



LAKE GEORGE

FISHERIES STATUS SUMMARY

LOCATION – Lake George is located in Rock Island County - 5 miles west of Andalusia off Route 92. It is part of Loud Thunder Forest Preserve

DESCRIPTION – In a joint effort to provide additional fishing opportunities to anglers in Illinois, the Illinois Department of Natural Resources entered into a lease agreement with Rock Island County Forest Preserve District. Lake George is 167 acre lake with a maximum depth of 62 feet and an average depth of 24 feet. The lake has 4.2 miles of wooded shoreline. Boating is permitted with electric trolling motors only. The lake has a 40 car/trailer paved parking lot with two concrete boat ramps. The boat launch is ADA accessible. There is a concession building at Lake George that offers boat and electric motor rentals, bait, food, and some tackle supplies. For more information contact Lake George at 309-795-1070.

MANAGEMENT ACTIVITIES - The fishery is managed by annual species-specific surveys, regulations and stocking. Artificial fish habitat is added to lake in the form of natural and plastic structures.

STATUS OF THE SPORT FISHERY – Lake George receives an annual stocking of Channel catfish, Walleye, Striped Bass hybrids (Wiper) and Muskie. Largemouth are stocked when available or when a poor year class has been identified. Below is a description of the fishery.

Muskie:

The Muskie population was sampled with 5- 4X6 large mesh trap nets for two nights. The 2023 sample again showed a healthy and diverse Muskie population. The 2023 sample was the highest overall CPUE in the past 5 samples. Fish 30-38 inches remained the dominate size class of the sample. The Muskie population has remained very stable over the years and continues to provide excellent fishing. Relative weights (Wr) for both male and female Muskie are in the good to excellent range.

<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)	1(10)	2(5)	NS	NS	2(5)	2(5)	2(5)
CPUE (fish/nn)(n)	0.3(2)	1.2(12)	1(10)			1.1(11)	1.4(14)	4.7(47)
CPUE 20.1-29.9 0.1	0.6	0.0			0.4	0.2	0.0	
CPUE 29.9-38.2 0.0	0.2	0.8			0.4	0.7	3.6	
CPUE 38.2-42.1	0.2	0.2	0.2			0.2	0.3	0.9
CPUE 42.1-50.0	0.0	0.2	0.0			0.1	0.1	0.2
CPUE 50+	0.0	0.0	0.0			0.0	0.0	0.0
RSD 36	0	33	20		46	38	28	
Avg Length mm 636	843	863			843	857	903	

<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>
20.1-29.9								
Avg Wr Female	NA			NA	NA			
Avg Wr Male		(96)				(101)	(103)	
29.9-38.2								
Avg Wr Female			(117)			(123)	(106)	(109)
Avg Wr Male		(88)	(101)			(98)	(99)	(101)
38.2-42.1								
Avg Wr Female		(89)	(102)			(101)	(114)	(116)
Avg Wr Male						(98)	(80)	

42.1-50.0

Avg Wr Female (96) (102) (104) (99)
 Avg Wr Male
 50+

Largemouth Bass:

Traditionally, Lake George has had an extremely good bass population. The Largemouth bass population continued to be stable in 2017. The lack of YOY Largemouth bass in the 2017 fall sample is a little concerning and will have to be monitored. No fall sample in 2018 was completed due to the lake draw down. 2019 data did indicate changes to the Largemouth bass population after the draw down. The catch per unit of effort (CPUE) of fish of the greater than 20 inches fell to zero and CPUE for all fish greater than 12 inches decreased from typical years. The 2020 sample was very similar to the 2019 sample but the strong 2019 year class seems to have moved into the 8-12 inch range. The 15-20 inch group did have a rebound from 2019 and hopefully a few of them move back into the greater than 20 inch group. A few more years of data will be helpful in evaluating the effects of the 2018 draw down. The 2021 sample did show a rebound of the largemouth population in size distribution and relative weights to better than 2020 and was on par with pre-draw down levels. Relative weights for 15 inch fish and larger are doing excellent and are better than pre-draw down years. 2021 was again a strong year class with the second highest CPUE of fish less than 8 inches since 2016. The 2022 survey indicates poor potential recruitment from previous years with the second lowest CPUE of fish less than 8 inches. Other size classes CPUE rates remained like previous years. Relative weights for fish in the 12-15 inch range do indicate some lacking resources, but all other size groups do not indicate any issues. The 2023 survey resulted in the highest overall CPUE since 2016. The strong 2021 year class is providing increased catch rates to both 12-15 and 15-20 inch size groups. Relative weights for all size groups sampled was good to excellent. 2023 looks to be an average year for Largemouth bass recruitment, historical data shows that Lake George has a strong year class every other year.

1.Management Plan Fall:Goal	2016	2017	2018	2019	2020	2021	2022	2023	
# Stock (200mm)	>100	41	54	NS	31	47	56	74	67
PSD	40-60	83	61		61	32	39	38	64
RSD 14	10-20	63	50		32	28	20	14	25
RSD 18	0-10	5	7		0	4	5	3	3

2.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Largemouth bass collected at Lake George

Year	<8	8-12	12.1-15	15.1-20	> 20	Total	
2016	63.3	4.7	10.0		12.0	0.7	90.7
Avg Wr	(99)	(91)	(92)		(97)	(99)	
2017	16.6	14.0	7.3		14.0	0.7	52.6
Avg Wr	(100)	(95)	(100)		(98)	(100)	
2018	NO sample due to the lake being drawn down for dam repairs in the fall of 2018						
2019	55.3	8.0	7.3		5.3	0.0	75.9
Avg Wr	(121)	(112)	(104)		(98)		
2020	28.0	21.3	2.0		8.0	0.0	59.3
Avg Wr	(101)	(100)	(101)		(92)		
2021	61.3	22.7	9.3		4.7	0.7	98.7
Avg Wr	(103)	(95)	(102)		(107)	(107)	
2022	18.7	30.7	13.3		5.3	0.0	68.0
Avg Wr	(102)	(95)	(89)		(102)		
2023	32.0	24.0	34.0		9.0	0.0	99.0
Avg Wr	(100)	(90)	(90)		(93)		

Bluegill:

Historically the Bluegill population was dominated by fish 3-6 inches in length with fair to good relative weights. The lake has a long history of a population with similar population make up. The population did change some post 2018 draw down. In 2019 the overall CPUE numbers decreased in comparison to the previous two years 2016 and 17. The 2020 sample showed the lake heading back to 3-6 inch fish dominating the sample with fair to good relative weights and the highest total CPUE and CPUE over 6 inches in the past 5 years. The 2021 sample indicated a decrease in CPUE in all size groups but also an increase in all size groups relative weights. The dominate size group of 3-6 inch fish still remains but is healthier and unlike it was in 2020. The 2022 sample was very similar to the 2021 survey with no changes in size distribution or relative weights. The 2023 sample was the highest overall CPUE since 2016. The biggest difference from previous years has been the explosion of fish less than 3 inches and the increase in fish less than 6 inches. Relative weights for all fish size groups fell.

1.Management Plan:	Goal:	2016	2017	2018	2019	2020	2021	2022	2023
#Stock(80mm)	>100	140	227	NS	133	223	137	180	240
PSD	20-60	28	6		29	22	6(4)	7(4)	5(3)
RSD 7	10-15	1	0		0	0	0	0	0
RSD 8	0-10	0	0		0	0	0	0	0

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

<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	68.7	67.3	26.0	0.0	162.0
Avg Wr		(102)	(98)		
2017	5.3	150.7	8.7	0.0	164.7
Avg Wr		(106)	(97)		
2018	No sample due to the fall draw down				
2019	10.0	62.7	26.0	0.0	98.7
Avg Wr		(109)	(101)		
2020	42.0	116.7	32.0	0.0	190.7
Avg Wr		(89)	(90)		
2021	26.0	86.0	5.3	0.0	117.3
Avg Wr		(106)	(91)		
2022	18.0	87.4	10.4	0.0	138.0
Avg Wr		(98)	(94)		
2023	238.0	227.0	13.0	0.0	478.0
Avg Wr		(88)	(87)		

Walleye:

Previously Lake Georges Walleye population was sampled via DC night electrofishing and the results have been poor. It is possible that environmental and lake conditions will not allow for a good Spring sample by electrofishing. In 2022 data to evaluate the Walleye population were taken from 5- 4x6 ft. 1.5 inch mesh trap nets. Trap net data showed a good size distribution with very good Wr's. Timing of this sample will have to be evaluated with some historic data. The 2023 survey did not contain enough numbers to evaluate population characteristics. Water temperatures at the time of the sample was 47 F. Future samples may need to move to warmer surface temps or develop a different sampling protocol may be needed.

1.Management Plan Spring:	2022	2023
Net nights: (# nets)	2(5)	2(5)
# Stock(250mm)	16	7
PSD	100	100
RSD 18	75	71

2.Spring CPUE (fish/nn) of each length group of Walleye collected at Lake George

<u>Year</u>	<u><9.8</u>	<u>9.8-15</u>	<u>15-20.1</u>	<u>20.1-24.8</u>	<u>24.8-29.9</u>	<u>>29.9</u>	<u>Total</u>
2022	0.0	0.0	1.1	0.2	0.3	0.0	1.6
Avg Wr			(91)	(116)	(121)		
2023	0.0	0.0	0.4	0.3	0.0	0.0	0.7
Avg Wr			(96)	(115)			

Crappie:

The Crappie population was sampled for the first time in the fall with 1 inch bar 3x6 trap nets. A total of 10 nets per day for a grand total of 20 net nights were completed. Otoliths were removed from 5-10 fish per species per cm group for age determination. A total of 127 crappie and 2 hybrids were sampled by trap nets. White Crappie were the dominate species with 102 sampled. Lake Georges lack of vegetation and lake structure will tends to favor the White crappie over the Black crappie. Black Crappie have slower growth with a mean length at age 2+ of 7.5 inches vs the White crappie at 8.5 inches. The White crappie are taking advantage of the Gizzard shad forage and growing better than the Black crappie. Age data for both species does potentially indicate high mortality rates, with both species having a max age of less than 4 years.

Black crappie:

<u>Management Plan</u>	<u>:Goal</u>	<u>2022</u>
# Stock (130mm)	>100	21
PSD	40-60	57
RSD 10	5-10	10
Mean length Age 2+		7.5" (190.75mm)
CPUE ≥ 8.0 inches		0.5
CPUE age-1(fish/nn)		0.1
Net nights: (# nets)		2(20)
CPUE (fish/nn) (n)		1.1(21)

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

<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>Total</u>
2022	0.0	0.5	0.5	0.1	0.0	1.1
Avg Wr		(89)	(90)	(82)		

3. Age length key of Black crappie collected from Lake George 10/25-26/2022

<u>Length (mm)</u>	<u>Age – 1</u>	<u>Age – 2</u>	<u>Age - 3</u>	<u>Age - 4</u>	<u>Total</u>
140	2				2
150					0
160					0
170			2		2
180			3		3
190			1	1	2
200				2	2
210			1	6	7
220			1		1
230					0
240					0
250				1	1
260					0

270					0
280				1	1
Total	2	8	10	1	21

White crappie:

Management Plan	:Goal	2022
# Stock (130mm)	>100	102
PSD	40-60	82
RSD 10	5-10	14
*Mean length Age 2+		8.5" (216.8mm)
CPUE \geq 8.0 inches		4.1
CPUE age-1(fish/nn)		0.2
Net nights: (# nets)		2(10)
CPUE (fish/nn) (n)		5.1(102)

*Mean length of aged fish not extrapolated data

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

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	Total
2022	0.0	0.9	3.1	1.1	0.0	5.1
Avg Wr		(87)	(86)	(89)		

3. Age length key of White crappie collected from Lake George 10/25-26/2022

Length (mm)	Age – 1	Age – 2	Age – 3	Total
140	1			1
150	1			1
160				0
170			1	1
180			4	4
190	1		8	2
200	1		5	6
210			7	6
220			7	17
230			5	2
240			3	3
250			5	7
260			1	4
270				3
280				2
Total	4		46	52

Gizzard Shad:

The Gizzard shad population has a history of being strong. Gizzard shad between 6 and 7 inches dominated the 2017 sample as in past years. The 2019 sample showed an opposite trend to previous years with YOY gizzard shad dominating the sample. I would assume this is a response to the draw down over the winter of 2018. Hybrid Striped bass were stocked in 2020 at a rate of 30 per acre to help keep numbers of Gizzard shad down. The 2020 survey showed a decline in total CPUE and a reduction in CPUE less than 6 inches. The 2021 survey again showed a reduction of Gizzard shad less than 6 inches. The 2022 survey again showed a decline overall CPUE of Gizzard shad and a decline in Gizzard shad less than 6 inches. The trend of declining CPUE rates of fish less than 6 inches continued in 2023. Catch rates for larger Gizzard shad remained stable in 2023.

Management Plan:	2016	2017	2018	2019	2020	2021	2022	2024
CPUE (fish/hr) < 6inches	20.0	16.0	NS	94.0	50.0	10.0	2.0	0.0
CPUE (fish/hr)	168.0	78.0		102.0	52.6	60.0	15.3	25.0

Other Species:

Other species sampled as part of the community electrofishing sample were Channel catfish, Flathead catfish, Walleye, Common carp, Black crappie, White crappie, Green sunfish, and Longear sunfish

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
- Large or Smallmouth Bass 6 Fish Daily Creel Limit (14" Minimum Length Limit)
- Bluegill or Redear Sunfish No Fish 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)
- Striped, White, or Hybrid Striped Bass 1 Fish Daily Creel Limit (17" 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 – Loud Thunder Forest Preserve: 309-795-1040
 IDNR Fisheries County Biologist: 630-360-4185