

The New York State-Threatened Longear Sunfish, *Lepomis megalotis*: Collection, Rearing and Recovery Efforts

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The Longear Sunfish is a colorful, deep-bodied fish that prefers weedy, slow-moving areas of creeks and small- to medium-size rivers. It's distributed throughout the Mississippi and Great Lakes drainages, including western New York.

Historically found in five water bodies in western New York, the Longear Sunfish is now limited to a small population in Tonawanda Creek of the Niagara drainage. Its decline is likely due to water quality deterioration arising from suburban sprawl and intense agricultural practices. A recovery program must be developed to save this interesting fish.

In June and September of 2005, Longear Sunfish were captured in the Huron River near Milford, Michigan. They were transported to New York and sent to the state pathologist for disease-free certification. Once certified, the fish were released into a small pond in the Perch River Wildlife Management Area (WMA). The pond was very productive, but had a clay bottom with dense aquatic vegetation. During the winter, piles of sand and gravel were placed on top of the ice. As the ice melted, the piles fell through, forming small spawning areas for the sunfish. The pond was then monitored weekly to see if any spawning behavior occurred. Finally, in mid-August 2006, male sunfish were seen building and guarding nests over the sand/gravel piles. Several weeks later the pond was sampled with a 50-foot haul seine and many young-of-year specimens were captured, verifying spawning success. Since aquatic plants were hindering our sampling efforts, the pond was treated with Sonar,[®] an herbicide.

Also in July 2006, a collection of Longear Sunfish was taken from the Moira River in Tweed County, Ontario,

Canada. Approximately 140 fish were brought back to New York and were held in holding tanks while pathology work was conducted. When these were determined to be disease-free, they were released in another pond in the Perch River Wildlife Management Area. We are hoping that these fish will spawn in 2007.

During the summer of 2005, we began working with the State University of New York at Brockport to start introducing some of the Huron River stock into the waters of New York State. Four sites have been selected for introductions: Marsh Creek and Johnson Creek in Orleans County; Cayuga Creek in Erie County; and Oneida Lake near Bridgeport in Madison County. Historical records show small populations at most of these sites and their habitat qualities are ideal for these sunfish. At this time only 1,250 juveniles have been released into the Marsh Creek site. These fish will be monitored closely to determine fingerling survival and, we hope, will become a reproducing population.

In the future we hope to capture a small number of Longear Sunfish from the Tonawanda Creek stock and transport them to another pond at the Perch River WMA. This stock is likely genetically unique, reproductively isolated, and the last functional population of Longear Sunfish in New York State; therefore, it is of the utmost importance to sustain this population.

The goal is to preserve and protect current self-sustaining populations and habitats of Longear Sunfish and to re-establish the species into historic watersheds of New York State. In addition, we will be looking to identify other potentially suitable habitats in New York. 