

U.S. Fish & Wildlife Service

# Lake Sturgeon

*Giant of the  
Great Lakes*





### A Great Fish of the Great Lakes

Contemporaries of dinosaurs, lake sturgeon have remained unchanged for millions of years. Once abundant in the shallows of the Great Lakes, these ancient fish look like fossils sprung to life.

A resident of the Great Lakes for 10,000 years, the lake sturgeon is more than a holdover from the distant past—it is a barometer of the health and diversity of the entire Great Lakes ecosystem. Today lake sturgeon inhabit large river and lake systems throughout the Great Lakes basin and the Mississippi River and Hudson Bay drainages.

Lake sturgeon are an awesome sight. The largest fish in the Great Lakes, they can grow to be nine feet long and weigh more than 300 pounds. Like their prehistoric ancestors, lake sturgeon have a distinct shark-like tail and rows of armored plates called “scutes” for protection. Despite their intimidating look and size, sturgeon are a docile fish. They have no teeth, and instead use a protruding vacuum mouth to feed on insects, crustaceans, fish and other organisms on the lake bottom.

Female sturgeon generally first reproduce between the ages of 24 and 26 years old—older than humans! Males usually mature between 8 and 12 years old, but may take up to 22 years to mature. Females spawn only once every four to nine years and males once every two to seven years. The sturgeon's periodic spawning cycle results in only 10 to 20 percent of the population spawning during a given year. While female sturgeon can live up to 150 years, the male sturgeon's life span is typically 50 to 60 years.

*Lay the monster  
Mishe-Nahme,  
Lay the sturgeon,  
King of fishes;  
Through his  
gills he breathed  
the water,  
With his fins  
he fanned and  
winnowed,  
With his tail  
he swept the  
sandfloor;  
There he lay in  
all his armour...*

*—The Song of  
Hiawatha  
by Henry  
Wadsworth  
Longfellow*



## From Revered to Nuisance to Caviar...and Back

Native Americans revered the sturgeon as an important part of their culture that provided the community with food, oil, leather and other staples. Early commercial fishermen (before 1850) slaughtered sturgeon as a nuisance fish that destroyed fishing nets targeted at other species.



Great Lakes Fishery Commission

By the mid to late 1800s, the economic value of lake sturgeon was recognized and a targeted commercial fishery intensified. Total catch of lake sturgeon peaked in the mid 1880s at 4,901 metric tons (8.6 million pounds). However, by 1900 commercial catches began to decline quickly as the population of sturgeon plummeted. Between 1900 and the 1970s, sturgeon populations continued to decline.

In addition to over-harvesting, habitat loss is a major factor contributing to the sturgeon's decline. In the Great Lakes, the damming of tributary waters has prevented access to historical spawning grounds and other spawning areas have been



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destroyed by siltation resulting from deforestation, poor agricultural practices and dredging. Pollution from nutrients and contaminants in the water has hindered reproductive success and the sturgeon's late maturity and infrequent spawning has also contributed to its decline.

Lake sturgeon populations that remain in the Great Lakes today represent only a fraction of their former number. The lake sturgeon is listed as a threatened species in 19 of the 20 states it inhabits and is recognized by the American Fisheries Society as threatened throughout North America. Lake sturgeon are now protected in most waters of the Great Lakes with closed seasons, size limits, harvest quotas and gear restrictions.



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## Partnerships to Bring Back the Lake Sturgeon

Throughout the Great Lakes, over 40 partnerships have been formed between federal and state agencies, tribal governments, Canadian agencies, academic institutions, commercial fishers, sport anglers, private organizations and individuals in order to conserve, protect and enhance lake sturgeon populations. U.S. Fish & Wildlife

Service offices throughout the Great Lakes are working together with other partners to better understand the lake sturgeon's unique life history and meet rehabilitation challenges.

Partners capture lake sturgeon to gather information such as age, growth and health of sturgeon, then tag and release the fish. Data from recaptured fish help biologists determine the number, distribution and movement of the fish. Telemetry studies are underway to determine lake sturgeon daily and seasonal movement, spawning areas and preferred habitat. Biologists evaluate the success of spawning and larval development, as well as factors inhibiting successful reproduction. The genetic analysis being conducted will help determine population variability and overlap.

These partners are also working together on various other projects, including the design and evaluation of "fishways" which will allow sturgeon to by-pass dams; stocking rivers with hatchery-reared lake sturgeon; and controlling sea lampreys to protect sturgeon. Law enforcement officers are also valuable partners who work to prevent the illegal harvesting of sturgeon and to educate the fishing public.

The many partnerships formed throughout the Great Lakes allow agencies and organizations to share knowledge and resources which helps to accomplish our common goal of lake sturgeon rehabilitation in the Great Lakes.

### **You Can Lend a Hand**

You can help the lake sturgeon stage a comeback. If you catch a lake sturgeon, and local fishing regulations allow you to possess it, gently measure and release the fish. If the fish has a tag, record the agency, number and color of the tag and then contact that agency. Report sightings of lake sturgeon to your nearest U.S. Fish & Wildlife Service Fishery Resources Office.

For centuries the lake sturgeon has been an important member of the Great Lakes fish community. Through education, increased awareness, habitat protection, water quality improvement and regulatory measures, we can still ensure a bright future for this timeless giant of the Great Lakes.

Visit the Great Lakes Lake Sturgeon web site (<http://www.fws.gov/r3pao/sturgeon>) for more information on programs, activities and agencies that benefit sturgeon.



Keweenaw Bay  
Indian Community



S. A. Stephenson, Fisheries and Oceans Canada

**Great Lakes  
Fishery Resources Offices**

**Lake Superior  
2800 Lakeshore Dr. E.  
Ashland, WI 54806  
715/682 6185 ext. 203**

**Lake Huron and Lake St. Clair  
145 Water Street  
Alpena, MI 49707  
517/356 3052**

**Lake Michigan  
1015 Challenger Ct.  
Green Bay, WI 54311  
920/465 7440**

**Lakes Ontario and Erie  
405 North French Road  
Amherst, NY 14228  
716/691 5456**

**Hearing impaired individuals can also reach these offices  
through the Federal Relay Number at 1 800/877 8339.**



**This brochure is a product of the U.S. Fish & Wildlife Service  
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Available in alternative formats upon request.**