

Minnesota Department of Natural Resources **Fisheries Management**



STANDARD LAKE SURVEY REPORT

DRAFT VERSION - PRELIMINARY DATA (AS OF 04/28/2014)

Survey Type: Winter Kill Assessment Lake Name: Pearl

Survey ID Date: 04/24/2014 **DOW Number: 32-0033-00**

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: N/A Primary Lake Class ID: 43 Alternate Lake Class ID: N/A

Lake Location

Primary County: Jackson Nearest Town: Jackson

Legal Descriptions

Lake Center: Township - 101N Range - 36W Section - 26

PLS Section Lake Center: 10103626

All Legal Descriptions:

Sections - 23, 24, 25, 26 Jackson County: Township - 101N Range - 36W

Area Office

Area Name: Windom ORG Code: F418 Region Name: Southern Region Number: 4

Lake Access

(Information based on Population Assessment dated 06/21/1993)

Station ID Ownership **Public Use Location / Comments** Type

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

5,231

Lake Characteristics

Lake Area (planimetered acres): 155.00 GIS Shoreline Length (miles): 1.94

GIS Lake Area (acres): 117.00 Maximum Fetch (miles): 0.70 DOW Lake Area (acres): 117.00 Fetch Orientation (degrees): 315 Littoral Area (acres): 117.00 USGS Quad Map Number: X09d USGS Quad 24K GIS Index: 4718 Area in MN (acres): 117.00

Maximum Depth (feet): 6.0 Mean Depth (feet): N/A

Watershed Characteristics

Major Watershed Minor Watershed

Name: Little Sioux River Name: To Spirit L Watershed Number: Watershed Number: 205,753 Watershed size (acres): Watershed size (acres):

Standard Lake Survey Report revision: 03/25/2014. Data Date: 04/28/2014 at 9:41 am.



Surveys And Investigations

Re-Survey: 06/23/1997, 06/20/1988.

 $\textbf{Population Assessment:} \ \ 06/28/2013, \ 06/25/2001, \ 06/21/1993.$

Dissolved Oxygen Check: 01/02/2014, 02/07/2013, 01/04/2013, 02/17/2012, 01/26/2012, 12/28/2010, 01/04/2010.

Net Catch Summary by Numbers for STN

Special sampling with trap nets

Number of Sets: 4

First Set Date: 04/24/2014 Last Lift Date: 04/25/2014 Target Species: N/A

Quartiles for Lake Class 43*

Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BIB	Bigmouth Buffalo	8	2.00	N/A	N/A	N/A
BLB	Black Bullhead	109	27.25	N/A	N/A	N/A
BLC	Black Crappie	15	3.75	N/A	N/A	N/A
CCF	Channel Catfish	6	1.50	N/A	N/A	N/A
CAP	Common Carp	1	0.25	N/A	N/A	N/A
NOP	Northern Pike	1	0.25	N/A	N/A	N/A
SNG	Shortnose Gar	3	0.75	N/A	N/A	N/A
WAE	Walleye	7	1.75	N/A	N/A	N/A
WTS	White Sucker	7	1.75	N/A	N/A	N/A
		Total Fish/Set:	39.25	* Quartiles for Number Per Set		er Set

Net Catch Summary by Weight for STN

Special sampling with trap nets

		Total Weight	Pounds	Mean	Quartiles for Lake Class 43*		s 43*
Abbr	Species	(Pounds)	Per Set	Weight	25%	50%	75%
BIB	Bigmouth Buffalo	28.02	7.00	3.50	N/A	N/A	N/A
BLB	Black Bullhead	83.35	20.84	0.76	N/A	N/A	N/A
BLC	Black Crappie	9.25	2.31	0.62	N/A	N/A	N/A
CCF	Channel Catfish	28.40	7.10	4.73	N/A	N/A	N/A
CAP	Common Carp	9.52	2.38	9.52	N/A	N/A	N/A
NOP	Northern Pike	6.35	1.59	6.35	N/A	N/A	N/A
SNG	Shortnose Gar	4.88	1.22	1.63	N/A	N/A	N/A
WAE	Walleye	18.30	4.57	2.61	N/A	N/A	N/A
WTS	White Sucker	15.12	3.78	2.16	N/A	N/A	N/A
		Total Pounds Fish/Set:	50.80		* Quartiles for Mean Weight		

Length Frequency Distribution For STN

Special sampling with trap nets

(Field work conducted between 04/24/2014 and 04/25/2014)

	BIB	BLB	BLC	CAP	CCF	NOP	SNG	WAE	<u>wts</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	-	-	-	-	-	-	-	-	-
7.50 - 7.99	-	-	1	-	-	-	-	-	-
8.00 - 8.49	-	-	1	-	-	-	-	-	-
8.50 - 8.99	-	-	-	-	-	-	-	-	-
9.00 - 9.49	-	2	1	-	-	-	-	-	-
9.50 - 9.99	-	-	1	-	-	-	-	-	-
10.00 - 10.49	-	-	2	-	-	-	-	-	-
10.50 - 10.99	_	2	2	_	_	_	_	_	_
11.00 - 11.49	_	2	3	_	_	_	_	_	_
11.50 - 11.99	_	3	3	_	_	_	_	_	_
12.00 - 12.99	_	1	_	_	_	_	_	_	_
13.00 - 13.99	_	-	_	_	_	_	_	_	1
14.00 - 14.99	_	_	_	_		_	_	_	
15.00 - 15.99	_		_		1	_			1
	1	_	_	_	'	_	_	_	'
16.00 - 16.99	4	-	-	-	-	-	-	2	3
17.00 - 17.99	-	-	-	-	-	-	-	2	
18.00 - 18.99	2	-	-	-	-	-	-	_	1
19.00 - 19.99	-	-	-	-	-	-	-	1	1
20.00 - 20.99	1	-	-	-	-	-	-	-	-
21.00 - 21.99	-	-	-	-	1	-	1	1	-
22.00 - 22.99	-	-	-	-	2	-	1	-	-
23.00 - 23.99	-	-	-	-	-	-	-	1	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-
25.00 - 25.99	-	-	-	-	-	-	1	-	-
26.00 - 26.99	-	-	-	-	1	-	-	-	-
27.00 - 27.99	-	-	-	1	-	-	-	-	-
28.00 - 28.99	-	-	-	-	1	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	-	-	-
30.00 - 30.99	-	-	-	_	-	1	_	_	_
31.00 - 31.99	_	_	_	_	_	_	_	_	_
32.00 - 32.99	_	_	_	_	_	_	_	_	_
33.00 - 33.99	_	_	_	_	_	_	_	_	_
34.00 - 34.99	_	_	_	_	_	_	_	_	_
35.00 - 35.99	_	_	_	_	_	_	_	_	_
= > 36.00	_	_	_	_		_	_	_	_
- > 30.00									
	BIB	BLB	BLC	CAP	CCF	NOP	SNG	WAE	<u>WTS</u>
Total	8	10	15	1	6	1	3	7	7
Min. Length	16.46	9.37	6.97	27.56	15.75	30.94	21.73	17.87	13.86
Max. Length	20.24	12.24	11.89	27.56	28.58	30.94	25.28	23.23	19.76
Mean Length	18.10	11.01	10.12	27.56	22.70	30.94	23.03	19.51	17.09
# Measured	8	10	15.12	1	6	1	3	7	7
No Lengths for	0	99	0	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

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 04/28/2014), 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: Pearl Survey Type: Winter Kill Assessment

DOW Number: 32-0033-00 Survey ID Date: 04/24/2014

Survey Status: Proposed

The following 25 (of 31) report components are not included in this report:

- 1. Current Water Level
- 2. Benchmark And Gauge Descriptions / Locations
- 3. Water Level History1
- 4. Water Level History Readings*
- 5. Water Level History Station Summary*
- 6. Lake Inlets
- 7. Additional Inlet Information
- 8. Lake Outlets
- 9. Additional Outlet Information
- 10. Water Control Structure (Dam)
- 11. Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations²
- 12. Resorts And Campgrounds
- 13. Fish Spawning Conditions
- 14. Erosion And Pollution
- 15. Fish Diseases And Parasites
- 16. Aquatic Vegetation And Shoalwater Substrates
- 17. Dissolved Oxygen And Temperature Profile Of Lake Water
- 18. Field Measusrements Of Water Quality
- 19. Laboratory Analysis Of Water Chemistry
- 20. Length At Capture With Last Incremental Length*
- 21. Back-Calculated Lengths
- 22. Age Class Frequency Distributions
- 23. Status Of Fishery And Field Notes
- 24. Other Species (added to revision 03/24/2009)
- 25. 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 04/28/2014 may not be reflected in the Distribution tables until after 12:30 pm on 04/28/2014.