

The Great Fish Migration

Please meet the ranger at **9 am** at the Somesville Museums and Gardens. Check your confirmation for more details. The bus will need to drop off students off at the Museum parking lot and may then park at the nearby Somesville Fire Station. The program concludes and 12 pm. Plan a bathroom break just before leaving the school or enroute (you may stop at the Thompson Island Picnic Area to use the restrooms there), as there will be NONE available on sight.

If you have questions about the program in advance, please call 288-8823. If you will be more than 15 minutes late, please call the Visitor Center at 288-8832 so that they can contact the ranger by radio.

Program and Schedule (timing and sequence may vary)

*9:00* Welcome, logistics, introduction, habitat and life cycle of alewives.

(Billy Helprin, Somes-Meynell Wildlife Refuge)

*9:15* Mill Pond Dam: Count alewives, collect elvers, measure temperature and salinity

*10:00* Human history of Somesville: How have people changed this brook? (Tim Garrity, MDI Historical Society)

*10:15* Students view Champlain Society exhibit inside Somesville Museum, Somesville history exhibit inside selectman’s building, snack break

*10:35* Walking along Brookside Road, observing alewives along brook

*10:45* Brookside Cemetery Exploration: lifespan survey

*10:55* Students assist program leaders in transferring stranded fish from fishway into Somes Pond

11:25 Fish Migration Game

11:55 Conclusion, walk back to museum

12:00 Departure

## **Plan to Bring**

* Chaperones: Plan early! Acadia requires a chaperone for every 10 students. Extra chaperones are welcome.
* Food: No food or drink is available at the field trip site. Every student needs to bring a snack and re-sealable drink. Although a lunch break will not be included in the program, you are welcome to plan to eat bag lunches afterward at eh Thompson Island Picnic Area before heading back to school.
* Clothing: wear layered outdoor clothing to accommodate changing weather conditions. Supportive shoes are essential-no sandals or flip flops. Students will not be wading in the water, but should wear shoes that can get wet and muddy.
* Nametags: Students and adults need name tags. A piece of masking tape with the name in marker is sufficient.
* Signed Photo Releases: Please send photo releases (provided by the park) home with students for parent signatures.

## **Teacher Responsibilities**

* Adherence to school procedures such as permission slips, insurance, transportation, etc.
* Recruit chaperones and inform them of their responsibilities. Please photocopy and distribute the chaperone handout.
* Prepare students to follow the Leave No Trace Principles:
  + Stay on trails if possible
  + Respect, listen, and use quiet voice.
  + Leave natural objects. Take trash with you. (You may want to bring a trash bag)
* Supervise students and help them stay focused while on the program.
* Notify trip participants to check for ticks after their field trip. Tick numbers have risen in recent years.
* Ensuring safe practices are followed throughout.

## **Program Goals**

* Increase students’ knowledge about human effects on fish and other organisms.
* Understand challenges and adaptations for survival during alewife migration.
* Assist students in understanding interdependent relationships in ecosystems.
* Aid students’ understanding of the variety of life cycles and the amazing phenomenon of fish migration.
* Foster a sense of respect for the human history of an area, stewardship for protected areas, and appreciation for the work of historians, scientists, and managers who conserve these resources.

## **Program Objectives**

Students will be able to:

* Describe 3 challenges that the alewives face and explain how environmental changes affect them.
* Describe 3 ways alewives are adapted to challenges along their migration path.
* Explain what changes early settlers made to Somes Brook, and how those affected alewives.
* Explain how some organisms can survive better in particular habitats than other organisms do.
* Identify 3 species of fish in Maine that migrate between fresh and salt water.
* Describe how different organisms have unique and diverse life cycles, but all have certain stages in common.
* List 3 advantages for fish living in groups.
* Explain 2 interdependent relationships or connections witnessed during the Somes Brook exploration. (food web, habitat connection, ect.)
* List 3 aspects of proper streamside safety and etiquette.
* Explain why it is important for places like Acadia National Park and Somes Meynell National Wildlife Sanctuary to protect lakes and streams, and for Mount Desert Historical Society to protect historical buildings, documents and artifacts.

## **Learning Standards**

From the Next Generation Science Standards: Interdependent Relationships in Ecosystems

3-LS2-1. Construct an argument that some animals form groups that help members survive.

3-LS4-3. Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.

3-LS4-4. Make a claim about the merit of a solution to a problem caused when the environment changes and the types of plants and animals that live there may change. Inheritance and Variation of Traits: Life Cycles and Traits

3-LS1-1. Develop models to describe that organisms have unique and diverse life cycles but all have in common birth, growth, reproduction, and death.