SHABBONA LAKE

FISHERIES STATUS SUMMARY

LOCATION – Shabbona Lake is in Dekalb County approximately 2 miles south and 1 mile east of the city of Shabbona.

DESCRIPTION –Shabbona Lake was constructed in 1974 for recreational fishing. Shabbona Lake has 318 surface acres of water. The lake has an average depth of 17.5 feet deep and a max depth of 40 feet. The original river channel can still be found along with old roadbeds and standing timber creating a unique fishing experience. A two-lane concrete boat ramp with car/trailer parking is available. Boat rentals are available from the bait shop.

MANAGEMENT ACTIVITIES - The fishery is managed by annual species-specific surveys. Habitat structures or brush piles are completed annually when weather and conditions allow.

STATUS OF THE SPORT FISHERY – Shabbona Lake receives an annual stocking of Channel catfish and Walleye. Muskie will be stocked every third year starting in 2018. Hybrid striped bass are stocked when available. Largemouth and Smallmouth bass are stocked when available or when a poor year class has been identified. Below is a description of the fishery.

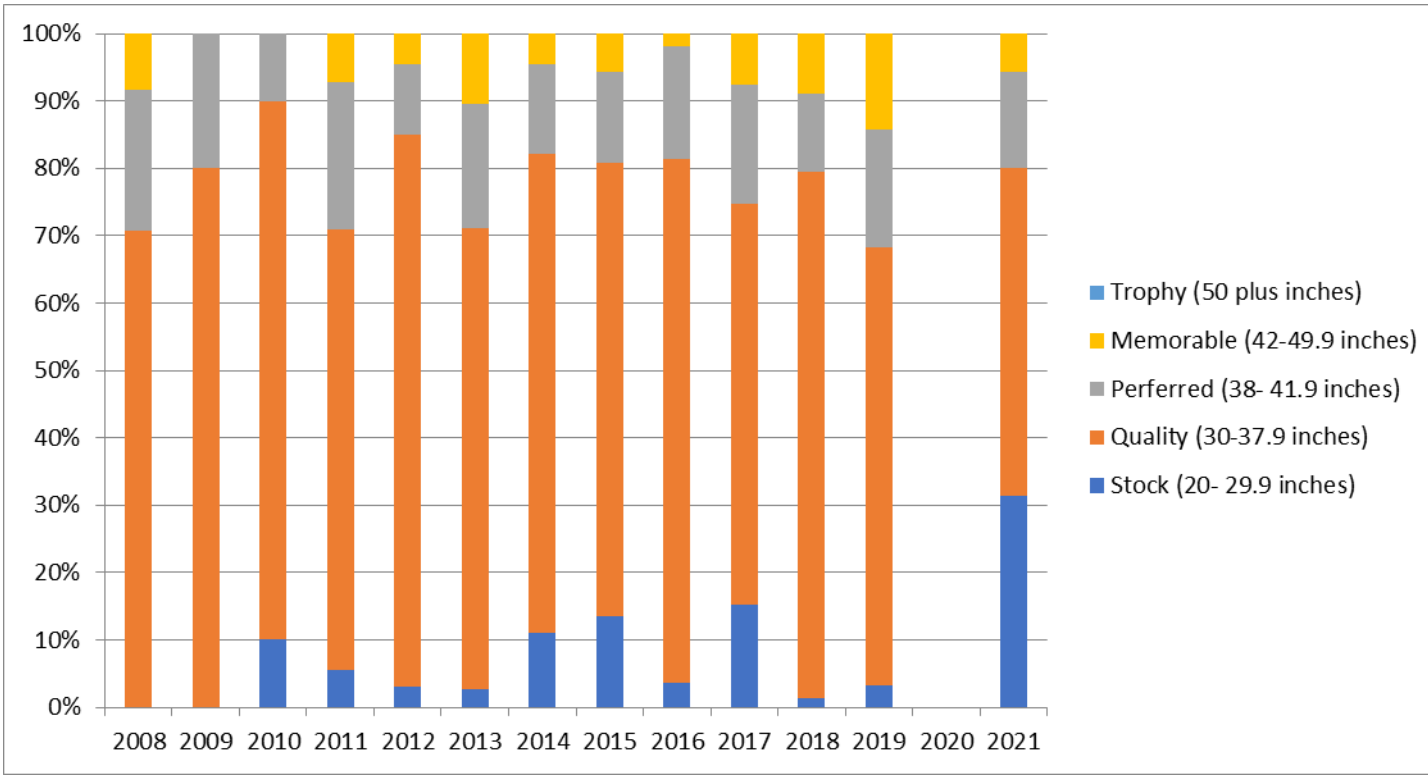
Muskie:

The Muskie population was sampled with 10 4X6 large mesh trap net on 4/13/2020. The Muskie population continues to be stable with size distribution like previous years even with decreased overall catch per unit effort in 2021. In 2021 33 Muskie were implanted with tracking receivers for a tracking study. This is year 3 of the decreased stocking rates in effort to increase relative weights. It is too early to tell but relative weights (Wr) for males in the 38-42-inch male Muskie have rebounded slightly in 2019 and 2020.

1.Management Plan:	2014	2015	2016	2017	2018	2019	2020	2021
Net nights: (# nets)	1(6)	1(6)	1(10)	1(10)	1(10)	1(10)	ns	1(10)
CPUE (fish/nn)(n)	7.5(45)	8.7(52)	5.3(53)	7.9(79)	7.9(79)	6.3(63)		3.5(35)
CPUE 20.1-29.9	0.8	1.2	0.2	1.2	0.1	0.2		1.1
CPUE 30.0-38.2	5.3	5.8	4.3	4.6	6.1	4.3		1.7
CPUE 38.2-42.1	0.6	1.2	0.8	1.5	1.0	1.1		0.5
CPUE 42.1-50.0	0.2	0.5	0.1	0.5	0.6	0.9		0.2
CPUE 50+	0.0	0.0	0.0	0.0	0.0	0.0		0.0
RSD 42	4	6	2	8	8	14		6
RSD 48	0	0	0	0	0	0		0

Avg Wr by sex :	2014	2015	2016	2017	2018	2019	2020	2021
20.1-29.9							**ns**	
Avg Wr Female	107							116
Avg Wr Male	89	94	108	95	112	101		91
30-38.0								
Avg Wr Female	97	126	97	93	103	105		104
Avg Wr Male	101	97	91	92	93	98		94
38.1-42.0								

Avg Wr Female	98	114	105	94	101	102	101
Avg Wr Male	87	89	98	93	85	90	90
42.1-50							
Avg Wr Female	96	89	96	106	101	95	92
Avg Wr Male							
50+							



Largemouth Bass:

The Largemouth bass (LMB) population was sampled on 10/4/2021 by 2 DC electrofishing boats. A total of 302 LMB were sampled ranging from 2-20 inches. The Largemouth bass population is strong with a PSD of 70. The 2021 survey showed a slight increase in CPUE of fish in the 12-15-inch size group. Relative weights for all size groups remain good like previous years.

1.Management Plan Fall:Goal		2016	2017	2018	2019	2020	2021	
# Stock (200mm)		>100	65	142	85	79	56	60
PSD		40-60	80	75	75	80	59	70
RSD 14	10-20		55	61	53	55	43	32
RSD 15	10-40		34	54	44	41	29	27
RSD 18	0-10		0	7	7	9	4	2
Effort(Min)			120	120	120	120	120	120

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

Year	<7.9	7.9-11.8	11.8-15	15-20.1	> 20	Total
2016	53.0	6.5	15.0	11.0	0.0	85.0
2017	101.5	18.0	15.0	37.0	1.0	172.5
Avg Wr	(111)	(104)	(102)	(105)	(96)	
2018	114.0	10.5	13.5	18.5	0.0	156.5

Avg Wr	(103)	(93)	(98)	(98)		
2019	156.5	8.0	15.5	15.5	0.5	196.0
Avg Wr	(100)	(98)	(100)	(96)	(121)	
2020	111.0	11.5	8.5	8.0	0.0	139.0
Avg Wr	(111)	(104)	(104)	(95)		
2021	121.0	9.0	12.5	8.0	0.5	151.0
Avg Wr	(121)	(122)	(96)	(94)	(93)	

Smallmouth Bass:

The Smallmouth bass population was sampled on 10/4/2021 a total of 120 minutes as part of the fall community sample. The Smallmouth bass population continues to be low density population with larger fish having very poor relative weights. Habitat and competition with Largemouth bass will be the limiting factors for this population.

Management Plan Fall:	Goal:	2016	2017	2018	2019	2020	2021
# Stock (180mm)	>100	13	9	4	1	19	13
PSD		39	33	100	0	94	85
RSD 14	8	11	50	0	5	23	
RSD 15	0	11	25	0	5	23	
RSD 18	0	0	0	0	0	0	

Walleye:

The Walleye population was sampled on 4/12/2021 by nocturnal DC electrofishing for 1 run (30 min). The 2021 sample was a total of 114 individuals, manly males, which is to be expected when sampling the dam face during the spawn. Numbers of harvestable size Walleye continue to be stable with 25 percent of the population sampled that is greater than 10 inches greater than harvestable size.

1.Management Plan Spring:	2017	2019	2021
# Stock(250mm)	125	99	105
PSD	90	68	82
RSD 18	37	29	25
Years to 18 inches	n/a	n/a	n/a

2.Spring nocturnal DC electrofishing CPUE (fish/hr) of each length group of Walleye collected at Shabbona Lake

Year	<9.8	9.8-15	15-20.1	20.1-24.8	> 24.8	Total
2017	0.0	24.0	198.0	26.0	0.0	248.0
2019	2.0	64.0	110.0	20.0	4.0	200.0
2021	18.0	38.0	144.0	28.0	0.0	228.0

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 30 net nights were completed. Otoliths were removed from 5-10 fish per species per cm group for age determination. A total of 156 crappie and 2

hybrids were sampled by trap nets. Black Crappie were the dominate species with 96 sampled. Both species have good relative weights for all size groups sampled. Both species have excellent growth reaching over 9 inches in 2 plus years. It seems that White Crappie could be specifically harvested over Black Crappie; they have a max age of 4 in the sample. Black crappie sampled have a max age of 8.

Black crappie**:**

Management Plan	:Goal	2020
# Stock (130mm)	>100	96
PSD	40-60	97
RSD 10	5-10	70
Mean length Age 2+		9.6" (243.38mm)
CPUE ≥ 8.0 inches		3.1
CPUE age-1(fish/nn)		0.2
Net nights: (# nets)		3(30)
CPUE (fish/nn) (n)		3.2(96)

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

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	>15	Total
2020	0.0	0.1	1.1	1.7	0.3	0.0	3.2
Avg Wr		(99)	(105)	(99)	(96)		

3. Age length key of Black crappie collected from Shabbona Lake 10/27-29/2020

Length (mm)	Age - 1	Age - 2	Age - 3	Age - 4	Age - 5	Age - 6	Age - 7	Age - 8	Total
160	1								1
170	1								1
180									0
190	1								1
200	1								1
210	1	1							2
220		3							3
230		5							5
240		15							15
250		8						2	10
260		3	7			1			11
270			4	2	6		3		15
280			2		2	8			12
290					3	5	5		13
300					1	3	1		5
310									0
320					1				1
Total	5	35	13	2	13	17	9	2	96

White crappie:

Management Plan	:Goal	2020
# Stock (130mm)	>100	62

PSD	40-60	77
RSD 10	5-10	37
Mean length Age 2+		9.4" (238.67mm)
CPUE ≥ 8.0 inches		1.6
CPUE age-1(fish/nn)		0.8
Net nights: (# nets)		3(30)
CPUE (fish/nn) (n)		2.0(63)

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

Year	<5	5.1-8	8.1-10	10.1-12	12.1-15	Total
2019	0.0	0.4	0.8	0.8	0.0	2.0
Avg Wr		(97)	(100)	(95)		

3. Age length key of White crappie collected from Shabbona Lake 10/27-29/2020

Length (mm)	Age - 1	Age - 2	Age - 3	Age - 4	Total
160	1				1
170	1	1			2
180	4				4
190	7				7
200	6				6
210	6				6
220	2				2
230	2	1	1		4
240		4	3		7
250		7	2	2	11
260			6	2	8
270			2	1	3
280					0
290				1	1
Total	29	13	14	6	62

Bluegill:

The Bluegill population was sampled using DC electrofishing for 120 minutes as part of the fall community sample. A total of 136 Bluegill were sampled. The 2021 sample showed a decrease in catch per unit of effort (CPUE) for all size groups. The decrease in 6-8-inch size group from 20 plus fish an hr. since 2017 will have to monitored. Relative weights (Wr) for all size groups sampled was excellent.

Management Plan:	Goal:	2016	2017	2018	2019	2020	2021
#Stock(80mm)	>100	105	160	298	176	236	21
PSD(95% CI)	20-60	40	33	12	26	21	33(20.1)
RSD 7		6	6	1	4	5	14
RSD 8	5-20	0	0	0	0	0	0
Effort		120	120	120	120	120	120

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

Year	<3	3.1-6	6.1-8	8.1-10	Total
2016	27.1	10.3	6.7	0.0	44.1
2017	21.5	54.0	26.0	0.0	101.5
Avg Wr		(115)	(101)		
2018	133.0	130.0	18.5	0.0	281.5
Avg Wr		(104)	(89)		
2019	80.0	62.0	23.0	0.0	165.0
Avg Wr		(96)	(90)		
2020	143.0	63.5	24.5	0.0	231.0
Avg Wr		(97)	(94)		
2021	57.5	7.0	3.5	0.0	68.0
Avg Wr		(108)	(100)		

Gizzard Shad:

Gizzard shad are the primary food for all the predators in Shabbona Lake. Small Gizzard shad are preferred for Walleye, Hybrids, intermediate Largemouth bass, and larger Crappie species. Larger Gizzard shad are preferred for Muskie and larger Largemouth bass. The 2021 survey showed decreased catch rates from 2020 to similar catch rates in previous years to 2020. Numbers will provide quality food for winter 2021 and spring 2022.

Management Plan:	2017	2018	2019	2020	2021
CPUE (fish/hr) < 6inches	316.5	76.0	395.0	1834.0	531.0
CPUE (fish/hr)	481.5	127.5	436.0	1886.0	556.0

ADDITIONAL FISH SPECIES – Shabbona Lake supports a variety of fish species which include sunfish (bluegill and green sunfish), common carp, yellow perch and others. Shabbona Lake is supported by a gizzard shad forage base as well as various other minnow and sucker species.

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).

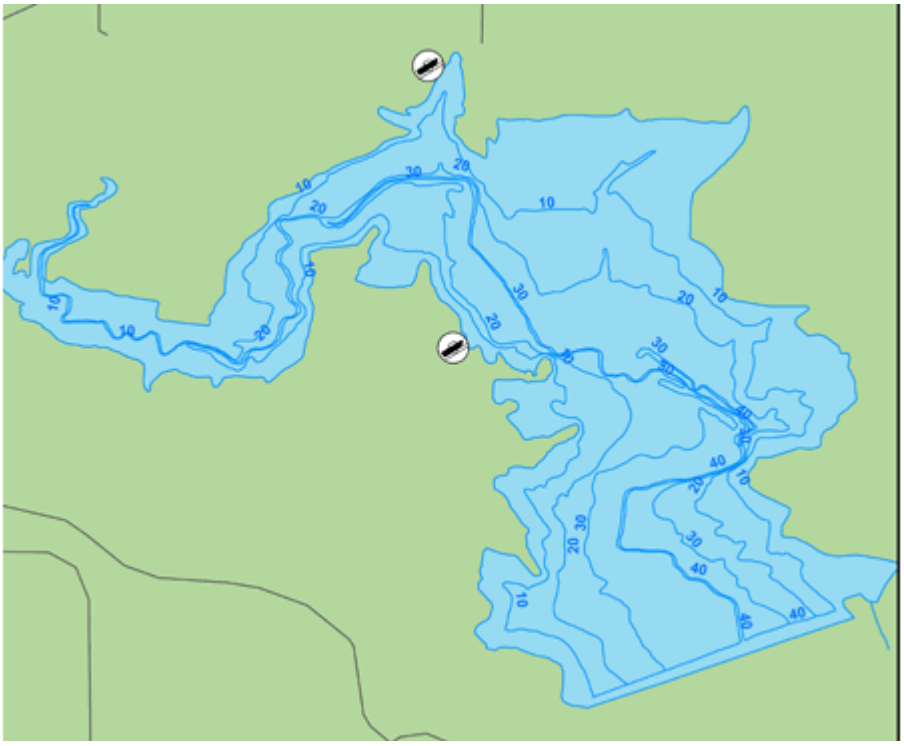
Additional Site Specific fishing regulations:

All Fish . . . . . 2 Pole and Line Fishing Only
Large or Smallmouth Bass . . . . . 1 Fish Daily Creel Limit (14″ Minimum Length Limit)
Bluegill or Redear Sunfish . . . . . 10 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 (48″ Minimum Length Limit)
Striped, White, or Hybrid Striped Bass . . . 3 Fish Daily Creel Limit (17″ Minimum Length Limit)
Walleye, Sauger, or Hybrid Walleye. . . . . 6 Fish Daily Creel Limit (18″ Minimum Length Limit)
White, Black, or Hybrid Crappie . . . . . 10 Fish Daily Creel Limit (No Minimum Length Limit)

Boat motor: Unlimited HP, No wake

CONTACT INFORMATION – Shabbona Lake State Park: 815-824-2106
IDNR Fisheries County Biologist: 630-360-4185

Shabbona Lake Map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