



Minnesota Department of Natural Resources Fisheries Management



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 08/01/2014)

Lake Name: Talcot

Survey Type: Population Assessment

DOW Number: 17-0060-00

Survey ID Date: 07/28/2014

Lake Identification

Alternate Lake Name: Talcott
Primary Lake Class ID: 43

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

Lake Location

Primary County: Cottonwood

Nearest Town: Dundee

All Counties: Cottonwood, Murray.

Legal Descriptions

Lake Center: Township - 105N Range - 38W Section - 19
PLS Section Lake Center: 10503819

All Legal Descriptions:

Cottonwood County: Township - 105N Range - 38W Sections - 19, 20, 30
Murray County: Township - 105N Range - 39W Sections - 24, 25

Area Office

Area Name: Windom
Region Name: Southern

ORG Code: F418
Region Number: 4

Lake Access

(Information based on Re-Survey dated 07/31/1995)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	STATE OWNED ACCESS ON SOUTHSORE.
AC - 2	DNR	Open to Public use	Carry-In	STATE OWNED CANOE ACCESS ON DES MOINES RIVER.

Lake Characteristics

Lake Area (planimetered acres): 678.00	GIS Shoreline Length (miles): 8.54
GIS Lake Area (acres): 873.05	Maximum Fetch (miles): 2.00
DOW Lake Area (acres): 928.00	Fetch Orientation (degrees): 45
Littoral Area (acres): 873.05	USGS Quad Map Number: W08b
Area in MN (acres): 873.05	USGS Quad 24K GIS Index: 4415
Maximum Depth (feet): 6.0	
Mean Depth (feet): N/A	

Watershed Characteristics**Major Watershed**

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

Minor Watershed

Name: Talcot L
 Watershed Number: 25
 Watershed size (acres): 7,297

Surveys And Investigations

Initial Survey: 08/05/1985.

Re-Survey: 07/29/2002, 07/31/1995.

Population Assessment: 07/28/2014, 07/26/2010, 07/24/2006, 08/02/1999, 07/29/1991, 07/23/1990, 07/24/1989.

Special Assessment: 07/28/2014, 10/04/2006, 10/11/2004, 10/07/2003, 10/07/2002, 09/13/2001, 09/12/2000, 09/14/1999, 09/21/1998, 09/24/1997, 09/24/1996, 09/27/1995.

Winter Kill Assessment: 04/07/2014.

Dissolved Oxygen Check: 01/02/2014, 02/07/2013, 01/07/2013, 01/21/2010.

Natural Reproduction Check: 10/16/2013, 10/16/2012, 10/26/2011, 10/18/2010, 10/08/2008, 10/11/2007.

Current Water Level

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/31/2014	Normal	-3.50	Above or below Benchmark

Benchmark and Gauge Descriptions / Locations

Station ID	Location Description
BM - 1	Top of concrete abutment on North end of dam.

Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	07/31/2014	Normal	-3.50	Above or below Benchmark
	07/29/2010	High	3.10	Above or below Benchmark
	07/24/2006	Normal	-3.60	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	-3.60	07/24/2006	3.10	07/29/2010	6.70	-1.33	Above or below Benchmark (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	07/29/2014	5.5	Surface	70.5	8.9
			1.0	70.5	8.6
			2.0	70.3	8.5
			3.0	70.3	8.5
			4.0	70.2	8.4
			5.0	69.8	7.8

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	07/29/2014	Surface	0.5	8.45	187	Green	Algae

Net Catch Summary by Numbers for GN

Standard gill net sets

Number of Sets: 3
 First Set Date: 07/28/2014
 Last Lift Date: 07/31/2014
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	39	13.00	0.75	2.58	6.96
BLB	Black Bullhead	65	21.67	30.34	75.58	150.62
BLC	Black Crappie	1	0.33	1.41	3.71	13.75
CCF	Channel Catfish	36	12.00	N/A	N/A	N/A
CAP	Common Carp	5	1.67	1.00	3.33	13.75
NOP	Northern Pike	3	1.00	1.08	3.00	8.00
QBS	Quillback	1	0.33	N/A	N/A	N/A
WAE	Walleye	11	3.67	2.28	6.83	18.06
WTS	White Sucker	219	73.00	0.81	2.33	6.50
YEP	Yellow Perch	52	17.33	2.65	8.00	25.00
Total Fish/Set:			144.00	* 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	Quartiles for Lake Class 43*		
					25%	50%	75%
BIB	Bigmouth Buffalo	40.42	13.47	1.04	N/A	N/A	N/A
BLB	Black Bullhead	22.59	7.53	0.35	0.17	0.26	0.39
BLC	Black Crappie	0.11	0.04	0.11	0.16	0.25	0.35
CCF	Channel Catfish	62.03	20.68	1.72	N/A	N/A	N/A
CAP	Common Carp	3.81	1.27	0.76	0.81	1.98	3.70
NOP	Northern Pike	7.43	2.48	2.48	1.82	2.50	3.35
QBS	Quillback	1.04	0.35	1.04	N/A	N/A	N/A
WAE	Walleye	11.73	3.91	1.07	1.01	1.53	2.30
WTS	White Sucker	165.11	55.04	0.75	0.93	1.58	2.02
YEP	Yellow Perch	9.01	3.00	0.17	0.13	0.21	0.31
Total Pounds Fish/Set:			107.76	* Quartiles for Mean Weight			

STANDARD LAKE SURVEY REPORT
POPULATION ASSESSMENT DATED 07/28/2014 FOR DOW NUMBER 17-0060-00

DRAFT

Net Catch Summary by Numbers for TN

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

Number of Sets: 11
 First Set Date: 07/28/2014
 Last Lift Date: 07/31/2014
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	11	1.00	0.17	0.38	1.04
BLB	Black Bullhead	39	3.55	11.50	42.00	132.61
BLC	Black Crappie	45	4.09	1.17	4.88	20.50
CAP	Common Carp	41	3.73	1.00	2.44	5.51
GSF	Green Sunfish	5	0.45	0.15	0.25	1.94
NOP	Northern Pike	1	0.09	N/A	N/A	N/A
OSS	Orangespotted Sunfish	2	0.18	N/A	N/A	N/A
QBS	Quillback	26	2.36	N/A	N/A	N/A
WAE	Walleye	8	0.73	0.50	1.33	2.95
WTS	White Sucker	185	16.82	0.34	0.88	2.58
YEB	Yellow Bullhead	1	0.09	0.50	1.13	2.50
YEP	Yellow Perch	17	1.55	0.33	1.37	3.76
Total Fish/Set:			34.64	* 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 43*		
					25%	50%	75%
BIB	Bigmouth Buffalo	44.59	4.05	4.05	2.56	3.75	5.83
BLB	Black Bullhead	10.83	0.98	0.28	0.18	0.28	0.40
BLC	Black Crappie	6.20	0.56	0.14	0.22	0.34	0.50
CAP	Common Carp	169.44	15.40	4.13	1.42	2.92	4.58
GSF	Green Sunfish	0.85	0.08	0.17	0.09	0.11	0.24
NOP	Northern Pike	4.74	0.43	4.74	N/A	N/A	N/A
OSS	Orangespotted Sunfish	0.08	0.01	0.04	N/A	N/A	N/A
QBS	Quillback	39.71	3.61	1.53	N/A	N/A	N/A
WAE	Walleye	16.28	1.48	2.04	0.82	1.44	2.28
WTS	White Sucker	112.27	10.21	0.61	1.05	1.47	2.04
YEB	Yellow Bullhead	0.21	0.02	0.21	0.31	0.48	0.67
YEP	Yellow Perch	1.88	0.17	0.11	0.11	0.18	0.30
Total Pounds Fish/Set:			37.01	* Quartiles for Mean Weight			

Length Frequency Distribution For GN

Standard gill net sets

(Field work conducted between 07/28/2014 and 07/31/2014)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>NOP</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	-	1	-	-	-	-	-	-
4.50 - 4.99	-	-	-	-	-	-	-	-	-	1
5.00 - 5.49	-	2	-	-	-	-	-	-	-	-
5.50 - 5.99	-	-	1	-	-	-	-	-	-	1
6.00 - 6.49	-	2	-	-	-	-	-	-	3	3
6.50 - 6.99	-	5	-	-	-	-	-	-	7	17
7.00 - 7.49	1	4	-	-	-	-	-	-	3	22
7.50 - 7.99	-	9	-	-	-	-	-	-	11	7
8.00 - 8.49	-	29	-	-	-	-	-	-	35	1
8.50 - 8.99	4	6	-	-	-	-	-	-	33	-
9.00 - 9.49	7	1	-	1	-	-	-	-	30	-
9.50 - 9.99	7	3	-	-	-	-	-	-	25	-
10.00 - 10.49	6	1	-	-	1	-	-	-	23	-
10.50 - 10.99	5	1	-	-	-	-	-	-	4	-
11.00 - 11.49	5	1	-	1	1	-	-	-	2	-
11.50 - 11.99	1	1	-	-	4	-	-	1	-	-
12.00 - 12.99	-	-	-	1	2	-	1	5	1	-
13.00 - 13.99	-	-	-	-	6	-	-	-	1	-
14.00 - 14.99	-	-	-	1	2	-	-	-	1	-
15.00 - 15.99	-	-	-	-	5	-	-	3	7	-
16.00 - 16.99	-	-	-	-	5	-	-	2	6	-
17.00 - 17.99	-	-	-	-	1	1	-	-	16	-
18.00 - 18.99	1	-	-	-	2	-	-	-	9	-
19.00 - 19.99	1	-	-	-	-	-	-	-	-	-
20.00 - 20.99	-	-	-	-	2	-	-	-	-	-
21.00 - 21.99	-	-	-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	3	-	-	-	-	-
23.00 - 23.99	-	-	-	-	-	2	-	-	-	-
24.00 - 24.99	-	-	-	-	1	-	-	-	-	-
25.00 - 25.99	1	-	-	-	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>CCF</u>	<u>NOP</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEP</u>
Total	39	65	1	5	36	3	1	11	217	52
Min. Length	7.48	5.35	5.83	4.13	10.24	17.60	12.83	11.89	6.42	4.96
Max. Length	25.63	11.77	5.83	14.53	25.67	23.46	12.83	16.81	18.70	8.23
Mean Length	10.81	8.16	5.83	10.31	15.97	21.44	12.83	13.83	11.13	7.02
# Measured	39	65	1	5	36	3	1	11	145	52
No Lengths for	0	0	0	0	0	0	0	0	74	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

STANDARD LAKE SURVEY REPORT
POPULATION ASSESSMENT DATED 07/28/2014 FOR DOW NUMBER 17-0060-00

DRAFT

Length Frequency Distribution For TN

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

(Field work conducted between 07/28/2014 and 07/31/2014)

	<u>BIB</u>	<u>YBIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>GSF</u>	<u>NOP</u>	<u>OSS</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	2	-	-	-	-	-	1	-	-	-	-	-
3.50 - 3.99	3	2	-	-	3	-	-	1	-	-	-	-	-
4.00 - 4.49	-	-	-	-	8	1	-	-	-	-	-	-	-
4.50 - 4.99	-	-	1	-	3	-	-	-	-	-	-	-	-
5.00 - 5.49	-	-	5	3	-	1	-	-	-	-	-	-	3
5.50 - 5.99	-	-	5	22	-	-	-	-	1	-	-	-	7
6.00 - 6.49	-	-	7	11	-	2	-	-	-	-	11	-	1
6.50 - 6.99	-	-	3	8	-	1	-	-	1	-	6	-	6
7.00 - 7.49	-	-	4	-	-	-	-	-	-	-	-	1	-
7.50 - 7.99	-	-	3	-	-	-	-	-	-	-	12	-	-
8.00 - 8.49	-	-	3	-	-	-	-	-	3	-	16	-	-
8.50 - 8.99	-	-	1	-	-	-	-	-	1	-	25	-	-
9.00 - 9.49	-	-	-	-	-	-	-	-	2	-	42	-	-
9.50 - 9.99	-	-	1	-	-	-	-	-	1	-	25	-	-
10.00 - 10.49	-	-	1	-	-	-	-	-	-	-	9	-	-
10.50 - 10.99	-	-	4	-	1	-	-	-	-	1	7	-	-
11.00 - 11.49	-	-	-	1	1	-	-	-	-	-	-	-	-
11.50 - 11.99	-	-	1	-	-	-	-	-	-	-	-	-	-
12.00 - 12.99	-	-	-	-	1	-	-	-	3	1	2	-	-
13.00 - 13.99	-	-	-	-	5	-	-	-	1	-	4	-	-
14.00 - 14.99	-	-	-	-	-	-	-	-	3	-	-	-	-
15.00 - 15.99	-	-	-	-	-	-	-	-	-	-	-	-	-
16.00 - 16.99	-	-	-	-	-	-	-	-	3	1	9	-	-
17.00 - 17.99	-	-	-	-	2	-	-	-	5	-	12	-	-
18.00 - 18.99	-	-	-	-	1	-	-	-	2	3	-	-	-
19.00 - 19.99	-	-	-	-	-	-	-	-	-	2	-	-	-
20.00 - 20.99	-	-	-	-	-	-	-	-	-	-	-	-	-
21.00 - 21.99	1	-	-	-	-	-	-	-	-	-	-	-	-
22.00 - 22.99	-	-	-	-	1	-	-	-	-	-	-	-	-
23.00 - 23.99	-	-	-	-	1	-	-	-	-	-	-	-	-
24.00 - 24.99	1	-	-	-	2	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	1	-	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	1	-	1	-	-	-	-	-	-
27.00 - 27.99	1	-	-	-	5	-	-	-	-	-	-	-	-
28.00 - 28.99	-	-	-	-	2	-	-	-	-	-	-	-	-
29.00 - 29.99	1	-	-	-	-	-	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	-	2	-	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	-	-	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	1	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>BIB</u>	<u>YBIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>GSF</u>	<u>NOP</u>	<u>OSS</u>	<u>QBS</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	7	4	39	45	41	5	1	2	26	8	184	1	17
Min. Length	3.50	3.31	4.88	5.04	3.62	4.09	26.42	3.15	5.79	10.79	6.10	7.40	5.35
Max. Length	29.13	3.58	11.69	11.30	34.17	6.50	26.42	3.82	18.19	19.57	17.87	7.40	6.97
Mean Length	16.12	3.45	7.27	6.10	15.91	5.66	26.42	3.48	13.15	16.75	9.81	7.40	6.06
# Measured	7	4	39	45	41	5	1	2	26	8	116	1	16
No Lengths for	0	0	0	0	0	0	0	0	0	0	69	0	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

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	3	0	N/A	0	N/A
	Spiney Softshell Turtle	3	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 08/01/2014), 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.

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REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Talcot

Survey Type: Population Assessment

DOW Number: 17-0060-00

Survey ID Date: 07/28/2014

Survey Status: Field Work Complete

The following 18 (of 31) report components are not included in this report:

1. Water Level History¹
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 Observations²
8. Resorts And Campgrounds
9. Fish Spawning Conditions
10. Erosion And Pollution
11. Fish Diseases And Parasites
12. Aquatic Vegetation And Shoalwater Substrates
13. Laboratory Analysis Of Water Chemistry
14. Length At Capture With Last Incremental Length*
15. Back-Calculated Lengths
16. Age Class Frequency Distributions
17. Status Of Fishery And Field Notes
18. Water Quality (Winter Observations) (added to revision 01/21/2010)

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 Standard 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 08/01/2014 may not be reflected in the Distribution tables until after 12:30 pm on 08/01/2014.

The following survey component was flagged to be specifically excluded from this report: TN - 9