

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

2017 East Alaska Lake Survey Summary, Kewaunee County

Report Completed: July 26, 2022

The Wisconsin Department of Natural Resources (DNR) conducted a spring electrofishing 2 (SE2) survey on East Alaska Lake in Kewaunee County on May 22, 2017. East Alaska Lake is a seepage/drainage lake located southwest of Algoma. The lake is 53 acres, with 1.4 miles of shoreline and a maximum depth of 50 feet (9.6% of the lake is under 3 feet; 33.7% over 20 feet). The predominant bottom composition is muck, with floating and submerged vegetation common. Predominant fish populations are Largemouth Bass and panfish (naturally occurring), along with Muskellunge (stocked).

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 1.34 miles of shoreline were surveyed, and all fish encountered, excluding Common Carp, were netted. A total of 476 fish were captured, representing seven different species.

Largemouth Bass

Largemouth Bass were the most abundant gamefish species sampled from East Alaska Lake. A total of 44 Largemouth Bass were captured (32.8/mi), ranging in length from 6.2 to 15.2 inches and averaging 9.8 inches (Figure 1). Eight of the bass (18.2%) sampled were greater than the 14-inch minimum size limit. Overall, the 2017 catch rate (32.8/mi) was slightly less than the 2009 survey (54.2/mi), but the range and average length of bass sampled was similar. Growth rates of Largemouth Bass have remained fairly consistent over the last three surveys (2004, 2009 and 2017) and appear to be at or near state averages (Table 1).

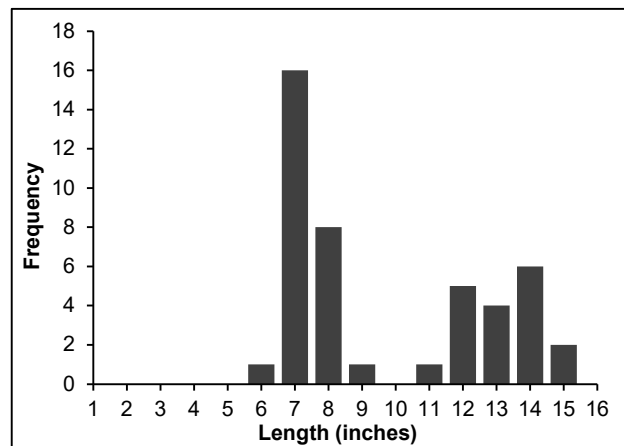


Figure 1. Length frequency of Largemouth Bass sampled from East Alaska Lake in 2017.

Table 1. Average length (inch) at age determined from age estimation of dorsal spines from Largemouth Bass captured on East Alaska Lake from surveys conducted in 2004, 2009 and 2017 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
2004	3.5	5.6	9.0	11.1	13.3	16.5
2009	--	6.5	9.7	11.3	13.1	--
2017	--	7.1	8.6	12.2	13.4	14.0

Ages in 2004 and 2009 were estimated from scales

Bluegill

Bluegill were the most abundant panfish species sampled from East Alaska Lake. A total of 368 Bluegills were captured (274.6/mi). Sampled Bluegills ranged in length from 2.4 to 7.8 inches and averaged 4.4 inches (Figure 2). Most Bluegills sampled were less than 6.0 inches (90%), and only two were greater than 7.0 inches (<1%). Overall, the 2017 catch rate (274.6/mi) was much greater than the 2009 survey (105.2/mi), and the catch was largely comprised of two- and four-year-old fish. Growth rates of Bluegill have remained fairly consistent over the last three surveys (2004, 2009, and 2017) and appear to be at or near state averages for the sampled fish (Table 2).

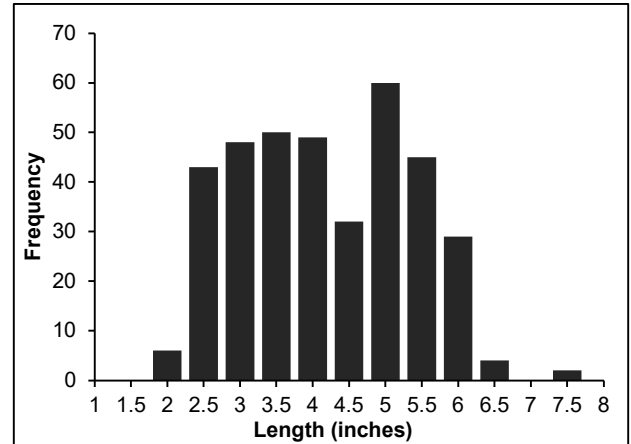


Figure 2. Length frequency of Bluegills sampled from East Alaska Lake in 2017.

Table 2. Average length (inch) at age determined from age estimation of otoliths from Bluegills captured on East Alaska Lake from surveys conducted in 2004, 2009 and 2017 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
2004	2.6	4.6	6.6	6.9	--	--
2009	2.8	4.6	5.5	6.4	--	--
2017	2.6	3.4	4.2	5.2	5.7	--

Ages in 2004 and 2009 were estimated from scales

Yellow Perch

A total of 36 Yellow Perch were sampled during the survey (26.9/mi). Sampled Yellow Perch ranged in length from 3.9 to 8.8 inches and averaged 5.5 inches. The catch rate and size structure of Yellow Perch sampled in 2017 are very similar to the respective measures from the 2009 survey.

Black Crappie

A total of five Black Crappies were sampled during the survey (3.7/mi). Sampled Black Crappies ranged in length from 5.1 to 9.8 inches and averaged 6.7 inches.

Pumpkinseed

A total of eight Pumpkinseed were sampled during the survey (6.0/mi). Sampled Pumpkinseed ranged in length from 3.1 to 5.0 inches and averaged 4.0 inches.

Rock Bass

A total of 12 Rock Bass were sampled during the survey (9.0/mi). Sampled Rock Bass ranged in length from 3.3 to 7.2 inches and averaged 5.4 inches.

Muskellunge

A single Muskellunge was captured in the survey. Unfortunately, no data was taken from the fish. An additional 79 large fingerling Muskellunge (average = 10.8 inches) were stocked in the autumn of 2017.

Other Species

In addition to the species mentioned, Common Carp, White Suckers and Golden Shiners were detected during the survey.

For more information please contact:**Logan Sikora**

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