

Lake Superior Research Reserve

Education is Change on the Ground



2022

Connect



3,835 visitors to the Lake Superior Estuarium and public programs



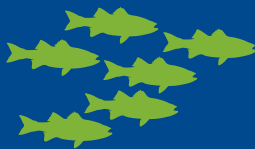
Prepare

2,081 students engaged over 4,422 contact hours
1,035 hours of professional development for teachers

Improve



36 white cedar trees planted by students in the Reserve



"You can meet lots of different kinds of standards with this kind of learning, not just science. Learning about the environment around you (i.e. local, relevant to you)...makes you feel like you're actually a part of something important."

Teacher, professional development participant

"Our students & families access[ed] things they've never experienced such as canoeing. They also learned to be very comfortable and caring of the outdoors."

Teacher, professional development participant

Community Celebrates Lake Superior

Lake Superior Day is hosted annually by the Lake Superior Reserve, and is celebrated each year in July in communities around the Great Lake. Learning booths featuring Reserve water quality monitoring experiments and activities from 12 partner entities formed the core of appreciating and celebrating the clearest and coldest Great Lake. About 300 people attended this summer, the Reserve's 11th year of collaboratively hosting this freshwater-centric community event.

Participants shared learning from the event on post-it notes, including: "Wild rice can teach us about the environment," "We live in a beautiful place!," "[It takes] 200 years for water to cycle through [the lake]-wow!-- this is so important for us to recognize and act accordingly," and "Sturgeon can live for 150 years!"

Naturalists in Residence at Superior Elementary School

Area schools know who to call when they want a boost for outdoor learning and incorporating local examples in their teaching. A school principal and classroom teacher, who is an alumni of the Reserve's place-based teacher professional development program, called the Lake Superior Reserve Education program. They asked us to lead a week of outdoor learning for all 198 students in the school, preschool through fifth grade. Could we model outdoor teaching for 21 teachers and staff so they can increase use of the forest and trails on school grounds? Yes. What project could we center the week around? Building a school-wide map of the forest that includes student observations, emotions, and experiences. Extra detail is placed on lichens, water quality, tree names, or life in puddles, depending on which deeper investigation students chose. The muddy week included 60 contact hours with educators modeling outdoor learning, and a cumulative 575 hours with students engaging with the environment around them at school in a new way.

The Lake Superior Reserve is one of 30 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.



National Estuarine Research Reserve Education Change on the Ground in 2022

Connects

People to Estuaries

**1 million+
ACRES**

of natural classrooms & living laboratories with



**26 INTERPRETIVE
CENTERS**



Hello to the Connecticut Reserve, designated in 2022!



296,131 VISITORS

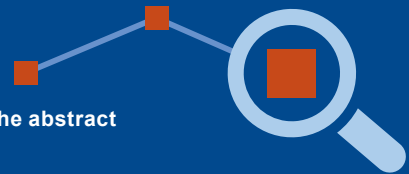
learn about estuaries through Research Reserve outreach & education

Prepares

the Next Generation

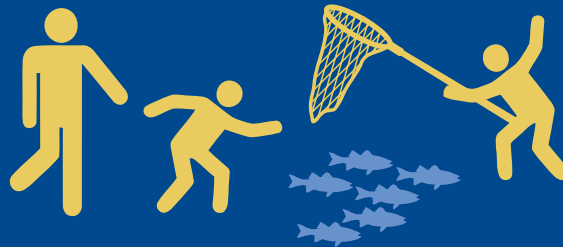
54,773 STUDENTS

take learning out of the abstract & into the outdoors



4,347 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

10,570 CITIZENS

are trained & inspired to protect their coasts & estuaries



VOLUNTEER ACTIONS

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

30 RESEARCH RESERVE EDUCATORS

lead programs that foster coastal stewardship in communities in 25 states



Creating value through education
37,371 volunteer hours = \$1,119,261*