



FRESHWATER FISH OF AMERICA

ATLANTIC STURGEON

Acipenser oxyrinchus oxyrinchus, (Mitchell 1815)



Atlantic Sturgeon. Photo credit: Egor Kamelev/Pexels

Natural History

Atlantic sturgeon are found along the east coast of North America, from southern Canada to northern Florida. They spend most of their adult life in the ocean migrating into coastal estuaries and rivers to spawn in spring and fall. They can occur in small groups or alone.

Female Atlantic sturgeon can lay between 400 thousand and 2 million eggs, depending on the size of the female. Adults return to the ocean after spawning, but may linger in the rivers till fall in northern rivers. Juveniles can spend up to 6 years in freshwater of large rivers or they move downstream into brackish waters near the river mouth, developing a tolerance to salinity as they go. As sub-adults, they live in coastal and continental waters where they grow and mature. Atlantic sturgeon are slow-growing and late-maturing. The males do not mature until they are 5 to 20 years old, and females mature at 7 to 30 years. The southern populations mature sooner than their northern counterparts. Adults live up to 60 years in northern populations, but likely only 25 to 30 years in the southeast. They can reach 14 feet in length.

Conservation

Atlantic sturgeon was listed as endangered in 2012. Within the Endangered Species Act, five Distinct Population Segments (DPS) were recognized, four of which are Endangered: (1) Carolina DPS; (2) Chesapeake Bay DPS; (3) New York Bight DPS; and (4) South Atlantic DPS, and one is listed as Threatened: (5) Gulf of Maine DPS. Threats to the five DPSs are generally the same and include habitat changes; degraded water quality; impeded access to spawning grounds by dams; reduced water quantity; vessel strikes; and bycatch in commercial fisheries. The impact of each of these threats varies by population segment.

FACTS AT A GLANCE

Size: Adult Atlantic sturgeon can reach 14 feet in length and weigh over 800 pounds. The largest was 811 pounds caught in coastal waters off Canada.

Age: Atlantic sturgeon live at least 30 years, with the oldest aged to be 60 years old captured from the St. Lawrence River. They don't mature until at least 10 to 30 years old, and then they reproduce every 1 to 5 years.

Range: Atlantic sturgeon live in marine and riverine systems along the eastern coast of the United States, ranging from southern Canada to northern Florida. Genetic, morphological, and archaeological evidence suggest that Atlantic sturgeon once colonized the Baltic Sea during the Middle Ages, replacing the native European sturgeon (*Acipenser sturio*), before becoming extirpated from Europe as a result of human activities and climate change.

Habitat: They inhabit the shallow waters of the continental shelf down to a depth of 246 feet and also coastal brackish waters. They enter large river systems to spawn.

Diet: Atlantic sturgeon eat crustaceans, worms and mollusks. As bottom-feeders, they use their barbels to find food, and their toothless mouth acts like a vacuum, capturing worms, small fish and other small animals living on the bottom.

<https://www.fws.gov/fisheries>

September 2023

Atlantic Sturgeon are managed cooperatively by the Service, NOAA, and state agencies and the Atlantic States Marine Fisheries Commission (ASMFC). The International trade of Atlantic sturgeon is now also restricted under the Convention on International Trade of Endangered Species (CITES).

Migration Behavior

Atlantic sturgeon migrate up and down the Atlantic coast of North America and into large tidal estuaries like the Chesapeake Bay and Albemarle Sound. They will return to large river systems where they were hatched, like the James River and the Roanoke River, to spawn.



Atlantic sturgeon. Photo credit: Ryan Hagerty/USFWS