



Lake Shelbyville

2020 Lake Status Summary

Location: Lake Shelbyville is located in Shelby and Moultrie Counties in east-central 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 developed U.S. Army Corps of Engineers (USACE, 217/774-3951) access-area boat ramps, and free access on IDNR state park or USACE undeveloped 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 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 actively 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 – Despite good natural reproduction and recruitment in most recent years, the recruitment of bass to age-3+ (14-15"+) and larger sizes has been poor. The reason is due primarily to largemouth bass virus (LMBV). This virus kills adult bass and has had a significant and persistent effect since 2012. There is some good news however, the 2019 year class was very well represented, likely due to flooded brush providing abundant habitat throughout the summer. Anglers reported that tournament results in 2019 were again slightly better than the year before, but unfortunately not significantly. For these reasons, the largemouth bass fishing prospects for 2020 are similar to 2019 and still projected to be good for the number of fish available (primarily smaller fish) and only fair for size structure of the population. Unfortunately, there is little that can currently be done to help the largemouth bass population, except improve habitat and careful handling of bass caught. The results of stocking evaluations of largemouth bass from many previous years in Lake Shelbyville, found an insignificant contribution to the fishery (~7-8%) after many years of stocking fin-clipped (marked) bass. These are not numbers that would benefit the fishery significantly. The stocked bass were raised in the Fin & Feathers Nursery Pond and provided bluegill in addition to the fathead minnows normally provided for forage. This should have given these fish a better chance of survival over just minnow-reared bass, but results were still poor for the money and time invested.

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 spawning and natural recruitment. Fishing prospects for smallmouth bass are poor in 2020. Anglers are encouraged to release any smallmouth bass caught immediately to improve the survival of these valuable stocked fish and keep them in ideal locations. Continued efforts to raise and stock smallmouth bass are planned.

Crappie – excellent – Size structure, the number of fish, and body condition of crappie caught by anglers in 2019 was outstanding! Angler catch rates were excellent in winter, spring, and late fall. Some fishermen had good fishing through the summer. The fishing prospects for crappie are expected to be excellent for both the number of fish available and size structure in 2020! There is a very strong year class recruiting into the fishery that have grown very well through summer 2020. Most of these fish will provide a lot of 9.5-9.75 inch fish in 2020. 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 of the remaining crappie to larger sizes. Anglers are also encouraged not to voluntarily keep more than two crappie greater than 12 inches, and/or the largest crappie. Releasing some or all of these larger fish and harvesting their limit of crappie under 10-inches is the best way to improve the quality of this fishery.

White Bass – fair- good – Despite predictions that the white bass population on Lake Shelbyville was rebounding, the quality of fishing expected in 2019 was not realized. The catch rate of white bass by anglers is often reduced in flood years, as many of the fish move into the upper most reaches of the lake. As is common in recent years, a strong year-class of white bass was produced in 2019. Barring excessive flooding, the fishing prospects for white bass

are expected to be improved over 2019 and are rated fair-good for the number of fish available and good for size structure in 2020.

Striped bass – poor - Striped bass fingerlings were stocked for the first time into Lake Shelbyville in 2018 and repeated in 2019. Some were collected in surveys in fall 2019 and a few others reported caught by a few anglers. 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. Increased predation on the usually over-abundant adult shad could actually benefit other game fish. The regulation for these fish in 2021 will be a 32” minimum length limit with a creel limit of 2 fish daily. Striped bass can be readily identified from the other two “true basses” in Lake Shelbyville, white bass and yellow bass, by a longer and narrower body in the striped bass (similar to a thin largemouth bass), a larger mouth in relationship to its size (again more like a largemouth bass), a completely white/silver background with very bold very dark stripes, and an elongated tooth patch on the back of the tongue which is slightly divided down the center of the patch. White bass have comparatively lighter grayish-stripes on a white background, a solid “heart-shaped” tooth patch on the tongue, a deeper body (resembling crappie), and a smaller mouth. Yellow bass, often mistakenly called “striped bass”, have an obvious yellow/gold hue (hence their name sake), rarely get larger than 9-10 inches, have a deeper body (again resembling crappie more than bass), a smaller mouth, 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. Fishing prospects are still rated as poor, until these fish recruit into the fishery.

Walleye – good - excellent – Although collections in surveys were quite variable, angler catch rates of walleye in 2019 were reported as very good! It appears that three or four relatively strong year classes are present in the lake (2016, 2017, 2018, and 2019). The walleye fishing prospects for Lake Shelbyville and the Kaskaskia River (above the lake) are rated as excellent for the number of fish available and good for size structure in 2020! In 2019, a record number of walleye were produced in the Fin & Feathers Nursery Pond (280,000+), which in addition to 110,000 stocked by the IDNR hatcheries, should materialize into an even better fishery in 2021 and beyond. Fishing prospects below the spillway for walleye are expected to be good for the number of fish available and excellent for size structure in 2020, with good reports already being received.

Sauger – fair – Previous introductory stockings of sauger, from 2006 through 2017, have contributed significantly to the fishery in past years. In 2019, a few young of the year sauger were collected in the lake, indicating a possibility of some minor level of natural recruitment in the lake. The 2017 year-class, stocked by state hatcheries, should be of legal size in 2020 providing a boost to this fishery. The fishing prospects for sauger in the lake should be fair for the number of fish available and good for size structure in 2020. Fishing prospects in the river below the spillway should be good for both number and size structure on 2020!

Muskellunge – poor & good – Only one musky was collected in the 2019 standard fall fish population or stocking success surveys on the lake. However, numerous muskie are observed incidentally below the spillway during smallmouth surveys. Despite recent increases in the number of muskie stocked, there has been a steady decline in the catch rate of muskie in fish population surveys on Lake Shelbyville. Although angler catch rates for muskie have been relatively consistent below the spillway, catch rates on the lake were poor in 2012 through 2019. However, a few diehard anglers reported catching a few fish in the lake in 2019. Fishing prospects for muskie in 2020 are expected to remain poor on the lake for both the number of fish available and size structure, but still **good for size and number below the spillway**. A study is currently being conducted in conjunction with the Illinois Natural History Survey to attempt to determine the reason for the loss of this once very successful and valuable fishery.

Channel Catfish / Flathead Catfish – good – Catfish numbers have been low in standardized fall surveys for many years and the size structure of catfish collected indicates that recruitment is relatively poor for many years. However, a good number of both juvenile and adult flathead catfish were collected in 2019. In addition, improved catches of channel catfish of all sizes were reported by fishermen in 2019. Fishing prospects for both channel and flathead catfish on the lake in 2020 should be improved (good) for the number of fish available and good for size structure. Fishing prospects for catfish below the spillway are somewhat better, especially for flatheads.

Bluegill – 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 7.5 inches. Fishing prospects for bluegill and other smaller sunfish species (green sunfish and longear sunfish) on Lake Shelbyville is expected to remain poor-fair in 2020.

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 to 10 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 very good substitute for canned salmon. They are very good when smoked 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 2019. 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 throughout 2019.

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. 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 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 ~800 Shelbyville and Georgia cube fish attractors, and an additional 100+ artificial stumps, which have all been placed in the lake through 2019. 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, including bass and walleye caught by anglers! Research results indicate good fish use on these structures.

The LSFHA successfully applied for grants through the “Friends of Reservoirs” and receives \$30,000, plus an additional \$17,000, in winter in 2018. An additional \$40,000 FOR grant was won in fall 2019 and will be distributed to the LSFHA in fall/winter 2020! 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 2017- 2019. These plantings are protected by wire-mesh “exclosures” which can be found in each of the major arms of the lake. Rip-rap is being ordered to develop some rock “reefs” for the near future. The LSFHA “adopt-a-cube” program has been very popular, with over \$5,000 donated to name cubes after loved-ones and businesses. Results and activities can be followed 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! Maps of habitat locations can be found on the Facebook page or the USACE web site by using “Lake Shelbyville Habitat Maps”.