



Lake Shelbyville

2016 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 gravel boat ramps. An annual fish attractor project is coordinated by the USACE in coordination with the Illinois Department of Natural Resources (IDNR) in mid-March. All fishing tournaments on USACE ramps require a permit from the USACE office. 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, swimming, hiking, and more.

Largemouth Bass – fair – 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 unclear. The 2015 year class was well represented by 605 young bass collected through electrofishing during the fall survey, ranging in size from 2 to 7 inches. This is a much higher catch rate than in 2014 (n=194). The number and collection rate of bass, age 1+ and older, collected in the 2015 fall fish population survey (52/hr) was lower than the number and rate collected from the 2014 (66/hr.), but higher than 2013 (31/hr.) and the 2012 (34/hr.) surveys. This is in part due to the good recruitment of the strong 2013 year class which ranges in size from 10 - 14". Size structure indices (PSD 56) were somewhat improved compared to 2014 (PSD 45). This is due in part to good recruitment of the 2013 year-class, but relatively poor success of the 2014 year class. The size structure indices for fish longer than 15 inches were very similar to 2014, but very slightly improved for bass longer than 18 inches. The largest bass collected during the 2015 fall survey was 21 inches and weighed 5.2 lbs. The body condition for largemouth bass (Relative weight "Wr" = 95) was good. From survey data, the average legal-size bass is expected to be 15.6" and weigh about 2.0 lbs. in spring 2016. For these reasons, the largemouth bass fishing prospects for 2016 are projected to be fair-good for the number of fish available and fair for size structure of the population with potential for improvement.

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. In 2015, 863 fingerling smallmouth bass, ranging from 4-8+ inches, were stocked into the lower part of the lake. Fishing prospects for smallmouth bass are poor 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 stocked fish.

Crappie – good – A very strong year class of black crappie has established in Lake Shelbyville with the vast majority of these fish being 7 to 8 inches long. Although forage conditions were ideal in 2015, these fish may not have been able to capitalize and could cause undesirable competition for forage in future years. The number of crappie greater than 10 inches should remain good through 2016 and provide good fishing, but getting bait and lures to these fish could prove difficult, unless larger lures are used. A high percentage (30%) of white crappie fell between 9.5 and 10 inches and should recruit well to 10"+ in 2016. The catch rates of all sizes of white crappie in the 2015 fall survey were similar to 2014, with a total of 388 collected. Catch rates of black crappie were significantly higher (~4X) than 2014, with 1409 collected. The size structure of the white crappie collected was good, with 34% being 10 inches or longer. Only 4% of the black crappie collected were 10 inches or longer, but this number was lower due in part to the strong year class represented in this fishery. Body condition was good indicating the potential for continued good growth and recruitment. The majority of white crappie available in spring 2016 will be from 9.5 – 11.0 inches, with 11 and 12-inch fish still fairly abundant. The majority of black crappie available in spring will be from 7 – 9 inches, with 10-inch fish less common. Anglers have reported catching white crappie up to 15 inches and black crappie up to 12 inches. The fishing prospects for crappie are expected to be good for both the number of fish available and size structure in 2016. 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 fish will help improve growth and recruitment to larger sizes.

White Bass – fair - good – The white bass population on Lake Shelbyville has improved significantly over the population crash in 2012-'13. Body condition improved from a very poor body condition index (Wr = 72) in 2012 to a modest average of 87 by fall 2013 and 84 in 2014 and 2015. The total catch of white bass in the 2015 fall fish population survey was significantly lower (166) compared to 309 in 2014, but almost every fish was 10" or longer. Of the adult white bass collected this fall, 54% exceeded 12 inches! Fish up to 15+ inches were collected. Fishing reports ranged from primarily fair to good for white bass in 2015, which improved significantly into late fall. The fishing prospects for white bass are expected to be similar to 2015 and are rated fair to good for the number of fish available and excellent for size structure in 2016.

Walleye – good – A strong year class of walleye is moving into the fishery for 2016. This is a result of annual stocking in addition to what appears to have been natural recruitment in spring 2013. Much of this year class will exceed 17 inches by spring. A slightly lower number of walleye (n= 66) were collected in the standard fall survey as compared to 2014. This is still higher than the average collected in the three previous years, 2014 (76), 2013 (44), and 2012

(35). The walleye collected in the standard fall survey ranged from 7 to 23+ inches, with the largest weighing 4.0 lbs. Unlike largemouth bass, white bass, and crappie the body condition of walleye has been very consistent body (Relative weight, "Wr" ~ 83) over the past five years and these fish look healthy. The size structure was good with about 93% of the fish collected in the fall survey exceeding 14 inches, 93% exceeding 15 inches, and 23% exceeding 18 inches. Two stocking success surveys were completed in October. Walleye were collected at the rate of 27/hr. and 25/hr., respectively. The catch was comprised of primarily of young-of-the-year fish. This compares to catch rates during the 2014 (28 & 46/hr.), 2013 (116/hr.), 2012 (24/hr.), 2011 (35/hr.), 2010 (18/hr.), 2009 (64/hr.), 2008 (19/hr.) stocking success surveys, which were often comprised primarily of young-of-the-year fish. The walleye collected in the 2015 stocking success survey ranged from 7 to 22 inches, with the largest weighing 4 lbs. From survey data, the average "legal-size" walleye is expected to be 18" and weigh about 2 pounds in 2016. 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 excellent size structure in 2016! Fishing prospects below the spillway for walleye are expected to be good for the number of fish available and excellent for size structure in 2016.

Sauger – fair - good – Previous introductory stockings of sauger, from 2006 through 2010, have contributed significantly to the fishery in the past three years. In addition, many sauger were reported caught in the Kaskaskia River above the lake in early to mid-spring. In 2014, an additional 256,000 sauger were produced in the Fins & Feathers Nursery Pond and stocked into the lake. During the 2015 standard fall survey, 39 sauger were collected (3.2/hr.), ranging from 10 to 19 inches. Catch rates have improved over the past two years due to the high number of fish stocked. In the two 2015 stocking success surveys, sauger were collected at the rate of 57 and 30 fish per hour of effort and ranged from 8 to 19 inches. Most were age-1+ fish from the 2014 year class. Catch rates during the 2014 (43 & 26/hr), 2013 (14/hr.), 2012 (12/hr.), 2011 (29/hr.), and 2010 (25/hr.) stocking success surveys all exceeded stocking success goals. The largest sauger collected in either survey weighed about 2.4 lbs. The average "legal-size" sauger is expected to be 16.5" and weigh about 1.2 lbs. in 2016. The 2014 year class will fall in the 12-13" range with a few reaching the legal size range in 2016. The fishing prospects for sauger in the lake should be fair-good for the number of fish available and good for size structure in 2016. Fishing prospects in the river below the spillway should be good for both number and size structure on 2016.

Muskellunge – poor - Only one musky, a recently stocked fish, was collected in the 2015 standard fall fish population survey. This is a lower catch rate than 2014, 2013 and 2012, when 3, 7, and 11 fish were collected, respectively. Despite recent increases in the number of muskie stocked, there has a steady decline in the catch rates in population surveys on Lake Shelbyville. Although angler catch rates for muskie have improved below the spillway, catch rates on the lake were poor in 2012 through 2015 for most anglers. Two muskies were collected in the two stocking success surveys, one just stocked (13 inches) and the other 34 inches. For unknown reasons, fishing prospects for muskie in 2016 are expected to remain poor on the lake for the number of fish available and size structure, but still good to excellent for size and number below the spillway.

Channel Catfish / Flathead Catfish – fair – Only nine (9) channel catfish were collected in the 2015 fall survey with the largest being 28+ inches and 9.8 lbs. Only two (2) flathead catfish were collected, with the largest being 29+ inches and 12 lbs. Catfish recruitment in Lake Shelbyville and the Kaskaskia River above the lake has been relatively poor in recent years. Moderate catches of larger fish are reported by fishermen, especially on trot lines. Fishing prospects for channel and flathead catfish on the lake in 2016 are poor to 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.

Bluegill – poor – 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 inches. Fishing prospects for bluegill and other smaller sunfish species (green sunfish and longear sunfish) on Lake Shelbyville is expected to remain poor in 2016.

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. There are very good to eat and despite the small size some fishermen keep as many as possible for this reason. **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. Some guides occasionally book trips for buffalo. Although bony, they too can be scored and fried (smaller fish), canned, or smoked and have a milder flavor compared to carp. Gizzard shad are the primary forage, very abundant, and had a wide range of sizes in 2015. This should help 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 2016.

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. Questions or concerns can be directed to Mike Mounce, IDNR Fisheries, 217-345-2420.

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