



Lake Sturgeon Restoration Efforts in the Midwest Region

James Boase, Rob Elliott, Henry Quinlan, Doug Aloisi, and Ann Runstrom

Leadership and Coordination

The U.S. Fish and Wildlife Service is recognized as a leader in lake sturgeon restoration throughout the Midwest Region. Working with other fishery agencies and the Great Lakes Fishery Commission, Service biologists chair sturgeon restoration committees on lakes Superior, Michigan, Huron and Erie. These committees function to coordinate and guide sturgeon restoration and research activities in their respective Great Lake.



As a partner in lake sturgeon restoration efforts the Service established the Great Lakes Lake Sturgeon Web Site which directly serves over 40 agencies, universities, and organizations throughout the region.

Habitat Creation



Lake sturgeon spawning habitat in the St. Clair River near Port Huron, MI (Adam Lintz photo).

Several artificial reefs were constructed in the St. Clair/Detroit River System focusing on lake sturgeon restoration. These reefs have not only benefited the lake sturgeon population in this system, they also provide habitat for other native fish species, including the globally rare northern Madtom.

Following the Strategic Habitat Conservation Model the Service, working with partners has lead efforts to assess which reefs are most successful and then incorporating that information into new habitats planned for the future. The construction of these reefs will aid in the delisting of the "Loss of Fish Habitat" Beneficial Use Impairment in this Area of Concern and the restoration of the lake sturgeon population.



Drop barge preparing to deploy rock material to create spawning habitat in the Detroit River (Jen Read photo).

Status and Monitoring



Lake sturgeon captured during population assessments in the Detroit River, MI (James Boase photo).

Adult, juvenile, and larval lake sturgeon assessments are conducted annually by Midwest Region Fish and Wildlife Conservation Offices to monitor lake sturgeon populations. The Service has taken a leadership role collaborating with other federal, state, and tribal agencies regarding lake sturgeon management.

Through careful monitoring, the Service and its partners are able to make scientifically sound management decisions regarding lake sturgeon populations around the Great Lakes.



Looking to the future, Service biologists assess juvenile sturgeon abundance and distribution (Service photo).



Service biologists work with partners to assess sturgeon populations in Great Lakes tributaries (Service photo).

Fish Passage

Most historic sturgeon rivers within the Great Lakes and Mississippi River basins contain dams that inundate and block access to historic spawning and rearing habitat important for lake sturgeon. Construction of fish passage facilities specifically designed for sturgeon is an important component of population rehabilitation across the Midwest Region where dam removal is not feasible. After more than a decade of research, assessment, planning, negotiations, and funding acquisition, fish passage facilities specifically designed for lake sturgeon passage are, have recently, or will soon be constructed on several major sturgeon rivers within the Midwest Region. These rivers include the Menominee River (tributary to Lake Michigan) and the Chippewa and Wisconsin Rivers within the Mississippi River drainages.



Sturgeon passage facilities are being constructed at these lower two dams on the Menominee River in 2013 (NEW Hydro photo).

Stocking and Streamside Rearing

Lake sturgeon culture for restoration encompasses many strategies in the Midwest Region, from producing small amounts of river specific progeny alongside natal streams (i.e., streamside rearing) to multi-agency stocking efforts involving the direct participation of federal, state, and tribal conservation partners. Each year thousands of lake sturgeon eggs and fingerlings are propagated on site or distributed from federal hatcheries to further lake sturgeon restoration efforts and to supply fish for research initiatives. Streamside rearing facilities have been established to increase the likelihood of sturgeon imprinting to their natal stream and minimize genetic outbreeding while maintaining genetic diversity in the Great Lakes.



This Service's lake sturgeon streamside rearing trailer is one of six such facilities in use on Lake Michigan rivers (Service photo).

The U.S. Fish and Wildlife Service's mission is, working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people.