Shortnose sturgeon (Acipenser brevirostrum)

Freshwater Fish Species of Concern

State Rank: S1 (critically imperiled) Global Rank: G3 (vulnerable)

Description

The shortnose sturgeon is a large fish, growing to 109 cm, with a heterocercla tail. It has a short, non-upturned, bluntly V-shaped snout, large fleshy barbels, a ventral mouth, large bony scutes on the head, back and sides, which are paler than adjacent skin. The shornose sturgeon is dark brown to black above, light brown to yellow on lower sides, and white below (natureserve.org)



Photo:

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Behavior

The shortnose sturgeon scatters its eggs openly, usually over rubble in the spring or fall, and does not guard its eggs (Cooper 1983). The species usually travels at least 200 km upstream to spawn. After spawning, the fish will return downstream; in the fall, the spent spawners will pass the spring spawners on their run.

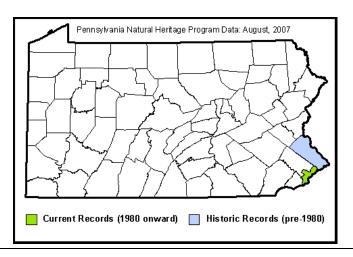
Diet

The shortnose sturgeon is demersal and feeds on a variety of benthic organisms found on the sea floor or on plant surfaces. Juveniles in the Hudson River estuary were found to have eaten mainly midge larvae and amphipods, along with other available benthic crustaceans and insects. Adults in freshwater will consume mollusks, crustaceans, and insect larvae. In estuaries, adults will eat polychaete worms, crustaceans, and mollusks (natureserve.org).

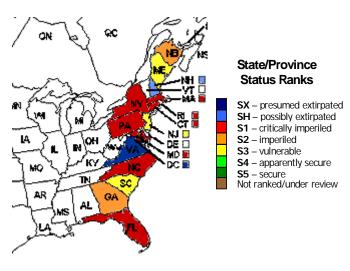
Threats and Protection Needs

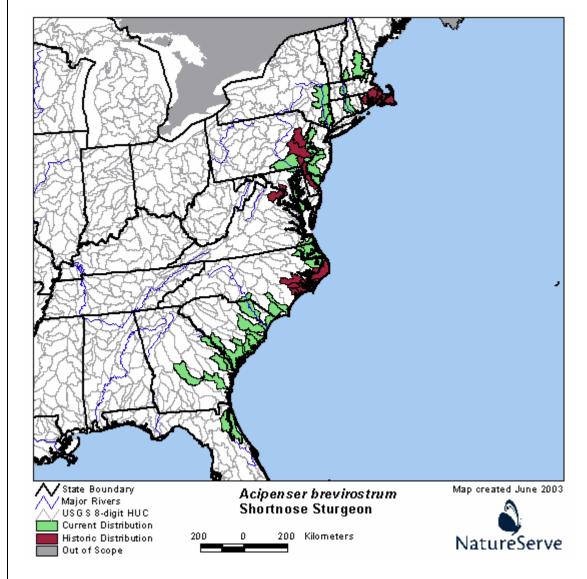
The shortnose sturgeon is endangered in Pennsylvania. It is thought that habitat destruction is a primary threat to the species, although, it is still caught in fishing, sometimes accidentally by fishermen who do not recognize it as distinct from the Atlantic Sturgeon. Damming has had an exceptionally detrimental affect on the shortnose sturgeon as dams have cut off upriver spawning areas, altered stream flow and temperature, and increased water pollution (natureserve.org). The main global protection needs for the shortnose sturgeon are as follows: improving water quality, protecting spawning sites, and restricting damming and dredging. Point and non-point source pollution is a problem for the shortnose sturgeon and to ameliorate this, critical habitat should be

identified and protected against such pollution (natureserve.org). The shortnose sturgeon is listed endangered both federally and in Pennsylvania (www.naturalheritage.state.pa.us).



North American State/Province Conservation Status Map by NatureServe (2007)





Habitat

Shortnose sturgeons are most abundant in estuaries within a few miles of the sea. But, they are also found in large deep rivers and the sea (natureserve.org). Individuals have, in recent years, been taken in the lower Delaware River and there are records of specimens being taken from freshwater at Torresdale, Pennsylvania. The shortnose sturgeon is now considered an endangered species in Pennsylvania and over most of the Atlantic Coast. Shortnose sturgeons range along the Atlantic coast from Florida to New Brunswick (Cooper 1983).

References



- Cooper, Edwin L. Fishes of Pennsylvania and the Northeastern United States. The Pennsylvania State University Press and University Park and London. 1983
- NatureServe. 2007. NatureServe Explorer: An online encyclopedia of life [web application]. Version 6.2. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: September 6, 2007).