Species of Concern
NOAA National Marine Fisheries Service

Atlantic sturgeon
*Acipenser oxyrinchus oxyrinchus*

Marine Fisheries Commission (ASMFC). In 1998, ASMFC instituted a coast-wide moratorium on the harvest of Atlantic sturgeon, which is to remain in effect until there are at least 20 protected year classes in each spawning stock (anticipated to take up to 40 or more years). NMFS followed this with a similar moratorium for Federal waters. Amendment 1 to ASMFC’s Atlantic sturgeon Fishery Management Plan also includes measures for preservation of habitat, habitat restoration and improvement, bycatch monitoring, stock recovery, and breeding/stocking protocols. Accurate
estimates of bycatch are needed to determine the size of this threat. A 2003 NMFS/USFWS workshop concluded that some populations were recovering while others were not. As a result NMFS began to look into whether the species warranted listing under the Endangered Species Act (ESA). A petition to list Atlantic sturgeon under the ESA was submitted by the Natural Resources Defense Council in October 2009. NMFS announced on 6 January 2010 that the petitioned action may be warranted and decided to seek a new round of public comment to update the 2007 status review before moving forward with a 12-month finding and determination on whether to propose ESA listing.

Brief Species Description:
The Atlantic sturgeon is a subtropical, anadromous species that attains lengths of up to 14 feet (4.25 m) (ASSRT 2007). Historically, they were present in 38 rivers in the U.S. from St. Croix, ME to the Saint Johns River, FL, of which 35 rivers have been confirmed to have had a historical spawning population. They are currently present in 35 rivers, and spawning occurs in at least 20 (ASSRT 2007). Atlantic sturgeon are bluish black or olive brown dorsally with paler sides and a white ventral surface. They can be distinguished from shortnose sturgeon by their larger size, small mouth, bony scutes between the anal fin base and the lateral scute row, a double row of scutes behind the dorsal fin, a double row of scutes before the anal fin, and a pale intestine. They may live up to 60 years (ASSRT 2007). There is faster growth and earlier maturation in southern populations, though not all data are consistent. For example, maturity is at 5 to 19 years of age in South Carolina, 11 to 21 in the Hudson River, and 22 to 34 in the Saint Lawrence River (ASSRT 2007).

Spawning adults migrate upriver in spring, beginning in February-March in the south and May-June in Canadian waters. In some areas, a small spawning run may also occur in the fall. Spawning occurs in flowing water between the salt front and fall line of large rivers. Atlantic sturgeon spawn every 1 to 5 years for males (Caron et al. 2002) and every 2 to 5 years for females (Stevenson and Secor 1999). Following spawning, males may remain in the river or lower estuary until fall; females typically exit the rivers within 4 to 6 weeks. Adults forage on benthic invertebrates (mussels, worms, shrimp), and reach weights of 800 pounds (363 kg). Juveniles move downstream into brackish waters for a few months; and at about 30 to 36 inches (76-92 cm) they move into coastal waters. Tagging data indicate that immature Atlantic sturgeon travel widely once they emigrate from their natal (birth) rivers.

References:


