



# WISCONSIN DEPARTMENT OF NATURAL RESOURCES

## Fisheries Information Sheet

LAKE: BUTTE DES MORTS

COUNTY: WINNEBAGO

YEAR: 2023

### Introduction

On May 11, 2023 the Wisconsin Department of Natural Resources (DNR) conducted a spring electrofishing (SEII) survey on Sunset Bay, Lake Butte des Morts in Winnebago County. The survey included approximately 2.0 miles of electrofishing and targeted primarily bass and panfish species. The survey station included .5 miles of sampling targeting all species encountered and the remaining 1.5 miles was targeting gamefish species. Water temperature was 70 degrees Fahrenheit. Primary sampling objectives of this survey are to characterize species composition, relative abundance, and size structure.



Image 1: Aerial view of Sunset Bay, Lake Butte des Morts.



Image 2: Fisheries biologist Jason Kohls holding a large black crappie.

## BLACK CRAPPIE



A total of 1 Black Crappie was captured during our .5 mile dip all station. The length was 9.6 inches.

# Captured Per Mile= 2	
(PSD) Quality Size $\geq 8"$	100
(PSD) Preferred Size $\geq 10"$	0

Table 1: PSD-Q and PSD-P values for black crappie captured in the 2023 survey.

## BLUEGILL



A total of 31 Bluegill were captured. Lengths ranged from 3.4-7.9 inches and the average length was 5.1 inches.

# Captured Per Mile= 62	
(PSD) Quality Size $\geq 6"$	29
(PSD) Preferred Size $\geq 8"$	0

Table 2: PSD-Q and PSD-P values for bluegill captured in the 2023 survey.

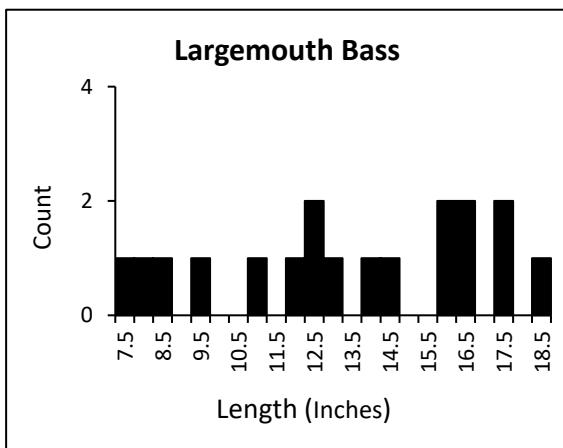


Figure 2: Largemouth bass catch rates observed in Sunset Bay SEII survey.

## LARGEMOUTH BASS



A total of 18 Largemouth Bass were captured. Lengths ranged from 7.8-18.8 inches and average length was 13.7 inches.

# Captured Per Mile= 9	
(PSD) Quality Size $\geq 12"$	72
(PSD) Preferred Size $\geq 15"$	39

Table 3: PSD-Q and PSD-P values for largemouth bass captured in the 2023 survey.

## WALLEYE



A total of 7 Walleye were captured. Lengths ranged from 9.1-21.8 inches and average length was 14.5 inches.

# Captured Per Mile= 3.5	
(PSD) Quality Size $\geq 15''$	43
(PSD) Preferred Size $\geq 20''$	14

Table 4: PSD-Q and PSD-P values for walleye captured in the 2023 survey.

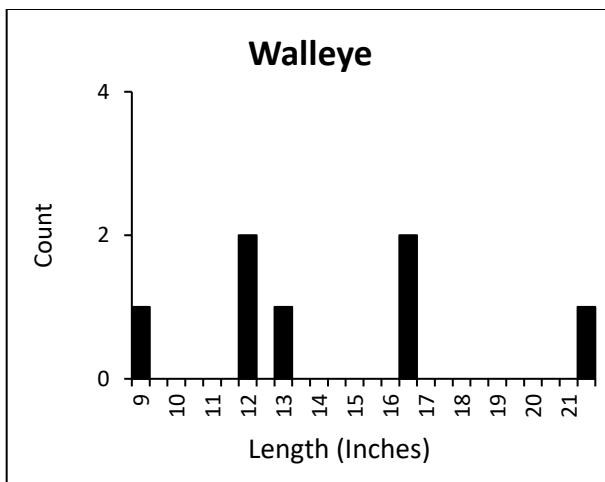


Figure 3: Walleye catch rates observed in Sunset Bay SEII survey.

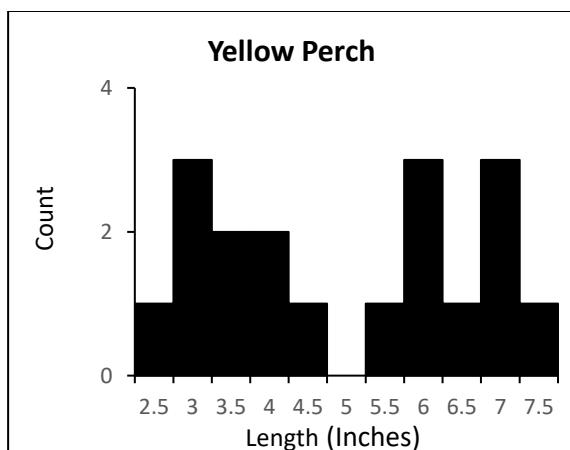
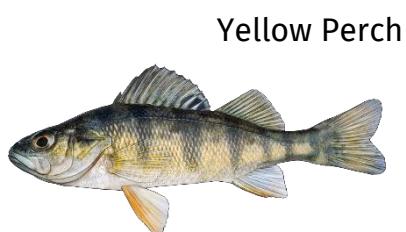


Figure 4: Yellow perch catch rates observed in Sunset Bay SEII survey.



A total of 18 Yellow Perch were captured. Lengths ranged from 2.8-7.5 inches and average length was 5.2 inches.

# Captured Per Mile= 36	
(PSD) Quality Size $\geq 8''$	0
(PSD) Preferred Size $\geq 10''$	0

Table 5: PSD-Q and PSD-P values for yellow perch captured in the 2023 survey.

## Summary

A total of 86 fish were sampled in this survey, representing 11 different species. Non-game species sampled included bullheads, white sucker, freshwater drum and bigmouth buffalo. Native panfish species sampled included bluegill, black crappie, pumpkinseed and yellow perch. Native gamefish species sampled included largemouth bass, smallmouth bass and walleye.

Largemouth bass were the dominant gamefish species captured in our survey and showed slightly lower than average catch rates compared to trend data collected since 2014. When comparing 2023 SEII data to long-term trend data largemouth bass

catch rates decreased from 12.8 to 9 per mile. Although average catch rates decreased, we did observe better size structure in 2023 compared to long-term averages. Average length increased from 12.8 inches in previous years to 13.7 inches in this year's survey. Quality and preferred proportional stock density increased compared to trend data, with quality PSD greater than or equal to 12 inches increasing from 57 to 72 and preferred PSD greater than or equal to 15 inches increasing from 23 to 39.

Another gamefish species that is popular among anglers but not specifically targeted in this survey is walleye. Catch rates were lower, coming in at 3.5 per mile compared to the trend average of 5.8 per mile. Although catch rates were lower than average, average length showed some improvement compared to long-term averages. Average length increased from 13 inches to 14.5 inches. Proportional Stock Density remained comparable to trend data averages since 2014.

Bluegill were by far the most represented panfish species caught in this survey, followed by yellow perch, pumpkinseed and then crappie. There was an above average catch rate of bluegill increasing from 54 per mile in previous years to 62 per mile this year. While catch rates increased in this year's survey, size structure declined with average size decreasing from 6.0 inches to 5.1 inches. Yellow perch catch rates also increased from 25.9 per mile to 36 per mile ranking that catch rate into the 82<sup>nd</sup> percentile among statewide catch rate averages.

Overall, the fish community in Sunset Bay appears to remain in a productive and healthy state and will continue to be monitored and evaluated to make sure species composition, relative abundance, and size structure remain stable.

*Table 1. General fishing regulations for Lake Winnebago, in Winnebago, Fond du Lac, Calumet and Outagamie County, Wisconsin.*

<b>SPECIES</b>	<b>SEASON DATES</b>	<b>DAILY BAG LIMIT</b>	<b>SIZE LIMIT</b>
Panfish	Open all year	25	No size limit
Walleye	Open all year	3	No size limit
Northern Pike	May 6, 2023-March 3, 2024	2	26"
Largemouth/Smallmouth Bass	Open all year	5	14"

## **Acknowledgements**

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

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Appendix 1. Spring electrofishing II trend data from 2014-2023

<b><u>2014</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	5.5	12.3	59	14
Bluegill	36.3	6.4	77	3
Black Crappie	.5	5.8	0	0
Yellow Perch	17.3	5	2	0
Walleye	5.8	8.7	13	4

<b><u>2015</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	2.5	12.9	60	20
Bluegill	3.5	7.2	86	14
Black Crappie	1	9.8	100	50
Yellow Perch	1	4.6	0	0
Walleye	6	16	50	33

<b><u>2016</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	16.5	11	55	9
Bluegill	33	6.1	38	23
Black Crappie	6.5	10.7	100	77
Yellow Perch	33	5.2	9	0
Walleye	9	12.5	39	0

<b><u>2017</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	29	11	26	10
Bluegill	152	5	11	0
Black Crappie	0	0	0	0
Yellow Perch	60	6.3	13	0
Walleye	4.5	8.2	0	0

<b><u>2018</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	11.8	11.5	43	22
Bluegill	64.1	6.2	78	0
Black Crappie	3.6	8	43	0
Yellow Perch	24.1	7.2	34	0
Walleye	4.1	17	63	13

<b><u>2019</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	15.9	13.3	79	15
Bluegill	43.2	7.1	85	17
Black Crappie	5.3	10.8	100	80
Yellow Perch	7.4	7.4	43	0
Walleye	7.3	16.3	56	22

<b><u>2021</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	22.7	13.4	71	45
Bluegill	55.6	5.8	51	6
Black Crappie	3.1	10.5	100	57
Yellow Perch	26.2	5.9	20	0
Walleye	9.8	15	55	9

<b><u>2022</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	2	15	100	50
Bluegill	36.5	5.8	51	1
Black Crappie	0	0	0	0
Yellow Perch	28	6.2	0	0
Walleye	2	18.5	75	50

<b><u>2023</u></b>	Catch/mile	Average Length	Quality PSD	Preferred PSD
Largemouth Bass	9	13.7	72	39
Bluegill	62	5.1	29	0
Black Crappie	2	9.6	100	0
Yellow Perch	36	5.2	0	0
Walleye	3.5	14.5	43	14

