



JOHNSON LAKE BANNER MARSH STATE FISH AND WILDLIFE AREA FISHERIES STATUS SUMMARY

LOCATION and DESCRIPTION: Located in Central Illinois, the 5,524 acre Banner Marsh State Fish and Wildlife Area lies adjacent to the Illinois River, 4 miles north of Banner, Illinois, along Route 24. The former bottomland lake and marsh was leveed and drained for agricultural practice from 1910 through 1958. From 1958 to 1974 approximately 90 percent of the site was strip-mined for coal. The strip-mined areas have since been reclaimed and purchased by the State of Illinois. Under the management of the Illinois Department of Natural Resources (1978 - present) the primary objective for the site is to establish a freshwater marsh providing fish and wildlife habitat in the Illinois River Valley.

Banner Marsh SFWA was characterized by narrow strip pits and upland ponds, but in 1994 the hydrology changed due to the intentional cessation of pumping operations in the levee district. The water level rose approximately 7 feet (435 M.S.L.) due mainly to groundwater recharge by seepage under the existing 1-100 year flood-tight levee with the Illinois River. The total surface water acreage for the site increased from 530 acres to approximately 2400 acres and created a large vegetated littoral zone.

Johnson Lake is the largest lake in the Banner Marsh SFWA at over 600 surface acres.

It is composed of a maze of final cut lakes interconnected by ditches to large shallow pond areas. The shallow areas (less than 6 feet) compose approximately 400 acres of flooded brush and diverse aquatic vegetation. The maximum water depth is 64.0 feet. Water clarity often exceeds 8 feet in the summer.

The main access area has a concrete boat ramp, 50 vehicle and trailer parking lot, restrooms and a handicap accessible fishing pier. The lake has a 25 h.p. motor limit. The site is open 24 hours a day, except for the Central Zone Duck Season. At which time only shoreline fishing is allowed after 1 p.m.

HISTORY & STATUS of the SPORT FISHERY:

Largemouth Bass: In 2020, fall D.C. electrofishing were used to survey the fish population. The largemouth bass population was evaluated by 114 bass from electrofishing with 62 minutes of effort.

The largemouth bass population appears to be defined by a high percentage of fish from 4 to 19 inches in length with good average Relative weights. In 2000, the bass regulation for the Marsh was changed from a 14 inch minimum size limit and 1 fish per day - to a 12 to 18 inch protected slot length with a harvest of 3 fish under or over the slot per day.

The 2020 electrofishing survey indicated a size structure that has maintained a consistent level since 2007. The PSD of 65, RSD14 of 55, RSD16 of 28 and the RSD18 of 7 are very good and consistent over the past four years. The average body condition was at a Wr of 93 and the growth rate was good.

The goal of the protected slot length limit was to create a high density bass population that is composed of fish large enough to be efficient predators upon the high density of slow growing panfish and the rough fish population. The benefit to bass anglers will be more fish surviving past 14 inches to catch, and for the anglers wanting to harvest bass will be the opportunity to harvest more fish.

The online IFISH tournament registration and result system was started in 2015. The tournament results showed these anglers spent 3,269 hours in 2016, 3,974 hours in 2017, 4,788 hours in 2018, and 6,072 hours in 2019 on Johnson Lake. They reported 554 legal fish in 2016 for .17 fish per angler hour. They reported 517 legal fish in 2017 for .13 fish per angler hour. They reported 529 legal fish in 2018 for .11 fish per angler

hour. They reported 836 legal fish in 2019 for .14 fish per angler hour. They reported 608 legal fish in 2020 for .17 fish per angler hour.

Bluegill and Redear Sunfish: The bluegill and redear sunfish populations were not sampled in 2020. The current bluegill and redear condition is of a poor state with a poor growth rate. The competition with the gizzard shad and carp have maintained this growth slowdown.

Crappie: In 2020, 14 stock size black crappie were sampled with a PSD of 79, RSD9 of 43. No white crappie were sampled in 2020. Black crappie had average WR values of 89. The body condition of both populations had decreased over the last 6 years. In 2018 the crappie harvest regulation changes to a harvest limit of 25 fish per day with only 10 fish over 10 inches allowed. Anglers should be able to concentrate on crappie with the flooded brush providing excellent habitat.

Channel Catfish: The channel catfish population was sampled by 3 fish in 2020. These fish ranged in size from 10.0 to 26.4 inches and were in excellent body condition. A low density population is present and an annual stocking of 500 to 600 fish is scheduled. In 2011, 612 fish were stocked at 8 to 10 inches long. 684 fish were stocked in 2012, 527 in 2013 and 800 in 2014, 2015 and 2016. 513 fish were stocked in 2017. 657 fish were stocked in 2018. And 560 fish were stocked in 2019. And 1003 fish were stocked in 2020.

Walleye: The walleye population was not sampled by trapnet sampling in 2020 due to COVID-19 work restrictions. In 2019 the trap net sampling resulted in 11 total fish in 12 net nights of effort (.9 fish per net night). These fish ranged from 22 to 25.5 inches long. The body condition of these fish was very good at an average Wr of 102. At this time the stocking of 2 inch walleye may have variable recruitment to the lake's walleye population. Several factors have probably contributed to this variability. They include: the increased density and size structure of the bass population and the esocid population, and the small size of the walleye being stocked. The bass in particular, and maybe the esocids are probably out competing and also eating the small walleye being stocked. In 1997 and 1995, 4 inch walleye were stocked and in 2000, 316 walleye at an average size of 8 inches were stocked into Johnson Lake from the site rearing ponds. The survival of these fish should be very good, but the numbers are limited. No walleye stocking occurred in 2011 due to a shortage from the state hatchery system. In 2012, 2013, 2014 and 2015 over 19,000 walleye at 1.25 to 2 inches were stocked each year. In 2016 through 2020, over 24,000 walleye at 1.8 inches were stocked each year.

Muskie: The muskie population was not sampled by trapnet sampling in 2020 due to COVID-19 work restrictions. A total of 43 stock size muskie were sampled by the spring trapnet survey in 2019 and 4 in the fall electrofishing survey. These fish ranged from 30.8 to 47.5 inches long. The body condition of these fish was good with an average Wr of 93. In 2001, a total of 2,174 muskie at an average size of 11.4 inches were stocked, in 2002, 725 muskie at an average size of 10.9 inches were stocked and in 2003, 1333 muskie at an average size of 10 inches were stocked into Johnson Lake. No muskie were stocked in 2004, but 600 at 10 inches long were annually from 2005 through 2014. No muskie were stocked in 2015 or 2016. In 2017, 602 fish at 12.4 inches were stocked. No muskie were stocked in 2020 due to COVID-19 hatchery production and brood fish collection. A triennial stocking is now scheduled to maintain a moderate density of healthy muskie.

FISHING REGULATIONS: Site specific angling regulations. Two pole and line fishing only except carp may be taken by bow and arrow devices, gigs or appears during May through August, all other statewide regulations apply.	Daily Creel Limit	Minimum Length Limit
All Fish	2 pole and line only	

Largemouth/Smallmouth Bass	3	12-18" protected slot length
Channel Catfish	6	None
Walleye	6	14" minimum
White and Black Crappie	25	With only 10 fish over 10"
Muskie	1	42" minimum

CONTACT INFORMATION – Rice Lake State Fish and Wildlife Area: 309/647-9184.

IDNR Fisheries County Fish Biologist: 309/446-9143.

Illinois Fishing Information booklet and IFISHILLINOIS website <http://www.ifishillinois.org/>