

LAKE SURVEY REPORT

DRAFT VERSION

PRELIMINARY DATA (AS OF 07/12/2024)

Lake Name: Budd Survey Type: Targeted Survey

DOW Number: 46-0030-00 Survey ID Date: 04/23/2024

TARGETED SURVEY
Electrofishing targeting Muskellunge All Ages
Electrofishing

Seining

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: C0452
Primary Lake Class ID: 24 Alternate Lake Class ID: N/A

Lake Location

Primary County: Martin Nearest Town: Fairmont

Legal Descriptions

Lake Center: Township - 102N Range - 30W Section - 17

PLS Section Lake Center: 10203017

All Legal Descriptions:

Martin County: Township - 102N Range - 30W Sections - 17, 18

Area Office

Area Name: Windom ORG Code: F418
Region Name: Southern Region Number: 4

Lake Access

(Information based on Re-Survey dated 08/10/1993)

Station ID Ownership Public Use Type Location / Comments

(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 222.00 GIS Shoreline Length (miles): 2.23

GIS Lake Area (acres): 227.91 Maximum Fetch (miles): 0.75

DOW Lake Area (acres): 224.00 Fetch Orientation (degrees): 315

Littoral Area (acres): 111.00 USGS Quad Map Number: X12b

Area in MN (acres): 227.91 USGS Quad 24K GIS Index: 4623

Maximum Depth (feet): 23.0 Mean Depth (feet): N/A



Watershed Characteristics

Major Watershed Minor Watershed

Name: Blue Earth River
Watershed Number: 30
Watershed size (acres): 777,240
Watershed size (acres): 8,071

Surveys and Investigations

Re-Survey: 08/13/2001, 08/10/1993, 08/07/1989, 07/03/1984.

Population Assessment: 08/17/2009, 08/11/1997.

Special Assessment: 09/15/1997.

Dissolved Oxygen Check: 02/11/2016, 02/24/2015, 01/03/2014, 01/08/2013, 12/28/2012, 02/16/2012, 12/29/201

01/15/2010.

External Management Survey: 07/31/2014.

Standard Survey: 08/10/2020, 08/14/2017.

Targeted Survey: 09/22/2023, 02/03/2020, 02/19/2019, 01/18/2018, 06/30/2017, 08/21/2015.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	08/13/2020	Low	-7.50	Above Mean Sea Level
	08/22/2017	Normal	-7.60	Above or below Benchmark
	08/19/2009	N/A	138.00	Above or below Benchmark

Water Level History - Station Summary

	Minimum Level		Maximum Level		Range	Average	Reading Type	
Station ID	Feet	Date	Feet	Date	(feet)	Level (feet)	(and number of readings)	
BM - 1 BM - 1		08/22/2017 08/13/2020		08/19/2009 08/13/2020	145.60 0.00		Above or below Benchmark (2) Above Mean Sea Level (1)	

Natural Reproduction Catch Summary for SEF

Special sampling, electrofishing

Number of Stations: 1

Total run-time for all stations: 277788:27:39
Total on-time for all stations: 12:41:46
First Sampling Date: 04/23/2024

Last Sampling Date: 05/08/2024
Daylight Sampling: Yes

Target Species: All ages muskellunge

			Total Number		Mean Length	Length Range (inches)		Catch Rates (number per hour)	
Abbr	Species	<u>Age</u>	Number	Measured	(inches)	<u>Min</u>	Max	Run-Time	On-Time
MUE	Muskellunge	All	12	12	38.15	35.43	40.98	0.00	0.95

Length Frequency Distribution for <u>SEF</u> (for fish < 36.00 inches)

Special sampling, electrofishing

(Field work conducted between 04/23/2024 and 05/08/2024)

(Field work	conducte
	MUE
< 3.00	
3.00 - 3.49	-
3.50 - 3.99	-
4.00 - 4.49	-
4.50 - 4.99	-
5.00 - 5.49	-
5.50 - 5.99 6.00 - 6.49	-
6.50 - 6.99	-
7.00 - 7.49	-
7.50 - 7.99	-
8.00 - 8.49	-
8.50 - 8.99	-
9.00 - 9.49	-
9.50 - 9.99 10.00 - 10.49	-
10.50 - 10.49	_
11.00 - 11.49	_
11.50 - 11.99	-
12.00 - 12.99	-
13.00 - 13.99	-
14.00 - 14.99	-
15.00 - 15.99 16.00 - 16.99	-
16.00 - 16.99 17.00 - 17.99	-
18.00 - 18.99	_
19.00 - 19.99	-
20.00 - 20.99	-
21.00 - 21.99	-
22.00 - 22.99	-
23.00 - 23.99	-
24.00 - 24.99 25.00 - 25.99	-
26.00 - 26.99 26.00 - 26.99	-
27.00 - 27.99	_
28.00 - 28.99	_
29.00 - 29.99	-
30.00 - 30.99	-
31.00 - 31.99	-
32.00 - 32.99	-
33.00 - 33.99	-
34.00 - 34.99 35.00 - 35.99	1
= > 36.00	11
T-4 !	<u>MUE</u>
Total	12 35.43
Min. Length Max. Length	40.98
Mean Length	38.15
# Measured	12
No Lengths for	0

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish.



Length Frequency Distribution for <u>SEF</u> (for fish ≥ 36.00 inches)

Special sampling, electrofishing

(Field work conducted between 04/23/2024 and 05/08/2024)

(i leid work	conducte
	MUE
< 36.00	1
36.00 - 36.99	4
37.00 - 37.99	1
38.00 - 38.99	1
39.00 - 39.99	3
40.00 - 40.99	2
41.00 - 41.99	-
42.00 - 42.99	-
43.00 - 43.99	-
44.00 - 44.99	
45.00 - 45.99	-
46.00 - 46.99	-
47.00 - 47.99	-
48.00 - 48.99	-
49.00 - 49.99 50.00 - 50.99	-
51.00 - 51.99	_
	_
52.00 - 52.99 53.00 - 53.99	_
54.00 - 54.99	_
55.00 - 55.99	_
56.00 - 56.99	_
57.00 - 57.99	_
58.00 - 58.99	_
59.00 - 59.99	-
60.00 - 60.99	-
61.00 - 61.99	-
62.00 - 62.99	-
63.00 - 63.99	-
64.00 - 64.99	-
65.00 - 65.99	-
66.00 - 66.99	-
67.00 - 67.99	-
68.00 - 68.99	-
69.00 - 69.99	-
70.00 - 70.99	-
71.00 - 71.99	-
72.00 - 72.99	-
73.00 - 73.99	-
74.00 - 74.99	-
75.00 - 75.99	-
76.00 - 76.99	-
77.00 - 77.99	-
= > 78.00	
	<u>MUE</u>
Total	12

	MUE
Total	12
Min. Length	35.43
Max. Length	40.98
Mean Length	38.15
# Measured	12
No Lengths for	0

Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish.



Field Notes - General Field

Entire Fairmont Chain of Lakes was sampled with EF to assess the Muskellunge population. Data entered into Budd Lake for consistency and a single report.



Approval Dates And Notices

Date Approved By Windom Area Fisheries Supervisor:	
Date Approved By Southern Region Fisheries Manager:	

This DRAFT VERSION of the Lake Survey Report contains preliminary data (as of 07/12/2024), and is therefore subject to change at any time.





Minnesota Department of Natural Resources

By accepting the data in this report, the user agrees the data will be used for personal benefit and not for profit. Any other uses or publication of the data needs the consent of the Department. The Minnesota Department of Natural Resources assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on the data.

REPORT OVERVIEW - FOR OFFICE USE ONLY

(This page is not part of the Lake Survey Report and should be discarded)

Lake Name: Budd Survey Type: Targeted Survey DOW Number: 46-0030-00 Survey ID Date: 04/23/2024

Electrofishing targeting Muskellunge All Ages, Electrofishing, Seining

Survey Status: Proposed

The following 25 (of 34) report components are not included in this Lake Survey Report:

- 1. Current Water Level
- 2. Benchmark And Gauge Descriptions / Locations
- 3. Water Level History1
- 4. Lake Inlets
- 5. Additional Inlet Information
- 6. Lake Outlets
- 7. Additional Outlet Information
- 8. Water Control Structure (Dam)
- 9. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations²
- 10. Resorts And Campgrounds
- 11. Fish Spawning Conditions
- 12. Erosion And Pollution
- 13. Fish Diseases And Parasites
- 14. Aquatic Vegetation And Shoalwater Substrates
- 15. Dissolved Oxygen And Temperature Profile Of Lake Water
- 16. Field Measusrements Of Water Quality
- 17. Water Quality (Winter Observations) (added to revision 01/21/2010)
- 18. Laboratory Analysis Of Water Chemistry
- 19. Zooplankton Sampling (added to revision 20221130)
- 20. Catch Summary (Pre-1993 Format) (added to revision 20201001)
- 21. Length At Capture With Last Incremental Length*
- 22. Back-Calculated Lengths
- 23. Age Class Frequency Distributions
- 24. Other Species (added to revision 03/24/2009)
- 25. Survey Attachments (added to revision 20150622)
- ¹ Water Level History report: This data has not yet been migrated into the Fisheries LSM database. On 01/08/2009, two additional Water Level History report components (Readings and Station Summary) were added.
- ² Effective 03/25/2014, the Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations report component was modified to be included in the Lake Survey report if it did not include any Watershed and Shoreline characteristics and only consisted of Riparian Landscape Observations.
- * Length At Capture With Last Incremental Length report: The following criteria must be met for a report to be generated:
 - 1. The fish species must have an assigned body scale constant.
 - 2. Fish must have an "official" age assigned.
 - 3. Fish must have a digitized measurement marked for back calculation use.

Note: The data source for Length and Age Class Frequency Distribution tables is updated twice daily - once at noon and once overnight. Any changes to the data made before noon on 07/12/2024 may not be reflected in the Distribution tables until after 12:30 pm on 07/12/2024.

The following survey component was flagged to be specifically excluded from this report: SSE - 1

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Lake Survey Report revision: 20230207-RJE. Data Date: 07/12/2024 at 8:35 am.

