

# WISCONSIN DEPARTMENT OF NATURAL RESOURCES Fisheries Information Sheet

LAKE: Little Butternut Lake COUNTY: Polk YEAR: 2022

## Introduction

Little Butternut Lake is a 185-acre drainage lake located in Polk County, Wisconsin. The lake has a maximum depth of 23 feet and a mean depth of 8 feet. Butternut Creek flows from Big Butternut Lake into Little Butternut Lake and eventually outflows to Long Trade Lake. Little Butternut Lake is a productive lake. It is classified as a complex-warm-dark lake, and likely receives low-moderate angling pressure and recreational boating use. Currently, recognized invasive species include Chinese mystery snail, curly-leaf pondweed, purple loosestrife and yellow iris. There is one boat access located off County Highway N.

Little Butternut Lake has had a long history of fish stocking. These efforts were aimed at establishing walleye (1972 - 2004) and muskellunge fisheries (1972 – 1989) but were generally unsuccessful and stocking was ceased after 2004. Little Butternut Lake has a history of winterkill events which likely impacted the fisheries. Largemouth bass were stocked during 1992 following a winterkill event. A compressed-air aeration system is operated annually to mitigate the potential of future winterkill events.

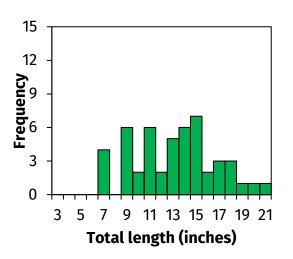
The Wisconsin Department of Natural Resources (DNR) surveyed Little Butternut Lake to assess the status of the fisheries during 2022. A late spring (SE2) electrofishing survey was conducted on May 24<sup>th</sup>, 2022, to assess largemouth bass and panfish populations. The SE2 survey consisted of 0.5-mile index stations where all gamefish and panfish were captured and 1.5-mile gamefish stations where all gamefish were collected. There were two index stations and one gamefish station completed, although some transect distances were reduced due to limited shoreline availability. All fish were measured, but aging structures were collected from five fish per 0.5-inch length group for age and growth analysis. Size structure was assessed by proportional size distribution (PSD). The PSD value for a species is the number of fish of a specified length and longer divided by the number of fish of stock length or longer, the result multiplied by 100. Catch per unit effort (CPUE; index of relative abundance) was estimated as catch per mile.

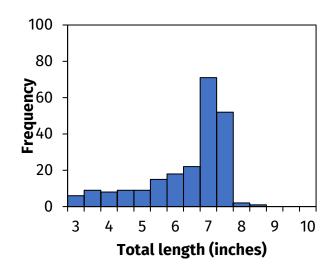
#### **BLUEGILL**



A total of 241 bluegills were collected during the SE2 survey. The CPUE was 241 fish/mile, which resembled the lake class 90<sup>th</sup> percentile and was well above the mean bluegill CPUE for Barron and Polk counties. Bluegill lengths ranged from 3.0 – 8.6 inches with an average length of 5.7 inches, which was near the lake class 95<sup>th</sup> percentile. The PSD-6 was 75. Mean length at age was similar to the lake class median length at age and the mean for Barron and Polk counties.

241 fish per mile ≥ 3 inches			
Quality Size ≥ 6	166 per mile		
inches			
Preferred Size ≥ 8	3 per mile		
inches			





#### LARGEMOUTH BASS



A total of 49 largemouth bass were collected during the SE2 survey. The CPUE was 20 fish/mile, which resembled the lake class 50<sup>th</sup> percentile. Lengths ranged from 7.6 – 21.3 inches with an average length of 14.5 inches, which was above the lake class 99<sup>th</sup> percentile. The PSD-12 was 69 and PSD-15 was 40. Mean length at age was greater than the lake class median length at age. Growth was above average.

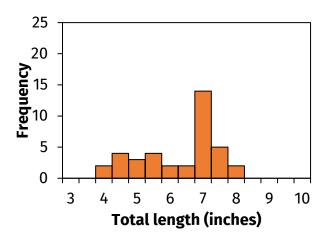
20 fish per mile ≥ 7 inches		
Quality Size ≥ 12	25 per mile	
inches		
Preferred Size ≥ 15	8 per mile	
inches		

#### **PUMPKINSEED**



A total of 38 pumpkinseeds were collected during the SE2 survey. The CPUE was 38 fish/mile and CPUE-6 was 25 fish/mile. Lengths ranged from 4.2 – 8.1 inches with an average length of 6.4 inches. The PSD-6 was 66.

38 fish per mile ≥ 3 inches		
Quality Size ≥ 6	25 per mile	
inches		
Preferred Size ≥ 8	2 per mile	
inches		



#### OTHER SPECIES

A total of 14 northern pike were collected and lengths ranged from 15.5 – 25.0 inches. A total of eight black crappie were collected and lengths ranged from 8.5 – 9.7 inches. Other species encountered at low abundances included bowfin, yellow perch, golden shiner and hybrid sunfish.

## **Summary**

Little Butternut Lake supports a typical bass-panfish fishery. A moderate to high-density bluegill population was present with average size structure and growth rates but few large individuals (greater than 8 inches) were present. The bluegill fishery likely supports quality harvest opportunities for anglers. Few black crappie were observed but SE2 surveys typically underrepresent population abundance are not the best approach to index black crappie population metrics. A low-density largemouth bass population with a high size structure and fast growth was present which provides anglers an opportunity for trophy-sized fish. No walleye or muskellunge were observed during the survey. Although, it is probable that walleye stocked into Big Butternut Lake migrate to Little Butternut Lake on occasion.

These desirable (bluegill and largemouth bass) sportfish populations likely support popular recreational fisheries among local anglers. The current daily bag limits for

panfish and largemouth bass should continue to promote quality recreational fisheries. Winter aeration should continue to support healthy fisheries in the future.

General fishing regulations for Big and Little Blake lakes, in Polk County, Wisconsin.

SPECIES	SEASON DATES	<b>DAILY BAG LIMIT</b>	SIZE LIMIT
Panfish	Open all year	25	No minimum length
Largemouth bass	May – March	5	14" minimum length
Northern pike	May – March	5	No minimum length
Walleye	May - March	3	15" minimum length,
·			20-24" protected slot

For answers to questions about fisheries management activities on Little Butternut Lake, contact:

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