



# Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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## Atlantic Sturgeon

*Acipenser oxyrinchus*

State Status: **Endangered**

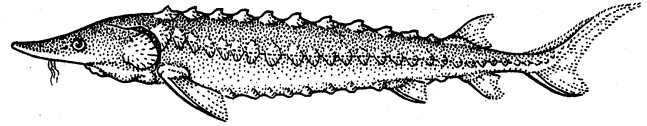
Federal Status: None

**Description:** The Atlantic Sturgeon is a very large prehistoric-looking fish, averaging 6 to 9 feet in length, but sometimes exceeding 13 ft in length and 800 lbs. Atlantic Sturgeon have five rows of well-developed, overlapping body plates called scutes. They have a long, pointed snout and a narrow subterminal mouth.

**Similar species:** The species most likely to be confused with the Atlantic Sturgeon is the Shortnose Sturgeon (see fact sheet). The most reliable distinguishing feature between the two species is mouth width: Atlantic Sturgeon have much narrower mouths than the Shortnose Sturgeon.

**Habitat:** The Atlantic Sturgeon is an anadromous fish, spawning in freshwater and spending much of its adult life in estuarine or coastal habitats. In freshwater, Atlantic Sturgeon use fast-flowing, rocky areas in rivers to spawn. They can be found in the Merrimack and Taunton Rivers.

**Food:** Atlantic Sturgeon are benthic feeders, consuming worms, amphipods, isopods, shrimps, mollusks, small fish, and large quantities of mud. They have two pairs of barbels which are used for feeling around for food. They do not feed during spawning migrations, but after spawning often feed in freshwater for a short time to regain energy. Sea lampreys are likely the only predators of adult sturgeon.

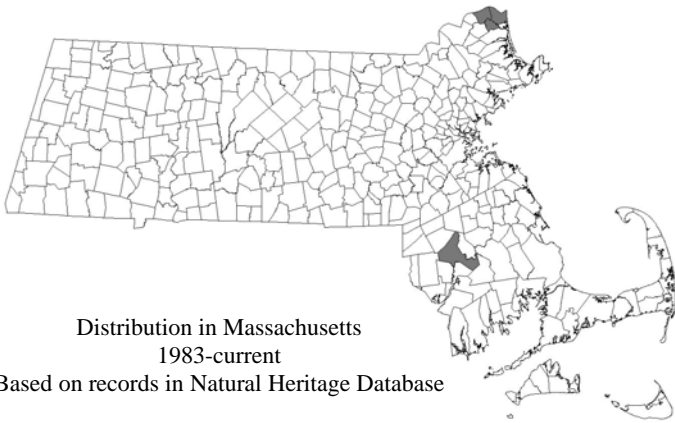


Drawing by Laszlo Meszoly, from Hartel et al. 2002. Inland Fishes of Massachusetts.

**Life History:** Atlantic Sturgeons migrate into freshwater rivers in May and June to spawn. Males generally migrate upstream earlier than females. Spawning occurs in flowing water over rocky substrates, often just above the salt front (the border between freshwater and saltwater). Little is known about sturgeon spawning, but egg fertilization is external and eggs are very adhesive and attach to rocks and plants. Spawning fish can sometimes be seen leaping and splashing. Females migrate back to the ocean soon after spawning, but males may remain in the rivers until colder weather arrives in the fall.

Juvenile Atlantic Sturgeons are active swimmers and remain in freshwater habitats feeding for some time but gradually move seaward as they mature, migrating out to sea between their second and sixth year when they reach a length of 760 mm. Female Atlantic Sturgeons do not spawn until they are at least 10 years old and over 150 lbs, whereas males often begin spawning younger when they are only 70 lbs. Although spawning runs occur every year, individuals do not spawn annually. Males spawn at intervals of 1 to 5 years and females spawn at intervals of 3 to 5 years. They can live up to 60 years.

**Threats:** Dams, water pollution, and historic over fishing are the major threats to this species. Two life history traits of the Atlantic Sturgeon make them particularly vulnerable to these threats 1) the late age at which they begin spawning and 2) requiring freshwater, estuarine, and coastal habitats to complete their life cycle.



Distribution in Massachusetts  
1983-current

Based on records in Natural Heritage Database

### Breeding Season

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Updated August 2008

Please allow the Natural Heritage & Endangered Species Program to continue to conserve the biodiversity of Massachusetts with a contribution for 'endangered wildlife conservation' on your state income tax form as these donations comprise a significant portion of our operating budget.