## Lake Shelbyville



## 2019 Lake Status Summary



**Location:** Lake Shelbyville is located in Shelby and Moultrie Counties in eastcentral Illinois. This lake is 11,100 acres, with a maximum depth of 65 feet, and an average depth of 18 feet. Numerous public boat launching facilities are available, with a fee assessed on <u>developed</u> U.S. Army Corps of Engineers (USACE, 217/774-3951) access area boat ramps, and free access on IDNR state

(USACE, 217/774-3951) access area boat ramps, and free access on IDNR state park or USACE gravel boat ramps. An annual fish attractor project is coordinated by the USACE in coordination with the Illinois Department of Natural Resources (IDNR) on the third Saturday in March. All fishing tournaments on USACE ramps require a permit from the USACE office as well as an IDNR permit. Lake Shelbyville is home to at least 32 species of fish. In addition to the lake, a popular fishery exists in the Kaskaskia River just below the spillway and in both the West Okaw and Kaskaskia Rivers upstream of the lake. In cooperation between the USACE and the IDNR, two nursery ponds, 6.5 and 0.7 acres, are utilized to improve fishing quality in Lake Shelbyville. Many other recreational opportunities exist on or near the lake, including camping, hunting, swimming, hiking, and more. See the section "NEWS" at the end of this report.

Largemouth Bass – fair - good – Despite good natural reproduction and recruitment in most recent years, the recruitment of bass, age-3+ (14-15"+) to larger sizes, has been much lower than expected, with the reason likely due to largemouth bass virus. The 2018 year class was very poorly represented due to water level fluctuations not conducive to nesting success, nor fry survival. Tournament results in 2018 were slightly better than 2017, but not by enough. For these reasons, the largemouth bass fishing prospects for 2019 are similar to 2018 and still projected to be good for the number of fish available and only fair for size structure of the population.

**Smallmouth Bass** – poor - Recent attempts to establish a self-sustaining population of smallmouth bass in Lake Shelbyville from the Kaskaskia River population have not produced expected results. Although anglers are catching a few of the stocked smallmouth bass, there has been no indication of natural recruitment. Fishing prospects for smallmouth bass are poor in 2019 due to low stocking rates and a lack of natural recruitment. Anglers are encouraged to release any smallmouth bass caught immediately to improve the survival of these valuable stocked fish. Expanded efforts to raise a greater number of smallmouth bass utilizing two nursery ponds, including the much larger Fin & Feathers Nursery Pond are planned in 2019!

**Crappie – excellent –** Size structure and the number of fish caught by anglers in 2018 was just short of amazing! Angler catch rates were outstanding in both spring and fall. The fishing prospects for crappie are expected to be excellent for both the number of fish available and size structure in 2019! Anglers are encouraged to keep their limit of five (5) crappie less than 10 inches, especially the more abundant black crappie. Thinning the number of smaller crappie, especially those less than 9.5 inches, will help improve growth and recruitment to larger sizes.

White Bass – good – The white bass population on Lake Shelbyville appears to be rebounding and stabilizing since the population crash in 2012-'13. The catch and size structure was improve and fishing reports were improved for white bass in 2018. The fishing prospects for white bass are expected to be improved over 2018 and are rated good for the number of fish available and good - excellent for size structure in 2019.

**Striped bass** – Striped bass fingerlings were stocked for the first time into Lake Shelbyville in 2018. This is the very large anadromous true bass, historically found in salt water, but has been stocked into freshwater lakes across the nation in "recent" years. Lake Shelbyville should provide ideal conditions to support a high quality fishery for this species. Research indicates that striped bass will prey exclusively on gizzard shad and will not be a threat to other established game species. Additional stocking are expected in 2019. The regulation for these fish will be a 32" minimum length limit with a creel limit of 2 fish daily. Striped bass can be identified from the other two "true basses" in Lake Shelbyville, white bass and yellow bass, by a longer thin body in the striped bass (similar to a thin largemouth bass), a larger mouth in relationship to its size (again similar to a largemouth bass), a completely white/silver back ground with very bold very dark stripes, and an elongated tooth patch on the tongue which is divided slightly down the center of the patch. White bass have comparatively light greyish

stripes on a white background, a solid heart-shaped tooth patch on the tongue, and a deeper body and smaller mouth (resembling crappie). Yellow bass, often mistakenly called "striped bass", have an obvious yellow/gold hue (hence their namesake), rarely get larger than 9-10 inches, have a deeper body and smaller mouth (again resembling thin crappie), and the spines on the anal fin are equal length for the second and third spine. ID cards will be printed and distributed to local retailers and other locations to help anglers identify these three species.

**Walleye** – good – The collection rate of walleye varied highly among surveys, but several very large fish were collected in 2017 and two strong year classes appear to be developing (2016 and 2017). The walleye fishing prospects for Lake Shelbyville and the Kaskaskia River (above the lake) are rated as good for the number of fish available and good for size structure in 2019! Fishing prospects below the spillway for walleye are expected to be good for the number of fish available and excellent for size structure in 2019.

**Sauger** – fair - good – Previous introductory stockings of sauger, from 2006 through 2017, have contributed significantly to the fishery in past years. Unfortunately, there has been no indication of natural recruitment and only one recent stocking since 2010. The fishing prospects for sauger in the lake should be fair for the number of fish available and excellent for size structure in 2019. Fishing prospects in the river below the spillway should be good for both number and size structure on 2019!

<u>Muskellunge</u> – poor & good – No adult musky were collected in the 2018 standard fall fish population or stocking success surveys. Despite recent increases in the number of muskie stocked, there has a steady decline in the catch rate in fish population surveys on Lake Shelbyville. Although angler catch rates for muskie have been consistent below the spillway, catch rates on the lake were poor in 2012 through 2018, although a few anglers reported catching fish. Fishing prospects for muskie in 2019 are expected to remain poor on the lake for the number of fish available and size structure, but still good for size and number below the spillway.

**Channel Catfish / Flathead Catfish – fair - good –** Catfish numbers have been low in standardized fall surveys for many years. Size structure of catfish collected indicates that recruitment is relatively poor in recent years, but a few more small flathead catfish were collected in 2018. Moderate catches of larger fish are reported by fishermen, especially on trot lines. Fishing prospects for channel and flathead catfish on the lake in 2019 are fair for the number of fish available and fair to good for size structure. Fishing prospects for catfish below the spillway are somewhat better, especially for flatheads.

<u>Bluegill</u> – poor - fair – Despite the positive effects of floods on the growth rates and body condition of other species, the bluegill population has been relatively unaffected. Although catch rates are good, the size structure of the bluegill population is poor with a very low percentage of bluegill exceeding 7-7.5 inches. A few bluegill near the 8-inch range were collected in 2016 with the Lithia arm producing somewhat larger fish. Fishing prospects for bluegill and other smaller sunfish species (green sunfish and longear sunfish) on Lake Shelbyville is expected to remain poor-fair in 2019.

**Other Species of Fish** – Many other species of fish occupy Lake Shelbyville and are often underutilized by fishermen. **Yellow bass** are very abundant, but rarely get longer than 9 inches. They are very good to eat and despite the smaller size some fishermen keep as many as possible. **Common carp** are abundant, and reach lengths of 25+ inches and 8+ lbs. They are a common target of bow fishermen. When common carp are canned, they are said to make a good substitute for canned salmon. They are very good when smoked as well and smaller fish can be scored and fried. **Freshwater drum** are abundant from 0.5 to 3 lbs. They are occasionally used to make "Poor-man's shrimp", when filleted, sliced vertically, and quickly boiled with a small amount of sugar added to the water. A fishery for jumbo **bigmouth buffalo** (up to 20+ lbs.) is getting more attention. Despite being primarily planktivores, these abundant and large fish can be targeted along drop-offs with jigging spoons and put up a great battle when hooked. Although bony, they too can be scored and fried (smaller fish), canned, or smoked and have a more-mild flavor compared to carp. **Gizzard shad** are the primary forage, were exceptionally abundant, and had a wide range of sizes in 2017. This helped improve the growth and body condition of piscivorous (fish-eating) species like largemouth bass, crappie, walleye, sauger, white bass, yellow bass, and catfish into early 2018.

**Regulations** – See the Illinois Fishing Information guide for a complete list of regulations for Lake Shelbyville and other USACE and IDNR project ponds and lakes. Unfortunately the regulations for striped bass were not included in the 2019 booklet. Regulations signs are posted at all boat ramps and major access points. You are encouraged to direct any questions or concerns to Mike Mounce, IDNR Fisheries, 217-345-2420.

**News** - The Lake Shelbyville Fish Habitat Alliance (LSFHA) was formed in 2017 with the purpose to apply to granting agencies for funding to improve angling quality on the Lake Shelbyville. Many individuals, fishing clubs, tournament organizers, businesses, non-governmental organizations, municipalities, and governmental agencies came together to form and successfully support the LSFHA.

Fund raising prior to and after organization, resulted in enough funds received to build 462 Shelbyville cubes and Georgia cube fish attractors, and an additional 60+ artificial stumps, which have all been placed in the lake through 2018. So far the cubes have been paying off very well, with numerous reports of good catches coming from the cubes. Large numbers of fish are congregating on the structures in as little as two days after deployment! Illinois Natural History Survey research results indicate good fish use on these structures.

The LSFHA successfully applied for a grant to the "Friends of Reservoirs" and will receive the standard \$30,000, plus an additional \$17,000 to further the cause of developing fish habitat in 2019. In addition to the cube and stump attractors, an aquatic plant nursery was developed by the USACE, and 1000s of plants produced and planted into Lake Shelbyville in both 2017 and 2018. These plantings are protected by wire-mesh exclosures which can be found in each of the major arms of the lake. Results and activities can be observed on our Facebook page; Lake Shelbyville Fish Habitat Alliance. Check us out and give us a "LIKE!" Watch for future structure building events this coming year, as several are planned!