

Lake Name: East Twin
DOW Number: 42-0070-00

Survey Type: Targeted Survey
Survey ID Date: 05/14/2024

TARGETED SURVEY
Electrofishing targeting Smallmouth Bass All Ages
Electrofishing

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 38

DNR Sounding Map Number: N/A
Alternate Lake Class ID: N/A

Lake Location

Primary County: Lyon

Nearest Town: Florence

Legal Descriptions

Lake Center: Township - 109N Range - 43W Section - 29
PLS Section Lake Center: 10904329

All Legal Descriptions:

Lyon County: Township - 109N Range - 43W Sections - 20, 28, 29, 32, 33

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 06/24/1996)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Carry-In	DNR OWNED ACCESS ON SW SIDE OF LAKE.

Lake Characteristics

Lake Area (planimetered acres): 352.00
GIS Lake Area (acres): 356.47
DOW Lake Area (acres): 280.00
Littoral Area (acres): 224.00
Area in MN (acres): 356.47
Maximum Depth (feet): 22.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 4.90
Maximum Fetch (miles): 1.70
Fetch Orientation (degrees): 315
USGS Quad Map Number: V05a
USGS Quad 24K GIS Index: 4210

Watershed Characteristics

Major Watershed

Name: Redwood River
 Watershed Number: 27
 Watershed size (acres): 447,531

Minor Watershed

Name: unknown DNR Minor Wshd
 Watershed Number: 17
 Watershed size (acres): 5,206

Surveys and Investigations

Re-Survey: 06/24/1996, 06/22/1987.
Population Assessment: 06/25/2012, 06/23/2008, 06/21/2004, 06/19/2000, 06/27/1992.
Special Assessment: 10/10/2000.
Dissolved Oxygen Check: 02/17/2016, 02/19/2015, 01/02/2014, 02/06/2013, 01/03/2013, 01/10/2012, 12/29/2010, 01/05/2010.
Standard Survey: 06/20/2016.
Targeted Survey: 05/14/2024, 06/24/2020, 02/06/2020, 01/19/2018, 09/12/2017, 06/24/2016, 06/21/2016.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/22/2016	Normal	1.50	Direct Gauge Reading
	06/26/2008	High	-5.00	Above or below Benchmark
BM - 2	06/27/2012	High	1.84	Direct Gauge Reading
	06/26/2008	N/A	1.78	Direct Gauge Reading

Water Level History - Station Summary

Station ID	Minimum Level		Maximum Level		Range (feet)	Average Level (feet)	Reading Type (and number of readings)
	Feet	Date	Feet	Date			
BM - 1	-5.00	06/26/2008	-5.00	06/26/2008	0.00	-5.00	Above or below Benchmark (1)
BM - 1	1.50	06/22/2016	1.50	06/22/2016	0.00	1.50	Direct Gauge Reading (1)
BM - 2	1.78	06/26/2008	1.84	06/27/2012	0.06	1.81	Direct Gauge Reading (2)

Electrofishing Catch Summary for EF

Standard electrofishing

Number of Stations: 4
Total run-time for all stations: 01:18:00
Total on-time for all stations: 01:09:03
First Sampling Date: 05/14/2024
Last Sampling Date: 05/14/2024
Daylight Sampling: Yes
Target Species: All ages smallmouth bass

Abbr	Species	Summary By Numbers			Summary By Weight (pounds)			
		Total Number	Number per Hour Run-Time	On-Time	Total Weight	Lbs per Hour Run-Time	Mean Weight	
SMB	Smallmouth Bass	101	77.69	87.76	137.36	105.66	119.36	1.36

Length Frequency Distribution for EF

Standard electrofishing

(Field work conducted on 05/14/2024)

	<u>SMB</u>
< 3.00	-
3.00 - 3.49	-
3.50 - 3.99	2
4.00 - 4.49	-
4.50 - 4.99	1
5.00 - 5.49	-
5.50 - 5.99	-
6.00 - 6.49	-
6.50 - 6.99	-
7.00 - 7.49	1
7.50 - 7.99	-
8.00 - 8.49	1
8.50 - 8.99	-
9.00 - 9.49	-
9.50 - 9.99	-
10.00 - 10.49	2
10.50 - 10.99	5
11.00 - 11.49	7
11.50 - 11.99	5
12.00 - 12.99	24
13.00 - 13.99	15
14.00 - 14.99	12
15.00 - 15.99	16
16.00 - 16.99	6
17.00 - 17.99	4
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	-
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	-
= > 36.00	-

	<u>SMB</u>
Total	101
Min. Length	3.70
Max. Length	17.87
Mean Length	13.20
# Measured	101
No Lengths for	0

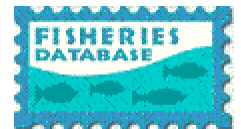
Note: Unless all fish were measured in the catch, totals shown for some length-frequency distributions may differ from the total number of fish in the catch, due to rounding of fractions used in the estimation of length frequency from a subsample of measured fish.

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 05/15/2024), 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.

Lake Survey Report revision: 20230207-RJE. Data Date: 05/15/2024 at 1:53 pm .

REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: East Twin
DOW Number: 42-0070-00

Survey Type: Targeted Survey
Survey ID Date: 05/14/2024

Electrofishing targeting Smallmouth Bass All Ages, Electrofishing

Survey Status: Field Work Complete

The following 26 (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 Measurements 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. Status Of Fishery And Field Notes
26. 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 after noon on 05/15/2024 may not be reflected in the Distribution tables until 05/16/2024.

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Fisheries Lake ID = 3933, Survey ID = 20822413537103000

Lake Survey Report revision: 20230207-RJE. Data Date: 05/15/2024 at 1:53 pm .