



Johnson Sauk Trail

FISHERIES STATUS SUMMARY

LOCATION – Johnson Sauk Trail is 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 2023 sample was more like previous years when fish in the Quality size (30-38 inches) typically dominate the sample. Relative weights of fish sampled in 202 were slightly lower than previous years.

Management Plan:	Goal:	2014	2015	2016	2017	2018	2019	2020	2021	2022
<u>2023</u>										
Net nights: (# nets)		1(6)	1(7)	1(6)	NS	2(5)	2(5)	NS	2(5)	2(5)
CPUE (fish/nn) (n)	>1.0	1(6)	1.6(11)	1(6)		1(10)	2.7(27)		2(20)	0.9(9)
RSD 36	50	36	50		40	37		70	56	100
Avg Size mm		903	832	934		910	885		952	890
									966	

2.Spring trap net CPUE (fish/nn) of each length group of Muskie collected at Johnson Sauk Trail

Year	<20	20.1-29.9	30-38.2	38.2-42.1	42.1-50	>50	Total
2014	0.0	0.0	1.0	0.0	0.0	0.0	1.0
2015	0.0	0.6	0.9	0.1	0.0	0.0	1.6
2016	0.0	0.0	0.7	0.3	0.0	0.0	1.0
2017	NS						
2018	0.0	0.0	0.6	0.4	0.0	0.0	1.0
2019	0.0	0.0	2.1	0.5	0.0	0.0	2.7
2020	NS						
2021	0.0	0.1	1.2	0.3	0.4	0.0	2.0
2022	0.0	0.4	0.0	0.4	0.1	0.0	0.9
2023	0.0	0.0	0.6	0.1	0.3	0.0	1.0

3.Average Wr (Relative Weights) of Muskie (male and female) by size group collected by Spring trap nets

Avg Wr by sex :	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
20.1-29.9					NS			NS		
Avg Wr Female										
Avg Wr Male			79				94		95	95
30-38.0										
Avg Wr Female			73	106					91	90
Avg Wr Male		91	72	91		87	91		83	87
38.1-42.0										
Avg Wr Female				97		90			91	103
Avg Wr Male			75	82		73	81			
42.1-50										
Avg Wr Female									90	95
Avg Wr Male										83
50+										62

Largemouth bass:

The Largemouth population was sampled once in 2023. The 2023 fall sample showed a diverse population with a PSD of 60. Overall catch per unit effort (CPUE) was the lowest in the past 12 years. This decline is due to low catch numbers in sub-stock fish indicating a possible weak 2023-year class. Johnson Sauk Trail typically has very good year class strength that leads to slowed growth during years 2-5. All size classes of Largemouth bass in the 2023 sample have higher mean Relative Weight (Wr) values than the 2022 sample, this is indicative of a population that has optimal food and space resources.

1.Management Plan	: Goal	2015	2016	2017	2018	2019	2020	2021	2022	2023
# Stock (200mm)	>100	66	74	70	65	111	71	65	72	65
PSD (95% CI)	40-60	38	31	43	28	24	34	62(15)	54(14)	60(17)
RSD 14	15-25	18	7	20	9	9	16	19(14)	17(13)	12(12)
RSD 18	0-10	9	0	3	6	3	3	5	1	0
Effort (Min)		60	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

Year	<8	8-12	12.1-15	15.1-20	20.1-24.8	Total
2011	42.0	24.0	44.0		10.0	120.0
2012	113.3	58.7	14.7		18.7	206.7
2013	71.0	44.0	17.0		15.0	148.0
2014	28.0	73.3	16.0		16.0	137.3
2015	41.0	41.0	16.0		7.0	107.0
2016	114.0	51.0	20.0		3.0	188.0
2017	84.0	40.0	25.0		5.0	154.0
2018	93.0	47.7	15.0		3.0	158.0
2019	75.0	84.0	18.0		6.0	186.0
Avg Wr (92)	(87)	(83)		(97)		(103)
2020	164.0	47.0	14.0		10.0	235.0
Avg Wr (105)	(98)	(95)		(98)		
2021	71.0	25.0	30.0		10.0	136.0
Avg Wr (114)	(102)	(98)		(101)		
2022	44.0	33.0	32.0		7.0	116.0
Avg Wr (86)	(90)	(88)		(92)		
2023	26.0	26.0	35.0		4.0	91.0
Avg Wr (99)	(99)	(98)		(103)		

410						1				1
420									1	1
430						1				1
Total	44	4	18	17	7	7	1	0	2	100

Bluegill:

The Fall 2023 survey resulted in the highest CPUE of fish less than 3 inches, but also one of the lowest CPUE rates for fish 6-8 inches. The relative weight of 6–8-inch fish was second highest in the past 5years. 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	2023
# Stock (80mm) >100	44	31	119	206	95	375	330	104	
PSD (95% CI)	20-40	34	23	8	14	17	14(4)	15(4)	3(3)
RSD 7	10-15	0	0	0	0	0	0	0	0
RSD 8	1-10	0	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
2011	5.0	91.0	52.0	0.0	148.0
2012	54.7	78.7	49.3	0.0	182.7
2013	118.0	82.0	77.0	0.0	277.0
2014	18.7	77.3	121.3	0.0	217.3
2015	39.0	43.0	39.0	0.0	121.0
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)		
2023	216.0	202.0	6.0	0.0	424.0
Avg Wr		(91)	(87)		

Redear Sunfish:

Redear Sunfish typically make up 20-40 percent of the overall sunfish population at Johnson Sauk Trail. The 2023 survey fall survey showed a population dominated by 4-7 inch fish with good to excellent relative weights. Johnson Sauk Trail has never produced large 9 plus inch individuals at a great rate. Larger sized individuals suffer with low relative weights.

1.Spring Nocturnal DC electrofishing CPUE (fish/hr) of each length group of Redear sunfish collected at Johnson Sauk Trail.

Year	<4	4-7.1	7.1-9.1	9.1-11	>11	Total
2022	13.0	33.0	2.0	0.0	0.0	48.0
Avg Wr		(89)	(80)			

2023 6.0 110.0 2.0 0.0 0.0 118.0
 Avg Wr (114) (94) (75)

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 \geq 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
<u>370</u>						<u>1</u>				<u>1</u>
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

<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>
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

<u>Length (mm)</u>	<u>Age 1</u>	<u>Age 2</u>	<u>Age 3</u>	<u>Age 4</u>	<u>Age 5</u>	<u>Age 6</u>	<u>Age 7</u>	<u>Age 8</u>	<u>Age 9</u>	<u>Total</u>
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
<u>270</u>				1				1		<u>2</u>
Total	92	2	46	8	0	1	3	3	7	162

Channel catfish:

The 28 Channel catfish collected in 2023 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