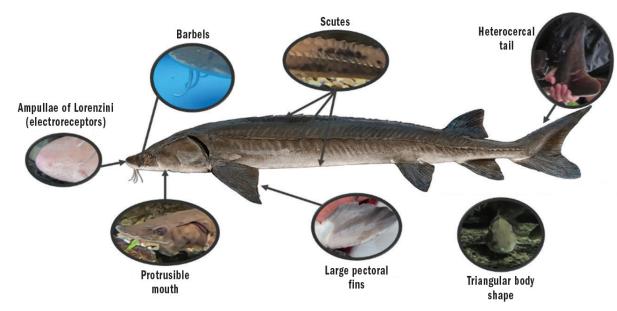
Lake Sturgeon Acipenser fulvescens

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Key features of the Lake sturgeon anatomy. Image credit: University of Wisconsin Zoological Museum

General Information and Description

Lake sturgeon are one of the largest and longest-lived freshwater fish inhabiting some of New York State's (NYS) rivers and lakes. Mature lake sturgeon average 6 feet in length and 100 pounds, but can grow to upwards of 8 feet and 300 pounds. They are known to reach ages of more than 100 years! Sometimes referred to as "living fossils", their prehistoric appearance hasn't changed for millions of years. Lake sturgeon are torpedo-shaped, and covered in five rows of distinct bony plates called scutes. They use barbels, specialized sensory pores (Ampullae of Lorenzini) on their snout, and a vacuum-like mouth to eat invertebrates and fish from a lake or river bottom. By the 1900s, lake sturgeon populations were brought to extremely low levels; a direct result of overfishing and habitat degradation. To protect remaining populations of lake sturgeon, New York State has designated lake sturgeon as "Threatened".

This status indicates they are a native species that could become an endangered species (at risk for extinction) within the foreseeable future. For this reason, they are the focus of several different research, conservation, and restoration projects. Lake sturgeon are a valued part of many Indigenous cultures and play an important role in the aquatic food web and ecosystems.

Biology/Life History

Lake sturgeon are found in shallow, nearshore waters of lakes and rivers. In the spring, May-June, they move to high flow rivers to spawn. They select a hard substrate such as cobble, gravel, or rubble to lay their eggs. A mature female lake sturgeon may lay 100,000-800,000 eggs during a single spawning season! Eggs hatch in 5-8 days and grow rapidly, reaching 7.5 inches by the end of the first year.

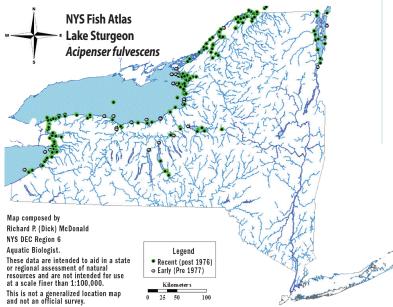




New York Sea Grant is part of a nationwide network of 34 university-based programs working with coastal communities through the National Oceanic Atmospheric Administration (NOAA). Sea Grant research and outreach programs promote better understanding, conservation, and use of America's coastal resources. Sea Grant is funded in New York through SUNY and Cornell University and federally through NOAA.

Distribution in New York State

In New York, lake sturgeon can be found in locations such as: Lake Ontario, Lake Erie, St. Lawrence River, Niagara River, Oswegatchie River, Grasse River, Lake Champlain, Cayuga Lake, Onondaga Lake, Cross Lake, Oneida Lake, and in the Seneca-Cayuga Canal.



Current and historic lake sturgeon distribution in New York State, 2016, Atlas of Inland Fishes of New York. *Image credit: New York State Museum*

Attention Anglers: *What to do to help?*

Remember, it is illegal to target lake sturgeon in New York State. If unintentionally caught:

- o Return fish to the water unharmed and as quickly as possible
- o Avoid bringing into boat
- o Remove hook
- o Support the fish horizontally
- o Move to another fishing spot to avoid re-hooking or catching another sturgeon by accident

To find other ways to help Lake Sturgeon, visit: www.nyseagrant.org/lakesturgeon

Juvenile lake sturgeon raised in the New York State Department of Environmental Conservation (NYSDEC) Oneida Lake Fish Hatchery, held by hatchery employee. Image credit: E. Stoddard/ NYSDEC



Conservation and Research Efforts

The New York State Department of Environmental Conservation (NYSDEC) and U.S. Fish and Wildlife Service (USFWS) are collaborating on propagation and stocking (Oneida Lake Fish Hatchery and Genoa National Fish Hatchery). They collect eggs and milt from spawning adult lake sturgeon in the wild. Fertilized eggs are brought back to hatcheries where they are raised before being returned to the wild. About 10,000 juvenile lake sturgeon are stocked in NYS waters annually. The USFWS, NYSDEC, and U.S. Geological Survey (USGS) study lake sturgeon movement within the Great Lakes and tributaries with the use of acoustic telemetry. Acoustic tags are implanted surgically and provide scientists with information about seasonal movement and habitat use and preference. Scientists conduct research across the state, focusing on topics such as lake sturgeon diet, age and growth, restoration ecology, and adaptive management.



Cornell University scientists catch, tag, and release lake sturgeon in Oneida Lake. Image credit: T. Brooking/Cornell University

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