



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 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 2022 collection was 865 mm (34.0 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>
Net nights: (# nets)	1(6)	2(5)	2(5)	2(5)	NS	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)
CPUE 20.1-29.9	0.0	0.2	0.0	0.1		1.0	0.2
CPUE 29.9-38.2	0.5	1.2	1.3	3.4		1.8	1.6
CPUE 38.2-42.1	0.2	0.3	0.4	0.7		0.3	0.1
CPUE 42.1-50.0	0.0	0.0	0.1	0.3		0.1	0.1
CPUE 50+	0.0	0.0	0.0	0.0		0.0	0.0
RSD 36	50	41	44	98		34	35
Avg. Length mm	898	877	917	909		859	865

<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>
20.1-29.9							
Avg Wr Female	NA			87	NA	91	
Avg Wr Male		89		81		90	86
30.0-38.0							
Avg Wr Female		79	93	87		91	87
Avg Wr Male		80	84	81		90	88
38.1-42.0							
Avg Wr Female		117	83	89		84	89
Avg Wr Male		74	84			83	
42.1-50.0							
Avg Wr Female			79	77		89	79
Avg Wr Male							
50+							

Largemouth Bass:

The Largemouth bass population was sampled on 9/28/2022 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). The Largemouth

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 272 bluegill were sampled. Total CPUE was within the running 5-year average of 296 fish per hr. Size distribution of the 2022 sample was like previous years with 3-6 inch fish dominating the sample. The 2022 sample had the highest CPUE for fish less than 3 inches indicating a possible strong 2022 year class. Relative weights for both 3-6 and 6-8 inch fish fell slightly from 2021 but are still above 90, not indicating any issues.

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

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

<u>Year</u>	<u><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)		

Saugeye:

The Saugeye population is doing very well at Lake Carlton. In 2021 one 30 min nocturnal DC electrofishing survey was done with 2 dippers. Males made up most of the sample below 500mm. Numbers for harvestable size fish have remained stable and will provide for great fishing opportunities.

<u>1.Management Plan Spring:</u>	<u>2017</u>	<u>2019</u>	<u>2021</u>
# Stock(230mm)	59	25	29
PSD	85	96	100
RSD18	54	48	59
Years to 14 inches	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><9.1</u>	<u>9.1-13.8</u>	<u>13.8-18.1</u>	<u>18.1-22</u>	<u>> 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

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

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

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

<u>Length (mm)</u>	<u>Age - 1</u>	<u>Age - 2</u>	<u>Age - 3</u>	<u>Total</u>
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:

