

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

Survey Type: Standard Survey
Survey ID Date: 06/03/2024

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 Shoreline Length (miles):	4.90
GIS Lake Area (acres):	356.47	Maximum Fetch (miles):	1.70
DOW Lake Area (acres):	280.00	Fetch Orientation (degrees):	315
Littoral Area (acres):	224.00	USGS Quad Map Number:	V05a
Area in MN (acres):	356.47	USGS Quad 24K GIS Index:	4210
Maximum Depth (feet):	22.0		
Mean Depth (feet):	N/A		

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, 12/29/2011, 01/05/2010.
Standard Survey: 06/03/2024, 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, 06/20/2016.

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)

Dissolved Oxygen and Temperature Profile of Lake Water

Station ID	Sampling Date	Bottom Depth (Feet)	Sample Depth (Feet)	Water Temperature (°F)	Dissolved Oxygen (ppm)
WQ - 1	06/03/2024	25.5	Surface	64.9	8.5
			3.0	64.9	8.5
			6.0	64.9	8.5
			9.0	64.8	8.5
			12.0	64.8	8.4
			15.0	64.6	8.4
			18.0	64.6	8.3
			21.0	64.4	8.3
			24.0	64.2	8.1

Field Measurements of Water Quality

Station ID	Sampling Date	Sample Depth (Feet)	Secchi Depth (Feet)	Field pH	Alkalinity (ppm)	Water Color	Color Cause
WQ - 1	06/03/2024	Surface	9.0	8.70	280	Clear	N/A

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 3
First Set Date: 06/03/2024
Last Lift Date: 06/06/2024
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 38 ¹		
				25%	50%	75%
SMB	Smallmouth Bass	9	3.00	N/A	N/A	N/A
WAE	Walleye	38	12.67	0.75	1.67	3.75
WTS	White Sucker	11	3.67	0.50	1.08	2.25
YEP	Yellow Perch	6	2.00	2.00	8.50	22.25
Total Fish/Set:			21.33	¹ Quartiles for Number Per Set		

Net Catch Summary by Weight for GN

Standard gill net sets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight ²	Quartiles for Lake Class 38 ¹		
					25%	50%	75%
SMB	Smallmouth Bass	8.95	2.98	0.99	N/A	N/A	N/A
WAE	Walleye	70.35	23.45	1.85	1.36	2.32	2.99
WTS	White Sucker	33.30	11.10	3.03	1.63	2.05	2.48
YEP	Yellow Perch	2.53	0.84	0.42	0.09	0.12	0.18
Total Pounds Fish/Set:			38.38	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Length Frequency Distribution for GN

Standard gill net sets

(Field work conducted between 06/03/2024 and 06/06/2024)

	<u>SMB</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
< 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	-	-	-	1
7.00 - 7.49	-	-	-	1
7.50 - 7.99	-	-	-	-
8.00 - 8.49	-	-	-	-
8.50 - 8.99	-	3	-	-
9.00 - 9.49	-	3	-	1
9.50 - 9.99	1	-	-	2
10.00 - 10.49	-	-	-	-
10.50 - 10.99	-	1	-	-
11.00 - 11.49	1	-	-	-
11.50 - 11.99	2	-	-	1
12.00 - 12.99	3	-	-	-
13.00 - 13.99	-	1	-	-
14.00 - 14.99	1	4	-	-
15.00 - 15.99	1	1	-	-
16.00 - 16.99	-	2	1	-
17.00 - 17.99	-	5	-	-
18.00 - 18.99	-	3	3	-
19.00 - 19.99	-	4	4	-
20.00 - 20.99	-	5	2	-
21.00 - 21.99	-	4	1	-
22.00 - 22.99	-	2	-	-
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>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
Total	9	38	11	6
Min. Length	9.88	8.50	16.57	6.93
Max. Length	15.35	22.48	21.34	11.81
Mean Length	12.41	16.80	19.16	9.12
# Measured	9	38	11	6
No Lengths for	0	0	0	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 07/12/2024), and is therefore subject to change at any time.



Minnesota Department of Natural Resources

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REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Survey Type: Standard Survey
Survey ID Date: 06/03/2024

Survey Status: Active

The following 24 (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. Water Quality (Winter Observations) (added to revision 01/21/2010)
16. Laboratory Analysis Of Water Chemistry
17. Zooplankton Sampling (added to revision 20221130)
18. Catch Summary (Pre-1993 Format) (added to revision 20201001)
19. Length At Capture With Last Incremental Length*
20. Back-Calculated Lengths
21. Age Class Frequency Distributions
22. Other Species (added to revision 03/24/2009)
23. Status Of Fishery And Field Notes
24. 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.

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