

Lake Name: Big Pine  
DOW Number: 01-0157-00

Survey Type: Standard Survey  
Survey ID Date: 08/30/2021

**Lake Identification**

Alternate Lake Name: N/A  
Primary Lake Class ID: 23

DNR Sounding Map Number: C0018  
Alternate Lake Class ID: N/A

**Lake Location**

Primary County: Aitkin

Nearest Town: Cutler

**Legal Descriptions**

Lake Center: Township - 45N Range - 27W Section - 29  
PLS Section Lake Center: 4502729

**All Legal Descriptions:**

Aitkin County: Township - 45N Range - 27W Sections - 20, 21, 28, 29

**Area Office**

Area Name: Aitkin  
Region Name: Northeast

ORG Code: F211  
Region Number: 2

**Lake Access**

(Information based on Re-Survey dated 08/26/1996)

Station ID	Ownership	Public Use	Type	Location / Comments
AC - 1	DNR	Open to Public use	Concrete	The state owned public access; with cement log ramp; is on the south side of the lake in Section 29.

**Lake Characteristics**

Lake Area (planimetered acres): 614.00	GIS Shoreline Length (miles): 6.44
GIS Lake Area (acres): 638.03	Maximum Fetch (miles): 1.66
DOW Lake Area (acres): 646.00	Fetch Orientation (degrees): 225
Littoral Area (acres): 259.00	USGS Quad Map Number: M14d
Area in MN (acres): 635.08	USGS Quad 24K GIS Index: 2528
Maximum Depth (feet): 78.0	
Mean Depth (feet): N/A	

**Watershed Characteristics**

**Major Watershed**

Name: Rum River  
Watershed Number: 21  
Watershed size (acres): 1,013,790

**Minor Watershed**

Name: From Round L  
Watershed Number: 1  
Watershed size (acres): 7,025

**Surveys and Investigations**

**Initial Survey:** 07/30/1941.  
**Re-Survey:** 08/26/1996, 08/25/1970, 06/20/1956, 08/26/1946.  
**Population Assessment:** 08/29/2011, 08/27/2007, 08/26/2002, 08/26/1991, 08/18/1986, 08/25/1980.  
**Special Assessment:** 08/26/2013, 06/24/1977, 09/10/1974, 06/17/1969, 08/21/1964, 09/10/1956.  
**Standard Survey:** 08/30/2021, 08/29/2016.  
**Targeted Survey:** 07/06/2021.

**Dissolved Oxygen and Temperature Profile of Lake Water**

<u>Station ID</u>	<u>Sampling Date</u>	<u>Bottom Depth (Feet)</u>	<u>Sample Depth (Feet)</u>	<u>Water Temperature (°F)</u>	<u>Dissolved Oxygen (ppm)</u>
WQ - 1	08/30/2021	80.0	Surface	71.6	7.6
			3.0	71.6	7.6
			6.0	71.4	7.6
			9.0	71.4	7.5
			12.0	71.4	7.5
			15.0	71.2	7.5
			18.0	71.2	7.5
			21.0	71.2	7.3
			22.0	70.7	6.8
			23.0	70.2	6.6
			24.0	68.2	5.6
			25.0	66.4	4.7
			26.0	63.3	3.0
			27.0	59.2	0.9
			28.0	57.4	0.5
			29.0	55.9	0.3
			30.0	54.9	0.3
			33.0	53.1	0.3
			36.0	51.3	0.2
			39.0	50.4	0.2
			42.0	49.6	0.2
			45.0	49.5	0.2
			48.0	49.1	0.2
			51.0	48.9	0.2
			54.0	48.7	0.2
			57.0	48.4	0.2
			60.0	48.4	0.2
			63.0	48.2	0.2
			66.0	48.2	0.2
			69.0	48.0	0.2
			72.0	48.0	0.2
			75.0	48.0	0.2

**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 - 1	08/30/2021	Surface	18.0	N/A	N/A	Clear	N/A

**Net Catch Summary by Numbers for GN**

Standard gill net sets

Number of Sets: 12  
First Set Date: 08/30/2021  
Last Lift Date: 09/03/2021  
Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 23 <sup>1</sup>		
				25%	50%	75%
BLC	Black Crappie	25	2.08	0.33	0.78	1.67
BLG	Bluegill	8	0.67	N/A	N/A	N/A
BRB	Brown Bullhead	2	0.17	0.25	0.67	1.83
HSF	Hybrid Sunfish	19	1.58	N/A	N/A	N/A
LMB	Largemouth Bass	30	2.50	0.50	0.79	1.67
NOP	Northern Pike	52	4.33	2.19	5.00	8.70
PMK	Pumpkinseed	8	0.67	N/A	N/A	N/A
RKB	Rock Bass	41	3.42	0.67	2.00	4.45
WAE	Walleye	41	3.42	1.00	2.37	5.00
YEB	Yellow Bullhead	12	1.00	1.00	2.58	6.00
Total Fish/Set:			19.83	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 23 <sup>1</sup>		
					25%	50%	75%
BLC	Black Crappie	11.42	0.95	0.46	0.20	0.30	0.50
BLG	Bluegill	0.75	0.06	0.09	N/A	N/A	N/A
BRB	Brown Bullhead	3.56	0.30	1.78	0.50	0.76	1.15
HSF	Hybrid Sunfish	4.22	0.35	0.22	N/A	N/A	N/A
LMB	Largemouth Bass	26.00	2.17	0.87	0.55	0.78	1.15
NOP	Northern Pike	122.57	10.21	2.36	1.55	2.21	3.21
PMK	Pumpkinseed	2.59	0.22	0.32	N/A	N/A	N/A
RKB	Rock Bass	13.99	1.17	0.34	0.23	0.30	0.44
WAE	Walleye	64.96	5.41	1.58	1.23	1.81	2.95
YEB	Yellow Bullhead	11.62	0.97	0.97	0.44	0.59	0.74
Total Pounds Fish/Set:			21.81	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> Mean Weights are based on measured fish counts only.

**Net Catch Summary by Numbers for TN**

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

Number of Sets: 12  
 First Set Date: 08/30/2021  
 Last Lift Date: 09/28/2021  
 Target Species: N/A

Abbr	Species	Total Fish	Number Per Set	Quartiles for Lake Class 23 <sup>1</sup>		
				25%	50%	75%
BLC	Black Crappie	5	0.42	0.48	0.96	2.15
BLG	Bluegill	38	3.17	7.74	19.83	43.38
BOF	Bowfin (Dogfish)	1	0.08	0.34	0.50	0.99
GSF	Green Sunfish	2	0.17	0.61	1.33	2.00
HSF	Hybrid Sunfish	80	6.67	N/A	N/A	N/A
LMB	Largemouth Bass	32	2.67	0.39	0.83	1.53
NOP	Northern Pike	9	0.75	N/A	N/A	N/A
PMK	Pumpkinseed	25	2.08	1.41	2.71	5.94
RKB	Rock Bass	6	0.50	0.80	1.67	3.69
SMB	Smallmouth Bass	1	0.08	0.16	0.29	0.77
WAE	Walleye	15	1.25	0.20	0.40	0.71
YEB	Yellow Bullhead	18	1.50	1.00	2.39	5.26
YEP	Yellow Perch	1	0.08	0.40	0.83	2.25
Total Fish/Set:			19.42	<sup>1</sup> 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 <sup>2</sup>	Quartiles for Lake Class 23 <sup>1</sup>		
					25%	50%	75%
BLC	Black Crappie	1.27	0.11	0.25	0.25	0.38	0.51
BLG	Bluegill	4.10	0.34	0.11	0.11	0.15	0.21
BOF	Bowfin (Dogfish)	7.32	0.61	7.32	2.64	4.00	4.94
GSF	Green Sunfish	0.14	0.01	0.07	0.08	0.12	0.17
HSF	Hybrid Sunfish	22.04	1.84	0.28	N/A	N/A	N/A
LMB	Largemouth Bass	17.57	1.46	0.55	0.22	0.40	0.71
NOP	Northern Pike	21.47	1.79	2.39	N/A	N/A	N/A
PMK	Pumpkinseed	5.20	0.43	0.21	0.12	0.18	0.23
RKB	Rock Bass	1.95	0.16	0.33	0.19	0.27	0.40
SMB	Smallmouth Bass	0.32	0.03	0.32	0.20	0.38	0.71
WAE	Walleye	52.45	4.37	3.50	0.72	1.45	2.80
YEB	Yellow Bullhead	19.15	1.60	1.06	0.52	0.66	0.86
YEP	Yellow Perch	0.05	0.00	0.05	0.11	0.16	0.23
Total Pounds Fish/Set:			12.75	<sup>1</sup> Quartiles for Mean Weight			

<sup>2</sup> Mean Weights are based on measured fish counts only.

**Electrofishing Catch Summary for EF**

**Standard electrofishing**

**Number of Stations:** 6  
**Total run-time for all stations:** 01:30:00  
**Total on-time for all stations:** 01:30:00  
**First Sampling Date:** 06/01/2021  
**Last Sampling Date:** 06/01/2021  
**Daylight Sampling:** No  
**Target Species:** All ages largemouth bass

Abbr	Species	Summary By Numbers			Summary By Weight (pounds)			
		Total Number	Number per Hour Run-Time	On-Time	Total Weight	Lbs per Hour Run-Time	On-Time	Mean Weight
LMB	Largemouth Bass	99	66.00	66.00	95.48	63.65	63.65	0.96

**Length Frequency Distribution for GN (for fish < 36.00 inches)**

**Standard gill net sets**

(Field work conducted between 08/30/2021 and 09/03/2021)

	<u>BLC</u>	<u>BLG</u>	<u>BRB</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>WAE</u>	<u>YEB</u>
< 3.00	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	-	-	3	-	-	-	-	-	-
4.00 - 4.49	-	5	-	1	-	-	-	1	-	-
4.50 - 4.99	3	2	-	-	-	-	1	2	-	-
5.00 - 5.49	1	-	-	-	-	-	-	1	-	-
5.50 - 5.99	-	-	-	3	-	-	1	4	-	-
6.00 - 6.49	-	-	-	2	1	-	1	3	-	-
6.50 - 6.99	-	-	-	4	-	-	2	4	-	-
7.00 - 7.49	-	-	-	4	-	-	2	5	-	-
7.50 - 7.99	3	-	-	1	-	-	-	5	-	-
8.00 - 8.49	2	1	-	1	-	-	-	6	-	-
8.50 - 8.99	-	-	-	-	-	-	-	6	1	1
9.00 - 9.49	2	-	-	-	-	-	-	2	-	1
9.50 - 9.99	6	-	-	-	3	-	-	1	-	-
10.00 - 10.49	4	-	-	-	5	-	1	1	-	2
10.50 - 10.99	3	-	-	-	5	-	-	-	1	1
11.00 - 11.49	-	-	-	-	4	-	-	-	1	1
11.50 - 11.99	1	-	-	-	3	-	-	-	1	-
12.00 - 12.99	-	-	-	-	1	-	-	-	7	1
13.00 - 13.99	-	-	1	-	2	-	-	-	3	4
14.00 - 14.99	-	-	-	-	5	-	-	-	4	1
15.00 - 15.99	-	-	1	-	1	1	-	-	4	-
16.00 - 16.99	-	-	-	-	-	2	-	-	3	-
17.00 - 17.99	-	-	-	-	-	2	-	-	2	-
18.00 - 18.99	-	-	-	-	-	3	-	-	2	-
19.00 - 19.99	-	-	-	-	-	9	-	-	2	-
20.00 - 20.99	-	-	-	-	-	11	-	-	6	-
21.00 - 21.99	-	-	-	-	-	8	-	-	1	-
22.00 - 22.99	-	-	-	-	-	3	-	-	1	-
23.00 - 23.99	-	-	-	-	-	3	-	-	1	-
24.00 - 24.99	-	-	-	-	-	3	-	-	-	-
25.00 - 25.99	-	-	-	-	-	1	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	-	-	-	-
27.00 - 27.99	-	-	-	-	-	2	-	-	1	-
28.00 - 28.99	-	-	-	-	-	-	-	-	-	-
29.00 - 29.99	-	-	-	-	-	1	-	-	-	-
30.00 - 30.99	-	-	-	-	-	-	-	-	-	-
31.00 - 31.99	-	-	-	-	-	1	-	-	-	-
32.00 - 32.99	-	-	-	-	-	-	-	-	-	-
33.00 - 33.99	-	-	-	-	-	-	-	-	-	-
34.00 - 34.99	-	-	-	-	-	1	-	-	-	-
35.00 - 35.99	-	-	-	-	-	-	-	-	-	-
= > 36.00	-	-	-	-	-	1	-	-	-	-

	<u>BLC</u>	<u>BLG</u>	<u>BRB</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>WAE</u>	<u>YEB</u>
Total	25	8	2	19	30	52	8	41	41	12
Min. Length	4.76	4.06	13.78	3.62	6.30	15.94	4.96	4.45	8.54	8.86
Max. Length	11.61	8.19	15.35	8.19	15.08	38.70	10.00	10.04	27.13	14.17
Mean Length	8.83	4.78	14.57	6.17	11.60	21.86	6.93	7.40	16.31	11.74
# Measured	25	8	2	19	30	52	8	41	41	12
No Lengths for	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

**Length Frequency Distribution for GN (for fish ≥ 36.00 inches)**

**Standard gill net sets**

(Field work conducted between 08/30/2021 and 09/03/2021)

	<u>BLC</u>	<u>BLG</u>	<u>BRB</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>WAE</u>	<u>YEB</u>
< 36.00	25	8	2	19	30	51	8	41	41	12
36.00 - 36.99	-	-	-	-	-	-	-	-	-	-
37.00 - 37.99	-	-	-	-	-	-	-	-	-	-
38.00 - 38.99	-	-	-	-	-	1	-	-	-	-
39.00 - 39.99	-	-	-	-	-	-	-	-	-	-
40.00 - 40.99	-	-	-	-	-	-	-	-	-	-
41.00 - 41.99	-	-	-	-	-	-	-	-	-	-
42.00 - 42.99	-	-	-	-	-	-	-	-	-	-
43.00 - 43.99	-	-	-	-	-	-	-	-	-	-
44.00 - 44.99	-	-	-	-	-	-	-	-	-	-
45.00 - 45.99	-	-	-	-	-	-	-	-	-	-
46.00 - 46.99	-	-	-	-	-	-	-	-	-	-
47.00 - 47.99	-	-	-	-	-	-	-	-	-	-
48.00 - 48.99	-	-	-	-	-	-	-	-	-	-
49.00 - 49.99	-	-	-	-	-	-	-	-	-	-
50.00 - 50.99	-	-	-	-	-	-	-	-	-	-
51.00 - 51.99	-	-	-	-	-	-	-	-	-	-
52.00 - 52.99	-	-	-	-	-	-	-	-	-	-
53.00 - 53.99	-	-	-	-	-	-	-	-	-	-
54.00 - 54.99	-	-	-	-	-	-	-	-	-	-
55.00 - 55.99	-	-	-	-	-	-	-	-	-	-
56.00 - 56.99	-	-	-	-	-	-	-	-	-	-
57.00 - 57.99	-	-	-	-	-	-	-	-	-	-
58.00 - 58.99	-	-	-	-	-	-	-	-	-	-
59.00 - 59.99	-	-	-	-	-	-	-	-	-	-
60.00 - 60.99	-	-	-	-	-	-	-	-	-	-
61.00 - 61.99	-	-	-	-	-	-	-	-	-	-
62.00 - 62.99	-	-	-	-	-	-	-	-	-	-
63.00 - 63.99	-	-	-	-	-	-	-	-	-	-
64.00 - 64.99	-	-	-	-	-	-	-	-	-	-
65.00 - 65.99	-	-	-	-	-	-	-	-	-	-
66.00 - 66.99	-	-	-	-	-	-	-	-	-	-
67.00 - 67.99	-	-	-	-	-	-	-	-	-	-
68.00 - 68.99	-	-	-	-	-	-	-	-	-	-
69.00 - 69.99	-	-	-	-	-	-	-	-	-	-
70.00 - 70.99	-	-	-	-	-	-	-	-	-	-
71.00 - 71.99	-	-	-	-	-	-	-	-	-	-
72.00 - 72.99	-	-	-	-	-	-	-	-	-	-
73.00 - 73.99	-	-	-	-	-	-	-	-	-	-
74.00 - 74.99	-	-	-	-	-	-	-	-	-	-
75.00 - 75.99	-	-	-	-	-	-	-	-	-	-
76.00 - 76.99	-	-	-	-	-	-	-	-	-	-
77.00 - 77.99	-	-	-	-	-	-	-	-	-	-
= > 78.00	-	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>25</b>	<b>8</b>	<b>2</b>	<b>19</b>	<b>30</b>	<b>52</b>	<b>8</b>	<b>41</b>	<b>41</b>	<b>12</b>
Min. Length	4.76	4.06	13.78	3.62	6.30	15.94	4.96	4.45	8.54	8.86
Max. Length	11.61	8.19	15.35	8.19	15.08	38.70	10.00	10.04	27.13	14.17
Mean Length	8.83	4.78	14.57	6.17	11.60	21.86	6.93	7.40	16.31	11.74
# Measured	25	8	2	19	30	52	8	41	41	12
No Lengths for	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

**Length Frequency Distribution for TN**

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

(Field work conducted between 08/30/2021 and 09/28/2021)

	<u>BLC</u>	<u>BLG</u>	<u>BOF</u>	<u>GSF</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</u>
< 3.00	-	-	-	-	-	-	-	-	-	-	-	-	-
3.00 - 3.49	-	-	-	-	-	-	-	-	-	-	-	-	-
3.50 - 3.99	-	3	-	-	1	-	-	-	-	-	-	-	-
4.00 - 4.49	-	4	-	-	4	-	-	-	1	-	-	-	-
4.50 - 4.99	-	4	-	2	3	-	-	1	-	-	-	-	-
5.00 - 5.49	1	10	-	-	6	2	-	2	1	-	-	-	1
5.50 - 5.99	-	9	-	-	10	4	-	7	-	-	-	-	-
6.00 - 6.49	-	4	-	-	11	2	-	6	-	-	-	-	-
6.50 - 6.99	-	1	-	-	12	1	-	6	-	-	1	-	-
7.00 - 7.49	2	1	-	-	16	2	-	3	1	-	-	-	-
7.50 - 7.99	-	2	-	-	6	-	-	-	-	-	1	-	-
8.00 - 8.49	-	-	-	-	6	1	-	-	2	-	-	-	-
8.50 - 8.99	-	-	-	-	5	5	-	-	-	1	-	-	-
9.00 - 9.49	1	-	-	-	-	2	-	-	1	-	-	-	-
9.50 - 9.99	1	-	-	-	-	5	-	-	-	-	-	-	-
10.00 - 10.49	-	-	-	-	-	2	-	-	-	-	-	-	-
10.50 - 10.99	-	-	-	-	-	-	-	-	-	-	-	1	-
11.00 - 11.49	-	-	-	-	-	-	-	-	-	-	-	2	-
11.50 - 11.99	-	-	-	-	-	-	-	-	-	-	-	2	-
12.00 - 12.99	-	-	-	-	-	1	-	-	-	-	1	11	-
13.00 - 13.99	-	-	-	-	-	-	-	-	-	-	-	1	-
14.00 - 14.99	-	-	-	-	-	4	-	-	-	-	-	1	-
15.00 - 15.99	-	-	-	-	-	1	1	-	-	-	1	-	-
16.00 - 16.99	-	-	-	-	-	-	-	-	-	-	-	-	-
17.00 - 17.99	-	-	-	-	-	-	1	-	-	-	-	-	-
18.00 - 18.99	-	-	-	-	-	-	-	-	-	-	-	-	-
19.00 - 19.99	-	-	-	-	-	-	1	-	-	-	1	-	-
20.00 - 20.99	-	-	-	-	-	-	1	-	-	-	1	-	-
21.00 - 21.99	-	-	-	-	-	-	-	-	-	-	1	-	-
22.00 - 22.99	-	-	-	-	-	-	1	-	-	-	2	-	-
23.00 - 23.99	-	-	-	-	-	-	2	-	-	-	2	-	-
24.00 - 24.99	-	-	-	-	-	-	-	-	-	-	1	-	-
25.00 - 25.99	-	-	-	-	-	-	1	-	-	-	-	-	-
26.00 - 26.99	-	-	-	-	-	-	-	-	-	-	3	-	-
27.00 - 27.99	-	-	1	-	-	-	-	-	-	-	-	-	-
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>BLC</u>	<u>BLG</u>	<u>BOF</u>	<u>GSF</u>	<u>HSF</u>	<u>LMB</u>	<u>NOP</u>	<u>PMK</u>	<u>RKB</u>	<u>SMB</u>	<u>WAE</u>	<u>YEB</u>	<u>YEP</u>
Total	5	38	1	2	80	32	9	25	6	1	15	18	1
Min. Length	5.24	3.62	27.91	4.57	3.74	5.28	15.75	4.88	4.45	8.62	6.77	10.63	5.16
Max. Length	9.76	7.91	27.91	4.61	8.82	15.28	28.94	7.28	9.25	8.62	26.57	14.41	5.16
Mean Length	7.73	5.47	27.91	4.59	6.61	9.19	21.86	6.18	7.12	8.62	19.93	12.39	5.16
# Measured	5	38	1	2	80	32	9	25	6	1	15	18	1
No Lengths for	0	0	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



**Length Frequency Distribution for EF**

**Standard electrofishing**

(Field work conducted on 06/01/2021)

	<u>LMB</u>
< 3.00	1
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	2
7.50 - 7.99	4
8.00 - 8.49	8
8.50 - 8.99	6
9.00 - 9.49	6
9.50 - 9.99	3
10.00 - 10.49	5
10.50 - 10.99	5
11.00 - 11.49	4
11.50 - 11.99	3
12.00 - 12.99	10
13.00 - 13.99	17
14.00 - 14.99	18
15.00 - 15.99	6
16.00 - 16.99	-
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	-
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	-

	<u>LMB</u>
Total	99
Min. Length	2.95
Max. Length	15.55
Mean Length	11.63
# Measured	99
No Lengths for	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 Aitkin Area Fisheries Supervisor: \_\_\_\_\_

Date Approved By Northeast Region Fisheries Manager: \_\_\_\_\_

**This DRAFT VERSION of the Lake Survey Report contains preliminary data (as of 09/10/2021), 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: 20210824-RJE. Data Date: 09/10/2021 at 8:46 am .

## REPORT OVERVIEW - FOR OFFICE USE ONLY

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

Lake Name: Big Pine  
DOW Number: 01-0157-00

Survey Type: Standard Survey  
Survey ID Date: 08/30/2021

Survey Status: Active

The following 25 (of 33) report components are not included in this Lake Survey Report:

1. Current Water Level
2. Benchmark And Gauge Descriptions / Locations
3. Water Level History<sup>1</sup>
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 Observations<sup>2</sup>
12. Resorts And Campgrounds
13. Fish Spawning Conditions
14. Erosion And Pollution
15. Fish Diseases And Parasites
16. Aquatic Vegetation And Shoalwater Substrates
17. Water Quality (Winter Observations) (added to revision 01/21/2010)
18. Laboratory Analysis Of Water Chemistry
19. Catch Summary (Pre-1993 Format) (added to revision 20201001)
20. Length At Capture With Last Incremental Length\*
21. Back-Calculated Lengths
22. Age Class Frequency Distributions
23. Other Species (added to revision 03/24/2009)
24. Status Of Fishery And Field Notes
25. 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 09/10/2021 may not be reflected in the Distribution tables until after 12:30 pm on 09/10/2021.**

**FOR OFFICE USE ONLY:** As of revision 20150622, this page is automatically suppressed on signed versions of this report (area supervisor, region manager, research biologist, research supervisor, program staff, or program manager signed).