



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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Shortnose Sturgeon

Acipenser brevirostrum

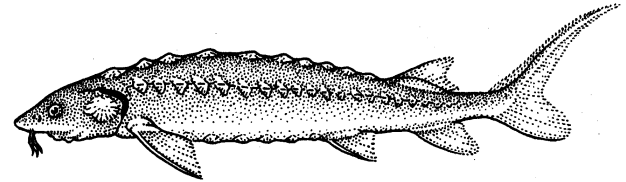
State Status: **Endangered**

Federal Status: **Endangered**

Description: The Shortnose Sturgeon is one of the smallest species of sturgeons, rarely exceeding 1 m (3 ft) in length. Adults possess a short, blunt, rounded snout with its mouth on the ventral side. They have four rows of bony plates called scutes along their body. Modified armored scales on the head give it a skull-like appearance. The Shortnose Sturgeon has a yellow-brown to blackish-olive dorsal surface, pale-colored scutes, and a white underside.

Similar species: The Shortnose Sturgeon can be confused with the Atlantic sturgeon. The best way to distinguish between the two species is by comparing mouth widths. The Shortnose Sturgeon's mouth is much wider, relative to head width, than that of the Atlantic Sturgeon.

Habitat: The Shortnose Sturgeon is an amphidromous species, meaning that they spawn in freshwater but enter saltwater habitats during their life. In Massachusetts, populations are mostly riverine, although estuaries and coastal areas are used during the winter months. They spawn in fast-flowing, rocky areas in rivers. They use areas with aquatic vegetation to feed. There are three populations of Shortnose Sturgeon in Massachusetts: one in the Merrimack River and two in the Connecticut River.



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

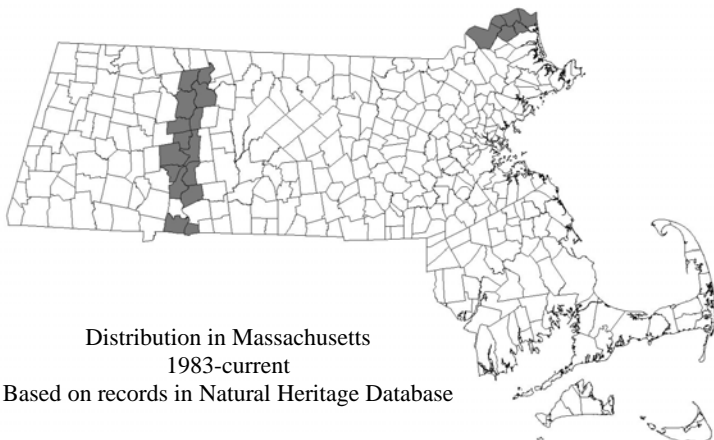
Food: They are benthic (bottom) feeders, using their extendable lips to siphon or vacuum up food. Young Shortnose Sturgeons eat insects and crustaceans, while adults eat a variety of foods including small mollusks, insect larvae, and crustaceans.

Life History: Shortnose Sturgeon spawning runs occur every year, but individuals may spawn only once every two to three years. In Massachusetts, the spawning runs usually occur in early May. Very little is known about the spawning behavior of this species. Spawning occurs in turbulent, fast-flowing water on gravel, rocky substrates and adults can sometimes be seen leaping and splashing.

After larvae hatch, they have poorly developed sensory systems and can not swim well so they hide under rocks or burrow into substrates. As their yolk sac is absorbed, their eyes and other sensory systems develop and they are able to swim normally.

Shortnose Sturgeons do not reach maturity until they are 5 to 10 years old, and spawning may be delayed further by as much as 2 years for males and up to 5 years for females. They may live up to 27 years or longer; the record is 67 years for females and 32 years for males.

Threats: Habitat degradation or loss and mortality are the main threats to this species. These threats can be through dams, bridge construction, channel dredging, impingement on water intake screens, and pollution. Shortnose Sturgeon are particularly vulnerable to these threats because they have a late age at which they spawn and because they undergo large movements to get to critical habitats.



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

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