Great Bay National Estuarine Research Reserve is Education on the Ground

Teachers engaged in science on the Estuary

How can teachers use estuaries as a tool to teach Next Generation Science Standards? How can teachers learn about what sea level rise really looks like on the ground? How can teachers translate estuarine science back to their students in the classroom?

--Teachers on the Estuary "TOTE", that's how! --

Each summer a group of teachers from New Hampshire and beyond gather at the Great Bay Discovery Center to dip their collective toes into a saltmarsh, eelgrass bed or a dissolved oxygen data set for Great Bay. In 2017, 30 teachers attended multi-day TOTE workshops at the reserve to learn how scientists study the estuary, how managers makes decisions around water quality and what kayaking through a meandering estuarine creek feels like on a hot summer day.

TOTE exposes teachers to real and relevant science. TOTE works!

Discovering the Magic of Nature

A young child squeals with delight as she realized the ominous looking horseshoe crab she is holding is actually quite harmless!... An angler draws his fly line back and watches it settle gently on the bay, waiting for the one moment when a striper grabs his fly... A grandparent strolls the boardwalk with multiple generations of family, listening to songbirds, feeling the breeze off the saltmarsh...

The Great Bay Discovery Center sits on the edge of Great Bay and serves as a gateway for visitors of all kinds to learn more about the Great Bay Estuary. Walking trails, exhibits with live estuary animals and interactive experiences with nature bring young and old to the Great Bay National Estuarine Research Reserve. Each year more than 10,000 visitors learn what makes Great Bay so special and why it is such a critical and important ecosystem. Over 5,000 school children visit the Center annually and leave with a sense of natural wonder and a spark of curiosity to learn more about the world around them.
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

29 RESEARCH RESERVES

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

ESTUARY SCIENCE
LOCAL DATA
LAB WORK
FIELD INVESTIGATION

SKILLS BUILT
✓ Observation
✓ Asking research questions
✓ Problem solving
✓ Data driven decision making

Improves
the Environment

12,849 CITIZENS
are trained & inspired to protect their coasts & estuaries

28 RESEARCH RESERVE EDUCATORS
lead programs that foster coastal stewardship in communities in 23 states

cost.noaa.gov/estuaries

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

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

*Value of a volunteer hour is calculated at $24.14 based on data from the Independent Sector.