

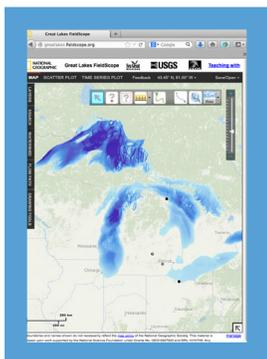


LEARNING ABOUT THE GREAT LAKES

Education

We live in the heart of the spectacular Great Lakes region. The Great Lakes define our culture, heritage and quality of life — and provide a unique educational opportunity.

Because an educated public makes informed decisions, Michigan Sea Grant helps students, educators and Michigan citizens of all ages incorporate the Great Lakes into lifelong learning. That happens in a variety of ways. From hands-on cruises and camps, to free online curriculum using real-world data and an interactive map tool, we offer programs and materials that enhance science education and encourage stewardship.



UPDATES IN YOUR INBOX

Sign up for the Michigan Sea Grant email list and get periodic updates on the program, new publications and additional classroom resources.

See: www.miseagrant.umich.edu/education

CRUISES

Great Lakes Education Program

This hands-on program introduces fourth-grade students to unique features of the Great Lakes through a combination of classroom and in-the-field learning. The program integrates elements of geography, history, biology and physical sciences in each of its three components:

- Classroom introduction to Great Lakes.
- Field trip on the Clinton River, Detroit River or Lake St. Clair.
- Follow-up classroom experiments and discussion.

GLEP cruises can be scheduled in the spring or fall.

See: www.glep.us

Summer Discovery Cruises

Open to learners of all ages, these cruises offer a chance for anyone (ages 5 and over) to get out on the water and uncover different aspects of the Great Lakes. Each year the summer schedule is full of a variety of themes to choose from, focusing on the ecology, culture and history of the Detroit River or Lake St. Clair.

The objective of the discovery cruises is to increase awareness and understanding of the Great Lakes, leading to enhanced stewardship. The 20-plus themed cruises sail on Lake St. Clair or Lake Erie and depart from the Lake St. Clair Metropark and the Lake Erie Metropark, respectively.

See: www.discoverycruises.org

CAMPS

4-H Great Lakes and Natural Resources Camp

The camp at Chickagami is an immersive outdoors experience for 13–15 year old students. Camp is in session for one week every August in Presque Isle, Michigan and attracts students from all corners of the state. Campers get to experience natural resources through fishing, sailing, swimming and beach activities, bird watching and hiking. During those activities, they are guided to become more aware and understanding of natural resources, related careers, 4-H club and other pursuits like community service.

See: www.miseagrant.umich.edu/education/4-h-great-lakes-natural-resources-camp

Life of Lake Superior Youth Program

The Life of Lake Superior is an experiential outdoor education program designed to teach youth and their parents about natural resource opportunities within their local area. This program includes a series of “workshops on the move” that run throughout each July. Workshops focus on the impact of science, economics, history, arts and culture as they relate to Lake Superior. Michigan Sea Grant is one of several partners who help run the camp.

See: www.msue.anr.msu.edu/county/alger/life_of_lake_superior_youth_program

PROFESSIONAL DEVELOPMENT AND NETWORKING

Northeast Michigan Great Lakes Stewardship Initiative

The Northeast Michigan Great Lakes Stewardship Initiative is a regional network of education and community partners who foster quality environmental education opportunities. Funded through the Great Lakes Fishery Trust, the focus is on place-based education — an educational process that enhances student academic achievement, environmental stewardship, community engagement and vitality.

The initiative has formed a networking hub based out of northeast Michigan, with three main goals:

- Support place-based education in local schools through mini-grant funding.
- Provide professional development.
- Help create and maintain strong community-school partnerships.

See: www.nemiglsi.org

WEB-BASED LESSONS, DATA AND TOOLS

All materials are free

Teaching Great Lakes Science

Ready-to-use lessons and data sets provide opportunities to learn about heat source and sink, microclimates, lake effect snow, ice cover, water temperatures, wind, sun and seasonal temperature changes, fish and fish habitat, natural resources management and careers, beach health and more. Many of the lessons include related activities, perfect for exploring and applying the concepts learned in each lesson. This curriculum provides teachers with methods that help students summarize knowledge, analyze data and evaluate findings. The resources are easily incorporated into existing curriculum and are multidisciplinary, addressing science, technology, engineering and math.

See: www.greatlakeslessons.org

Great Lakes FieldScope - National Geographic

A web-based mapping, analysis and visualization tool, FieldScope can be used to investigate real-world issues. This type of learning provides a rich geographic context that allows teachers, students and volunteers to gain a better understanding of how they are connected to the Great Lakes. Users may explore data layers such as rivers and streams, watershed boundaries, water depth, political boundaries, elevation and land cover. Part of a growing National Geographic initiative, FieldScope participants can upload their own field data, including photos, quantitative measurements and field notes, collaborate and compare with data collected from other areas.

See: greatlakes.fieldscope.org

CLASSROOM RESOURCES

- Photos
- Fact Sheets
- Posters, Guidebooks and Maps

Web features:

- Climate and Weather
- Dangerous Currents
- Fisheries
- Great Lakes Coastal Habitats

www.miseagrant.umich.edu/education



Michigan Sea Grant helps to foster economic growth and protect Michigan's coastal, Great Lakes resources through research, education and outreach.



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