

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Shea Lake Spring Survey Summary (SE2)

Kewaunee County, Wisconsin 2025 – Waterbody Identification Code 85400
Report Completed March 30, 2026

On May 13, 2025, the Wisconsin Department of Natural Resources (DNR) conducted a spring electrofishing (SE2) survey on Shea Lake in southwestern Kewaunee County. Shea Lake is a 32-acre seepage lake with one mile of shoreline and a maximum depth of 24 feet. The habitat in Shea Lake is characterized by a muck bottom and abundant floating and submerged vegetation; notably, 17% of the lake is shallower than 3 feet, while 7% exceeds 20 feet. Fish populations have historically been dominated by northern pike, largemouth bass and panfish. Intermittent fish kills have occurred on Shea Lake, including a winterkill during winter 2013-2014, and another during spring 2025. DNR stocked northern pike and largemouth bass into Shea Lake during 2014, 2015 and 2016, following the 2013-2014 winterkill, and private stocking of northern pike via permit occurred during 2018, 2019, 2022 and 2024. Shea Lake was recently sampled via electrofishing in 2009, 2017 and again in 2025.

The goal of this 2025 survey was to assess the fish populations in Shea Lake, with the primary objective of assessing bass and panfish. Using a boomshocker electrofishing boat, we electrofished the entire 1.0 mile of shoreline at night. All fish that were encountered were netted except for common carp which were counted if the netters could touch the fish. A total of 274 fish were captured, representing 5 different species. In addition, 4 fish species were observed but not netted, resulting in 9 total species documented in this survey.

Black Crappie

Black crappies were the most abundant panfish species sampled from Shea Lake in 2025. A total of 242 black crappies were sampled (242/mile). A subsample of crappies were measured for length (n=62) and ranged from 4.6 to 8.6 inches, with an average length of 7.0 inches (Figure 1). An 8-inch crappie is considered

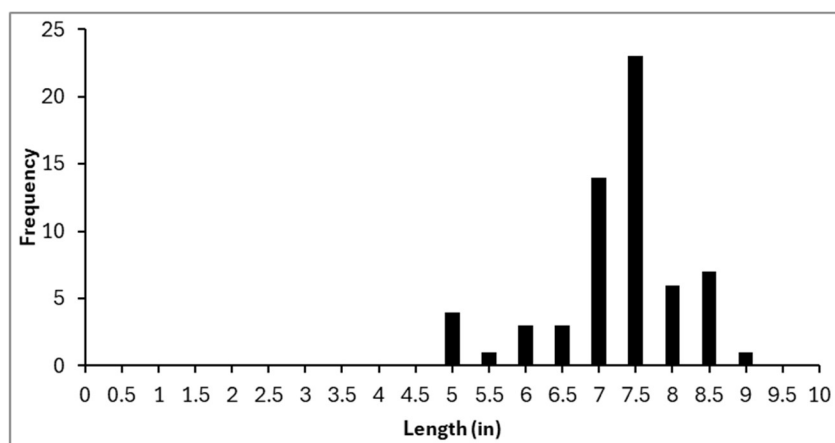


Figure 1. Length frequency of black crappie sampled from Shea Lake in 2025, expressed as the number of crappies sampled per 0.5-inch length grouping (i.e. 5.1-5.5, 5.6-6.0, etc.).

quality size (10-inch preferred), and 14% of the black crappies sampled were at or above 8 inches in length. Overall, the 2025 catch rate (242/mile) was much higher than the 2017 survey (~3/mile), but the average length in 2025 (7.0 in) was similar to the 2017 survey (6.8 in).

Bluegill

A total of 15 bluegills were sampled from Shea Lake in 2025 (15/mile). Sampled bluegills ranged in length from 3.2 to 6.0 inches, with an average of 4.7 inches. A 6-inch bluegill is considered quality size (8-inch preferred), and 6% of bluegill captured were at or above 6 inches in length.

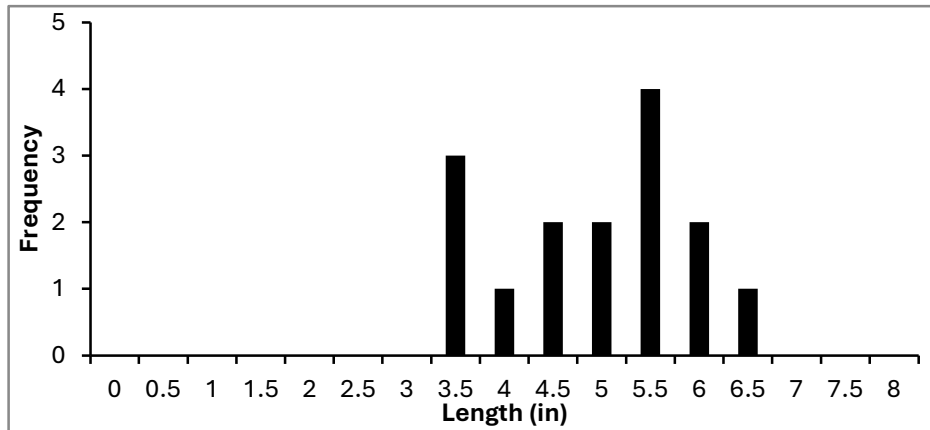


Figure 2. Length frequency of bluegills sampled from Shea Lake in 2025, , expressed as the number of bluegills sampled per 0.5-inch length grouping (i.e. 5.1-5.5, 5.6-6.0, etc.).

Overall, the 2025 catch rate (15/mile) decreased from the 2017 survey (306.1/mile), but the average length was similar between the 2017 (4.8 in) and 2025 (4.7 in) surveys.

Yellow Perch

A total of 12 yellow perch were sampled from Shea Lake in 2025 (12/mile). Sampled yellow perch ranged in length from 4.8 to 7.1 inches, with an average of 5.6 inches (Figure 3). An 8-inch yellow perch is considered quality size (10 preferred), and all yellow perch captured were below 8 inches.

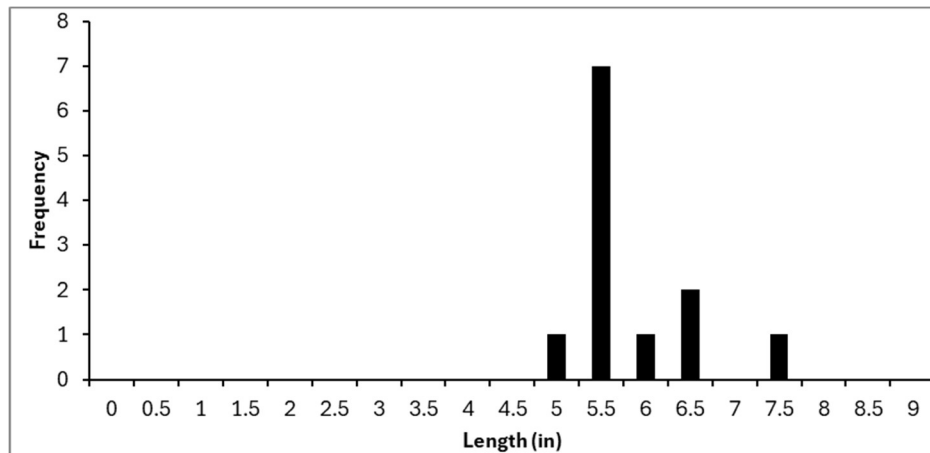


Figure 3. Length Frequency of yellow perch sampled from Shea Lake in 2025, , expressed as the number of perch sampled per 0.5-inch length grouping (i.e. 5.1-5.5, 5.6-6.0, etc.).

Overall, the 2025 catch rate (12/mile) increased from the 2017 survey (1/mile),

and the average length was similar between the 2017 (7.6 in) and 2025 (5.6 in) surveys (samples sizes were low however, with only 15 perch in 2015, and only 4 in 2017 that measured 2.8, 5.7, 10.0 and 11.8 inches).

Other Species

A total of four pumpkinseed (4.0, 4.1, 5.2 and 5.2 in) and one northern pike (29.3 in) were sampled. An additional two northern pike (~28 in), one largemouth bass (~15 in), 15 common carp, numerous bullhead and golden shiners were observed but not netted during the survey.

Acknowledgements

Electrofishing on Shea Lake during 2025 was conducted by DNR Senior Fisheries Biologist Logan Sikora, Fisheries Biologist Jacob Steckmesser and Fisheries Technician Ben Gosenheimer. Survey data were entered by Jacob Steckmesser. Survey results were summarized, and this report was written by Fisheries Technician Josh Fluor, with review and edits by Logan Sikora.

For more information please contact:

Logan Sikora
DNR Senior Fisheries Biologist
110 S. Neenah Avenue, Sturgeon Bay, WI 54235
logan.sikora@wisconsin.gov