

Apalachicola Research Reserve Education is Making Coastal Connections

2017

Connect



Over 30,000 visitors to the Nature Center learned about Estuaries

4,600 participants in public education programs



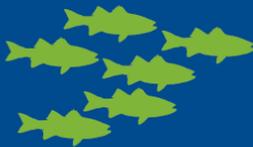
Prepare

Every local student, grades pre-K, 1, 3, 5, 7 and 10, participated in outdoor education programs about Estuaries

Improve



50 tons of fossilized limerock bagged and installed for restoration of living shoreline



“I have never heard the message delivered so well and understood so quickly. Because of this one day I heard students express concern and motivation to act to care for their own estuary in Bay County.”

Paula Weaver, Local Science Teacher

“Who knew that how much water I use in Atlanta affects the life of Oysters in Apalachicola Bay? Well, now I know!”
Visitor from Georgia



Keystone Species

Apalachicola Bay oysters, known historically as some of the best in the world, have been in serious decline. While the argument as to why made it to the highest court in the land, local tenth grade students kept watch through an experiment tracking the growth of oysters. By counting the number of oysters that settle on three different substrates and correlating the results to salinity over the previous year the students generate an authentic assessment of the estuary.

Breathmaker and the Bay

An original play performed at ANERR, this performance by fourth graders elaborately decorated as inhabitants of the bay was an account of sea creatures living in harmony until the twin villains of invasive species, the lionfish and a tiger prawn, began to invade. The threat was further magnified by micro plastics which an oyster valiantly tried to turn into pearls. Quotes from students after the play gave their meaning of the story. “I learned that everybody’s throwing trash in the ocean. The fish are eating the microbeads, and we’re eating it, so technically we’re getting plastic in our bodies. It’s a cycle.” Another astute observation, “‘It’s only one little microplastic.’ It may seem extremely small, but when 1.9 million microplastics are in a quarter mile, it adds up to be bigger than just ‘a microplastic.’ Like, if you took one human child, he’s not going to be that big, but if you take a hundred thousand human children, they’re going to make a difference.”

Seeds to Shoreline

Restoring the saltmarsh at ANERR is an ongoing mission for the local fifth grade in Franklin County. Starting in 2011, every fifth grader comes to the site, puts on the boots and gets in the mud to plant Spartina grass. The project begins with students making detailed plot assessments to measure the prior year’s growth to track the development of the marsh. This year they planted over 250 plants.

Florida’s Apalachicola Research 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. Learn more at <http://apalachicolareserve.com>



Apalachicola
National Estuarine
Research Reserve



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



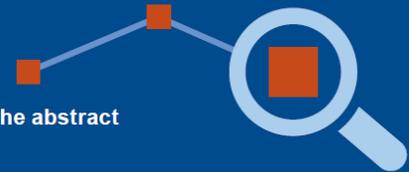
Aloha to our Hawai'i Reserve, designated in 2017!

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*