



Minnesota Department of Natural Resources Fisheries Management



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 08/13/2013)

Lake Name: Stay

Survey Type: Winter Kill Assessment

DOW Number: 41-0034-00

Survey ID Date: 05/02/2013

Lake Identification

Alternate Lake Name: N/A
Primary Lake Class ID: 42

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

Lake Location

Primary County: Lincoln

Nearest Town: Arco

Legal Descriptions

Lake Center: Township - 111N Range - 44W Section - 29
PLS Section Lake Center: 11104429

All Legal Descriptions:

Lincoln County: Township - 111N Range - 44W Sections - 29, 32

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 07/22/1996)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	STATE OWNED ACCESS ON WEST SIDE OF LAKE.

Lake Characteristics

Lake Area (planimetered acres): 224.00	GIS Shoreline Length (miles): 2.95
GIS Lake Area (acres): 221.20	Maximum Fetch (miles): 0.88
DOW Lake Area (acres): 220.00	Fetch Orientation (degrees): 360
Littoral Area (acres): 221.20	USGS Quad Map Number: U05b
Area in MN (acres): 221.20	USGS Quad 24K GIS Index: 4009
Maximum Depth (feet): 6.0	
Mean Depth (feet): N/A	

Watershed Characteristics

Major Watershed

Name: Minn R-Yellow Medicine R.
Watershed Number: 25
Watershed size (acres): 1,332,769

Minor Watershed

Name: Co Ditch #4
Watershed Number: 143
Watershed size (acres): 7,863

Surveys And Investigations

Re-Survey: 07/22/1996, 07/26/1988.
 Population Assessment: 07/09/2012, 07/14/2008, 07/19/2004, 07/17/2000, 07/27/1992.
 Special Assessment: 08/31/1967.
 Winter Kill Assessment: 05/02/2013, 04/19/2010.
 Dissolved Oxygen Check: 02/06/2013, 01/03/2013, 01/10/2012, 12/29/2010, 01/04/2010.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/09/2012	Normal	4.80	Above or below Benchmark
	07/16/2008	Low	-4.30	Above or below Benchmark

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	-4.30	07/16/2008	4.80	07/09/2012	9.10	0.25	Above or below Benchmark (2)

Net Catch Summary by Numbers for TN

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

Number of Sets: 4
First Set Date: 05/02/2013
Last Lift Date: 05/03/2013
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 42*		
				25%	50%	75%
BLB	Black Bullhead	3,661	915.25	2.20	17.30	60.46
CAP	Common Carp	5	1.25	1.00	2.06	3.56
NOP	Northern Pike	12	3.00	N/A	N/A	N/A
OSS	Orangespotted Sunfish	1	0.25	N/A	N/A	N/A
WAE	Walleye	2	0.50	0.40	0.86	1.94
WTS	White Sucker	10	2.50	0.28	0.67	2.20
YEP	Yellow Perch	51	12.75	0.48	1.29	3.45
Total Fish/Set:			935.50	* 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	Quartiles for Lake Class 42*		
					25%	50%	75%
BLB	Black Bullhead	57.80	14.45	0.02	0.19	0.30	0.50
CAP	Common Carp	2.05	0.51	0.41	2.10	3.55	5.29
NOP	Northern Pike	41.03	10.26	3.42	N/A	N/A	N/A
OSS	Orangespotted Sunfish	0.03	0.01	0.03	N/A	N/A	N/A
WAE	Walleye	4.05	1.01	2.03	0.59	1.53	2.56
WTS	White Sucker	16.13	4.03	1.61	1.14	1.79	2.50
YEP	Yellow Perch	3.64	0.91	0.07	0.10	0.17	0.27
Total Pounds Fish/Set:			31.18	* Quartiles for Mean Weight			

Length Frequency Distribution For TN

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

(Field work conducted between 05/02/2013 and 05/03/2013)

	<u>BLB</u>	<u>CAP</u>	<u>NOP</u>	<u>OSS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
< 3.00	1936	-	-	-	-	-	1
3.00 - 3.49	121	-	-	1	-	-	11
3.50 - 3.99	484	-	-	-	-	-	13
4.00 - 4.49	363	-	-	-	-	-	7
4.50 - 4.99	121	-	-	-	-	-	4
5.00 - 5.49	-	-	-	-	-	-	1
5.50 - 5.99	-	-	-	-	-	-	1
6.00 - 6.49	-	-	-	-	-	-	-
6.50 - 6.99	-	1	-	-	-	-	4
7.00 - 7.49	-	-	-	-	-	-	3
7.50 - 7.99	-	2	-	-	-	-	4
8.00 - 8.49	-	-	-	-	-	-	1
8.50 - 8.99	-	-	-	-	-	-	-
9.00 - 9.49	-	-	-	-	-	-	-
9.50 - 9.99	-	1	-	-	-	-	1
10.00 - 10.49	-	-	-	-	-	-	-
10.50 - 10.99	-	-	-	-	-	-	-
11.00 - 11.49	-	-	-	-	-	-	-
11.50 - 11.99	-	-	-	-	-	1	-
12.00 - 12.99	-	1	-	-	-	2	-
13.00 - 13.99	-	-	-	-	-	-	-
14.00 - 14.99	-	-	-	-	-	-	-
15.00 - 15.99	-	-	-	-	-	2	-
16.00 - 16.99	-	-	-	-	-	3	-
17.00 - 17.99	-	-	-	-	1	1	-
18.00 - 18.99	-	-	-	-	1	1	-
19.00 - 19.99	-	-	-	-	-	-	-
20.00 - 20.99	-	-	-	-	-	-	-
21.00 - 21.99	-	-	1	-	-	-	-
22.00 - 22.99	-	-	1	-	-	-	-
23.00 - 23.99	-	-	2	-	-	-	-
24.00 - 24.99	-	-	1	-	-	-	-
25.00 - 25.99	-	-	2	-	-	-	-
26.00 - 26.99	-	-	2	-	-	-	-
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>CAP</u>	<u>NOP</u>	<u>OSS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
Total	3025	5	12	1	2	10	51
Min. Length	1.93	6.85	21.22	3.23	17.83	11.61	2.83
Max. Length	4.80	12.32	28.39	3.23	18.54	18.62	9.88
Mean Length	2.98	8.94	25.12	3.23	18.19	15.39	4.78
# Measured	25	5	12	1	2	10	51
No Lengths for	3636	0	0	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

Other Species

Gear Type (1)	Other Species (Gender) (2)	Total Num	Number Measured	Length (inches) Min - Mean - Max	Number Weighed	Weight (pounds) Min - Mean - Max
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.

Approval Dates And Notices

Date Approved By Windom Area Fisheries Supervisor: _____

Date Approved By Southern Region Fisheries Manager: _____

This Draft version of the Standard Lake Survey Report contains preliminary data (as of 08/13/2013), 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 Standard Lake Survey Report and should be discarded)

Lake Name: Stay

Survey Type: Winter Kill Assessment

DOW Number: 41-0034-00

Survey ID Date: 05/02/2013

Survey Status: Field Work Complete

The following 22 (of 31) report components are not included in this report:

1. Current Water Level
2. Benchmark And Gauge Descriptions / Locations
3. Water Level History*
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 Observations
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. Laboratory Analysis Of Water Chemistry
18. Length At Capture With Last Incremental Length*
19. Back-Calculated Lengths
20. Age Class Frequency Distributions
21. Status Of Fishery And Field Notes
22. Water Quality (Winter Observations) (added to revision 01/21/2010)

* 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.

* 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 08/13/2013 may not be reflected in the Distribution tables until after 12:30 pm on 08/13/2013.