



LAKE STURGEON

Acipenser fulvescens

Lake sturgeon were historically abundant in all of the Great Lakes. They served as an important food source for many Native American tribes. When European settlers arrived in the region, sturgeon were so numerous during the spring spawning run that they were reportedly capable of capsizing fishing boats.

Life History

Lake sturgeon are nearshore fish that live at water depths of 15 to 30 feet. They feed along lake bottoms, eating a variety of small animals including snails, crustaceans, aquatic insects, mussels, and small fish. Most lake sturgeon caught today weigh between 30 and 100 pounds and grow three to six feet in length.

Lake sturgeon live longer than any other fish species in Michigan. Male lake sturgeon live an average of 55 years. Females live 80 to 150 years. Despite their long lives, sturgeon are slow to mature. It takes between 8 and 12 years for male lake sturgeon to reach reproductive maturity and 20 to 25 years for females.

In early spring, adult sturgeon enter fast flowing rivers to spawn. Female lake sturgeon spawn once every four years, each depositing millions of eggs on gravel bars. It is estimated that only about 10 to 20 percent of adult lake sturgeon spawn during a given year.

Take the Lake Sturgeon Quiz and see related standards based curriculum on the back of this sheet.

Habitat Restoration

Today, the State of Michigan prohibits commercial fishing for lake sturgeon and closely regulates sturgeon sport fishing. A limited number of sportfishing licenses are issued each year. In some areas of the state, volunteers help monitor spring spawning runs to protect sturgeon from being taken illegally.

Other management efforts focus on tracking sturgeon migration and identifying the location of remaining spawning grounds. Restoration efforts involve creating and protecting sturgeon habitat to enhance spawning success.

Belle Isle Habitat Project

The Detroit River ecosystem supports a remnant population of lake sturgeon. In 2004, Michigan Sea Grant led a consortium of federal, state and private groups in the construction of three sturgeon spawning reefs in the waters off Belle Isle. The project represents the largest effort to date to restore a primitive, wild fish within a major urban area in the Great Lakes region. The reefs are made of limestone rock, cobblestone, and coal cinders—materials used by spawning lake sturgeon in other areas of the Great Lakes. Biologists monitor the reefs to assess sturgeon spawning success.

www.miseagrant.umich.edu



Contact

Jennifer Read
Assistant Director, Research Coordinator
jenread@umich.edu
(734) 936-3622



Michigan Sea Grant College Program
Michigan Sea Grant is a cooperative program of the University of Michigan and Michigan State University. Funding: NOAA-National Sea Grant College Program with matching funds from the University of Michigan and Michigan State University. Michigan State University and the University of Michigan are equal opportunity/affirmative action institutions.

UNIVERSITY OF MICHIGAN

MICHIGAN STATE UNIVERSITY

For more information, see: www.miseagrant.umich.edu/sturgeon

LAKE STURGEON QUIZ

Multiple Choice

Female sturgeon produce about how many eggs?

- a) One hundred (100)
- b) Eighty thousand (80,000)
- c) Four million (4,000,000)

The sturgeon's oily swim bladder was often processed to produce isinglass, a type of gelatin used in making what type of product?

- a) Jello
- b) Beer and wine
- c) Soda pop

How many teeth do lake sturgeon have?

- a) Twenty eight (28)
- b) Twelve (12)
- c) Zero (0)

What is the name of the Detroit River island closest to the sturgeon habitat project?

- a) Mackinac Island
- b) Belle Isle
- c) Grosse Ile

Female sturgeon live to be how old?

- a) 80–150 years old
- b) 11 months old
- c) 15–25 years old

True or False

The State of Michigan prohibits commercial fishing for lake sturgeon and closely regulates sturgeon sport fishing.

- a) True
- b) False

The current lake sturgeon population is estimated to be ten percent of its historic abundance in Michigan.

- a) True
- b) False

People once burned huge piles of sturgeon along the shores of the Detroit River. They also used oily sturgeon carcasses as fuel for passing steam ships.

- a) True
- b) False

Sturgeon have uneven or asymmetrical tails like those of sharks.

- a) True
- b) False

When European settlers arrived in the region, sturgeon were so numerous during the spring spawning run that they were reportedly capable of capsizing fishing boats.

- a) True
- b) False

Fish of the Great Lakes

Standards-based Activity:

Working with a set of Great Lakes fish cards, students identify distinguishing characteristics of fish and organize the collection based on similarities and differences, as well as into an interconnected food web.

The Great Lakes and other lakes and rivers of the region are home to an impressive variety of fish. Among the species are coldwater fishes like lake trout and lake whitefish, and ancient species such as sturgeon and gar. Students may be most familiar with warm-water fishes like sunfish and bass. Each major family of fishes has traits that set it apart from others, called distinguishing characteristics. These characteristics help fish survive in their environment. By observing and comparing distinguishing characteristics, students begin to understand how fish, like other animals, can be organized and classified into meaningful groups, and how these groups are interrelated in the aquatic food web.

See Fisheries Learning on the Web

Download fish cards:

www.miseagrant.umich.edu/flow/U3

Grade level: 4–8

Subjects: Science, social studies

Setting: Classroom

Duration: 30–60 minutes

Michigan Science Curriculum Standards:

I.1.1, 1.2, 1.5, 1.6

II.1.2, 1.3, 1.4

III.2.4, 4.2, 5.1, 5.2, 5.3, 5.5

Also see: advanced lesson, *Fins, Tails and Scales: Identifying Great Lakes Fish*. www.projectflow.us

For the correct answers, see the sturgeon website at www.miseagrant.umich.edu/sturgeon

