Atlantic Coast Sturgeon

Life History

Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) and shortnose sturgeon (*Acipenser brevirostrum*) are anadromous fish found in rivers, estuaries, and coastal waters along the Atlantic Coast of North America. Anadromous fish migrate between fresh and marine waters throughout their life history for spawning, overwintering, and foraging. Most Atlantic and shortnose sturgeon return to the very river where they were born (natal river) to spawn. They are distinguishable from other fish by five rows of bony scutes along the length of their body, a protrusible mouth, and a heterocercal tail where the upper lobe is longer than the bottom. Atlantic sturgeon can reach over 14 feet in length and 60 years of age. Shortnose sturgeon can reach ages up to 67 years, but typically do not exceed lengths of 5 feet.

Atlantic sturgeon scutes (top), heterocercal tail (middle), and protrusible mouth (below).

Shortnose sturgeon photo courtesy of UMAINE (above); Dorsal scute (below)

Historic Fisheries

Atlantic and shortnose sturgeon were once abundant along the Atlantic coast of the United States. They were fished by Native Americans and European settlers for their protein rich meat. Oils from sturgeon were used to replace sperm whale oil in lamps, the skin was used for leather, and roe (eggs) was valuable as caviar.

The highest reported landings of sturgeon along the Atlantic coast were in the late 1800's due to the boom in the caviar industry. Throughout the 1900's population numbers declined dramatically due to overfishing and habitat degradation. These two threats were the primary influences responsible for population declines early in the 20th century.

ecomb at his commercial sturgeon-fishing operation at Sturgeon Island in Merrymeeting Bay, about 1900.

Commercial and recreational fishing for shortnose and Atlantic sturgeon is prohibited; however, fisheries directed at other species may continue to pose a threat to sturgeon given that they are incidentally (unintentionally) caught and killed in the gear that is used. Vessel strikes, dams, and habitat degradation continue to pose a threat to sturgeon as well.

Sturgeon and the ESA

The Endangered Species Act (ESA) was established to protect species from extinction. Shortnose sturgeon were listed as endangered throughout their range in 1967 under the Endangered Species Preservation Act, and later the ESA when it was enacted in 1973.

U.S. populations of Atlantic sturgeon were listed under the ESA in 2012. Five populations of Atlantic sturgeon, comprising at least 20 spawning rivers, occur in the U.S. The Gulf of Maine population was listed as threatened and the New York Bight, Chesapeake Bay, Carolina, and South Atlantic were listed as endangered (75 FR 61872).

Further information on status reviews, sturgeon, and the ESA process is available at the following website:

http://www.greateratlantic.fisheries.noaa.gov/protected/soc.

For sturgeon education and activities,

visit: http://www.greateratlantic.fisheries.noaa.gov/scutes/.