

Lake Name: West Twin
DOW Number: 42-0074-00

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

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 43

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 - 30
PLS Section Lake Center: 10904330

All Legal Descriptions:

Lyon County: Township - 109N Range - 43W Sections - 29, 30, 31, 32

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Initial Survey dated 07/23/1986)

<u>Station ID</u>	<u>Ownership</u>	<u>Public Use</u>	<u>Type</u>	<u>Location / Comments</u>
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(Data excludes records where public use is not designated or is designated "No Public Use")

Lake Characteristics

Lake Area (planimetered acres): 232.00
GIS Lake Area (acres): 219.96
DOW Lake Area (acres): 237.00
Littoral Area (acres): 219.96
Area in MN (acres): 219.96
Maximum Depth (feet): 10.0
Mean Depth (feet): N/A

GIS Shoreline Length (miles): 2.88
Maximum Fetch (miles): 1.00
Fetch Orientation (degrees): N/A
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

Initial Survey: 07/23/1986.
Re-Survey: 06/27/2005.
Population Assessment: 06/25/2012.
Special Assessment: 08/19/2013, 07/30/1948.
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, 06/12/2017, 06/20/2016.
Targeted Survey: 06/23/2020, 01/09/2020, 04/26/2019, 08/24/2018, 06/26/2018, 01/19/2018, 06/15/2017, 02/08/2017.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/27/2012	Normal	4.86	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	4.86	06/27/2012	4.86	06/27/2012	0.00	4.86	Direct Gauge Reading (1)

Dissolved Oxygen and Temperature Profile of Lake Water

Station ID	Sampling Date	Bottom Depth (Feet)	Sample Depth (Feet)	Water	Dissolved
				Temperature (°F)	Oxygen (ppm)
WQ - 1	06/03/2024	7.7	Surface	68.0	8.0
			1.0	68.0	8.0
			2.0	68.0	8.0
			3.0	67.8	7.9
			4.0	67.8	7.9
			5.0	67.8	8.0
			6.0	67.8	7.9
			7.0	67.6	7.8

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	3.0	8.98	240	Brown Grn	N/A

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 1
 First Set Date: 06/05/2024
 Last Lift Date: 06/06/2024
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 ¹		
				25%	50%	75%
BLB	Black Bullhead	11	11.00	30.34	75.58	150.62
BLG	Bluegill	7	7.00	N/A	N/A	N/A
NOP	Northern Pike	10	10.00	1.08	3.00	8.00
WAE	Walleye	3	3.00	2.28	6.83	18.06
YEP	Yellow Perch	81	81.00	2.65	8.00	25.00
Total Fish/Set:			112.00	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 43 ¹		
					25%	50%	75%
BLB	Black Bullhead	10.66	10.66	0.97	0.17	0.26	0.39
BLG	Bluegill	1.53	1.53	0.22	N/A	N/A	N/A
NOP	Northern Pike	38.21	38.21	4.23	1.82	2.50	3.35
WAE	Walleye	12.13	12.13	4.04	1.01	1.53	2.30
YEP	Yellow Perch	9.16	9.16	0.13	0.13	0.21	0.31
Total Pounds Fish/Set:			71.68	¹ Quartiles for Mean Weight			

² Mean Weights are based on measured fish counts only.

Net Catch Summary by Numbers for TN

Standard 3/4-in mesh, double frame trap net sets

Number of Sets: 6
First Set Date: 06/03/2024
Last Lift Date: 06/05/2024
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 ¹		
				25%	50%	75%
BLB	Black Bullhead	38	6.33	11.50	42.00	132.61
BLG	Bluegill	58	9.67	1.17	3.89	20.00
GSF	Green Sunfish	1	0.17	0.15	0.25	1.94
NOP	Northern Pike	6	1.00	N/A	N/A	N/A
WAE	Walleye	24	4.00	0.50	1.33	2.95
YEP	Yellow Perch	6	1.00	0.33	1.37	3.76
Total Fish/Set:			22.17	¹ Quartiles for Number Per Set		

Net Catch Summary by Weight for TN

Standard 3/4-in mesh, double frame trap net sets

Abbr	Species	Total Weight (Pounds)	Pounds Per Set	Mean Weight ²	Quartiles for Lake Class 43 ¹		
					25%	50%	75%
BLB	Black Bullhead	36.00	6.00	0.95	0.18	0.28	0.40
BLG	Bluegill	11.89	1.98	0.21	0.13	0.24	0.39
GSF	Green Sunfish	0.11	0.02	0.11	0.09	0.11	0.24
NOP	Northern Pike	18.99	3.16	3.16	N/A	N/A	N/A
WAE	Walleye	127.90	21.32	5.31	0.82	1.44	2.28
YEP	Yellow Perch	0.64	0.11	0.10	0.11	0.18	0.30
Total Pounds Fish/Set:			32.59	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 06/05/2024 and 06/06/2024)

	<u>BLB</u>	<u>BLG</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
< 3.00	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-
3.50 - 3.99	-	-	-	-	1
4.00 - 4.49	-	-	-	-	-
4.50 - 4.99	-	-	-	-	-
5.00 - 5.49	-	-	-	-	11
5.50 - 5.99	-	3	-	-	35
6.00 - 6.49	-	3	-	-	17
6.50 - 6.99	-	1	-	-	6
7.00 - 7.49	-	-	-	-	7
7.50 - 7.99	-	-	-	-	3
8.00 - 8.49	-	-	-	-	1
8.50 - 8.99	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-
10.50 - 10.99	-	-	-	-	-
11.00 - 11.49	1	-	-	-	-
11.50 - 11.99	4	-	-	-	-
12.00 - 12.99	6	-	-	-	-
13.00 - 13.99	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-
17.00 - 17.99	-	-	-	-	-
18.00 - 18.99	-	-	-	-	-
19.00 - 19.99	-	-	-	1	-
20.00 - 20.99	-	-	-	1	-
21.00 - 21.99	-	-	1	1	-
22.00 - 22.99	-	-	3	-	-
23.00 - 23.99	-	-	-	-	-
24.00 - 24.99	-	-	4	-	-
25.00 - 25.99	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-
27.00 - 27.99	-	-	2	-	-
28.00 - 28.99	-	-	1	-	-
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>BLB</u>	<u>BLG</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
Total	11	7	11	3	81
Min. Length	11.42	5.91	21.30	19.61	3.94
Max. Length	12.52	6.85	28.46	21.73	8.27
Mean Length	11.95	6.21	25.32	20.76	6.27
# Measured	11	7	7	3	40
No Lengths for	0	0	3	0	41

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 TN

Standard 3/4-in mesh, double frame trap net sets

(Field work conducted between 06/03/2024 and 06/05/2024)

	<u>BLB</u>	<u>BLG</u>	<u>GSF</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-
4.00 - 4.49	-	-	-	-	-	-
4.50 - 4.99	-	-	-	-	-	1
5.00 - 5.49	-	10	1	-	-	-
5.50 - 5.99	1	34	-	-	-	4
6.00 - 6.49	1	8	-	-	-	-
6.50 - 6.99	-	3	-	-	-	2
7.00 - 7.49	1	-	-	-	-	-
7.50 - 7.99	-	3	-	-	-	-
8.00 - 8.49	-	-	-	-	-	-
8.50 - 8.99	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	-
9.50 - 9.99	-	-	-	-	-	-
10.00 - 10.49	1	-	-	-	-	-
10.50 - 10.99	-	-	-	-	-	-
11.00 - 11.49	4	-	-	-	-	-
11.50 - 11.99	13	-	-	-	-	-
12.00 - 12.99	16	-	-	-	-	-
13.00 - 13.99	1	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-
16.00 - 16.99	-	-	-	2	-	-
17.00 - 17.99	-	-	-	1	-	-
18.00 - 18.99	-	-	-	-	-	-
19.00 - 19.99	-	-	-	-	1	-
20.00 - 20.99	-	-	-	-	3	-
21.00 - 21.99	-	-	-	-	2	-
22.00 - 22.99	-	-	-	-	2	-
23.00 - 23.99	-	-	-	1	4	-
24.00 - 24.99	-	-	-	-	2	-
25.00 - 25.99	-	-	-	-	7	-
26.00 - 26.99	-	-	-	1	4	-
27.00 - 27.99	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-
32.00 - 32.99	-	-	-	1	-	-
33.00 - 33.99	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-

	<u>BLB</u>	<u>BLG</u>	<u>GSF</u>	<u>NOP</u>	<u>WAE</u>	<u>YEP</u>
Total	38	58	1	6	25	7
Min. Length	5.59	5.00	5.20	16.57	19.37	4.88
Max. Length	13.07	7.72	5.20	32.72	26.85	6.54
Mean Length	11.59	5.88	5.20	22.17	23.76	5.65
# Measured	38	58	1	6	23	5
No Lengths for	0	0	0	0	1	1

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.

Other Species

<u>Gear Type (1)</u>	<u>Other Species (Gender) (2)</u>	<u>Total Num</u>	<u>Number Measured</u>	<u>Length (inches) Min - Mean - Max</u>	<u>Number Weighed</u>	<u>Weight (pounds) Min - Mean - Max</u>
TN	Painted Turtle	27	0	N/A	0	N/A

(1) Key to sampling gear abbreviations:

TN = Standard 3/4-in mesh, double frame trap net sets

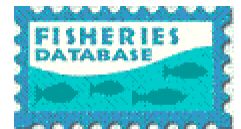
(2) Gender: If identified and reported.

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.

Lake Survey Report revision: 20230207-RJE. Data Date: 07/12/2024 at 8:49 am .

REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: West Twin
DOW Number: 42-0074-00

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

Survey Status: Field Work Complete

The following 23 (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. Status Of Fishery And Field Notes
23. 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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