

# Threatened and Endangered Species

United States Department of Agriculture  
Natural Resources Conservation Service  
Montana

## PALLID STURGEON *Scaphirhynchus*



**OFFICIAL STATUS:** **Endangered.** Endangered species are species that are in danger of extinction throughout all or a significant portion of their range. It is unlawful to kill, harm, or harass endangered species.

**LISTED:** 55 Federal Register 36641; September 6, 1990.

**HISTORICAL STATUS:** Pallid sturgeon were not identified as a separate species until 1905. Because of that, the historic data is sparse. However, catch records indicate that pallid sturgeon were somewhat common as late as the 1950's and 1960's. Observation data from the Missouri River and its tributaries in the Dakotas and Montana reflects the downward trend of the population. In the 1960's there were an average of 50 observations per year, and in the 1980's there were an average of only 6 observations per year.

**PRESENT STATUS:** Pallid sturgeon are found in the Mississippi and Missouri Rivers and in their larger tributaries. Total length of the historic range is approximately 3,550 river miles; however, only portions of this range are presently suitable pallid sturgeon habitat. In Montana, fishermen on the Missouri and Yellowstone rivers occasionally catch pallid sturgeon.

**HABITAT:** Pallid sturgeon are adapted for living close to the bottom of large, silty rivers with swift currents. The preferred habitat is comprised of sand flats and gravel bars.

**LIFE HISTORY:** Pallid sturgeon do not appear to be sexually mature until they reach at least 3 to 4 years of age. In North Dakota, pallid sturgeon spawning occurs in May or June over gravel or other hard surfaces. The eggs take 5 to 8 days to hatch. Both male and female sturgeon may go 3 to 10 years between spawnings. Pallid sturgeon are long lived, with individuals reaching perhaps 50 years of age. Pallid sturgeon feed on aquatic insects, mollusks, and small fishes.

**AID TO IDENTIFICATION:** Pallid sturgeon are armored with lengthwise rows of bony plates and have a "shark-like" appearance. The range of the pallid sturgeon in Montana overlaps with the range of the shovelnose sturgeon. Pallid sturgeon can weigh up to 80 pounds, while shovelnose sturgeon reach a maximum weight of 5 pounds and average 2 pounds. The back and sides of the pallid sturgeon are grayish white versus the brown color of the shovelnose

sturgeon. The length of the inner barbels (4 whisker-like appendages in front of the mouth) on a pallid are only about 1/2 as long as the outer barbels, while on the shovelnose all barbels are the same length. Pallid sturgeons are known to hybridize with the smaller shovelnose sturgeon.

**REASONS FOR DECLINE:** Of the 3,550 river miles the pallid sturgeon inhabits, all have been significantly effected by man. Approximately 28 percent of the effected area has been impounded, which has created unsuitable lake-like habitat, 51 percent of the area has been channelized into deep, clear channels, and the remaining 21 percent of the historic habitat is below dams. In the later 21 percent, the water released from dams has reduced silt loads, different runoff patterns, and colder temperatures, all of which are believed to be detrimental to pallid sturgeon. Commercial fishing may have also played a role in the pallid sturgeon's decline.

**RECOMMENDATIONS:** Pallid sturgeon caught in Montana must be released immediately. Contact a natural resources agency with information on any pallid sturgeon you catch.

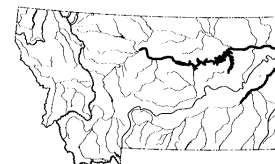
**COMMENTS:** Pallid sturgeon are an ancient species of fish that were in existence long before the advent of man. Like other ancient fish, pallid sturgeon have a skeleton of cartilage rather than true bones. Sturgeon are the common source of caviar although the pallid sturgeon was rarely used for this purpose.

**REFERENCES:** *The Pallid Sturgeon Recovery Plan* is in preparation by the North Dakota State Office of the U.S. Fish and Wildlife Service. A *Pallid Sturgeon Recovery Update* is available from the same office. "Dinosaurs of the Deep" by Pat Clancy, *Montana Outdoors*, Vol. 23, No. 2, Mar/Apr. 1991, pg. 19-22.

North America



Montana



Present Distribution of the Pallid Sturgeon