



WHEEL 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.

Wheel Lake (approximately 350 acres) is a deep final cut lake which is connected to a large series of strip mine wheel cut lakes. The wheel cut portion contains points, islands, flooded brush and diverse aquatic vegetation, while the final cut portion has little littoral zone and gravel substrate. The maximum water depth is 60 feet. Water clarity averages 4 feet in the summer.

The East Point access area has a concrete boat ramp, 50 vehicle and trailer parking lot, restrooms and a picnic pavilion. 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 2019, spring trapnetting and fall D.C. electrofishing were used to survey the fish population. The largemouth bass population was evaluated by 177 bass in 127 minutes of electrofishing in 2019.

The largemouth bass population indices showed a high percentage of fish from 6 to 17 inches with average to good relative weight values. 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 2019 electrofishing survey indicated a size structure that is continuing to maintain a good level and stability since 2001. The PSD of 64, RSD14 of 28, RSD16 of 10 and the RSD18 of 4 have been consistent since 2016. The average body condition was a little low at 90.

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.

Bluegill and Redear Sunfish: The bluegill population was sampled by 32 stock size fish in 2019. No fish were over 7 inches in length and the average Wr value was 78. 19 redear sunfish were collected up to 7.9 inches in length, but the average Wr was an 87. The bluegill and redear populations continue to have poor size structure and body condition. The food and space competition with gizzard shad and common carp have continued the slow growth of the panfish.

Crappie: In 2019, 35 black crappie were sampled with a PSD of 91, RSD9 of 66 and a RSD10 of 40. 25 white crappie were sampled with a PSD of 96, RSD9 of 84, RSD10 of 56 and a RSD11 of 40. The body condition ratings were 91 and 89. Both crappie populations have seen an improvement in size indices since 2018. 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 represented by 25 fish. These fish were in excellent body condition with an average Wr of 100. The PSD of 92 and RSD18 of 80 indicates a population of large fish is present. 490 channel catfish were stocked in 2019.

Flathead Catfish: A brood stock introduction of Flathead catfish was completed in 2000. 126 fish were stocked at an average weight of 4.9 pounds each. These fish should reproduce and maintain a low density population in the Marsh. Their diet has been shown to consist mainly of gizzard shad, bullheads, crawfish, carp, bluegill and crappie. In 2019, 6 fish from 18 to 37 inches were collected. Natural reproduction and recruitment has been occurring in Wheel Lake.

Muskie: A total of 6 muskie were sampled by the spring trapnet survey in 2019. These fish ranged from 29.5 to 40.7 inches long. The body condition of these fish was good at an average Wr of 101. Muskie had been stocked annually in Wheel lake since the fall of 1996 at a rate of 1/acre. No muskie were stocked in 2015 or 2016. In 2017, 352 fish at 12.4 inches were stocked. A triennial stocking is now scheduled to maintain a moderate density of healthy muskie.

White Bass: White bass have been collected since 2010 in IDNR surveys. They were probably an introduction by anglers from the Illinois River. In 2019 a total of 13 white bass were collected from 12.6 to 17.7 inches. The body condition was good at a Wr of 92. It appears natural reproduction is now occurring enough to support recruitment in the lake. A low density population will probably be maintained.

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	9" minimum
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/>

