

Lake Name: Loon

Survey Type: Standard Survey

DOW Number: 32-0020-00

Survey ID Date: 06/29/2020

**Lake Identification**

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

DNR Sounding Map Number: C0523  
Alternate Lake Class ID: N/A

**Lake Location**

Primary County: Jackson

Nearest Town: Jackson

**Legal Descriptions**

Lake Center: Township - 101N Range - 36W Section - 24  
PLS Section Lake Center: 10103624

**All Legal Descriptions:**

Jackson County: Township - 101N Range - 35W Sections - 18, 19  
Township - 101N Range - 36W Sections - 13, 24, 25

**Area Office**

Area Name: Windom  
Region Name: Southern

ORG Code: F418  
Region Number: 4

**Lake Access**

(Information based on Re-Survey dated 06/21/1993)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	State owned access on southwest side of lake.

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

**Lake Characteristics**

Lake Area (planimetered acres): 679.00	GIS Shoreline Length (miles): 6.30
GIS Lake Area (acres): 707.68	Maximum Fetch (miles): 2.00
DOW Lake Area (acres): 738.00	Fetch Orientation (degrees): 292
Littoral Area (acres): 706.97	USGS Quad Map Number: X09d
Area in MN (acres): 707.68	USGS Quad 24K GIS Index: 4718
Maximum Depth (feet): 8.0	
Mean Depth (feet): N/A	

**Watershed Characteristics**

**Major Watershed**

Name: Little Sioux River  
Watershed Number: 84  
Watershed size (acres): 205,753

**Minor Watershed**

Name: To Spirit L  
Watershed Number: 25  
Watershed size (acres): 5,231

### Surveys and Investigations

**Re-Survey:** 06/25/2001, 06/21/1993, 06/20/1983.  
**Population Assessment:** 06/18/2012, 06/28/2008, 06/28/2004, 06/23/1997, 06/11/1990, 06/14/1988.  
**Special Assessment:** 10/17/2000, 10/07/1998, 10/02/1996, 11/14/1994, 08/10/1948.  
**Creel Survey:** 05/01/1990.  
**Winter Kill Assessment:** 04/24/2014.  
**Dissolved Oxygen Check:** 02/10/2016, 01/20/2015, 01/02/2014, 02/07/2013, 01/04/2013, 02/17/2012, 01/26/2012, 12/28/2010, 01/04/2010.  
**Natural Reproduction Check:** 09/16/2010.  
**External Management Survey:** 07/30/2014.  
**Standard Survey:** 06/29/2020, 06/27/2016.  
**Targeted Survey:** 01/10/2019, 01/19/2018, 09/07/2017, 09/28/2016.

### Current Water Level

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/30/2020	High	-2.00	Above or below Benchmark

### Benchmark and Gauge Descriptions / Locations

Station ID	Location Description
BM - 1	Centerline top of lower Right downstream concrete headwall of outlet culvert, on south side of lake.

### Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	06/30/2020	High	-2.00	Above or below Benchmark
	06/27/2016	High	-2.20	Above or below Benchmark
	06/18/2012	Normal	1.50	Direct Gauge Reading
	07/02/2008	N/A	-2.70	Above or below Benchmark
GA - 1	06/27/2016	High	1.30	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	-2.70	07/02/2008	-2.00	06/30/2020	0.70	-2.30	Above or below Benchmark (3)
BM - 1	1.50	06/18/2012	1.50	06/18/2012	0.00	1.50	Direct Gauge Reading (1)
GA - 1	1.30	06/27/2016	1.30	06/27/2016	0.00	1.30	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 - 3	06/29/2020	N/A	Surface	77.4	9.3
			1.0	77.4	9.2
			2.0	77.4	8.8
			3.0	77.4	8.5
			4.0	77.4	8.1
			5.0	77.4	7.7
			6.0	77.2	7.2

**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 - 3	06/29/2020	6.3	1.0	8.20	280	Brown	Sediment

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 3  
 First Set Date: 06/29/2020  
 Last Lift Date: 07/02/2020  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	14	4.67	0.75	2.58	6.96
BLB	Black Bullhead	51	17.00	30.34	75.58	150.62
BLC	Black Crappie	3	1.00	1.41	3.71	13.75
CCF	Channel Catfish	4	1.33	N/A	N/A	N/A
CAP	Common Carp	3	1.00	1.00	3.33	13.75
FRD	Freshwater Drum	11	3.67	0.50	2.56	8.33
NOP	Northern Pike	1	0.33	1.08	3.00	8.00
WAE	Walleye	73	24.33	2.28	6.83	18.06
WTS	White Sucker	18	6.00	0.81	2.33	6.50
YEB	Yellow Bullhead	1	0.33	0.50	1.50	3.50
YEP	Yellow Perch	31	10.33	2.65	8.00	25.00
Total Fish/Set:			70.00	* 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	68.08	22.69	4.86	N/A	N/A	N/A
BLB	Black Bullhead	34.92	11.64	0.68	0.17	0.26	0.39
BLC	Black Crappie	1.09	0.36	0.36	0.16	0.25	0.35
CCF	Channel Catfish	11.46	3.82	2.87	N/A	N/A	N/A
CAP	Common Carp	21.95	7.32	7.32	0.81	1.98	3.70
FRD	Freshwater Drum	18.79	6.26	1.71	0.40	0.82	1.67
NOP	Northern Pike	1.75	0.58	1.75	1.82	2.50	3.35
WAE	Walleye	115.42	38.47	1.58	1.01	1.53	2.30
WTS	White Sucker	31.84	10.61	1.77	0.93	1.58	2.02
YEB	Yellow Bullhead	0.21	0.07	0.21	0.31	0.53	0.73
YEP	Yellow Perch	17.02	5.67	0.55	0.13	0.21	0.31
Total Pounds Fish/Set:			107.51	* Quartiles for Mean Weight			

**Net Catch Summary by Numbers for TN**

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

Number of Sets: 12  
 First Set Date: 06/29/2020  
 Last Lift Date: 07/02/2020  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 43*		
				25%	50%	75%
BIB	Bigmouth Buffalo	38	3.17	0.17	0.38	1.04
BLB	Black Bullhead	109	9.08	11.50	42.00	132.61
BLC	Black Crappie	17	1.42	1.17	4.88	20.50
BLG	Bluegill	16	1.33	1.17	3.89	20.00
CCF	Channel Catfish	9	0.75	N/A	N/A	N/A
CAP	Common Carp	18	1.50	1.00	2.44	5.51
FRD	Freshwater Drum	11	0.92	0.23	0.92	3.25
LMB	Largemouth Bass	1	0.08	0.23	0.38	0.67
NOP	Northern Pike	5	0.42	N/A	N/A	N/A
SNG	Shortnose Gar	5	0.42	N/A	N/A	N/A
WAE	Walleye	5	0.42	0.50	1.33	2.95
WTS	White Sucker	8	0.67	0.34	0.88	2.58
YEB	Yellow Bullhead	3	0.25	0.50	1.13	2.50
YEP	Yellow Perch	8	0.67	0.33	1.37	3.76
Total Fish/Set:			21.08	* 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	272.76	22.73	7.18	2.56	3.75	5.83
BLB	Black Bullhead	94.67	7.89	0.87	0.18	0.28	0.40
BLC	Black Crappie	2.83	0.24	0.17	0.22	0.34	0.50
BLG	Bluegill	7.91	0.66	0.49	0.13	0.24	0.39
CCF	Channel Catfish	31.63	2.64	3.51	N/A	N/A	N/A
CAP	Common Carp	116.16	9.68	6.45	1.42	2.92	4.58
FRD	Freshwater Drum	23.22	1.93	2.11	0.28	0.60	0.95
LMB	Largemouth Bass	1.98	0.17	1.98	0.30	0.85	1.53
NOP	Northern Pike	30.43	2.54	6.09	N/A	N/A	N/A
SNG	Shortnose Gar	13.90	1.16	2.78	N/A	N/A	N/A
WAE	Walleye	5.39	0.45	1.08	0.82	1.44	2.28
WTS	White Sucker	21.41	1.78	2.68	1.05	1.47	2.04
YEB	Yellow Bullhead	2.12	0.18	0.71	0.31	0.48	0.67
YEP	Yellow Perch	2.11	0.18	0.26	0.11	0.18	0.30
Total Pounds Fish/Set:			52.21	* Quartiles for Mean Weight			

**Length Frequency Distribution for GN**

**Standard gill net sets**

(Field work conducted between 06/29/2020 and 07/02/2020)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>NOP</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</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	-	-	-	-	-	-	-	-	-	-	-
5.50 - 5.99	-	-	-	-	-	-	-	-	-	-	-
6.00 - 6.49	-	-	-	-	-	-	-	-	-	-	2
6.50 - 6.99	-	-	-	-	-	1	-	-	-	-	-
7.00 - 7.49	-	-	-	-	-	-	-	-	-	1	-
7.50 - 7.99	-	-	-	-	-	2	-	-	-	-	-
8.00 - 8.49	-	-	1	-	-	-	-	-	-	-	6
8.50 - 8.99	-	2	-	-	-	-	-	1	-	-	3
9.00 - 9.49	-	6	-	-	-	-	-	1	-	-	-
9.50 - 9.99	-	6	-	-	-	-	-	1	1	-	-
10.00 - 10.49	-	11	1	-	-	-	-	1	-	-	6
10.50 - 10.99	-	9	-	-	-	-	-	5	-	-	4
11.00 - 11.49	-	9	-	-	-	-	-	-	-	-	8
11.50 - 11.99	-	3	-	-	-	-	-	-	-	-	1
12.00 - 12.99	-	4	-	-	-	-	-	1	2	-	1
13.00 - 13.99	2	1	-	-	-	2	-	10	-	-	-
14.00 - 14.99	-	-	-	-	-	2	-	16	-	-	-
15.00 - 15.99	1	-	-	-	-	-	-	9	4	-	-
16.00 - 16.99	2	-	-	-	-	-	-	11	6	-	-
17.00 - 17.99	2	-	-	-	-	2	-	2	4	-	-
18.00 - 18.99	1	-	-	-	1	1	-	2	-	-	-
19.00 - 19.99	1	-	-	-	2	-	-	1	1	-	-
20.00 - 20.99	-	-	-	-	-	-	-	4	-	-	-
21.00 - 21.99	-	-	-	-	-	-	-	2	-	-	-
22.00 - 22.99	1	-	-	-	1	1	-	3	-	-	-
23.00 - 23.99	-	-	-	1	-	-	-	1	-	-	-
24.00 - 24.99	1	-	-	-	-	-	-	1	-	-	-
25.00 - 25.99	-	-	-	1	-	-	-	-	-	-	-
26.00 - 26.99	-	-	-	1	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	-	-	-	-	-	-
28.00 - 28.99	2	-	-	-	-	-	-	-	-	-	-
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>FRD</u>	<u>NOP</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	13	51	3	3	4	11	1	72	18	1	31
Min. Length	13.07	8.70	4.76	23.62	18.19	6.85	24.02	8.82	9.80	7.36	6.10
Max. Length	28.62	13.82	10.39	26.46	22.87	22.83	24.02	24.06	19.84	7.36	12.09
Mean Length	19.32	10.60	7.76	25.12	20.08	14.16	24.02	15.59	15.90	7.36	9.90
# Measured	13	51	3	3	4	11	1	72	18	1	31
No Lengths for	1	0	0	0	0	0	0	1	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

**Length Frequency Distribution for TN**

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

(Field work conducted between 06/29/2020 and 07/02/2020)

	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>LMB</u>	<u>NOP</u>	<u>SNG</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4.00 - 4.49	-	-	2	-	-	-	-	-	-	-	-	-	-	-
4.50 - 4.99	-	-	6	-	-	-	-	-	-	-	-	-	-	-
5.00 - 5.49	-	-	3	-	-	-	-	-	-	-	-	-	-	1
5.50 - 5.99	-	-	-	-	-	-	-	-	-	-	-	-	-	1
6.00 - 6.49	-	-	1	-	-	-	-	-	-	-	-	-	-	2
6.50 - 6.99	-	-	-	-	-	-	1	-	-	-	-	-	-	-
7.00 - 7.49	-	-	-	4	-	-	-	-	-	-	-	-	-	-
7.50 - 7.99	-	-	1	2	-	-	2	-	-	-	-	-	-	1
8.00 - 8.49	-	-	-	3	-	-	-	-	-	-	-	-	-	1
8.50 - 8.99	-	-	1	7	-	-	1	-	-	-	-	-	-	-
9.00 - 9.49	-	1	-	-	-	-	-	-	-	-	-	-	-	-
9.50 - 9.99	-	4	-	-	-	-	-	-	-	-	-	-	1	-
10.00 - 10.49	-	6	2	-	-	-	-	-	-	1	-	-	-	1
10.50 - 10.99	-	17	-	-	-	-	-	-	-	2	-	-	-	1
11.00 - 11.49	-	21	-	-	-	-	-	-	-	-	-	-	1	-
11.50 - 11.99	-	32	-	-	-	-	-	-	-	-	-	-	1	-
12.00 - 12.99	-	25	-	-	-	-	1	-	-	-	-	-	-	-
13.00 - 13.99	-	2	-	-	-	-	-	-	-	-	-	-	-	-
14.00 - 14.99	1	-	-	-	-	-	-	1	-	-	-	-	-	-
15.00 - 15.99	2	-	-	-	-	-	-	-	-	-	1	-	-	-
16.00 - 16.99	1	-	-	-	-	-	1	-	-	-	-	1	-	-
17.00 - 17.99	3	-	-	-	-	2	1	-	-	-	-	1	-	-
18.00 - 18.99	3	-	-	-	-	-	1	-	-	-	-	3	-	-
19.00 - 19.99	2	-	-	-	-	3	1	-	-	-	-	3	-	-
20.00 - 20.99	1	-	-	-	-	1	-	-	-	-	1	-	-	-
21.00 - 21.99	4	-	-	-	-	-	1	-	-	-	-	-	-	-
22.00 - 22.99	3	-	-	-	4	-	-	-	-	-	-	-	-	-
23.00 - 23.99	3	-	-	-	6	1	-	-	-	-	-	-	-	-
24.00 - 24.99	3	-	-	-	4	1	1	-	1	1	-	-	-	-
25.00 - 25.99	4	-	-	-	2	1	-	-	-	1	-	-	-	-
26.00 - 26.99	3	-	-	-	1	-	-	-	-	-	-	-	-	-
27.00 - 27.99	2	-	-	-	1	-	-	-	1	1	-	-	-	-
28.00 - 28.99	3	-	-	-	-	-	-	-	-	1	-	-	-	-
29.00 - 29.99	-	-	-	-	-	-	-	-	-	1	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	-	-	-	1	-	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-	-	2	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	<u>BIB</u>	<u>BLB</u>	<u>BLC</u>	<u>BLG</u>	<u>CAP</u>	<u>CCF</u>	<u>FRD</u>	<u>LMB</u>	<u>NOP</u>	<u>SNG</u>	<u>WAE</u>	<u>WTS</u>	<u>YEB</u>	<u>YEP</u>
Total	38	108	16	16	18	9	11	1	5	5	5	8	3	8
Min. Length	14.41	9.06	4.25	7.13	22.13	17.56	6.85	14.29	24.02	24.45	10.31	16.73	9.61	5.20
Max. Length	28.74	13.15	10.47	8.98	27.32	25.59	24.02	14.29	33.27	29.96	20.08	19.53	11.81	10.83
Mean Length	22.40	11.49	5.99	8.20	24.03	21.08	14.65	14.29	29.89	27.28	13.53	18.48	10.83	7.56
# Measured	38	108	16	16	18	9	11	1	5	5	5	8	3	8
No Lengths for	0	1	1	0	0	0	0	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

**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	14	0	N/A	0	N/A
	Snapping Turtle	1	1	16.14	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 07/07/2020), 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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Lake Survey Report revision: 20190410-RJE. Data Date: 07/07/2020 at 10:24 am .

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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: Loon

Survey Type: Standard Survey

DOW Number: 32-0020-00

Survey ID Date: 06/29/2020

Survey Status: Field Work Complete

The following 19 (of 32) 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. 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)
19. 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 before noon on 07/07/2020 may not be reflected in the Distribution tables until after 12:30 pm on 07/07/2020.**

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