

# STONE LABORATORY

LAKE ERIE SCIENCE  
FIELD TRIP PROGRAM



[STONELAB.OSU.EDU](http://STONELAB.OSU.EDU)



OHIO STATE'S ISLAND CAMPUS ON LAKE ERIE





# Bring science to life FOR YOUR STUDENTS

Take your class on a Lake Erie Science Field trip to Stone Lab, available for students in grades 5-12 and for groups of adults.

Field trips are held in April, May, August, September and October.

During the school year, each group spends two hours aboard a Lake Erie research vessel, collecting environmental and biological data. The students return to the island where they don lab coats to dissect fish and examine the lake's microorganisms through microscopes.

Groups can choose from up to 10 additional specialized activities to create a one-day trip lasting up to eight hours or a two-day overnight trip which includes a stay at the island dormitory and meals at the Dining Hall. Field trips can accommodate up to 80 people.

All Field experiences are aligned with Ohio's Science Academic Content Standards. Visit [go.osu.edu/SLfieldtrips](http://go.osu.edu/SLfieldtrips) for more information.



## STONE LAB'S LAKE ERIE SCIENCE FIELD TRIPS

Your visit includes lunch in the Stone Lab Dining Hall and the following core activities:

### LAKE ERIE SCIENCE CRUISE

On a research boat, students do the hands-on work of a scientist, measuring current environmental conditions such as wind speed and direction, water depth, temperature, oxygen content, wave heights and sunlight intensity. They also have the opportunity to determine water clarity, collect algae and zooplankton, survey benthic macroinvertebrates, and collect and observe Lake Erie fish.

### LABORATORY PRACTICE

Groups take their samples from the Science Cruise into the research building for the Plankton and Fish Labs. These labs start with a limnology overview, including a discussion of geology, chemistry, physics and biology of aquatic ecosystems, food pyramids, and the examination of live phytoplankton and zooplankton under compound microscopes. Students learn fish identification techniques. The session ends with a fish dissection to examine internal organs, stomach contents and parasites and/or diseases.





## ADDITIONAL OPTIONS

To enhance your students' learning experience, other activities may be added from the list below:

### INVERTEBRATE WALK

Learn to use "biological indicators" by collecting macroinvertebrates on Gibraltar Island's Alligator Bar, a rocky shoal, using kick seines, dip nets and direct observations. Students examine specimens under a dissecting scope, and then a score is calculated to determine local water quality.

### EXOTIC SPECIES SLIDE SHOW

Discuss invasive plants and animals and their impacts on Lake Erie's ecosystem and view specimens of several common exotic species now found in North America.

### INSECT COLLECTING

Get an introduction to the world of insects using diagrams and specimens, then take a peek at live subjects up close and personal using aerial nets and other techniques to capture some of Gibraltar Island's six-legged residents.

### ISLAND GEOLOGY WALK AND TALK

Take a walk around Gibraltar Island to see evidence of the area's ancient history through embedded fossils, rock formations and glacial grooves, then discuss it in a short classroom session.

### HERPETOLOGY

See live and preserved specimens and photos of a variety of Ohio's reptiles and amphibians and learn about current snake research underway at Stone Lab, which has been featured on the Discovery Channel's "Dirty Jobs."

### ORNITHOLOGY HIKE

See a large variety of museum specimens, then hike around Gibraltar with a set of binoculars to spot and learn about Western Lake Erie's local bird life and its world-wide importance as a migratory flyway corridor.

### FISH SEINING

Experience a fish sampling technique different from the trawl on the Science Cruise. Use a throw seine to net small fish in the shallow waters off the dock, and then use dichotomous keys to identify the catch. (This is most often done as a 15-minute activity paired with the Invertebrate Walk.)

### CLIMATE EXPEDITION

Explore Gibraltar Island while learning about climate change, its effects on Lake Erie, and how small changes can have big impacts on the world. This activity explains the impacts of climate change in the Great Lakes first-hand while visiting island locations.

### AQUATIC VISITORS CENTER (AVC)

Participate in hands-on science activities and learn how to fish at the Aquatic Visitors Center on South Bass Island. Activities include inspecting Lake Erie's complex ecosystem through hands-on displays, observing and identifying live fish in aquaria, and discovering current research projects that help protect Lake Erie.

## AVC ADVENTURES

Can't bring your group for a visit during the school year? In the summer, Stone Lab offers AVC Adventures, four-hour field trips for up to 30 people at the Aquatic Visitors Center, just a short walk from downtown Put-in-Bay on South Bass Island. Choose up to four one-hour activities from the following: Erie Island Cruise, AVC Tour & Fishing Fun, Birds for Beginners, Water Quality Walk, Ins and Outs of Lake Erie, Reptiles & Amphibians. AVC Adventures are offered on Mondays and Tuesdays in June, July and August.



## TRANSPORTATION

Groups are responsible for arranging their own transportation to and from the mainland to South Bass Island via ferry on the Miller Boat Line (800-500-2421) or the Jet Express (800-245-1538). On South Bass, groups must travel from the ferry docks to Stone Lab's research dock, which can be arranged with the Island Transportation Company (419-285-4855). Group discounts are available.

To ensure transportation, it is important that participants arrive on time and adhere closely to research vessel and science cruise schedules while on the island.

Maps, directions, and additional transportation information can be found at [stonelab.osu.edu/maps](http://stonelab.osu.edu/maps).

## HOUSING

Two-day field trips are available. All groups participating in two-day field trips are housed overnight on the island at the Harborview House dormitory, a 12-unit, heated building that can hold a maximum of 60 people. Rooms include bunk beds and a desk. Linens, towels, pillows, and blankets are not provided. Overflow housing for larger groups is assigned to Barney Cottage, which is not heated. For more about our buildings visit [stonelab.osu.edu/explore](http://stonelab.osu.edu/explore).

## MEALS

Groups spending one day at Stone Lab receive lunch in the Dining Hall, while those groups staying overnight are served dinner, breakfast and lunch. All meals are served in the dining hall. Individuals with serious food allergies or special dietary restrictions should plan to pack their own food.

## CHAPERONES

Each group should include two adult chaperones for every 15 participants in attendance.

## COST AND REGISTRATION

To estimate cost for your group, visit [stonelab.osu.edu/tripsandtours/estimator](http://stonelab.osu.edu/tripsandtours/estimator). Once your costs are estimated, you can then fill out the online registration form and request two or three potential dates. Returning groups get first priority and remaining groups are scheduled on a first-come, first-served basis.

**All participants receive a complimentary Stone Lab backpack.**



If you do not have internet access, call the Stone Lab office at 419-285-1800, and a staff member will be happy to help you complete the form. Casual phone conversations or personal email messages cannot be substituted for submitting the online registration form.

Groups are not officially registered until they receive confirmation from Stone Lab staff, at which time a down payment of 10 percent is required to hold the date. The initial assignment of dates for each year will begin in January, and groups will not receive confirmation until that time. If your total attendance number changes following confirmation, the Stone Lab office must be notified at least three business days prior to your workshop date for billing to be adjusted.

Did you miss the first round of scheduling? Dates may still be available at any time during the calendar year, so go ahead and register!

[stonelab.osu.edu/tripsandtours](http://stonelab.osu.edu/tripsandtours)



**QUESTIONS?**  
TWEET US @STONELAB



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