



# LAKE CARLTON

## FISHERIES STATUS SUMMARY

**LOCATION** – Lake Carlton is in Whiteside County just north of Morrison off Route 78 within Morrison-Rookwood State Park.

**DESCRIPTION** – Lake Carlton was built in 1969 and is a 77-acre lake with a maximum depth of 24 feet and an average depth of 12 feet. The lake has 2.9 miles of shoreline and a watershed of 1,478 acres. The lake has a two-lane boat ramp and a concession stand that offers boat rentals.

**STATUS OF THE SPORT FISHERY** –Lake Carlton receives an annual stocking of Channel catfish and Saugeye. Muskie are currently stocked every other year. Below is a description of the fishery.

**Muskie:**

Lake Carlton was sampled with 5- 4x6 ft. 1.5 inch mesh trap nets for Muskie. The nets were fished for two nights. Total Catch per unit effort (CPUE) was 2.7 fish a net night, which is in line with the running 5-year average of 2.24 per net night. Size distribution was the same as historical samples with the 30–38-inch fish as the dominate group sampled. Average size for the 2023 collection was 898 mm (35.4 inches).

<u>1. Management Plan:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
Net nights: (# nets)	1(6)	2(5)	2(5)	2(5)	NS	2(5)	2(5)	2(5)
CPUE (fish/nn)(n)	0.7(4)	1.7(17)	1.8(18)	4.5(45)		3.2(32)	2(20)	2.7(27)
CPUE 20.1-29.9 0.0	0.2	0.0	0.1		1.0	0.2	0.0	
CPUE 29.9-38.2 0.5	1.2	1.3	3.4		1.8	1.6	2.1	
CPUE 38.2-42.1	0.2	0.3	0.4	0.7		0.3	0.1	0.6
CPUE 42.1-50.0	0.0	0.0	0.1	0.3		0.1	0.1	0.0
CPUE 50+	0.0	0.0	0.0	0.0		0.0	0.0	0.0
RSD 36 50	41	44	98		34	35	44	
Avg. Length mm	898	877	917	909		859	865	898

<u>2. Avg Wr by Sex:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
<b>20.1-29.9</b>								
Avg Wr Female	NA			87	NA	91		
Avg Wr Male		89		81		90	86	
<b>30.0-38.0</b>								
Avg Wr Female		79	93	87		91	87	95
Avg Wr Male		80	84	81		90	88	88
<b>38.1-42.0</b>								
Avg Wr Female		117	83	89		84	89	98
Avg Wr Male		74	84			83		82
<b>42.1-50.0</b>								
Avg Wr Female			79	77		89	79	
Avg Wr Male								
<b>50+</b>								

**Largemouth Bass:**

The Largemouth bass population was sampled on 9/27/2023 by one DC electrofishing boat with two dippers for a total of 60 minutes as part of the Fall community sample (Tables 1 and 2). Total catch per unit



120	1									1
130	5									5
140	3	1								4
150	1	1								2
160										0
170										0
180		1								1
190										0
200										0
210		1								1
220		2	2							4
230			2							2
240										0
250			1							1
260			2	3						5
270				4						4
280			1	2						3
290				2						2
300										0
310				3	1					4
320					1	1				2
330					1	1	1			3
340					1	1	3			5
350						1		1		2
360						1	2			3
370							1	1		2
380										0
390									1	1
400								1		1
Total	19	6	8	14	3	5	8	2	2	67

**Bluegill:**

The Bluegill population was sampled using DC electrofishing in the fall as part of the annual survey. A total of 266 bluegill were sampled. Size distribution of the 2023 sample was like previous years with 3–6-inch fish dominating the sample. The 2022 strong year class has moved into the 3–6-inch size class. Relative weights remain good for all size groups sampled.

<u>Management Plan:</u>	<u>Goal:</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>
#Stock(80mm)	>100	357	96	290	250	269	140	139	170
PSD (95% CI)	20-60	15	37	45	17	23	31(8)	19	12(5)
RSD 7	10-15	1	0	11	3	5	2	4	5
RSD 8	0-10	0	0	0	1	1	0	0	0

2. Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Bluegill collected at Lake Carlton

<u>Year</u>	<u>&lt;3</u>	<u>3.1-6</u>	<u>6.1-8</u>	<u>8.1-10</u>	<u>Total</u>
2016	69.0	302.0	55.0	0.0	426.0
2017	21.0	72.0	35.0	0.0	128.0
2018	117.0	161.0	129.0	0.0	407.0
2019	106.0	207.0	40.0	3.0	356.0
Avg Wr		(89)	(97)	(86)	
2020	81.0	207.0	61.0	1.0	350.0
Avg Wr		(93)	(95)	(100)	

2021	99.0	96.0	44.0	0.0	239.0
Avg Wr		(113)	(99)		
2022	133.0	113.0	26.0	0.0	272.0
Avg Wr		(94)	(92)		
2023	96.0	150.0	20.0	0.0	266.0
Avg Wr		(97)	(90)		

### Saugeye:

The Saugeye population is doing very well at Lake Carlton. In 2023 one 30 min nocturnal DC electrofishing survey was done with 2 dippers. Numbers for harvestable size fish have remained stable and will provide for great fishing opportunities. Catch rates for fish over 22 inches was at an all time high in the 2023 season.

<u>1.Management Plan Spring:</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>	<u>2023</u>
# Stock(230mm)	59	25	29	38
PSD	85	96	100	84
RSD18	54	48	59	32
Years to 14 inches	n/a	n/a	n/a	n/a

### 2.Spring nocturnal DC electrofishing CPUE (fish/hr) of each length group of Saugeye collected at Lake Carlton

<u>Year</u>	<u>&lt;9.1</u>	<u>9.1-13.8</u>	<u>13.8-18.1</u>	<u>18.1-22 &gt; 22</u>	<u>Total</u>	
2017	0.0	18.0	36.0	56.0	8.0	118.0
2019	0.0	2.0	24.0	16.0	8.0	50.0
2021	0.0	10.0	14.0	24.0	10.0	58.0
2023	0.0	2.0	26.0	34.0	16.0	78.0

### Crappie:

The Crappie population at Lake Carlton was sampled with 1.0-inch bar mesh trap nets. A total of 25 crappies were collected (25 BLC). The Black crappie population is low density and made of only 2 age groups, Age 1 and Age 3. Population characteristics should be used with caution due to the low catch rates. This is the first time the Crappie population has been evaluated with fall trap nets. The lack of more age groups indicates a possible Crappie spawning issue. Low density Crappie fisheries do allow for better growth as indicated by the age data. Black Crappie are reaching 10.8-inches by age 3+ which is outstanding. The lack of White Crappie is also good to see since White crappie have been shown to feed on fish earlier in life than Black Crappie that have a better ability to feed on aquatic insects when fish prey are not available. If White Crappie were to show up it would be like Johnson Sauk Trail with stunting issues and compounding issues in the Largemouth population.

#### Black crappie:

<u>Management Plan</u>	<u>:Goal</u>	<u>2021</u>
# Stock (130mm)	>100	25
PSD (95% CI)	40-60	12 (12)
RSD 8	15-25	12
RSD 10	5-10	12
Mean length Age 2+		n/a
CPUE $\geq$ 8.0 inches		0.2
CPUE age-1		1.1
Net nights: (# nets)		2(10)
CPUE (fish/nn) (n)		1.25(25)

2. Fall trap netting CPUE (fish/nn) of each length group of Black crappie collected at Lake Carlton

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	>15	Total
2021	0.0	1.1	0.0	0.2		0.0	1.25

3. Age length key of Black crappie collected from Lake Carlton 10/26-27/2021

Length (mm)	Age - 1	Age - 2	Age - 3	Total
140	1			1
150	4			4
160	10			10
170	2			2
180	4			4
190	1			1
200				0
210				0
220				0
230				0
240				0
250			1	1
260				0
270				0
<u>280</u>			<u>2</u>	<u>2</u>
Total	22	0	3	25

**FISHING REGULATIONS** – Statewide fishing regulations apply at this lake (see current Illinois Fishing Information booklet and IFISHILLINOIS website <http://www.ifishillinois.org/> for specific details).

Additional Site Specific fishing regulations:

- All Fish . . . . . 2 Pole and Line Fishing Only except
- Large or Smallmouth Bass . . . . . 1 Fish Daily Creel Limit (14" Minimum Length Limit)
- Bluegill or Redear Sunfish . . . . . No Daily Creel Limit (No Minimum Length Limit)
- Channel Catfish . . . . . 6 Fish Daily Creel Limit (No Minimum Length Limit)
- Pure Muskellunge . . . . . 1 Fish Daily creel Limit (36" Minimum Length Limit)
- Walleye, Sauger, or Hybrid Walleye. . . . . 6 Fish Daily Creel Limit (14" Minimum Length Limit)
- White, Black, or Hybrid Crappie . . . . . 25 Fish Daily Creel Limit (No Minimum Length Limit)

**CONTACT INFORMATION** – Morrison-Rookwood State Park: 815-772-4708  
 IDNR Fisheries County Biologist: 630-360-4185

**Lake Map:**

