

# WISCONSIN DEPARTMENT OF NATURAL RESOURCES

## 2019 West Alaska Lake Survey Summary, Kewaunee County

Report Completed July 27, 2022

The Wisconsin Department of Natural Resources (DNR) conducted a spring electrofishing 2 (SE2) survey on West Alaska Lake in Kewaunee County on June 3, 2019. West Alaska Lake is a seepage lake located southwest of Algoma. The lake is 27 acres, with 1.03 miles of shoreline and a maximum depth of 41 feet (15% of the lake is under 3 feet; 35% over 20 feet). The predominant bottom composition is muck, with floating and submerged vegetation common. Predominant fish populations are Largemouth Bass and panfish.

The goal of this survey was to assess the fish populations in the lake. The primary objectives of SE2 surveys are specifically to count and measure adult bass and panfish sampled with boomshocker electrofishing conducted at night along the shoreline. A total of 0.94 miles of shoreline were surveyed, and all fish encountered were netted. A total of 432 fish were captured representing six different species.

### Largemouth Bass

Largemouth Bass were the most abundant gamefish species sampled from West Alaska Lake. A total of 89 Largemouth Bass were captured (94.7/mi), ranging in length from 5.5 to 15.9 inches and averaging 10.5 inches (Figure 1). Nine of the bass sampled (10%) were greater than the 14-inch minimum size limit. Overall, the 2019 catch rate (94.7/mi) was slightly less than the 2003 survey (109.0/mi), but the average length of bass sampled increased from 8.0 inches in 2003 to 10.5 inches in 2019. Growth rates of Largemouth Bass also appear to have increased from the 2003 survey and to be at or near state averages (Table 1).

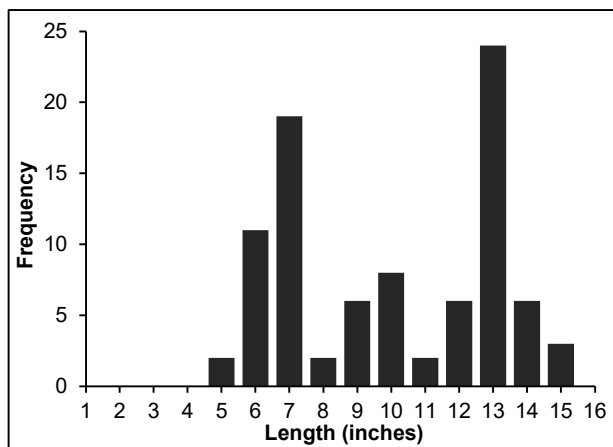


Figure 1. Length frequency of Largemouth Bass sampled from West Alaska Lake in 2019.

Table 1. Average length (inch) at age determined from age estimation of dorsal spines from Largemouth Bass captured on West Alaska Lake from surveys conducted in 2003 and 2019 compared to the statewide average length at age for Largemouth Bass.

Year	AGE 1	AGE 2	AGE 3	AGE 4	AGE 5	AGE 6
State Avg.	3.8	6.5	9.0	11.4	13.3	15.1
2003	2.6	4.6	7.0	8.9	10.9	12.6
2019	--	7.0	10.0	10.3	13.6	13.4

\*\*\*Ages in 2003 were estimated from scales\*\*\*

## Bluegill

Bluegill were the most abundant panfish species sampled from West Alaska Lake. A total of 245 Bluegills were captured (260.6/mi). Sampled Bluegills ranged in length from 3.0 to 8.6 inches and averaged 5.3 inches (Figure 2). Of the Bluegills sampled, 37% were greater than 6.0 inches, 14% were greater than 7.0 inches and 2% were greater than 8.0 inches. Overall, the 2019 catch rate (274.6/mi) was much greater than the 2003 survey (48.2/mi), and the size structure of the population appears to have improved. The growth rates of Bluegill observed in the 2019 survey increased from the 2003 survey and appear to be at or above state averages for the sampled fish (Table 2).

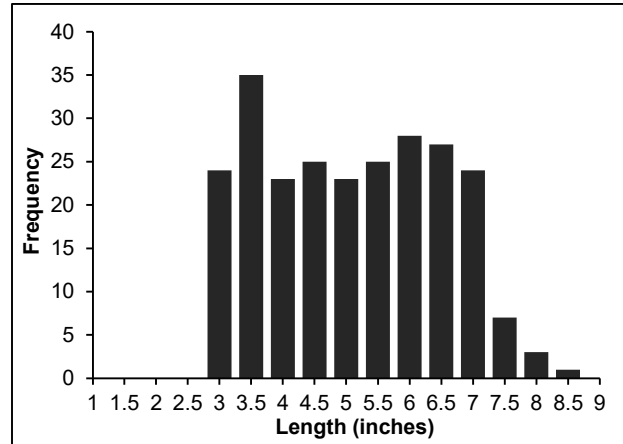


Figure 2. Length frequency of Bluegills sampled from West Alaska Lake in 2019.

Table 2. Average length (inch) at age determined from age estimation of otoliths from Bluegills captured on West Alaska Lake from surveys conducted in 2003 and 2019 compared to the statewide average length at age for bluegills.

Year	AGE 1	AGE 2	AGE 3	AGE 4	AGE 5	AGE 6
State Avg.	2.5	3.8	4.8	5.8	6.6	7.2
2003	2.8	3.7	5.4	--	--	--
2019	3.5	4.9	6.6	7.5	7.5	8.4

\*\*\*Ages in 2003 were estimated from scales\*\*\*

## Black Crappie

A total of 47 Black Crappies were sampled during the survey (50.0/mi). Sampled Black Crappies ranged in length from 4.1 to 8.3 inches and averaged 7.3 inches (Figure 3). The Black Crappie catch was much greater than the 2003 survey and was comprised of two- to four-year-old fish.

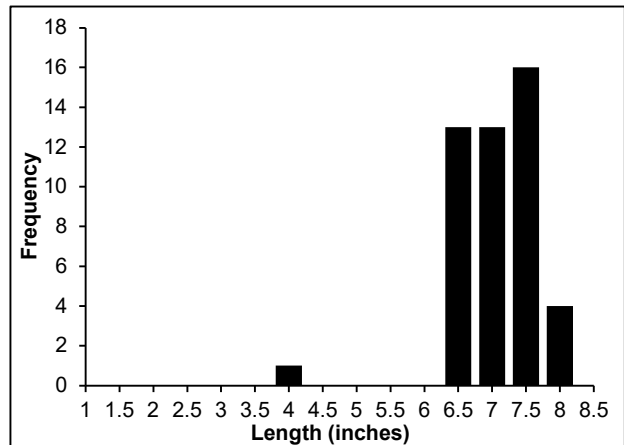


Figure 3. Length frequency of Black Crappies sampled from West Alaska Lake in 2019.

## Pumpkinseed

A total of 46 Pumpkinseed were sampled during the survey (48.9/mi). Sampled Pumpkinseed ranged in length from 3.9 to 7.3 inches and averaged 5.7 inches. The Pumpkinseed catch was much greater than the 2003 survey and was comprised of two- to four-year-old fish.

**Other Species**

Two Yellow Perch (6.0 and 6.5 inches) and three Yellow Bullheads (8.3, 10.1 and 10.5 inches) were also sampled during the survey.

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