USGS
science for a changing world

Lake Ontario Biological Station

The USGS Great Lakes Science Center is dedicated to providing scientific information for restoring, enhancing, managing, and protecting living resources and their habitats in the Great Lakes basin.
The Center is headquartered in Ann Arbor, Michigan, and has biological stations and research vessels located throughout the Great Lakes Basin.

Background

The Lake Ontario Biological Station (LOBS) at 17 Lake Street in Oswego, New York, is a field station of the U.S. Geological Survey's Great Lakes Science Center in Ann Arbor, Michigan. The Center is headquarters for a broad and complex program of research on fish and other living resources of the Great Lakes region. The mission of the LOBS is to determine the changing population dynamics and status of Lake Ontario fish stocks induced by natural processes, management actions, and recently established exotic species. For LOBS scientists to accomplish their mission, the GLSC maintains the 65-foot research vessel *Kaho* in Oswego, NY.

Sorting a trawl on the deck of the R/V*Kaho*

Staff

Personnel currently assigned to the LOBS include three fishery research biologists, two biological technicians, one administrative technician, one research vessel captain, and one marine machinery repairer.

Partners

The LOBS has strong ties to the research community of central New York. Since 1978, most long-term research and monitoring activities, such as assessing important fish stocks, have been conducted annually in partnership with the New York Department of Environmental Conservation. Short-term research on emerging issues is accomplished either in-house, in cooperation with USGS scientists at the Tunison Laboratory of Aquatic Sciences (Cortland, NY), or in partnership with local universities (Cornell University and State University College of Environmental Science and Forestry). Other cooperators include the Great Lakes Fishery Commission, U.S. Fish and Wildlife Service, Ontario Ministry of Natural Resources, and Department of Fisheries and Oceans Canada

Recent Accomplishments

Scientists at the Lake Ontario Biological Station documented that lake trout stocked in Lake Ontario as part of a bi-national effort to reestablish a self-sustaining population successfully reproduced in U.S. waters during 1993-99. Widespread reproduction by hatchery lake trout is not evident in any of the other Great Lakes except Lake Superior.

They also demonstrated that reproductive success of alewives is strongly influenced by water temperatures, thus providing fishery managers a means of anticipating the future direction of the population. Alewives are the primary food of salmon and trout in Lake Ontario. Consequently, the decline of alewife recruitment prompted management agencies to reduce stocking in 1992. Research at the station documented that survival of hatchery-reared lake trout stocked from shore plummeted

Sampling zooplankton on the R/V Kaho.

in the mid 1990s, presumably because of predation in nearshore waters. To increase survival of stocked trout and salmon, the New York Department of Environmental Conservation began stocking fish offshore in deep water in 1998.

U.S. Department of the Interior
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Great Lakes Science Center
1451 Green Road
Ann Arbor, MI 48105
(734) 994-3331
www.glsc.usgs.gov

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