



Fisheries Research Fact Sheet

White Catfish in Jordan Lake

July 2022



Illustration: Duane Raver

B. Everett Jordan Reservoir (Jordan Lake) hosts exceptional Largemouth Bass and Black Crappie populations, but it is also home to a lesser-known gamefish, the White Catfish. White Catfish, a native bullhead species, was once widespread across many of the lakes and rivers in North Carolina. Invasive Flathead Catfish and Blue Catfish, which consume native catfish as prey, have caused White Catfish population declines especially throughout the coastal rivers in North Carolina. Jordan Lake, despite having an established Flathead Catfish population, still maintains a surviving and healthy White Catfish population. To conserve native bullhead populations, the North Carolina Wildlife Resources Commission (Commission) recently classified native bullheads as gamefish and they are now regulated under a 10 fish in combination daily creel limit. Commission biologists recently surveyed White Catfish in Jordan Lake during the winter months in 2018-2021.

Project Objectives

- To evaluate population characteristics and establish baseline knowledge of reservoir White Catfish populations in North Carolina.
- To use this data to track population changes over time as Flathead Catfish become more established.

Methods:

- Fish were collected annually in December and January using six to eight gillnets from 2018-2021.
- Nets that are 8 feet tall by 100 feet long were set near the bottom perpendicular to shore in 12 to 25 feet of water and deployed overnight throughout the survey dates.
- In the field, fish were weighed and measured to assess size structure and body condition and otoliths, or ear bones, from a sub-sample of White Catfish were removed for age structure and growth analyses.



A White Catfish captured in Jordan Lake



As seen in this photo, White Catfish have a forked tail whereas other bullhead species have a rounded tail.



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Results so far?

- A total of 273 White Catfish were surveyed from winter 2018 to 2021. Fish ranged from 220 mm (8.6 inches) to 562 mm (22.1 inches). The oldest fish was 16 years old, and the largest fish weighed 2,703 g (6 lbs).
- The average body condition score (an index used to describe how much a fish should weigh relative to their length, where fish with body condition score in the 90s and greater are considered healthy) for White Catfish in Jordan Lake was 93.
- White Catfish growth in Jordan Lake was fast compared to coastal rivers and fish reached an average length of 335 mm (13.1 inches) by age 5.
- Biologists estimated the annual survival rate of White Catfish in Jordan Lake to be 70%, which the first survival rate estimated for a reservoir population of White Catfish in North Carolina.

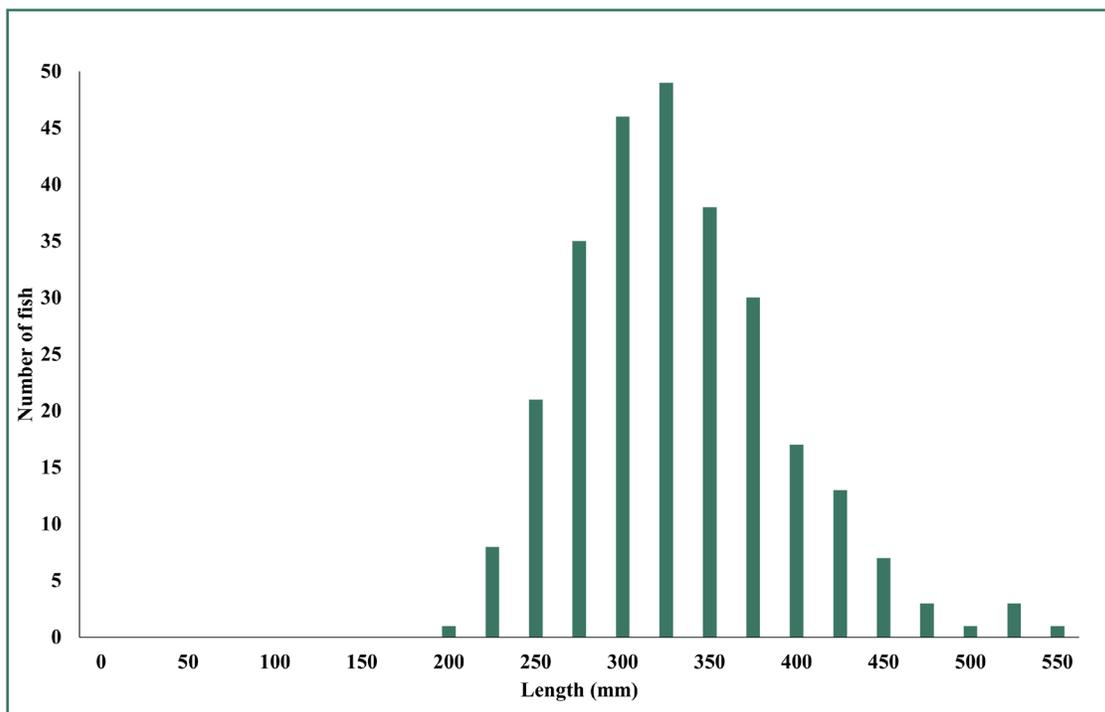


Table 1: Shown here are the length distributions for White Catfish collected in Jordan Lake during the 2018-2021 winter surveys. The x-axis depicts length categories in increments of 25 mm (~1.0 in). For example, fish in the column labeled 250 mm are fish ranging in length from 250 to 275 mm (or 9.8 to 10.8 in).

What's Next?

- Biologists will continue to monitor the Jordan Lake population using a combination of winter gillnetting and summer electrofishing to evaluate the effect of the invasive Flathead Catfish.
- For more information on Catfish Management in North Carolina, please visit the [Catfish Management Plan](#).

Contact

Kelsey Roberts
Piedmont Fisheries Research Coordinator
919-618-7945
kelsey.roberts@ncwildlife.org

