



# Lake Sturgeon

## North Carolina Wildlife Profiles



Dylan Owensby/NCWRC

### Lake Sturgeon

(*Acipenser fulvescens*) (Rafinesque, 1817)

Lake Sturgeon are freshwater fish that were believed to be extirpated from North Carolina's waters in the mid-20th century. Lake Sturgeon have been reintroduced into the lower French Broad River downstream of Marshall, N.C. (Madison Co.), where the species has been stocked annually since 2015.

### Description

Due to habitat degradation, barriers to migration, overharvest and pollution, Lake Sturgeon (*Acipenser fulvescens*) have been extirpated from North Carolina and much of the Southeast United States for more than 50 years. In 2015, the N.C. Wildlife Resources Commission (NCWRC) joined surrounding states in the Southeast Lake Sturgeon Working Group in their comprehensive efforts to restore Lake Sturgeon to the Tennessee and Cumberland river systems. Brood stock comes from the Wolf River in Wisconsin, where the U.S. Fish and Wildlife Service (USFWS) works with Wisconsin Department of Natural Resources to collect eggs and milt for transportation and hatching at the Warm Springs National Fish Hatchery in Georgia. After hatching and growing to the late fry stage, Lake Sturgeon fry are sent to the USFWS National Fish Hatchery at Edenton, N.C. and the Wildlife Commission's Table Rock State Fish Hatchery for several months of grow-out before release. Approximately 2,000-9,000 juvenile Lake Sturgeon have been stocked annually in the French Broad River in Madison County since 2015.

### History and Status

Lake Sturgeon are slow-growing, long-living fish. They can live up to 150 years and can grow more than 6 feet and up to 200 lbs. Females mature at 14 to 33 years of age and reproduce only once every four or more years. Males mature at 8 to 20 years of age. Sturgeon are bottom dwellers that feed on aquatic invertebrates including larval insects, crayfish and mollusks. They use their barbels and thick lips to locate food.

Lake Sturgeon migrate upstream in the spring to spawn in riffle and shoal areas over boulder, cobble and coarse gravel substrates. Research has shown that egg survival is dependent on available interstitial space that is relatively clear of silt.

Learn more about Lake Sturgeon at [ncwildlife.org/lake-sturgeon](http://ncwildlife.org/lake-sturgeon).

### Habitats & Habits

Lake Sturgeon are benthic (bottom-dwelling) and prefer sand and gravel substrates in rivers, lakes and reservoirs. In North Carolina, Lake Sturgeon have been reintroduced into the lower French Broad River downstream of Marshall, in Madison County, where the species has been stocked annually since 2015.

The Lake Sturgeon is classified as a State Species of Special Concern.



U.S. Fish and Wildlife Service



Dylan Owensby/NCWRC



Dylan Owensby/NCWRC

### Range and Distribution

In North Carolina, Lake Sturgeon are limited to the French Broad River in Madison County.

### Range Map



■ Lake Sturgeon Range Map

# Lake Sturgeon

Wildlife Profiles - North Carolina Wildlife Resources Commission

## Regulations and Permits

Lake Sturgeon are listed as Species of Special Concern in North Carolina. There is no open season for sturgeon in North Carolina. Any sturgeon caught must be immediately released. A Scientific Fish Collection License is needed to take or collect any aquatic animal for scientific purposes. An Endangered Species Permit is also required in order to take or possess any State or Federally listed endangered, threatened or special concern species for scientific, education, exhibition or other purposes.

## NCWRC Interactions

Biologists are conducting ongoing research to find out more about population size, spawning migrations, habitat, food requirements, reproductive biology, and early life history. Biologists will use results from the research to conserve and enhance habitat and explore expansion of populations into other areas of the Tennessee River System.



Luke Etchison

## Wild Facts

### Classification

Class: Actinopterygii

Order: Acipenseriformes

### Average Size

3 to 6 feet

### Food

Aquatic invertebrates including larval insects, crayfish and mollusks

### Breeding

Spawning occurs in Spring over riffles and shoals with coarse gravel, cobble and boulder substrates. Spawning behaviors include porpoising and even jumping out of the water prior to and during spawning.

### Life Expectancy

Up to 150 years

## References

<https://www.fws.gov/southeast/wildlife/fishes/lake-sturgeon/>

## Credits

Written by Dylan Owensby and Luke Etchison, N.C. Wildlife Resources Commission.  
2019