



Tunison Laboratory of Aquatic Science

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 region. The USGS Great Lakes Science Center is headquartered in Ann Arbor, Michigan, and has biological stations and research vessels located across the Great Lakes Basin.



The Station

Tunison Laboratory of Aquatic Science (TLAS), located in Cortland, New York, is a field station of the USGS Great Lakes Science Center (GLSC). TLAS was established by congressional action in 1930 under initial supervision by the U.S. Bureau of Fisheries. TLAS became part of the USGS GLSC in 1997.

The station was initially called the Cortland Experiment Station. Early work at the station centered around research in nutrition and husbandry of trout. Subsequently, the station experienced a series of name changes, including “Trout Nutrition Laboratory” (1940s), “Eastern Fish Nutrition Laboratory” (1950s), and “Tunison Laboratory of Fish Nutrition” (1970s). After a shift in research emphasis from primarily laboratory studies to a broader program that consists of field oriented investigations supported by laboratory observations, the station was renamed “Tunison Laboratory of Aquatic Science” in 1994.

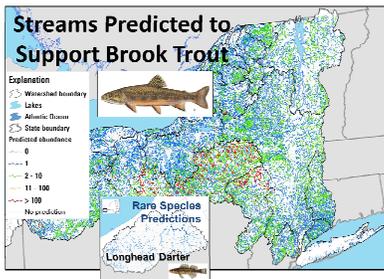
Research

Research at TLAS focuses on a wide array of issues important to state, federal, tribal, and Canadian

natural resource managers throughout the Great Lakes.

Specific research topics currently being investigated by TLAS scientists include: (1) examining the feasibility of restoring Atlantic salmon, deepwater ciscoes, and lake sturgeon in Lake Ontario and the St. Lawrence River; (2) determining the effects of double-crested cormorant predation on fish populations in Lake Ontario and the St. Lawrence River; (3) determining the effect of cormorant control measures (egg oiling) on reducing impacts on fish populations; (4) examining the cause, effect, and possible remediation of thiamine deficiency that causes high fry mortality in salmonids; (5) determining the ecological health of Great Lakes tributaries, nearshore areas, and embayments as it relates to fishery management, native species restoration, and exotic species expansion; (6) predicting aquatic biodiversity patterns and gaps in the distribution and conservation of aquatic species in both riverine and coastal areas throughout the Great Lakes Basin, using Aquatic Gap Analysis methods; and (7) assessing the status and conservation needs of





threatened, endangered, and species of special concern in the St. Lawrence River basin.

Facilities & Vessels

TLAS is located on a 100 acre property and consists of three buildings for offices, laboratories, and storage. The main building includes three offices, laboratories, a classroom, and multiple indoor raceways. A laboratory building contains additional office space and laboratories, a fish production annex, conference room, and library. A storage building houses multiple vehicles and a backup generator, and has a work shop and tool room. The laboratory also has a newly upgraded isolation (UV treatment) facility, outdoor concrete raceways, and multiple residences, two of which are used by the Lime

Hollow Nature Center which is co-located with TLAS. TLAS acreage contains nature trails and stream, pond, and wetland habitats. TLAS also has five small research vessels ranging in length from 10 to 22 ft.

Partners

TLAS collaborates with a diversity of management and research partners. Partners include the New York State Department of Environmental Conservation, U.S. Fish and Wildlife Service, Bureau of Indian Affairs, St. Regis Mohawk Tribe, New York Sea Grant, U.S. Environmental Protection Agency, Ontario Ministry of Natural Resources, USGS Water Resources Division, State University of New York College of Environmental Science and Forestry, Cornell University, and Hobart and William Smith Colleges.



Lake herring being reared at Tunison Laboratory of Aquatic Science.

