

Delaware River Atlantic Sturgeon Research



ATTENTION!

Please report any dead Atlantic sturgeon you find along the Delaware River or Bay to the Division of Fish & Wildlife (302) 735-8663. Or at:

<http://apps.dnrec.state.de.us/Sturgeon>

TAGGING PROGRAM:

If you happen to find or catch an Atlantic sturgeon please look for tags, write down the tag number, and call the phone number printed on the tag. Tag returns provide important information about the species.

What do the tags look like?



Do you know the difference?



For more information on Atlantic sturgeon contact:

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The Atlantic sturgeon is a prehistoric fish dating back >70 million years. It is found in coastal rivers and waters along the Atlantic Coast from Labrador, Canada to the St. Johns River, FL. Sturgeon have five rows of bony scutes running the length of their body and four sensory barbels in front of an extendable mouth with no teeth. The largest documented Atlantic sturgeon was 14 feet, 811 pounds, and 60 years old. Atlantic Sturgeon are anadromous, meaning they use freshwater rivers for spawning and marine environments for growth and migration. Males usually mature in 12-14 years while females tend to mature in 18-20 years. Adults ascend large coastal rivers for spawning from April-May and spawn at water temperatures from 55-65°F. After hatching, juvenile sturgeon remain in estuarine waters for several years before moving into coastal waters.

The Delaware River once supported the largest and most profitable Atlantic sturgeon fishery along the Atlantic Coast. However, overfishing of spawning adults, poor water quality, and by-catch of juveniles in other fisheries caused the population to collapse prior to the turn of the 20th century. Due to the depleted condition of Atlantic sturgeon populations along the Atlantic Coast, a coast-wide harvest moratorium was implemented in 1998. The goal of the moratorium is to restore Atlantic sturgeon spawning stocks to levels that will provide sustainable fisheries and ensure viable spawning populations. The Atlantic Sturgeon was listed as a federally protected endangered species in 2012, and portions of the Delaware River were determined to be critical habitat in 2017.

The Division conducts juvenile abundance surveys of Atlantic Sturgeon in the Delaware River. This survey monitors population levels and evaluates spawning success rate by evaluating the addition of newly hatched fish entering the sturgeon population. The survey uses small mesh gill nets to capture individuals that hatched over the past two years. The number of fish caught is used to estimate the population size for these young year classes. Telemetry tags provide biologists with a unique tool to identify areas of high concentrations of juvenile sturgeon as individual fish movements are monitored from their initial release throughout the life of the tag, which is usually from one to two years. The fish's daily position is calculated as the location most visited within a 24-hour period, and habitat use is determined by the location most preferred along the entire river. The survey indicates specific areas of the Delaware River are important nursery grounds for immature sturgeon. This information helps environmental programs protect the habitat need for the survival and recovery of the sturgeon population.

