

## **Fisheries Management**

### LAKE SURVEY REPORT

#### **DRAFT VERSION**

PRELIMINARY DATA (AS OF 05/11/2023)

Lake Name: Shetek Survey Type: Targeted Survey

DOW Number: 51-0046-00 Survey ID Date: 05/08/2023

# TARGETED SURVEY Gill Netting

Lake Identification

Alternate Lake Name: N/A DNR Sounding Map Number: B0292
Primary Lake Class ID: 41 Alternate Lake Class ID: N/A

**Lake Location** 

Primary County: Murray Nearest Town: Currie

**Legal Descriptions** 

Lake Center: Township - 108N Range - 40W Section - 30

PLS Section Lake Center: 10804030

**All Legal Descriptions:** 

Murray County: Township - 107N Range - 40W Sections - 6, 7

Township - 107N Range - 41W Sections - 1, 2, 11, 12

Township - 108N Range - 40W Sections - 18, 19, 20, 29, 30, 31, 32 Township - 108N Range - 41W Sections - 11, 13, 14, 24, 35, 36

**Area Office** 

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

#### **Lake Access**

(Information based on Special Assessment dated 10/10/1995)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Carry-In	CARRY IN ACCESS ON INLET (NORTHWEST SIDE OF LAKE).
AC - 2	DNR	Fee/Permit needed	Concrete	DNR OWNED ACCESS AT THE STATE PARK (EAST SIDE OF LAKE).
AC - 4	DNR	Open to Public use	Concrete	DNR 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): 3,596.00 GIS Shoreline Length (miles): 36.04
GIS Lake Area (acres): 3,462.23 Maximum Fetch (miles): 2.60
DOW Lake Area (acres): 3,596.00 Fetch Orientation (degrees): 45
Littoral Area (acres): 3,462.22 USGS Quad Map Number: V07b
Area in MN (acres): 3,462.23 USGS Quad 24K GIS Index: 4213

Maximum Depth (feet): 10.0

Mean Depth (feet): 5.0

#### **Watershed Characteristics**

Major Watershed Minor Watershed

Name: Des Moines-Headwaters Name: L Shetek

Watershed Number: 51 Watershed Number: 78

Watershed size (acres): 798,595 Watershed size (acres): 21,416

#### **Surveys and Investigations**

**Re-Survey:** 08/07/2006, 08/10/1992, 07/26/1983.

Population Assessment: 08/04/2014, 08/06/2012, 08/09/2010, 07/20/2009, 08/11/2008, 07/23/2007, 08/05/2002,

08/03/1998, 08/05/1996, 08/08/1988.

Special Assessment: 09/26/2000, 10/13/1998, 10/10/1995, 10/25/1994, 10/18/1993, 07/23/1956.

**Creel Survey:** 05/09/1998. **Winter Kill Assessment:** 04/13/2010.

Dissolved Oxygen Check: 02/16/2016, 02/18/2015, 12/31/2013, 01/02/2013, 01/11/2012, 12/28/2010, 01/04/2010.

External Management Survey: 06/29/2007.

**Standard Survey:** 08/01/2022, 08/03/2020, 08/06/2018, 08/08/2016.

Targeted Survey: 05/08/2023, 10/10/2022, 10/12/2020, 02/05/2020, 09/19/2019, 01/18/2018, 09/27/2017,

02/08/2017.

#### Water Level History - Readings

Station ID	Date	Level	Reading (feet)	Reading Type
BM - 1	08/04/2022	Normal	-0.25	Above or below Benchmark
	08/07/2018	High	0.50	Above or below Benchmark
	08/08/2016	High	0.10	Above or below Benchmark
	08/05/2014	Normal	0.15	Above or below Benchmark
	07/23/2009	Low	0.00	Above or below Benchmark
	08/15/2008	Low	-0.10	Above or below Benchmark
GA - 1	08/07/2018	High	5.15	Direct Gauge Reading
	08/05/2014	Normal	4.60	Direct Gauge Reading

#### Water Level History - Station Summary

	Minimum Level		Maximum Level		Range	Average	Reading Type
Station ID	Feet	Date	Feet	Date	(feet)	Level (feet)	(and number of readings)
BM - 1	-0.25	08/04/2022	0.50	08/07/2018	0.75	0.07	Above or below Benchmark (6)
GA - 1	4.60	08/05/2014	5.15	08/07/2018	0.55	4.88	Direct Gauge Reading (2)

## Net Catch Summary by Numbers for **GN**

## Standard gill net sets

Number of Sets: 2

First Set Date: 05/08/2023
Last Lift Date: 05/09/2023
Target Species: N/A

Quartiles	for La	ake C	lass 41¹
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Abbr	Species	Total Fish	Number Per Set	25%	50%	75%
BLB	Black Bullhead	23	11.50	4.56	23.42	83.00
NOP	Northern Pike	2	1.00	1.20	3.50	7.79
QBS	Quillback	1	0.50	N/A	N/A	N/A
WAE	Walleye	14	7.00	3.22	7.67	15.33
YEP	Yellow Perch	11	5.50	3.00	8.94	22.50
		Total Fish/Set:	25.50	¹ Quartile	s for Number Pe	r Set

## Net Catch Summary by Weight for **GN**

## Standard gill net sets

		Total Weight	Pounds	Mean	Quartiles	for Lake Clas	s 41¹
Abbr	Species	(Pounds)	Per Set	Weight <sup>2</sup>	25%	50%	75%
BLB	Black Bullhead	20.36	10.18	0.89	0.21	0.38	0.60
NOP	Northern Pike	3.66	1.83	1.83	1.53	2.12	2.95
QBS	Quillback	0.00	0.00	N/A	N/A	N/A	N/A
WAE	Walleye	11.17	5.58	0.80	0.88	1.37	1.90
YEP	Yellow Perch	3.53	1.76	0.32	0.14	0.24	0.36
		 Total Pounds Fish/Set:	19.36		¹ Quartil	es for Mean Wei	ght

<sup>&</sup>lt;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 05/08/2023 and 05/09/2023)

(1 1014 110111 001	laactoa	5011100	00,00,	a
	BLB	NOP	WAE	<u>YEP</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	-	-	-	1
6.50 - 6.99	-	-	-	2
7.00 - 7.49	-	-	-	1
7.50 - 7.99	1	-	1	1
8.00 - 8.49	-	-	1	1
8.50 - 8.99	-	-	1	-
9.00 - 9.49	-	-	-	3
9.50 - 9.99	-	-	-	-
10.00 - 10.49	3	-	-	1
10.50 - 10.99	3	-	-	-
11.00 - 11.49	5	-	-	1
11.50 - 11.99	6	-	-	-
12.00 - 12.99	5	-	5	-
13.00 - 13.99	-	1	-	-
14.00 - 14.99	-	-	2	-
15.00 - 15.99	-	-	2	-
16.00 - 16.99	-	-	2	-
17.00 - 17.99	-	-	-	-
18.00 - 18.99	-	-	-	-
19.00 - 19.99	-	-	-	-
20.00 - 20.99	-	-	-	-
21.00 - 21.99	-	-	-	-
22.00 - 22.99	-	-	-	-
23.00 - 23.99	-	1	-	-
24.00 - 24.99	-	-	-	-
25.00 - 25.99	-	-	-	-
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			-	
	BLB	NOP	WAE	YEP
T-4-1	23	2	1/	11

	<u>BLB</u>	<u>NOP</u>	WAE	<u>YEP</u>
Total	23	2	14	11
Min. Length	7.68	13.74	7.91	6.34
Max. Length	12.68	23.15	16.18	11.34
Mean Length	11.22	18.44	12.81	8.38
# Measured	23	2	14	11
No Lengths for	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 Lake Survey Report contains preliminary data (as of 05/11/2023), and is therefore subject to change at any time.



FISHERIES

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 Lake Survey Report and should be discarded)

Lake Name: Shetek Survey Type: Targeted Survey

DOW Number: 51-0046-00 Survey ID Date: 05/08/2023

#### Gill Netting

Survey Status: Field Work Complete

The following 26 (of 34) report components are not included in this Lake Survey Report:

- 1. Current Water Level
- 2. Benchmark And Gauge Descriptions / Locations
- 3. Water Level History1
- 4. Lake Inlets
- 5. Additional Inlet Information
- 6. Lake Outlets
- 7. Additional Outlet Information
- 8. Water Control Structure (Dam)
- Surrounding Watershed Characteristics, Shoreline Characteristics, and Riparian Landscape Observations<sup>2</sup>
- 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 Measusrements Of Water Quality
- 17. Water Quality (Winter Observations) (added to revision 01/21/2010)
- 18. Laboratory Analysis Of Water Chemistry
- 19. Zooplankton Sampling (added to revision 20221130)
- 20. Catch Summary (Pre-1993 Format) (added to revision 20201001)
- 21. Length At Capture With Last Incremental Length\*
- 22. Back-Calculated Lengths
- 23. Age Class Frequency Distributions
- 24. Other Species (added to revision 03/24/2009)
- 25. Status Of Fishery And Field Notes
- 26. 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 05/11/2023 may not be reflected in the Distribution tables until after 12:30 pm on 05/11/2023.

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Fisheries Lake ID = 3756, Survey ID = 20822312935538000