



## Great Lakes Science Center

# Through the Decades: A Short History of the Great Lakes Science Center



**In 1932, a scientist weighs and measures chubs and lake trout. GLSC scientists do similar work today.**

Visitors to the Great Lakes Science Center are often surprised to learn that the Center has been conducting research for over 70 years. As you'll see from the photographs in this fact sheet, clothing, hairstyles, and scientific equipment and techniques have changed since the Center was established in 1927. Between then and now, the Center's name, location, and federal agency affiliation also altered several times. One thing that has remained the same is the Center's commitment to provide critical information for the management of Great Lakes fish populations and other important natural resources.

### An Early Beginning

The seeds that resulted in the creation of a research center devoted to Great Lakes fisheries were sown in 1871 when the U.S. Fish Commission conducted a study of Lake Michigan, the lake with the longest line of shore within the United States and the largest number of fisheries at that time. Federal activities in the Great Lakes between 1871 and 1920 were

limited to infrequent surveys of the fisheries of the Great Lakes and to the operation of fish hatcheries.

The earliest continuing work on the Great Lakes began in 1920 when the U.S. Bureau of Fisheries, formerly the U.S. Fish Commission, undertook support of the graduate research of Walter N. Koelz and John Van Oosten at the University of Michigan (UM) on the taxonomy and life histories of coregonids (lake whitefish and related fishes). The UM's Dr. Jacob Reighard was a renowned fishery scientist who encouraged Koelz and Van Oosten to direct their research to Great Lakes fishes. This connection also explains how a research center focused on Great Lakes fisheries ended up in Ann Arbor, far from Great Lakes waters.

Exploitation of the Great Lakes began as human settlement in the watershed increased. Fishing without regard to conservation led to the inevitable collapse of the commercial fishing industries for lake herring and blue pike in Lake Erie in 1925. The furor generated by the 1925 collapse was the formal



**The crew and staff of the Fulmar, the Center's first research vessel, in 1932. Dr. John Van Oosten is at the far right.**

beginning of what is now known as the Great Lakes Science Center. In 1927, the Bureau of Fisheries established the Great Lakes Fishery Investigations in space provided by the UM with Dr. John Van Oosten as the Director.

## Decades of Accomplishment

During the 1930s and 1940s, with relatively little financial support and only one research vessel, the Center made significant contributions to understanding the role of commercial fisheries and pollution on the fisheries of lakes Erie and Michigan. Interest in and funding for Great Lakes research increased when the sea lamprey, native to the Atlantic Ocean, gained access to Lake Ontario through the Erie Canal and to the upper Great Lakes after the Welland Canal was built around Niagara Falls. The sea lamprey spread throughout the Great Lakes during the 1940s and decimated the lake trout and lake whitefish on which the commercial fishery was largely based. Scientists at the Center's Hammond Bay Biological Station identified a chemical, especially toxic to larval lampreys, which is still used to control sea lamprey.

In addition to work on the biology and control of sea lampreys, studies began during the 1950s on the biology of commercially important fish species, on the restoration of lake trout, and on the limnology (the study of freshwater) of the Great Lakes. The expansion of the research program led to a need for more space, and in 1950 a residence in downtown Ann Arbor was converted to a laboratory and used until 1965. Three research vessels were also acquired during the 1950s. In 1959, the Center became known as the Great Lakes Biological Laboratory.

Growth continued in the 1960s, and in 1965 the Center moved into the then newly constructed headquarters it now occupies. The present building was built on the UM's North Campus with land sold to the Bureau of Commercial Fisheries by the University for \$1.

In 1970, the Center was renamed the Great Lakes Fishery Laboratory, with the mission to study the environment, fish populations and fisheries of the Great Lakes. The study of the effects of pesticide and heavy metal contamination on the Great Lakes fisheries became important during the decade, as did fish physiology and behavior programs. Thermal pollution and related impacts of energy production on Great Lakes biota were also major concerns and subjects of study in the early 1970s. Two research vessels were added during the decade, bringing the fleet total to five ships, one on each of the Great Lakes.

## Recent Years and Beyond

In 1987, the Center was renamed the National Fisheries

Research Center-Great Lakes. During the late 1980s, the Center played a key role in developing a technical basis for interagency management of the walleye in Lake Erie and made important contributions to understanding the biology and population dynamics of other major species necessary for effective fishery management. A wetlands research program



**Today, modern technology, such as side-scan sonar, helps scientists record lake trout spawning habitat.**

was established in 1986. Providing information to restore naturally reproducing lake trout populations in all five Great Lakes was, and remains, an important research objective.

The Center's research mission expanded significantly in the early 1990s to include the ecology of the Great Lakes Basin ecosystem. To reflect its broader mission, in 1994, the Center was renamed the Great Lakes Science Center. Today, a wide range of research is conducted using the latest tools and technologies. Fisheries research remains a key area. Other areas include exotic species, habitat and biodiversity research, wetlands ecology, coastal research on public lands, and laboratory studies to provide information under controlled conditions.

The Great Lakes Science Center has a long history of cooperating with regional commissions and state, provincial, tribal, and other federal agencies in developing research to address resource management information priorities in the Great Lakes basin. The Center looks forward to continuing this work for many more years and to providing valuable information for managing our natural resources.