



U.S. Geological Survey and U.S. Fish and Wildlife Service News Release

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Dr. Leon Carl

734-214-7200

lcarl@usgs.gov

Dr. John Hartig

734-692-7608

john_hartig@fws.gov

Lake Whitefish Released in the Detroit River International Wildlife Refuge!

Lake whitefish, currently the number one commercial fish in the Great Lakes and a key indicator of ecosystem health, are once again reproducing in the Detroit River according to scientists with the U.S. Geological Survey (USGS) and the U.S. Fish and Wildlife Service (USFWS). In November 2005, scientists documented the presence of spawning lake whitefish and fertilized whitefish eggs in the river for the first time since 1916. This discovery provides further evidence of progress in ecological recovery of the Detroit River and the entire Huron-Erie Corridor (HEC) which includes St. Clair River, Lake St. Clair, the Detroit River, and western Lake Erie. The Detroit River International Wildlife Refuge is located in the HEC and the Detroit River is also designated an International Heritage River System.

Today, scientists from USGS and USFWS will symbolically release a small number of young whitefish, raised from eggs collected from the Detroit River last November, back into the river to celebrate the tremendous ecological improvements that have taken place.

“Whitefish restoration in the Detroit River clearly validates the U.S. and Canadian pollution control/prevention and conservation efforts over the last 35 years,” said Dr. Leon Carl, Center Director, USGS Great Lakes Science Center. “Scientific research and monitoring were instrumental in this whitefish recovery and will be essential in the future to fully understand the factors limiting natural reproduction and to potentially re-establish this heritage fishery.”

“Lake whitefish has long been a mainstay of commercial fishing in the Great Lakes because of its exceptional flavor,” said Dr. John Hartig, Refuge Manager, Detroit International Wildlife Refuge. “We now have the potential to not only restore this heritage fishery, but to help further ecotourism for over six million residents of southeast Michigan and southwest Ontario.”

The Detroit River was well known for its whitefish fishery in the 1800s and early 1900s, but habitat loss and degradation, pollution, and other factors contributed to the loss of this important fishery. For example, the dredging of the river bottom for navigation has caused changes to natural flow regimes in the river as well as the loss of substrates required by spawning lake whitefish and other native fish and aquatic organisms. The loss of these spawning grounds was a major contributing factor in the collapse of the whitefish fishery in the Detroit River in the early 1900s. In addition, changing flow patterns and velocity may have reduced access to habitat for some aquatic species. For example, larval fish may be carried directly into Lake Erie rather than to wetlands or other nursery habitat where they can grow before moving into the lake. This habitat loss and degradation, and pollution, also had tremendous economic impacts. In 1872, Detroit ranked second only to Chicago in landing over 2.5 million pounds of fresh fish worth \$126,000 (about 11% of the entire Great Lakes fishery and worth about \$2 million in 2006 dollars).

The good news is that water quality has improved substantially as a result of the 1972 U.S. - Canada Great Lakes Water Quality Agreement and the 1972 Clean Water Act. In the past 34 years there has been a more than 98% reduction in oil discharges, a 90% reduction in phosphorus loadings from the Detroit Wastewater Treatment Plant (one of the largest in North America), a 70% decline in mercury contamination of fish, and an 83% decline in PCB contamination of herring gull eggs from Fighting Island in the Detroit River. Pollution prevention and cleanup of the Detroit River and scientific research by the U.S. and Canada have contributed to the restoration of reproducing populations of peregrine falcons, lake sturgeon, and bald eagles, a greatly improved walleye fishery, and a potentially recovering lake whitefish population. Further, this evidence of natural reproduction of whitefish in the Detroit River helps support a multi-million dollar whitefish fishery in the Great Lakes.

The current and proposed habitat restoration and research that is taking place in the Detroit River and the entire Huron-Erie Corridor also addresses many of the recommendations of the Great Lakes Regional Collaboration (GLRC) Strategy to Restore and Protect the Great Lakes. The GLRC Strategy document was developed with input from federal, tribal, state, local, and non-governmental organizations and the general public and is viewed as a road map to help guide Great Lakes restoration and protection strategies. Scientists and managers hope that restoration of Detroit River whitefish will be nominated as a top priority under the GLRC and supported through the recently signed Great Lakes Fish and Wildlife Restoration Act that will provide \$16 million for restoring fish and wildlife habitat in the Great Lakes.

Refuge and HEC partners will continue to collaborate to find ways to better understand, restore, and manage this unique river ecosystem and re-establish a heritage fishery. A healthy and biologically diverse ecosystem will provide numerous economic, societal, and ecological benefits for the people of Detroit/Windsor and the Great Lakes region. The USFWS and USGS, along with the Michigan and Ohio Departments of Natural Resources, Ontario Ministry of Natural Resources and other key partners in the U.S. and Canada, are working to address critical restoration issues in the Detroit River and the entire HEC, and to coordinate management efforts. Together, they contribute to the ongoing ecological recovery and revitalization of this important ecosystem and North America's only International Wildlife Refuge.

The U. S. Geological Survey Great Lakes Science Center exists to meet the Nation's need for scientific information for restoring, enhancing, managing, and protecting living resources and their habitats in the Great Lakes basin ecosystem.

The USFWS provides scientific assistance to regional, state, tribal, and other interested entities by encouraging cooperative conservation, restoration, and management of the fishery resources of the Great Lakes Basin.

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