



Johnson Sauk Trail

FISHERIES STATUS SUMMARY

LOCATION – Johnson Sauk Trail is located in Henry County five miles north of Kewanee on Illinois Route 78.

DESCRIPTION – Johnson Sauk Trail is a 58 surface acre impoundment with a maximum depth of 23 feet and an average depth of 8.2 feet. The lake was built in 1949 and finished in 1955. The lake was opened to fishing in 1957. It has a watershed of 876.1 acres. Boating is allowed, No wake for entire lake. The lake has one paved boat ramp and parking lot. Part of the shoreline is ADA accessible.

STATUS OF THE SPORT FISHERY – Johnson Sauk Trail receives an annual stocking of Channel catfish at a rate of 35 per acre. Muskie are stocked every three years at a rate of 1 per acre. Below is a description of the fishery.

Muskie:

Johnson Sauk Trail has had a history of good numbers of Muskie up to 38 inches. Muskie are scheduled to be stocked at one per acre every third year starting in 2016. No Muskie sample was done in 2017 or 2020. The 2022 sample was unlike previous years when fish in the Quality size (30-38 inches) typically dominate the sample. The 2022 sample lacked this size group for an unknown reason. It is highly unlikely that this group has been lost and more likely that seasonal issues caused a poor sample for this group. Relative weights of fish sampled in 2022 were slightly better than previous years and look very good for a population that survives on sunfish.

Management Plan:	Goal:	2014	2015	2016	2017	2018	2019	2020	2021	2022
Net nights: (# nets)		1(6)	1(6)	1(6)	ns	2(5)	2(5)	ns	2(5)	2(5)
CPUE (fish/nn) (n)	>1.0	1(6)	1.8(11)	1(6)		1(10)	2.7(27)		2(20)	0.9(9)
CPUE 20.1-29.9									0.1	0.4
CPUE 29.9-38.2		0.7	0.3	0.7		0.6	2.1		1.2	0
CPUE 38.2-42.1		0.3	0.7	0.3		0.4	0.5		0.3	0.4
CPUE 42.1-50		0	0	0		0	0		0.4	0.1
CPUE 50+		0	0	0		0	0		0	0
RSD 36		50	36	50		40	37		70	56

Avg Wr by sex :	2014	2015	2016	2017	2018	2019	2020	2021	2022
20.1-29.9				NS			NS		
Avg Wr Female									
Avg Wr Male								95	95
30-38.0									
Avg Wr Female								91	
Avg Wr Male								83	
38.1-42.0									
Avg Wr Female								91	103

Avg Wr Male

42.1-50

Avg Wr Female

90

95

Avg Wr Male

50+

Largemouth bass:

The Largemouth population was sampled once in 2022. The 2022 fall sample showed a diverse population with a PSD of 54. Size distribution in the 2022 sample was like previous years and most like the 2021 fall survey. Overall catch per unit effort (CPUE) was the lowest in the past 7 years. This decline is due to low catch numbers in sub-stock fish indicating a possible weak 2022-year class. Johnson Sauk Trail typically has very good year class strength that leads to slowed growth during years 2-5, so a possible weak year class is not all bad. All size classes of Largemouth bass in the 2022 sample have slightly lower mean Relative Weight (Wr) values than previous years since the start of intensive spring vegetation treatment in 2019.

<u>1.Management Plan</u>	<u>:Goal</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>
# Stock (200mm)	>100	66	74	70	65	111	71	65	72
PSD (95% CI)	40-60	38	31	43	28	24	34	62(15)	54(14)
RSD 14	15-25	18	7	20	9	9	16	19(14)	17(13)
RSD 18	0-10	9	0	3	6	3	3	5	1
Effort (Min)		60	60	60	60	60	60	60	60

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

<u>Year</u>	<u><8</u>	<u>8-12</u>	<u>12.1-15</u>	<u>15.1-20</u>	<u>> 20</u>	<u>Total</u>
2016	114.0	51.0	20.0	3.0	0.0	188.0
2017	84.0	40.0	25.0	5.0	0.0	154.0
2018	93.0	47.7	15.0	3.0	0.0	158.0
2019	75.0	84.0	18.0	6.0	3.0	186.0
Avg Wr (92)	(87)	(83)	(97)	(103)		
2020	164.0	47.0	14.0	10.0	0.0	235.0
Avg Wr (105)	(98)	(95)	(98)			
2021	71.0	25.0	30.0	10.0	0.0	136.0
Avg Wr (114)	(102)	(98)	(101)			
2022	44.0	33.0	32.0	7.0	0.0	116.0
Avg Wr (86)	(90)	(88)	(92)			

3.Spring Electrofishing Population assessment

<u>Management Plan</u>	<u>:Goal</u>	<u>2021</u>
# Stock (130mm)	>100	101
PSD (95% CI)	40-60	49 (14)
Mean length Age 3*		9.79”(248.8mm)

*average length of age 3 fish aged

4.Spring Electrofishing CPUE (fish/nn) of each length group of Largemouth Bass collected at Johnson Sauk Trail

Year	<8	8-12	12.1-15	15.1-20	> 20	Total
2021	77.0	52.0	22.0	25.0	2.0	178.0

5. Age length key of Largemouth Bass collected from Johnson Sauk Trail collected 5/10/2021

Length (mm)	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Total
80	4									4
90	9									9
100	8									8
110	5									5
120	4									4
130	4									4
140	5									5
150	3									3
160	2									2
170										0
180										0
190										0
200		1	1							2
210			2		1					3
220										0
230		1	3							4
240		1	4							5
250		1	3							4
260			1		1					2
270			3	3						6
280				4						4
290			1	4						5
300				3	2					5
310				1	1					2
320					1	2	1			4
330				1						1
340				1		1				2
350										0
360										0
370					1	1				2
380						1				1
390									1	1
400										0
410						1				1
420									1	1
430						1				1
Total	44	4	18	17	7	7	1	0	2	100

Bluegill:

The Fall 2022 survey resulted in the second largest CPUE of Bluegill in the past 6 years. The 2022 survey showed similar size distributions with increased catch rates of both 3-6- and 6-8-inch fish. These results are like between 2005 and 2011, when a more aggressive vegetation control program was conducted to make the bluegill more vulnerable to predation. As a result, quality sized bluegill were collected in record numbers in 2006(144/Hr), 2007(63/Hr), 2009(74/Hr), 2010(71/Hr) and 2011(61/Hr). Intensive Aquatic vegetation treatments will continue in efforts to help Bluegill growth for better population numbers of preferred fish in the future.

Management Plan	:Goal	2016	2017	2018	2019	2020	2021	2022
# Stock (80mm)	>100	44	31	119	206	95	375	330
PSD (95% CI)	20-40	34	23	8	14	17	14(4)	15(4)
RSD 7	10-15	0	0	0	0	0	0	0
RSD 8	1-10	0	0	0	0	0	0	0

2.Fall diurnal DC electrofishing CPUE (fish/hr) of each length group of Bluegill collected at Johnson Sauk Trail

Year	<3	3.1-6	6.1-8	8.1-10	Total
2016	29.0	46.0	15.0	0.0	90.0
2017	53.0	56.0	7.0	0.0	116.0
2018	80.0	109.0	10.0	0.0	199.0
2019	63.0	177.0	29.0	0.0	269.0
Avg Wr		(82)	(76)		
2020	132.0	79.0	16.0	0.0	227.0
Avg Wr		(94)	(84)		
2021	77.0	322	53.0	0.0	452.0
Avg Wr		(104)	(90)		
2022	58.0	279	51.0	0.0	388.0
Avg Wr		(98)	(74)		

Crappie:

The Crappie population at Johnson Sauk Trail was sampled with 1.0 inch bar mesh trap nets. A total of 175 crappies were collected (142 WHC) and (33 BLC). Age and growth data was not taken in 2022 and will be done in 2025. The 2022 survey did not show any drastic changes to the ether the Black or White crappie populations. Black crappie are limited in numbers and have slightly better overall Wr's. White crappie dominate numbers and have very poor growth. The crappie population will need heavy fishing pressure to help growth rates and relative weights.

Black crappie:

Management Plan	:Goal	2019	2022
# Stock (130mm)	>100	35	33
PSD	40-60	31	9
RSD 8	15-25	31	9
RSD 10	5-10	20	6
Mean length Age 2+		5.98" (152mm)	NA
CPUE ≥ 8.0 inches		0.55	NA
CPUE age-1		0.45	NA
Net nights: (# nets)		2(10)	2(10)

CPUE (fish/nn) (n) 1.75(35) 1.65(33)

2. Fall trap netting CPUE (fish/nn) of each length group of Black crappie collected at Johnson Sauk Trail

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	>15	Total
2019	0.0	1.4	0.2	0.1	0.2	0.1	1.75
2022	0.0	1.5	0.05	0.0	0.05	0.05	1.65
Avg Wr		(93)	(97)		(82)	(90)	

3. Age length key of Black crappie collected from Johnson Sauk Trail 10/24-25/2019

Length (mm)	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Total
140	1									1
150	3	2								5
160	1		2							3
170	4		5							9
180			4							4
190			1	1						2
200				2			1			3
210										0
220										0
230										0
240								1		1
250										0
260										0
270										0
280				1						1
290							1			1
300						1				1
310										0
320						1				1
330										0
340										0
350										0
360						1				1
370						1				1
Total	9	2	12	4	0	4	2	0	1	34

White crappie:

Management Plan	:Goal	2019	2022
# Stock (130mm)	>100	162	141
PSD	40-60	22	24
RSD 8	15-25	22	21
RSD 10	5-10	2	4
Mean length Age 2+		7.04"(179mm)	NA
CPUE ≥ 8.0 inches		1.8	NA
CPUE age-1		4.6	NA
Net nights: (# nets)		2(10)	2(10)

CPUE (fish/nn) (n) 8.1(162) 7.1(142)

2. Fall trap netting CPUE (fish/nn) of each length group of White crappie collected at Johnson Sauk Trail

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	Total
2019	0.0	7.4	1.9	0.2	0.0	8.1
2022	0.05	5.4	1.5	0.2	0.05	7.1
Avg Wr		(95)	(93)	(90)		

3. Age length key of White crappie collected from Johnson Sauk Trail 10/24-25/2019

Length (mm)	Age 1	Age 2	Age 3	Age 4	Age 5	Age 6	Age 7	Age 8	Age 9	Total
150	8									8
160	83									83
170	1	1	5							7
180		1	12							13
190			12			2		1		15
200			10	1	1	1	1	3		17
210			4	1				2		7
220				3			1			4
230			1	1						2
240			2	1						3
250							1			1
260										0
270				1					1	2
Total	92	2	46	8	0	1	3	3	7	162

Channel catfish:

The few Channel catfish collected in 2021 had very good relative weights as in the past. An effort to collect more specimens by hoop nets will be made in the future.

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 Daily Creel Limit (No Minimum Length Limit)
- Channel Catfish 6 Fish Daily Creel Limit (No Minimum Length Limit)
- Muskellunge 1 Fish Daily creel Limit (36" Minimum Length Limit)
- White, Black, or Hybrid Crappie No Fish Daily Creel Limit (No Minimum Length Limit)

CONTACT INFORMATION – Johnson Sauk Trail State Park: 309-853-5589
IDNR Fisheries County Biologist: 630-360-4185

