EMIQUON PRESERVE
THOMPSON LAKE
FISHERIES STATUS SUMMARY

The Illinois Department of Natural Resources has the responsibility to provide diverse, outdoor recreation for the citizens of, and visitors to the State of Illinois. One means of providing for recreational opportunity has been to form cooperative fisheries management agreements with nongovernment organizations. Thompson Lake at The Nature Conservancy's Emiqoun Preserve is one such area.

LOCATION and DESCRIPTION: The Nature Conservancy's Emiquon Preserve is adjacent to the Illinois River in Fulton County, Illinois, approximately 1 mile northwest of Havana and 3 miles southeast of Lewistown. Since 1996, the Conservancy has acquired nearly 8800 acres at the site and currently owns and manages approximately 7100 acres. Through the US Department of Agriculture's Wetland Reserve Program (WRP), the Natural Resources Conservation Service manages a 30-year conservation easement on a total of 6285 acres of the Conservancy's Emiquon Preserve. The Nature Conservancy's main goal for the Emiquon Preserve is the restoration and conservation of natural ecological processes and habitats that sustain native plant and animal communities of the Illinois River Valley.

Historically, what is now the Emiquon Preserve included two backwater lakes, Thompson Lake and Flag Lake, and was argued to have been one of the better hunting and fishing complexes in the Illinois River Valley if not the whole Midwest. From the early 1920s through the present, most of the property currently owned by the Conservancy was managed for agriculture, most recently primarily for intensive row-crop production. In 2007, the site pumps were shut off and the water level in the site was allowed to rise and reform the lakes. The current Thompson/Flag Lake covers approximately 4,000 surface acres. The lake topography is two large shallow basins with deep water ditches dissecting it. In midsummer, the lake basins can be 70% covered with aquatic vegetation.
Public access to the water bodies on the Emiquon Preserve is limited to registered boats. A free annual registration to access the site for all users is required and available at the adjacent Dickson's Mounds State Museum. Only electric trolling motors are allowed. No gas motors are allowed on the boats. No bank fishing is currently allowed. A concrete boat ramp with a gravel parking lot for 25 vehicle/trailers is present and a boardwalk, visitor area and canoe launch.

The site contains an inviolate refuge from public access. This refuge will attempt to serve as a limited disturbance area for all of the wildlife utilizing the Preserve. This refuge encompasses approximately the eastern half of the former Thompson Lake basin, all of the former Flag Lake basin and then to the Illinois River levee. This refuge area is designated with marked buoys and signs. The access time to the water bodies is sunrise to sunset. This access is year round, except during the Central Zone waterfowl hunting season. During the Central Zone waterfowl hunting season, no water access is allowed on hunting days. Currently waterfowl is allowed 3 days a week, thereby allowing fishing access 4 days a week. Ice fishing is allowed when practical on the entire lake basin.

HISTORY & STATUS of the SPORT FISHERY: In 2007, The Nature Conservancy entered into a cooperative fish management agreement with the Illinois Department of Natural Resources for the Emiquon Preserve. The water bodies on the site underwent an immediate fish rehabilitation project to remove exotic fish species. The IDNR initiated fish restocking in 2007 with brood fish that included:
largemouth bass, white crappie, black crappie, bluegill, bowfin, spotted gar, channel catfish, brown bullhead, warmouth, orangespotted sunfish, pumpkinseed sunfish, golden shiner, brook silverside, and blackstripe topminnow. IDNR fish stockings and surveys have resulted in the potential of at least 43 fish species now present in the lake.

Largemouth Bass: In 2019, the largemouth bass population was sampled by 255 fish by electrofishing and 215 fish in large mesh trap nets. The largemouth bass population was defined by a good year of recruitment. This Young of the Year class was from 2.8 to 6.0 inches, and was in excellent body condition in the fall survey.

The fall 2019 electrofishing survey indicated that the high density bass population that has been present since 2009, has started to decrease and restructure the size distribution. It appears that a large portion of the 2007 year class has now left the population. The collection rate of stock size bass (over 8 inches) dropped from 1.8 fish per minute in 2018 to .9 fish per minute in 2019. And with this lowered collection rate was a drop in the PSD from 95 to 48 and RSD 15 from 69 to 44.

The bass population structure is good and meets the typical objective of a PSD index rating of from 40 to 60. The body condition rating (Wr) has also improved for bass over 8 inches from a 95 in 2018 to a rating of 107 in 2019. The reduced bass density and high gizzard shad density in 2019 would support this increase in body condition. The previous 5 years have shown a trend of lower body condition values into the 80's for the bass from 16 to 19 inches.

The bass population indices have now shifted downward in 2019. In 2011, 7% of the fish were greater than 16 inches. In 2012, the percentage had increased to 14% greater than 16 inches. And in 2013 the percentage had increased to 31% greater than 16 inches. And in 2014 the percentage over 16 inches was 47%. And in 2015 the percentage over 16 inches had backed down to 35%. And in 2016 it was in the middle at 42% of the bass over 16 inches. And in 2017 the percentage was at 45%. And in 2018 the percentage was at 36%. And in 2019 the RSD16 was at 30%.

Bluegill: In 2019 the bluegill population was sampled by 162 fish by electrofishing and 52 fish in large mesh trap nets. The survey samples represent a bluegill population with good distribution from 1.6 to 10.2 inches long. Good recruitment has now occurred each of the last 9 years. The body condition was a good Wr of 99 for the fish over 5 inches. The bluegill electro fishing collection rate for stock size fish (over 3.1 inches) was .33 fish per minute. This is a decrease from 2.4 fish per minute in 2012. And at a lowpoint for the .37 per minute in 2010 and the 1.9 fish per minute collection rate in 2011.

The bluegill PSD value of 10 for electrofishing was well below the objective range of 20 to 40 in 2019. The bluegill RSD7 was at 6 which is within the objective range of 5 to 20, but well below the 5 year average of 27. However, the 2019 spring trapnet survey did show 27% of the bluegill over 8 inches in length. These indices all indicate a quality bluegill population still exists, but the density maybe much lower.

Pumpkinseed: In 2019 the pumpkinseed population was sampled by 35 fish by electrofishing and 2 fish in large mesh trap nets. The survey samples appear to represent YOY fish up to 3.5 inches in length and several year classes up to 7.9 inches in length. The body condition was only average with a Wr of 85 for the adult fish. The pumpkinseed electrofishing collection rate for stock size fish (over 3.1 inches) was .17. This is consistent with the collection range since 2011. The RSD7 was 13 for the 2019 survey.

Crapppie: The black crappie population was sampled by 142 fish with electrofishing and 861 fish in trap nets in 2019. The black crappie electrofishing collection rate was .69 fish per minute for all sizes in 2019, and the trapnet CPUE was 17.9 fish per net night. This rate was below the 5 year average of 1.3 fish per minute of electrofishing, but above the 5 year average of 12.7 fish per net night of trapnetting.

The black crappie sample shows a low number fish in the YOY class from 2.4 to 5.9 inches long and multiple year clasess from 7.0 to 14.2 inches long. The body condition was still a good Wr of 97 for the fish over 8 inches.

For the first time since the brood stocking in 2007, 10 white crappie were sampled in 2012, 1 fish in 2013, 63 fish in 2014, 51 fish in 2015, 108 fish in 2016, 41 fish in 2017, 19 fish in 2018, and 33 fish in 2019. The

2019 white crappie sample was composed of fish from 2.4 to 14.6 inches long. The body condition average was very good at 100.

This dense crappie population with large fish will feed on the gizzard shad population and also provide additional predation upon potential exotic fish species reproduction. The future emergence of the white crappie population to a common occurrence will probably depend upon the water clarity. In a lake habitat with both species of crappie, the black crappie dominate in clearer water, while the white crappie succeed with more turbid conditions.

Bowfin: The bowfin population was sampled by 197 fish from 14.2 to 32.3 inches in 2019. Several year classes appear to be present. The body condition of these fish was extremely good. The bowfin population has seen a steady increase in density and biomass in the sampling. In 2019 the electrofishing rates were .17 fish per minute and 40 lbs per hour and 20 lbs per netnight of trapnetting.

Channel Catfish: 67 channel catfish were sampled in 2019. This is the highest rate and number since their consistent sampling that started in 2014. In 2010, 14 channel catfish from 22.8 to 25.6 inches long were collected in the spring trapnet survey. These fish were undoubtedly brood fish from the 2007 stocking. Very limited recruitment probably occurred from 2007 to 2011 from the adult channel catfish stocking. Channel catfish reproduction would have experienced very high predation rates with the very clear water conditions present at Emiquon throughout 2007 to 2009. If more turbid water conditions exist in the future, channel catfish recruitment will be very likely. In 2019, 3 of the channel catfish were less than 18 inches.

FISHING REGULATIONS: Site specific angling regulations. Two pole and line fishing only, no live minnows for fishing bait, all other statewide regulations apply.	**Daily Creel Limit**	**Minimum Length Limit**
All Fish	**2 pole and line only**	
Largemouth Bass	**1**	**18"**
Bluegill	**25**	**None**
Channel Catfish	**6**	**None**
Walleye, Sauger or Hybrid Walleye	**6**	**14”**
White and Black Crappie	**25**	**9”**

CONTACT INFORMATION – The Nature Conservancy site office: (309)547-2730.
IDNR Fisheries County Fish Biologist: (309)446-9143.
Illinois Fishing Information booklet and IFISHILLINOIS website http://www.ifishillinois.org/