Cedar Creek Lake Bass Assessment 2022

Cedar Creek Lake, a 788-acre lake located 5 miles southeast of Stanford in Lincoln County, has an average depth of 22 feet and maximum depth of 60 feet. The lake was impounded in 2002 and was a cooperative effort between the Kentucky Department of Fish and Wildlife Resources (KDFWR), the Kentucky Transportation Cabinet, and the Lincoln County Fiscal Court. The watershed occupies 14,000 acres, and is primarily agriculture, with 45% consisting of pastureland, 35% woodland, and 19% cropland. A 300-ft buffer zone surrounds the lake and prevents development around the lake. The lake is fertile (eutrophic) and is typically thermally stratified between May and November. Much of the littoral zone of the lake is covered with aquatic vegetation (primarily watermilfoil, naiads, coontail, and muskgrass) during summer and early fall.

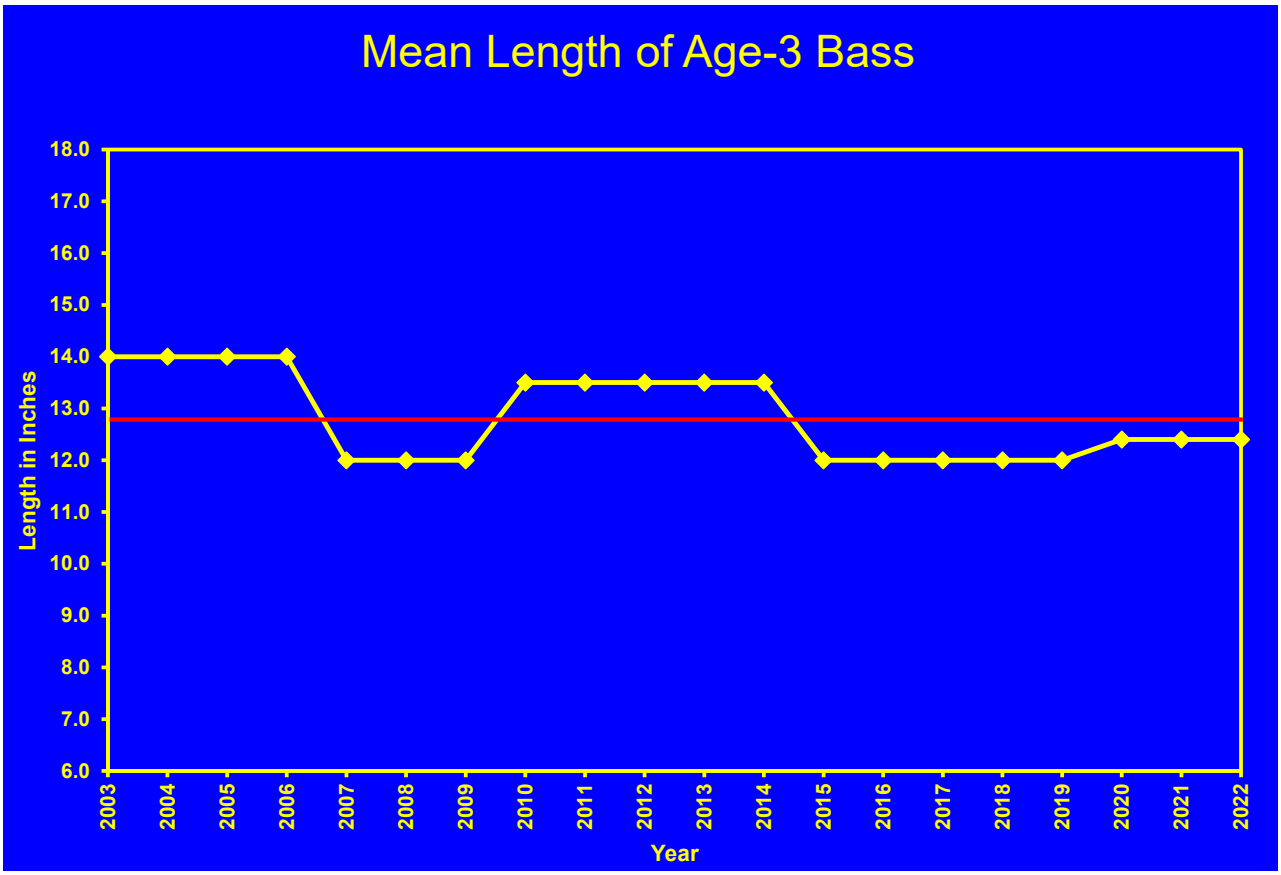
The lake was developed with anglers in mind and extensive habitat structures were placed in the lake basin prior to impoundment. In addition, much of the standing timber was left in the lake to provide fish habitat, and additional fish habitat has been added to the lake in the recent years to help replenish the original structures.

Cedar Creek Lake is managed as a trophy bass fishery (20-inch size limit, 1 fish creel limit). The trophy regulation was implemented upon impoundment (2002) and has been well received by anglers

Please see the Sportfish Assessments page for an explanation of how the assessment works and for a list of other lakes with largemouth bass assessments.

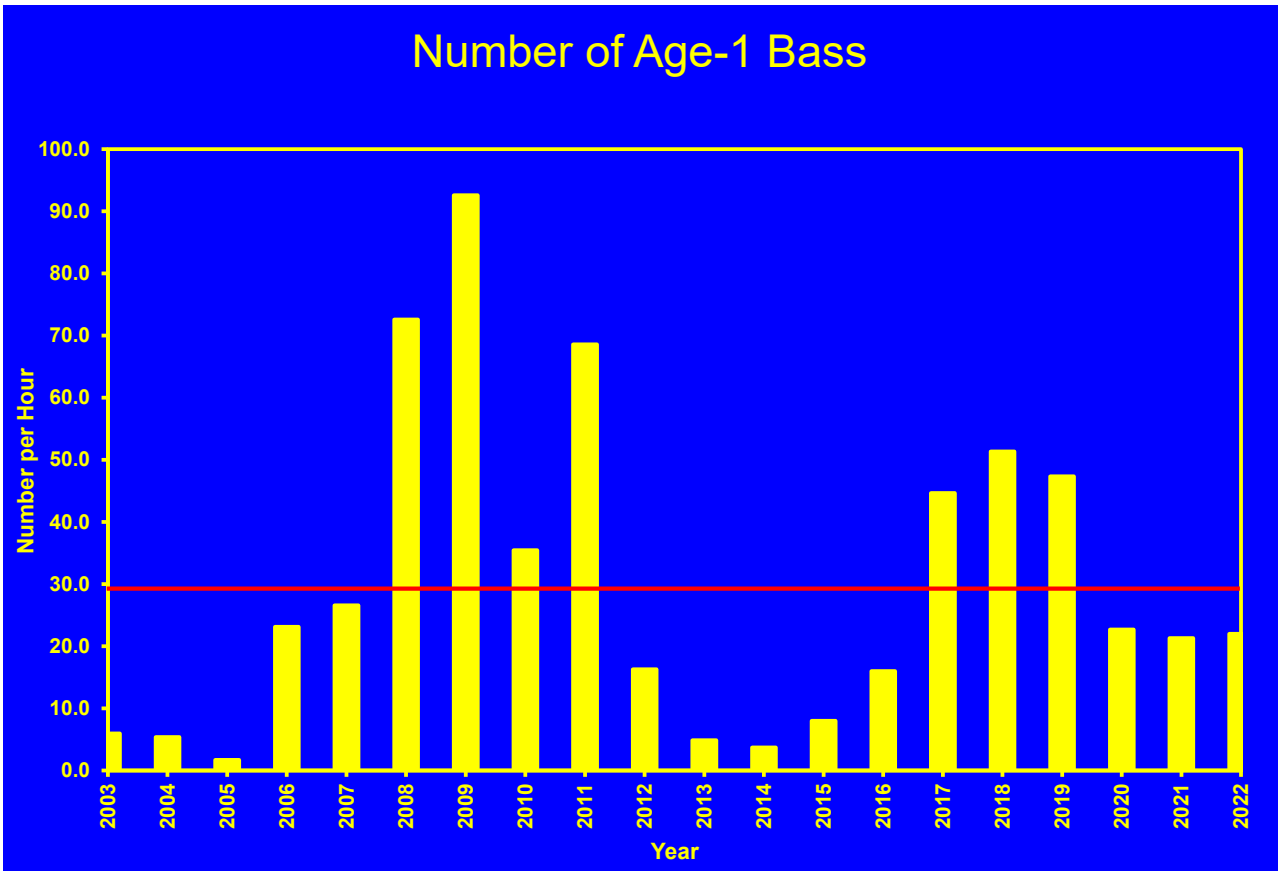
Parameter 1 – Length at Age-3 (growth rate)

At Cedar Creek Lake, the length of an age-3 largemouth bass has averaged 12.8 inches since 2003 (represented by the red line). Initial growth rates were influenced by stocked bass (2003-2006), which were raised under ideal growth conditions at the hatchery. Although naturally reproduced bass exhibited slightly slower growth rates than hatchery-raised fish, growth rates of bass at Cedar Creek Lake are excellent when compared to other lakes in the state. Growth rates will be evaluated every 5 years to monitor any changes.



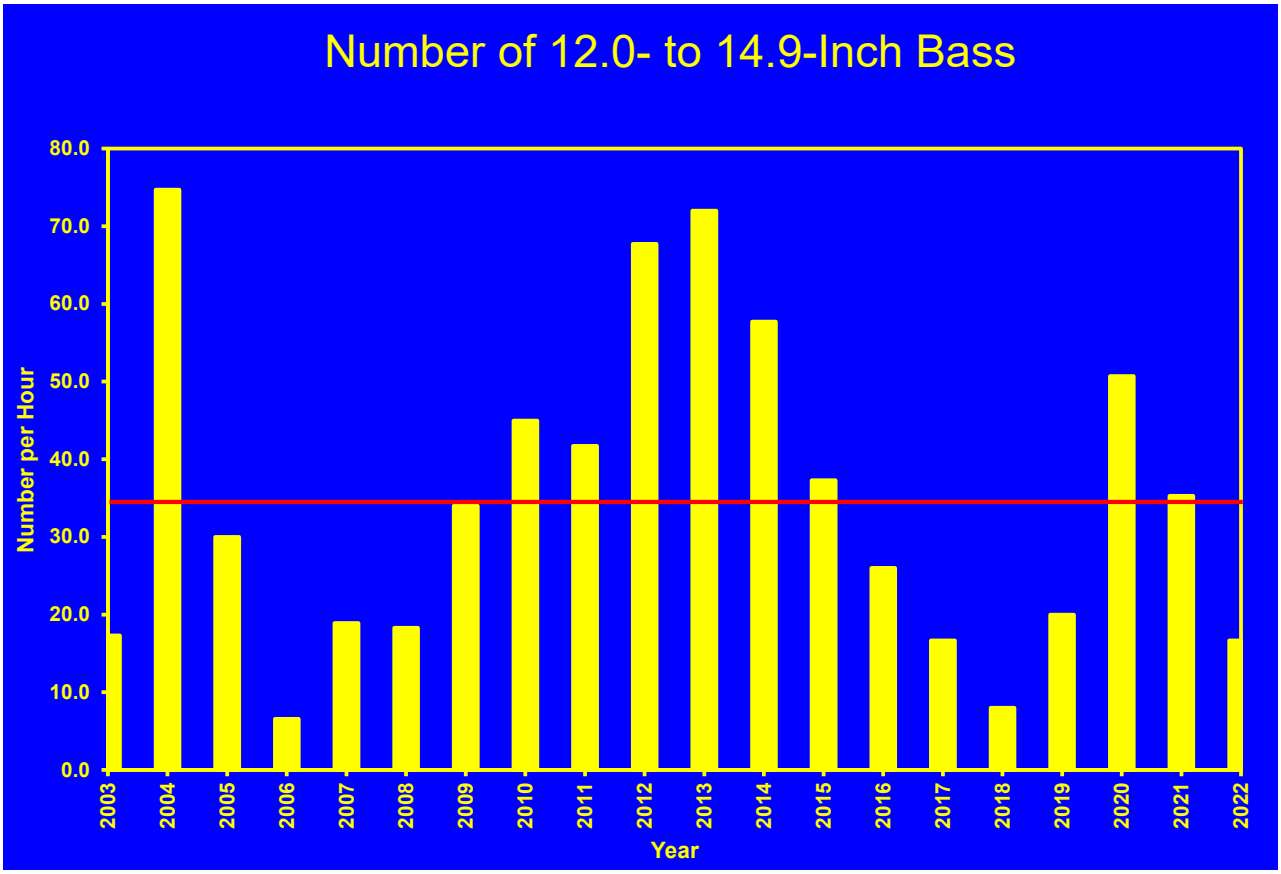
Parameter 2 – Number of Age-1 Bass (how good the spawn was)

KDFWR looks at the spring electrofishing catch rates of age-1 largemouth bass to assess the success of the spawn that occurred in the prior year. For example, the age-1 catch rate in 2016 would represent the 2015 year-class. This is an important parameter because the number of bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Cedar Creek Lake, age-1 largemouth bass catch rates have averaged 29.5 fish per hour of electrofishing (red line) since 2003. When compared to other lakes of this size, the average catch rate of age-1 bass in Cedar Creek is good. With the high size limit reducing harvest of the larger bass, lower numbers of age-1 bass are required to replenish the population, so the reduced catch rates from 2012-2016 were expected. Increased catch rates from 2017-2019 have helped bolster the current population resulting in good numbers of bigger fish. The catch rate the last three years has been consistent and will help to maintain the largemouth bass population in the years to come. Age-1 catch rates will continue to be monitored annually to ensure the future of the fishery.



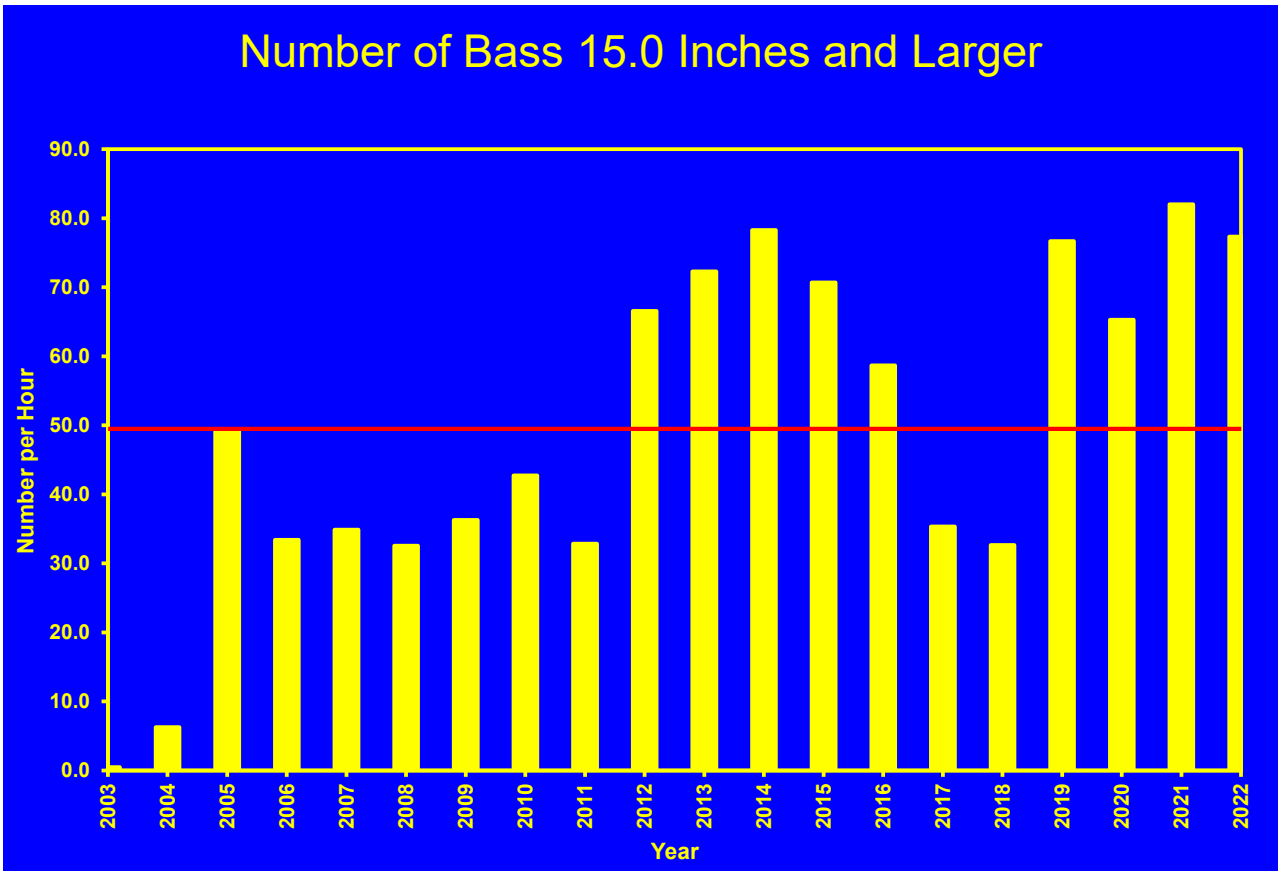
Parameter 3 – Number of 12.0- to 14.9-Inch Bass

The electrofishing catch rate of 12.0- to 14.9-inch largemouth bass has averaged 34.7 fish/hour (red line) over the years at Cedar Creek Lake, which is considered good for lakes of its size. The high catch rate observed in 2004 was comprised of hatchery-raised bass. The upward trend in the population starting in 2007 represents naturally reproduced bass attaining those sizes. Declines in the number of 12.0- to 14.9-inch bass from 2014-2018 is due to low reproduction from 2012-2015 and bass growing out of the size class. Age-1 catch rates started to improve in 2016, which helped to boost the number of 12.0- to 14.9-inch fish starting in 2019. Several consistent year classes will continue to add to this size group for the next few years, which bodes well for the future of the fishery.



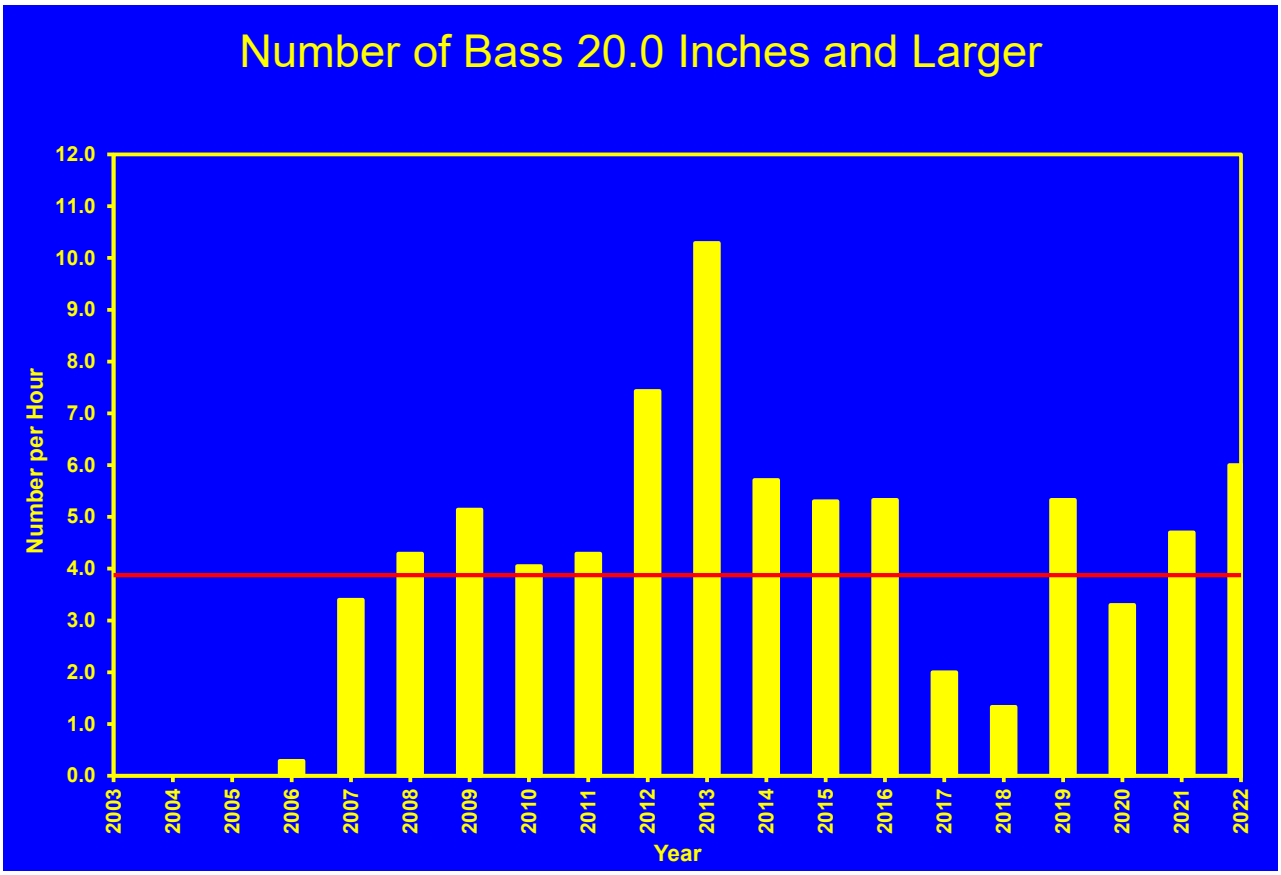
Parameter 4 – Number of Bass 15.0 Inches and Larger

The catch rate of 15.0-inch and larger largemouth bass at Cedar Creek Lake has averaged 49.2 fish/hour of electrofishing, which is represented by the red line. In comparison to other lakes of the same size, Cedar Creek ranks excellent for the catch of largemouth bass over 15.0 inches. The dramatic increase in the catch rate in 2005 is the result of the initially stocked bass attaining 15.0 inches. Although catch rates of larger fish declined from 2015-2018, the population has rebounded, largely as the result of increased spawning success starting in 2015. These high catch rates bode well for the future, as anglers should be able to enjoy good fishing for quality-sized largemouth for the next several years.



Parameter 5 – Number of 20.0 Inch and Larger Bass

The electrofishing catch of 20.0-inch and larger largemouth bass has averaged 3.9 fish/hour for Cedar Creek Lake (red line; 2003-present). Several year classes have recruited into the 20-inch size class, and we expect anglers to be able to catch large bass in future years. Although the number of bass larger than 20 inches has been variable over the recent years, Cedar Creek Lake still remains one of the best places in southeast Kentucky to catch a trophy largemouth bass.



Overall – Total Assessment Score (all five parameters added together)

Overall, the largemouth bass fishery at Cedar Creek Lake has averaged a good rating (16.2). The steady improvement in the rating was a culmination of several factors, including good growth and low mortality, which resulted in increased numbers of larger bass (parameters 4 and 5). The assessment score had plateaued, due in large part to low reproduction and subsequent reduced number of mid-sized bass. The overall score has improved in the last few years due to good recruitment and growth and strong numbers of large fish. We expect the Cedar Creek Lake bass population to remain strong over the next few years.