

North Carolina Research Reserve Education is making coastal connections



2017

Students



4133 students learned about estuaries



Teachers

85 educators enhanced their estuarine literacy

Plants



122 *Spartina* seedlings were planted by elementary students



Students

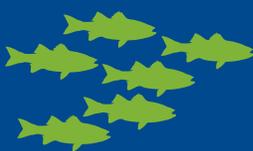
The Rachel Carson site and Masonboro Island site of the North Carolina National Estuarine Research Reserve serve as perfect spots for students to learn all about estuaries and their importance. Each year, hundreds of students from around North Carolina visit these sites for a hands-on experience they will never forget. Each trip is tailored to the grade level's science curriculum standards and allows the students to see, smell, and touch all the components that make North Carolina's estuaries so unique.

Teachers

The goal of the teacher professional development workshops is to provide K-12 teachers and environmental educators with a dynamic learning experience based on estuarine and marine science to help foster coastal environmental stewardship and informed decision-making. Workshops are aligned with the North Carolina Standard Course of Study, Ocean Literacy Concepts, and National Education Standards. Participants learn information and concepts about estuaries, the National Estuarine Research Reserve System, the North Carolina coast, and current estuarine research. Participants experience field-based explorations and activities to integrate into their learning environment.

Seeds to shoreline

Seeds to Shoreline is a restoration project designed for teachers and students to grow *Spartina* plants in their classrooms. Through obtaining seeds, cultivating them, and then planting them on Reserve property, students learn how this plant serves a crucial role in North Carolina's estuaries.



North Carolina Reserve is one of 29 sites in the National Estuarine Research Reserve System. Each site is a state federal partnership that combines research, monitoring, and education to advance the understanding and management of estuarine environments.



**NORTH CAROLINA
COASTAL RESERVE &
NATIONAL ESTUARINE
RESEARCH RESERVE**



Coastal Management
ENVIRONMENTAL QUALITY

National Estuarine Research Reserve Education Change on the Ground in 2017

Connects

People to Estuaries

**1 million+
ACRES**

of natural classrooms & living laboratories with



**28 INTERPRETIVE
CENTERS**



**650,340
VISITORS**

learn about estuaries through Research Reserve outreach & education



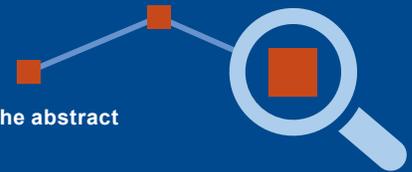
Aloha to our Hawai'i Reserve, designated in 2017!

Prepares

the Next Generation

**87,899
STUDENTS**

take learning out of the abstract & into the outdoors



**3,079
TEACHERS**

are trained in the estuary & supported in the classroom



SKILLS BUILT

- ✓ Observation
- ✓ Asking research questions
- ✓ Problem solving
- ✓ Data driven decision making

ESTUARY SCIENCE

LOCAL DATA

LAB WORK

FIELD INVESTIGATION

Improves

the Environment

**12,849
CITIZENS**

are trained & inspired to protect their coasts & estuaries



VOLUNTEER ACTIONS

- ✓ Protect wildlife
- ✓ Monitor water quality
- ✓ Plant native species
- ✓ Clean up the coasts

**28 RESEARCH RESERVE
EDUCATORS**

lead programs that foster coastal stewardship in communities in 23 states



Creating value through education
39,035 volunteer hours = \$942,305*