



## NOAA FISHERIES SERVICE

### Atlantic Sturgeon South Atlantic Distinct Population Segment: Endangered

Based on the best available science, we determined that the South Atlantic distinct population segment of Atlantic sturgeon is endangered because it is currently in danger of extinction throughout its range due to:

- (1) precipitous declines in population sizes and the protracted period in which sturgeon populations have been depressed;
- (2) the limited amount of current spawning; and,
- (3) the impacts and threats that have and will continue to prevent population recovery.

#### Population

Numbers of Atlantic sturgeon in the South Atlantic distinct population segment are extremely low compared to historic levels and have remained so for the past 100 years.

- The Altamaha River, Georgia, spawning population, which is believed to be the largest in the Southeast, is at approximately 6% of its historic level. The remaining riverine spawning populations in the South Atlantic distinct population segment are estimated to be at less than 1% of their historic numbers.
- Prior to 1890, there were an estimated 8,000 spawning adult females in South Carolina and 11,000 spawning adult females in Georgia.
- Currently, there are an estimated 343 adult Atlantic sturgeon spawning annually in the Altamaha River, and less than 300 adults spawning each year in each of the remaining existing spawning populations in the South Atlantic distinct population segment.

#### Spawning

In addition to having fewer numbers of fish spawning, some spawning populations have been completely eliminated.

- There are believed to be spawning populations in only six of 9-10 historical spawning rivers within the South Atlantic distinct population segment.
- Elimination of at least two spawning populations has occurred (the St. Marys and St. Johns rivers), with the fate of two additional spawning populations uncertain at this time.



Atlantic sturgeon photos courtesy of Robert Michelson.



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### Threats

Threats to already depressed populations of Atlantic sturgeon from habitat degradation and being accidentally caught and potentially injured or killed by fishermen are working in combination to put the South Atlantic distinct population segment in danger of extinction.

- Approximately 63% of historical sturgeon habitat in the St. Johns River is believed to be blocked by a dam, and there is no longer a spawning population in this river (though it is still used as nursery habitat by juveniles spawned in other rivers). The 37% of historical habitat available for spawning is lower quality and not sufficient to allow recovery of the South Atlantic distinct population segment.
- Dredging, which can displace sturgeon while it is occurring and affect the quality of the habitat afterwards by changing the depth, sediment characteristics, and prey availability, is occurring throughout the range of the South Atlantic distinct population segment (e.g., the Savannah River and the St. Johns River).
- Water quality and quantity parameters (temperature, velocity, depth, dissolved oxygen, pollutants) have been degraded in areas throughout the range of the South Atlantic distinct population segment. This has occurred as a result of runoff from agricultural runoff, silviculture, industrialization (e.g., paper mills), the alteration of river systems by dams and reservoirs, and the transfer of water between river basins for commercial and residential uses.
- Climate change is expected to exacerbate existing water quality and quantity problems in the range of this distinct population segment.
- Fisheries known to incidentally catch Atlantic sturgeon occur throughout the marine range of the South Atlantic distinct population segment and in some riverine waters as well. Because Atlantic sturgeon mix extensively in marine waters and may use multiple river systems for spawning, foraging, and other life functions, they are subject to being caught in multiple fisheries throughout their range.

For more information on Atlantic sturgeon, visit:

<http://sero.nmfs.noaa.gov/pr/sturgeon.htm>

<http://www.nmfs.noaa.gov/pr/species/fish/atlanticsturgeon.htm>