ridge State Park was slated for development. The land was cleared of vegetation and a road was constructed. The development never took place, but the northern section of the park and dune remained devoid of plants. In addition, protective vegetation along the riparian shoreline was damaged by vehicle and foot traffic, allowing sand to blow directly onto fringing salt marsh. As the marsh became buried and stressed, it became more susceptible to wave-driven erosion from Roanoke Sound. As a result, over 40% of the marsh has disappeared along the Park's estuarine shoreline.

## Restoring a Precious Resource

The Park, NCCF, the Nature Conservancy and the N.C. Division of Marine Fisheries worked together to develop a multi-tiered approach to restoring the natural marsh along a portion of the shoreline. Beach grasses and wax myrtles were planted and protected with sand fencing on the upland edge of the site. These trap sand before it can be blown onto the restored marsh.





June 2008: Jockey's Ridge before restoration.



Students from First Flight Middle School enjoy their end-of-the-year field trip to the restoration site.



Community volunteers helped plant over 20,000 marsh grasses on the shoreline.



The restored marsh at Jockey's Ridge after two years of community and student plantings.

A low profile sill containing 4,000 bushels of bagged oyster shells was constructed just offshore. The sill slows and dampens the often-large waves generated by wind on Roanoke Sound. In the quiet pool behind the sill, volunteers and students planted coastal *Spartina alterniflora* grasses to further absorb wave energy and provide valuable estuarine habitat. Approximately 1.5 acres of marsh and riparian habitat has been restored along 725 feet of the park's shoreline. The natural system is designed to function holistically to support finfish, crabs and other estuarine creatures.

### Community Involvement

The Friends of Jockey's Ridge and students from the First Flight Middle School played a key role in the successful implementation of this project. The Friends hosted an annual "Reef and Roast" event during the project period, attracting over 100 volunteers each year to an oyster bagging and oyster eating event. In addition, the site serves as a living classroom. Since 2008 over 600 students from First Flight have been involved in NCCF's Student Wetland Nursery Program. Through lessons offered by NCCF staff throughout the school year, students learned about marsh and oyster habitat and ecology and their value in enhancing water quality. As an end-of-year field trip the students helped with marsh planting and oyster reef creation. Student and adult volunteers donated over 4,700 hours of their time to this project.

The shoreline restoration project has become a destination within the park for visitors to learn about the value and importance of coastal marsh and oysters. Grant funding for this project was provided by the U.S. Fish and Wildlife Service, the National Oceanic and Atmospheric Administration's collaboration with the Southeast Aquatic Resources Partnership and the Carlson Family Foundation.

**North Carolina Coastal Federation**

North Carolina Coastal Federation | 3609 Hwy 24 (Ocean) | Newport, NC 28570  
 252.393.8185 | Fax: 252.393.7508 | [nccf@nccoast.org](mailto:nccf@nccoast.org) | [www.nccoast.org](http://www.nccoast.org)

**"Citizens Working Together for A Healthy Coast"**

The North Carolina Coastal Federation (NCCF) is the state's only non-profit organization focused exclusively on protecting and restoring the coast of North Carolina through education, advocacy and habitat restoration and preservation.

For more information call 252.393.8185 or check out NCCF's website at [www.nccoast.org](http://www.nccoast.org).