

Cave Run Lake Bass Assessment 2016

Cave Run Lake is an 8,270 acre US Army Corps of Engineers reservoir on the mainstem Licking River located in Bath, Menifee, Morgan and Rowan counties and is mostly surrounded by the Daniel Boone National Forest. Impounded in the early 70's, this lake is a popular destination for those anglers fishing for largemouth bass, muskie, crappie, bluegill, white bass, channel and flathead catfish. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. In 1998, 2002, 2009, 2010, 2011 and 2015 adverse water conditions made sampling unfeasible; therefore, data is not presented for those years.

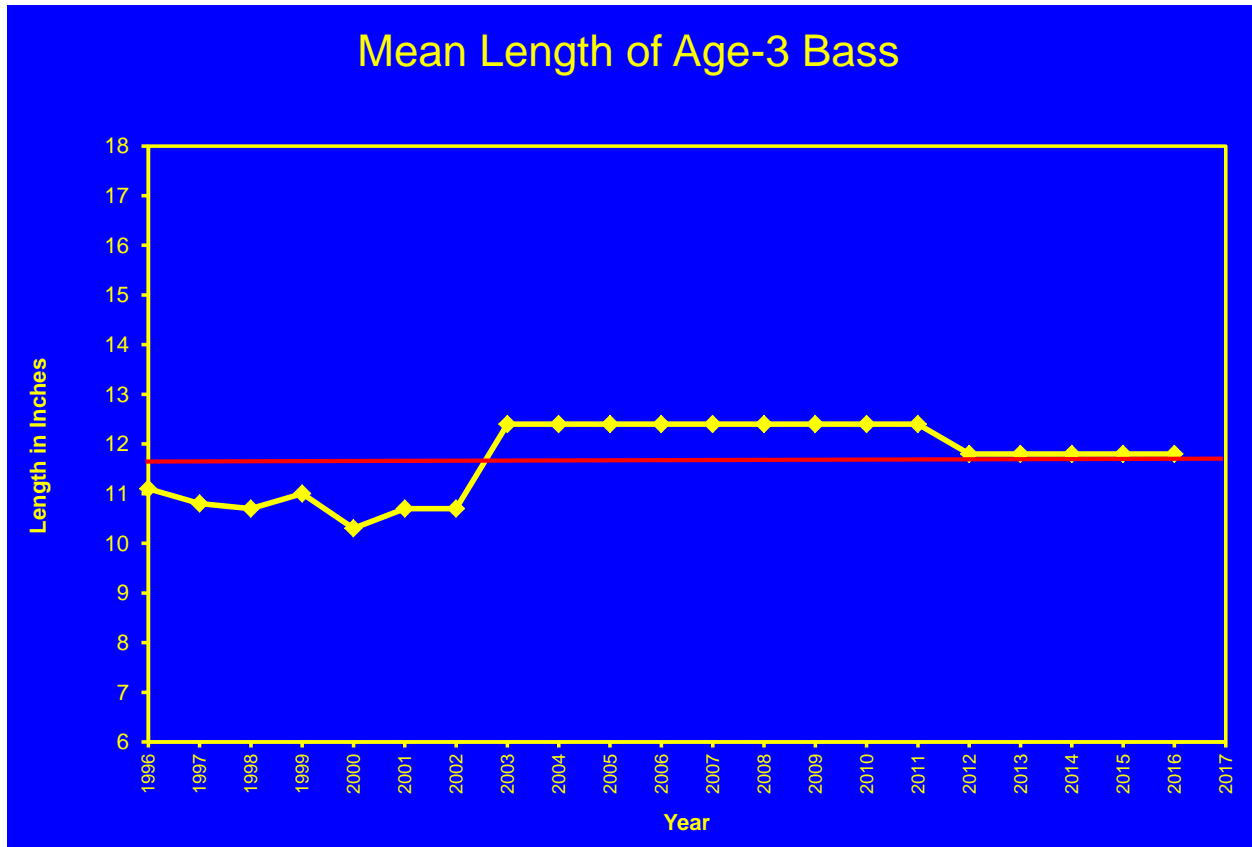
Please see the [Sportfish Assessments](#) page for an explanation of how the assessment works and for a list of other lakes with largemouth bass assessments.

Please note there is a 13.0-16.0 inch protective slot limit on largemouth bass which has been in effect since 1996.



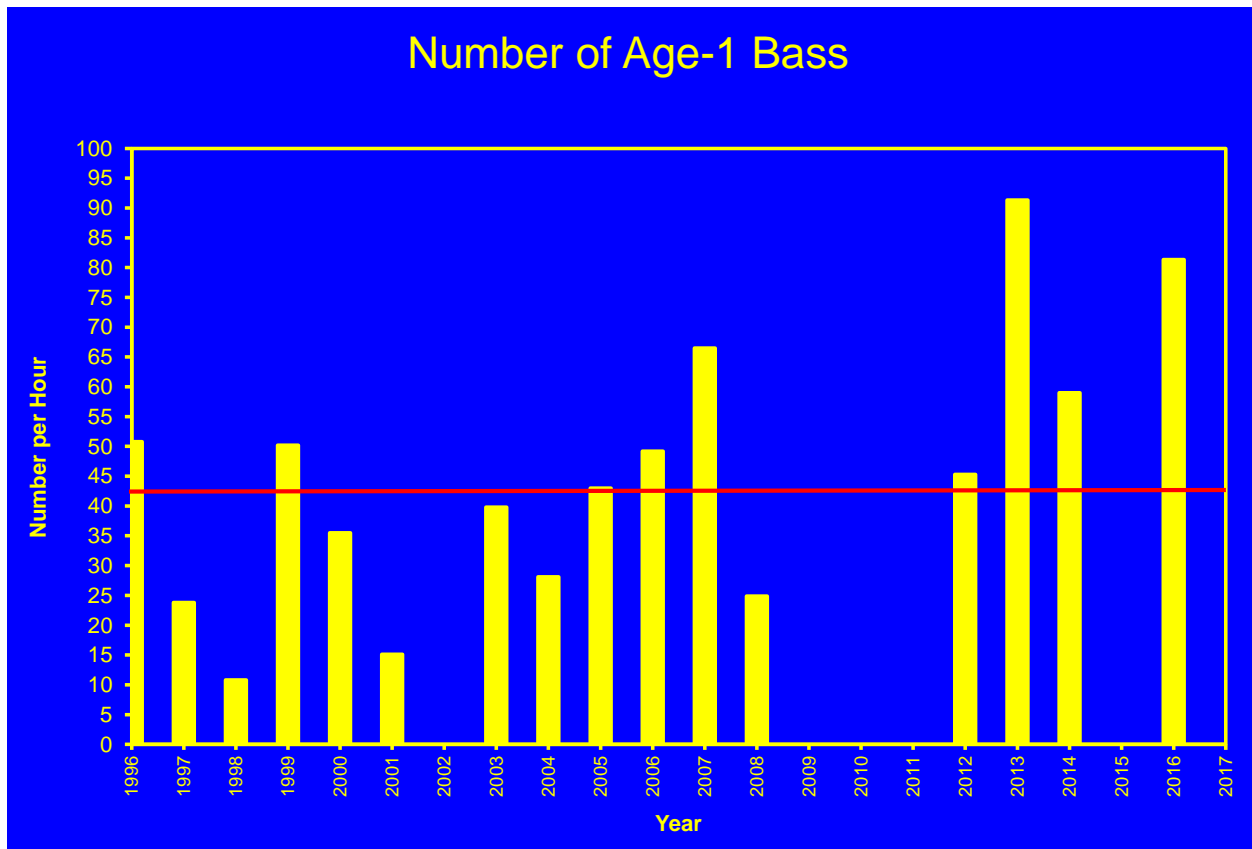
Parameter 1 – Length at age-3 (growth rate)

At Cave Run Lake, the length of an age-3 largemouth bass has averaged 11.7 inches since 1996 (represented by the red line). When compared to other lakes of this size, this is considered to be “Fair” growth for largemouth bass. The last three largemouth bass age samples at Cave Run Lake have show above average growth to age-3 and borderline “Good”. Growth rates are generally related to factors such as population density, food resources, lake fertility and weather patterns.



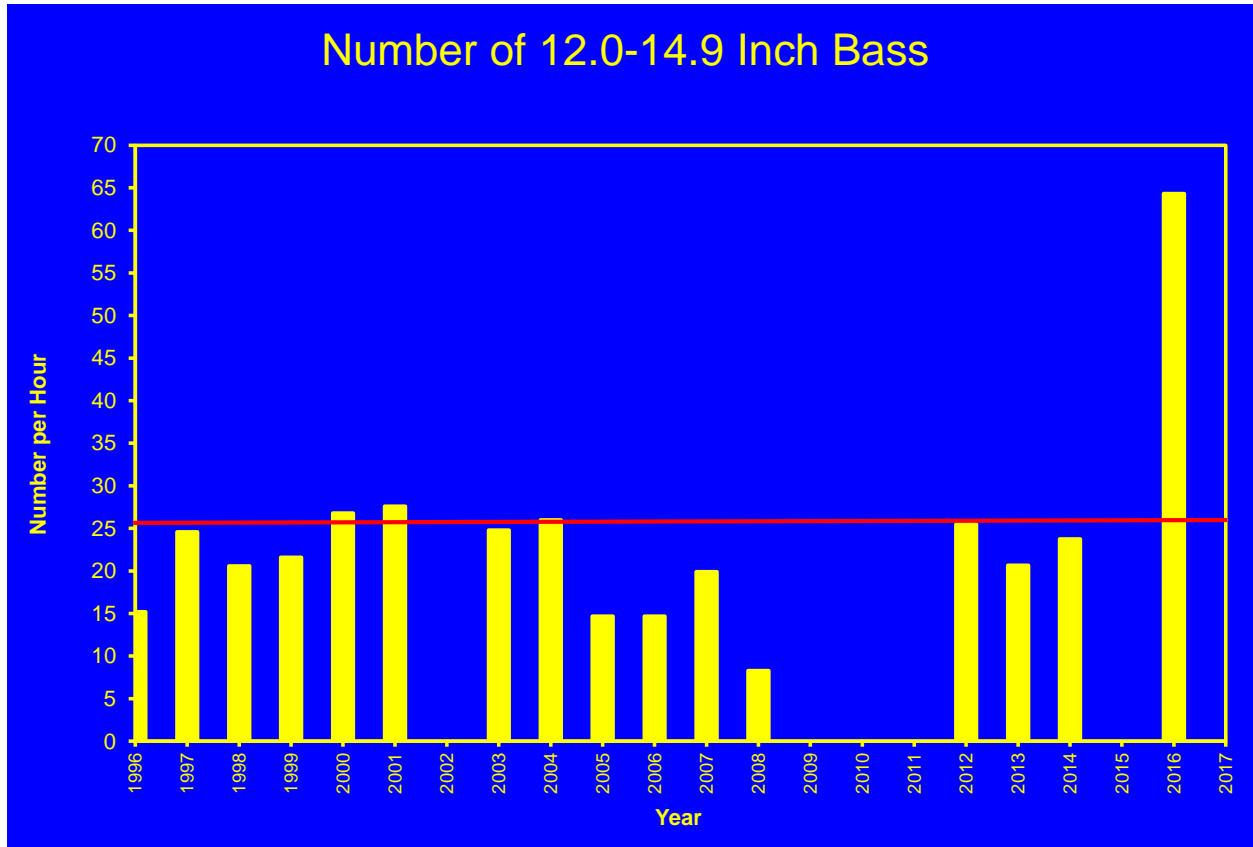
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the electrofishing catch rates of age-1 largemouth bass to assess the success of the spawn which occurred in the prior year. This is an important parameter because the number of age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Cave Run Lake, age-1 largemouth bass catch rates have averaged 42.6 fish per hour of electrofishing (f/h) since 1990. When compared to lakes of similar size this is considered to be “Excellent”. These exceptionally high recruitment rates are one reason Cave Run Lake has a slot limit. The excess recruits compete for limited resources in the lake and slow growth rates down. Removal of some of these fish helps to open up resources and improve growth rates.



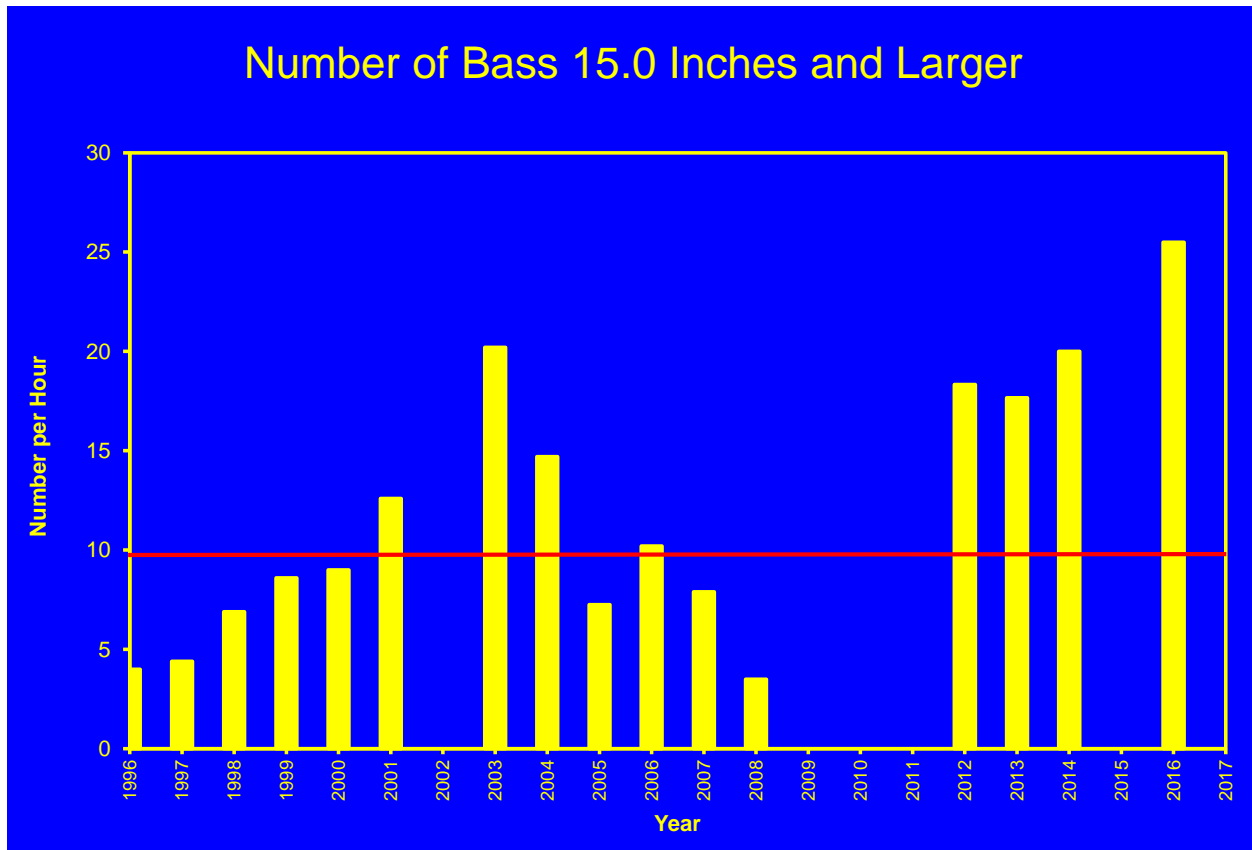
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch rate of 12.0-14.9 inch largemouth bass has averaged 25.5 f/h since 1990, which gives Cave Run Lake a “Good” rating when compared to other lakes of similar size. Catch rates for this category can be deceiving when compared to lakes which have a 15.0-inch minimum size limit. The slot limit on Cave Run Lake allows some fish in this category (from 12.0-12.9 inches) to be harvested. In spite of this, 2016 showed the highest rate of capture of fish in this size range, with a value of 64.3 f/h.



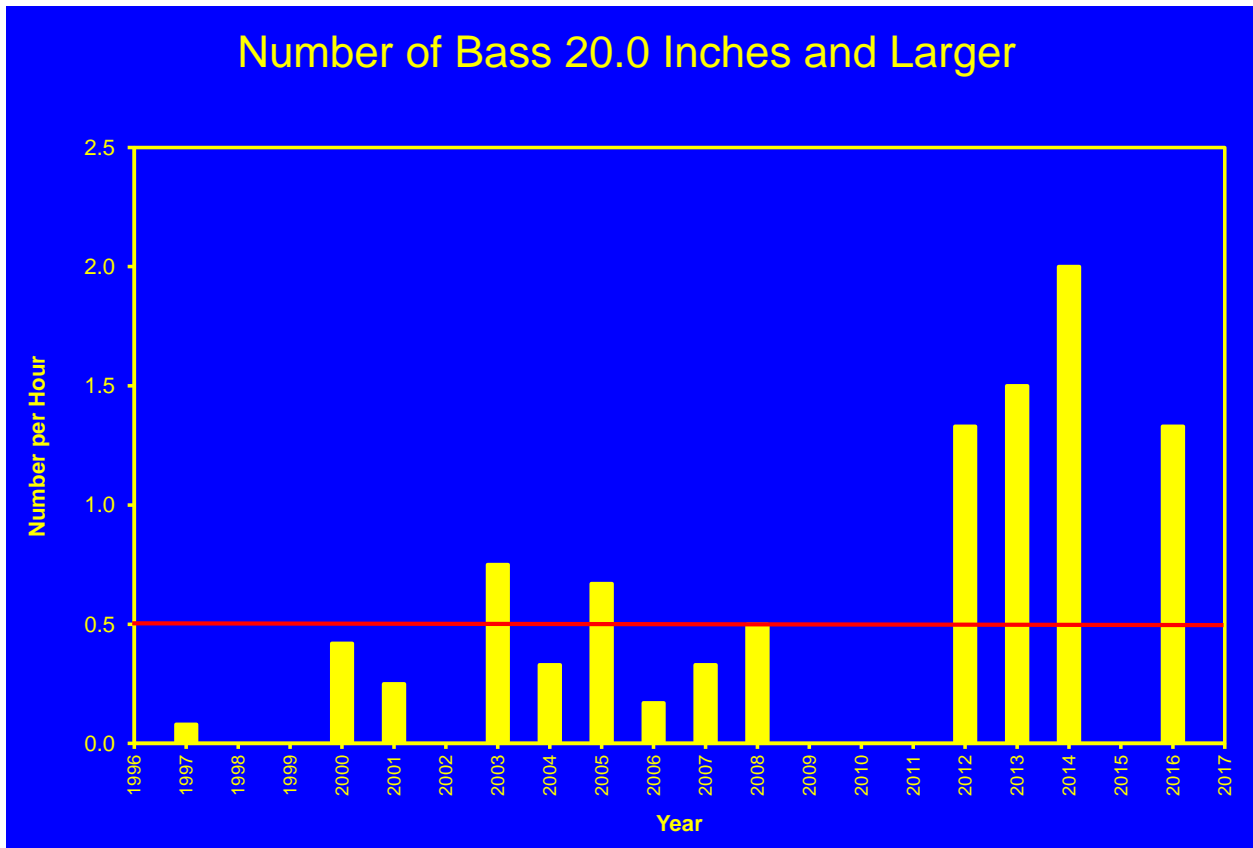
Parameter 4 – Numbers of 15.0 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Cave Run has averaged 9.9 f/h since 1990. When compared to other lakes of similar size, this is a “Fair” catch rate for this size category. Catch rates obtained since 2012 have been some of the highest recorded, and put the lake in the “Good” to “Excellent” range.



Parameter 5 – Numbers of 20.0-inch and larger bass

The electrofishing catch rate for 20.0 inch and larger largemouth bass has averaged 0.5 f/h since 1990. This catch rate gives the lake a lower “Good” rating when compared to other lakes of similar size. Similar to catch rates of fish over 15.0 inches, values obtained since 2012 have been some of the highest recorded, and put the lake in the upper “Good” to “Excellent” range.



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

Overall, the largemouth bass fishery at Cave Run Lake has averaged a high “Fair” rating of 12 since 1990 when compared to other lakes of similar size. Recent assessment has put the lake in the higher “Good” to “Excellent” range. While assessment have ranged mainly in the “Good” to “Fair” range, the population trend has been on the increase since the inception of the slot limit. Removal of some of the excess recruits has increased growth rates, and allowed fish to get to a larger size quicker and this has shown in our catch rates of fish over 15.0 and 20.0 inches.

