

Lake Name: Yankton

Survey Type: Standard Survey

DOW Number: 42-0047-00

Survey ID Date: 06/18/2022

**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: Balaton

**Legal Descriptions**

Lake Center: Township - 109N Range - 42W Section - 14  
PLS Section Lake Center: 10904214

**All Legal Descriptions:**

Lyon County: Township - 109N Range - 42W Sections - 11, 13, 14, 23

**Area Office**

Area Name: Windom  
Region Name: Southern

ORG Code: F418  
Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 06/14/1994)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	STATE OWNED PUBLIC BOAT ACCESS ON SOUTH END.

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

**Lake Characteristics**

Lake Area (planimetered acres): 387.00	GIS Shoreline Length (miles): 4.90
GIS Lake Area (acres): 402.57	Maximum Fetch (miles): 1.21
DOW Lake Area (acres): 382.00	Fetch Orientation (degrees): 45
Littoral Area (acres): 401.33	USGS Quad Map Number: V06a
Area in MN (acres): 401.33	USGS Quad 24K GIS Index: 4212
Maximum Depth (feet): 8.0	
Mean Depth (feet): N/A	

**Watershed Characteristics**

**Major Watershed**

Name: Des Moines-Headwaters  
Watershed Number: 51  
Watershed size (acres): 798,595

**Minor Watershed**

Name: From L Yankton  
Watershed Number: 109  
Watershed size (acres): 3,643

### Surveys and Investigations

**Initial Survey:** 06/10/1985.  
**Re-Survey:** 06/19/2006, 06/14/1994.  
**Population Assessment:** 06/16/2014, 06/21/2010, 06/17/2002, 06/15/1998, 06/11/1990.  
**Special Assessment:** 07/03/2014, 03/29/1995.  
**Dissolved Oxygen Check:** 02/16/2016, 02/18/2015, 12/31/2013, 02/06/2013, 01/03/2013, 01/11/2012, 12/28/2010, 01/04/2010.  
**Standard Survey:** 06/18/2022, 06/18/2018.  
**Targeted Survey:** 01/08/2020, 09/16/2019, 04/24/2019, 02/01/2019, 01/18/2018, 10/04/2017, 02/08/2017.

### Current Water Level

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/18/2022	High	1.30	Above or below Benchmark
GA - 1	06/18/2022	High	N/A	Direct Gauge Reading

### Benchmark and Gauge Descriptions / Locations

Station ID	Location Description
BM - 1	Top of west wing on lake side of cement walkway that crosses outlet 5 feet from the lake.
GA - 1	Gauge on north side of pole at outlet.

### Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/18/2022	High	1.30	Above or below Benchmark
	06/18/2018	High	-0.40	Above or below Benchmark
	06/17/2014	High	-0.20	Above or below Benchmark
	06/24/2010	High	-0.75	Above or below Benchmark
	06/19/2006	Normal	-1.20	Above or below Benchmark
GA - 1	06/18/2022	High	N/A	Direct Gauge Reading
	06/18/2018	High	2.90	Direct Gauge Reading
	06/24/2010	High	12.10	Direct Gauge Reading
	06/19/2006	Normal	2.58	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	-1.20	06/19/2006	1.30	06/18/2022	2.50	-0.25	Above or below Benchmark (5)
GA - 1	2.58	06/19/2006	12.10	06/24/2010	9.52	5.86	Direct Gauge Reading (3)

### 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	06/21/2022	8.6	Surface	78.3	6.9
			1.0	78.3	6.9
			2.0	78.3	6.9
			3.0	78.3	6.8
			4.0	78.3	6.8
			5.0	78.3	6.7
			6.0	78.1	6.7
			7.0	78.1	6.6

**Field Measurements of Water Quality**

<u>Station ID</u>	<u>Sampling Date</u>	<u>Sample Depth (Feet)</u>	<u>Secchi Depth (Feet)</u>	<u>Field pH</u>	<u>Alkalinity (ppm)</u>	<u>Water Color</u>	<u>Color Cause</u>
WQ - 1	06/21/2022	Surface	1.8	8.60	260	Brown Grn	Algae

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 3  
 First Set Date: 06/21/2022  
 Last Lift Date: 06/24/2022  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 <sup>1</sup>		
				25%	50%	75%
BIB	Bigmouth Buffalo	6	2.00	0.75	2.58	6.96
BLB	Black Bullhead	173	57.67	30.34	75.58	150.62
BLC	Black Crappie	4	1.33	1.41	3.71	13.75
CAP	Common Carp	13	4.33	1.00	3.33	13.75
WAE	Walleye	48	16.00	2.28	6.83	18.06
WTS	White Sucker	7	2.33	0.81	2.33	6.50
YEP	Yellow Perch	247	82.33	2.65	8.00	25.00
Total Fish/Set:			166.00	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 43 <sup>1</sup>		
					25%	50%	75%
BIB	Bigmouth Buffalo	34.05	11.35	5.68	N/A	N/A	N/A
BLB	Black Bullhead	35.15	11.72	0.22	0.17	0.26	0.39
BLC	Black Crappie	0.90	0.30	0.22	0.16	0.25	0.35
CAP	Common Carp	36.17	12.06	2.78	0.81	1.98	3.70
WAE	Walleye	105.51	35.17	2.20	1.01	1.53	2.30
WTS	White Sucker	7.69	2.56	1.10	0.93	1.58	2.02
YEP	Yellow Perch	64.61	21.54	0.28	0.13	0.21	0.31
Total Pounds Fish/Set:			94.69	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> 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: 9  
 First Set Date: 06/21/2022  
 Last Lift Date: 06/24/2022  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43 <sup>1</sup>		
				25%	50%	75%
BLB	Black Bullhead	60	6.67	11.50	42.00	132.61
BLC	Black Crappie	1	0.11	1.17	4.88	20.50
BLG	Bluegill	5	0.56	1.17	3.89	20.00
CAP	Common Carp	27	3.00	1.00	2.44	5.51
GSF	Green Sunfish	2	0.22	0.15	0.25	1.94
NOP	Northern Pike	3	0.33	N/A	N/A	N/A
YEB	Yellow Bullhead	6	0.67	0.50	1.13	2.50
YEP	Yellow Perch	16	1.78	0.33	1.37	3.76
Total Fish/Set:			13.33	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 43 <sup>1</sup>		
					25%	50%	75%
BLB	Black Bullhead	29.99	3.33	0.50	0.18	0.28	0.40
BLC	Black Crappie	1.10	0.12	1.10	0.22	0.34	0.50
BLG	Bluegill	0.49	0.05	0.10	0.13	0.24	0.39
CAP	Common Carp	95.01	10.56	3.52	1.42	2.92	4.58
GSF	Green Sunfish	0.10	0.01	0.05	0.09	0.11	0.24
NOP	Northern Pike	9.32	1.04	3.11	N/A	N/A	N/A
YEB	Yellow Bullhead	3.20	0.36	0.53	0.31	0.48	0.67
YEP	Yellow Perch	2.83	0.31	0.16	0.11	0.18	0.30
Total Pounds Fish/Set:			15.78	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> Mean Weights are based on measured fish counts only.

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 06/21/2022 and 06/24/2022)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
< 3.00	-	1	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-
4.00 - 4.49	-	1	-	-	-	-	-
4.50 - 4.99	-	4	-	-	-	-	2
5.00 - 5.49	-	6	-	-	-	-	58
5.50 - 5.99	-	10	1	-	-	-	38
6.00 - 6.49	-	38	-	-	-	-	6
6.50 - 6.99	-	51	-	-	-	-	1
7.00 - 7.49	-	32	2	-	-	-	7
7.50 - 7.99	-	11	1	-	-	-	14
8.00 - 8.49	-	3	-	-	-	-	46
8.50 - 8.99	-	2	-	-	-	2	19
9.00 - 9.49	-	4	-	-	-	-	21
9.50 - 9.99	-	1	-	-	-	-	21
10.00 - 10.49	-	2	-	-	1	1	9
10.50 - 10.99	-	3	-	-	1	-	-
11.00 - 11.49	-	-	-	-	-	-	1
11.50 - 11.99	-	2	-	-	-	-	-
12.00 - 12.99	-	2	-	-	-	1	-
13.00 - 13.99	2	-	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	1	-	-	-
16.00 - 16.99	-	-	-	1	2	2	-
17.00 - 17.99	-	-	-	5	15	1	-
18.00 - 18.99	-	-	-	4	27	-	-
19.00 - 19.99	-	-	-	1	2	-	-
20.00 - 20.99	-	-	-	1	-	-	-
21.00 - 21.99	1	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-
23.00 - 23.99	1	-	-	-	-	-	-
24.00 - 24.99	1	-	-	-	-	-	-
25.00 - 25.99	1	-	-	-	-	-	-
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>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
Total	6	173	4	13	48	7	243
Min. Length	13.03	0.83	5.75	15.79	10.08	8.70	4.80
Max. Length	25.28	12.83	7.95	20.00	19.84	17.40	11.10
Mean Length	20.15	7.02	7.04	17.97	17.86	12.96	7.54
# Measured	6	125	4	13	48	7	187
No Lengths for	0	48	0	0	0	0	60

**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 06/21/2022 and 06/24/2022)

	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>GSF</u>	<u>NOP</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	1	-	-	-
4.00 - 4.49	1	-	-	-	1	-	-	-
4.50 - 4.99	2	-	1	-	-	-	-	1
5.00 - 5.49	-	-	4	-	-	-	-	8
5.50 - 5.99	1	-	-	-	-	-	-	1
6.00 - 6.49	4	-	-	-	-	-	-	1
6.50 - 6.99	2	-	-	-	-	-	-	-
7.00 - 7.49	8	-	-	-	-	-	-	-
7.50 - 7.99	6	-	-	-	-	-	1	2
8.00 - 8.49	-	-	-	-	-	-	1	-
8.50 - 8.99	1	-	-	-	-	-	1	1
9.00 - 9.49	-	-	-	-	-	-	1	2
9.50 - 9.99	5	-	-	-	-	-	-	-
10.00 - 10.49	5	-	-	-	-	-	1	-
10.50 - 10.99	9	-	-	-	-	-	-	-
11.00 - 11.49	9	-	-	-	-	-	-	-
11.50 - 11.99	6	-	-	-	-	-	-	-
12.00 - 12.99	1	1	-	-	-	-	-	-
13.00 - 13.99	-	-	-	-	-	-	1	-
14.00 - 14.99	-	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	3	-	-	-	-
17.00 - 17.99	-	-	-	3	-	-	-	-
18.00 - 18.99	-	-	-	9	-	-	-	-
19.00 - 19.99	-	-	-	6	-	-	-	-
20.00 - 20.99	-	-	-	3	-	1	-	-
21.00 - 21.99	-	-	-	2	-	-	-	-
22.00 - 22.99	-	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	-	-	-	-	-
24.00 - 24.99	-	-	-	-	-	1	-	-
25.00 - 25.99	-	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	1	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	1	-	-	-	-
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>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>GSF</u>	<u>NOP</u>	<u>YEB</u>	<u>YEP</u>
Total	60	1	5	27	2	3	6	16
Min. Length	4.45	12.05	4.80	16.46	3.90	20.91	7.91	4.96
Max. Length	12.64	12.05	5.35	29.57	4.41	26.06	13.43	9.13
Mean Length	9.20	12.05	5.13	19.26	4.15	23.67	9.57	6.25
# Measured	60	1	4	27	2	3	6	14
No Lengths for	0	0	1	0	0	0	0	2

**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**

<b>Gear Type (1)</b>	<b>Other Species (Gender) (2)</b>	<b>Total Num</b>	<b>Number Measured</b>	<b>Length (inches) Min - Mean - Max</b>	<b>Number Weighed</b>	<b>Weight (pounds) Min - Mean - Max</b>
TN	Painted Turtle	4	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.

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**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 07/07/2022), 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: 20210824-RJE. Data Date: 07/07/2022 at 2:54 pm .

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## REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Yankton

Survey Type: Standard Survey

DOW Number: 42-0047-00

Survey ID Date: 06/18/2022

Survey Status: Field Work Complete

The following 20 (of 33) report components are not included in this Lake Survey Report:

1. Water Level History<sup>1</sup>
2. Lake Inlets
3. Additional Inlet Information
4. Lake Outlets
5. Additional Outlet Information
6. Water Control Structure (Dam)
7. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations<sup>2</sup>
8. Resorts And Campgrounds
9. Fish Spawning Conditions
10. Erosion And Pollution
11. Fish Diseases And Parasites
12. Aquatic Vegetation And Shoalwater Substrates
13. Water Quality (Winter Observations) (added to revision 01/21/2010)
14. Laboratory Analysis Of Water Chemistry
15. Catch Summary (Pre-1993 Format) (added to revision 20201001)
16. Length At Capture With Last Incremental Length\*
17. Back-Calculated Lengths
18. Age Class Frequency Distributions
19. Status Of Fishery And Field Notes
20. Survey Attachments (added to revision 20150622)

<sup>1</sup> 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.

<sup>2</sup> 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 07/07/2022 may not be reflected in the Distribution tables until 07/08/2022.**

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