# Project Summary—
# Enhancing understanding of Minnesota River aquatic ecosystem

## Activity 4A: Population dynamics and movement of Shovelnose Sturgeon

**Establish an understanding of the Minnesota River Shovelnose Sturgeon population; a species of the globally imperiled sturgeon family.**

## Shovelnose Sturgeon—

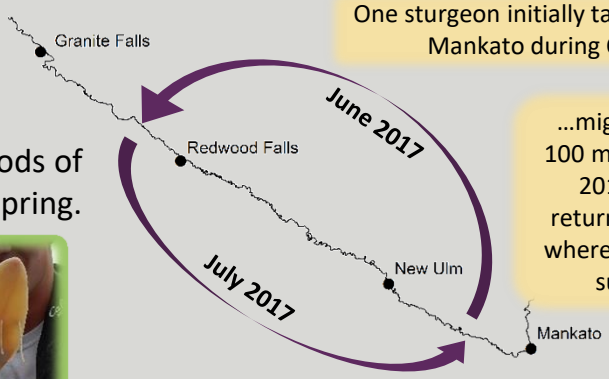
- Smallest of the North American sturgeon species.
- Inhabit many rivers throughout the Mississippi River basin.
- Many sturgeon species have experienced population declines resulting from the construction of dams and over-harvest for their valuable roe (eggs used for caviar).
- Like other sturgeons, Shovelnose Sturgeon are late maturing (after age-5) and spawn infrequently (every 2–3 years).

## Evidence of an abundant and healthy population—

Likely more than 150 adult Shovelnose Sturgeon inhabit each mile of the Minnesota River downstream of Granite Falls Dam. Presence of Shovelnose Sturgeon from ages 2 to 15 indicate a self-sustaining and reproducing population.

## Acoustic telemetry—

Similar to Paddlefish, many Shovelnose Sturgeon remain within small reaches of river for long periods of time, but others migrate up to 100 miles during spring.

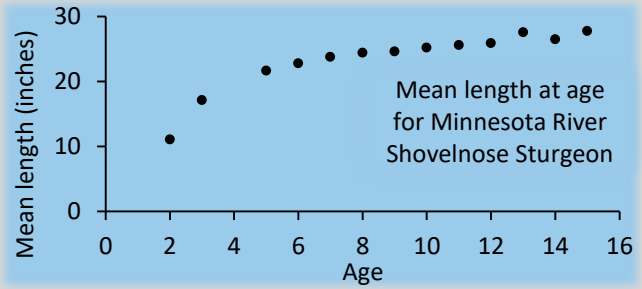



One sturgeon initially tagged upstream of Mankato during Oct. 2016…

…migrated upstream 100 miles during spring 2017 and quickly returned downstream where it remained thru summer 2018

## Unique growth pattern—

Shovelnose Sturgeon grow fast during the first several years of life, but unlike other sturgeon species, growth of adults is minimal and few fish reach 30 inches or 6 pounds.




## Important outcome—Identified a currently healthy population of Minnesota River Shovelnose Sturgeon and provided a baseline for measuring changes resulting from management actions or future perturbations.

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M.L. 2016, Chp. 186, Sec. 2, Subd. 03ib

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