

N.C. Coastal Reserve &
National Estuarine Research Reserve

Tidal Flat

Spring 2015



Duke Students Help the Reserve Prepare for a Disaster

Graduate students in the Master of Environmental Management program at Duke University's Nicholas School of the Environment developed Disaster Response Plans (DRP) for the four national Reserve sites as part of their Master's Project. These sites include Currituck Banks, Masonboro Island, Rachel Carson, and Zeke's Island reserves. The DRPs include response options for a number of disasters, including hurricanes, coastal erosion, oil/hazardous material spills, harmful algal blooms, and marine mammal strandings. Facilitated stakeholder workshops brought together all relevant local, state, and federal emergency response personnel and garnered input on potential hazards, impacts, and preparation needs of each site. The input from Reserve site managers and stakeholders informed the creation of the DRP, which will be included in NCNERR's 2016-2021 Management Plan.



Oysters, Red Drum, and Toadfish (oh my!) at the Rachel Carson Reserve



In March, scientists from Maryland, Virginia, and North Carolina shared their [research](#) on fishery resources and aquatic ecosystems at the American Fisheries Society -

Tidewater Chapter conference held at the N.C. Aquarium at Pine Knoll Shores. During the three-day conference, graduate students from East Carolina University, UNC-CH Institute of Marine Sciences

Upcoming Events

Explore Reserve sites and learn about estuaries this summer by registering for these free programs offered by the Reserve!

Public Field Trips at the [Rachel Carson Reserve](#) and [Bird Island Reserve](#)

[Masonboro Island Reserve events](#)

[Summer Science School programs](#) in partnership with the N.C. Maritime Museum

Information about all of these events is available on our [event calendar](#).

Fun Facts

Do you know about our **Responsible Use Policies**? Read about them on our [website](#).

Kitty Hawk Woods Reserve has the only maritime forest in the state of North Carolina where bald cypress trees dominate the swamp forest community.

The North Carolina National Estuarine Research Reserve has been protecting sites for **30 years**, since the initial designation of Currituck Banks, Rachel

(UNC IMS), and other institutions featured research occurring in and around the Rachel Carson Reserve (RCR). Studies included everything from the movement of larval oysters to the impacts of boat noise on oyster toadfish reproduction.

Terrapin Tally, Round Two: Expanding the Citizen Science Initiative

In an effort to learn more about the diamondback terrapin population at the Masonboro Island Reserve, Reserve staff launched an initiative in 2014 in partnership with the N.C. Wildlife Resources Commission (WRC) to document terrapin sightings with help from volunteers in the community.



As part of the project, teams of two kayaked predetermined routes around Masonboro Island and logged terrapin sightings using an app on their smartphone. With help from 73 volunteer citizen scientists, the group was able to record 144 terrapin sightings. The success of this pilot study prompted staff to expand the project this year by adding three new routes and an additional day to log sightings. As a result, 102 enthusiastic volunteers joined Reserve staff and paddled around the site, keeping their eyes peeled for terrapin heads breaking the surface of the water.

Population information about the diamondback terrapin is valuable for current and future site monitoring efforts. These data would have been impossible to collect without the committed citizen scientists who took part in the project. [Learn more](#) about the elusive diamondback terrapin.

New Faces at the Reserve



[Meet our new staff!](#)

Carson, and Zeke's Island Reserves in 1985!

Vegetation Data Now Available

We are happy to announce that we are 1 of 11 reserves with marsh monitoring data available in the new [Vegetation Data Application portal!](#) The data was collected from permanent sampling plots along fixed transects. Parameters monitored include percent cover of all plant species, as well as stem density and canopy height of the common species. Data files for 2010 - 2012 are readily available for those looking at changes in abundance or species composition over time.

We're on Twitter!

Since creating the N.C. Coastal Reserve Twitter page just under a month ago, we've engaged over 20,000 people! We hope to continue this positive momentum, so please follow us to learn about the research, education, and stewardship activities taking place across all of our Reserve sites.



Follow us @NCReserve



N.C. Coastal Reserve
Rachel Carson Reserve
Masonboro Island Reserve

[Join Our Mailing List!](#)

Living Shorelines Workshops are a Hit Among Coastal Professionals



Lately there's been a lot of buzz in the coastal community about the use of living shorelines for erosion control, and the North Carolina Coastal Reserve & National Estuarine Research Reserve has played an integral role in promoting this idea. A living shoreline is a method used to prevent erosion through strategic placement of natural

materials, like vegetation and oysters. In many settings, living shorelines represent an effective and relatively inexpensive approach to long-term shoreline stabilization by buffering wave energy and trapping sediments. [Learn about](#) how the Reserve's Coastal Training Program is working to promote this approach.

Lichen Survey Yields New Discoveries

After 18 weeks of trudging through a labyrinth of mangled trees, tangled vines, and untamed underbrush, researchers at the New York Botanical Garden (NYBG) came away with a few scrapes and bruises and over 14,000 samples of lichens collected during their field survey of the mid-Atlantic coastal plain. Prior to the survey, this region, which



spans from southern New Jersey to Florida, had not been studied for lichen species. For this reason James Lendemer, a field biologist with NYBG's Institute of Systematic Botany, received funding from the National Science Foundation to develop the first inventory of the lichens in the area. [Find out](#) what Lendemer and his team found.

Facebook Favorites



Aerial image of NOAA's living shoreline at Pivers Island captured by Dr. Carolyn Currin



Children at Wild Horse Day learn about being responsible observers of the horses by keeping a distance of 50 feet



Kids measure salinity and turbidity on a field trip to the Reserve



The first sea turtle tracks of the season appear at Masonboro Island Reserve

nccoastalreserve.net