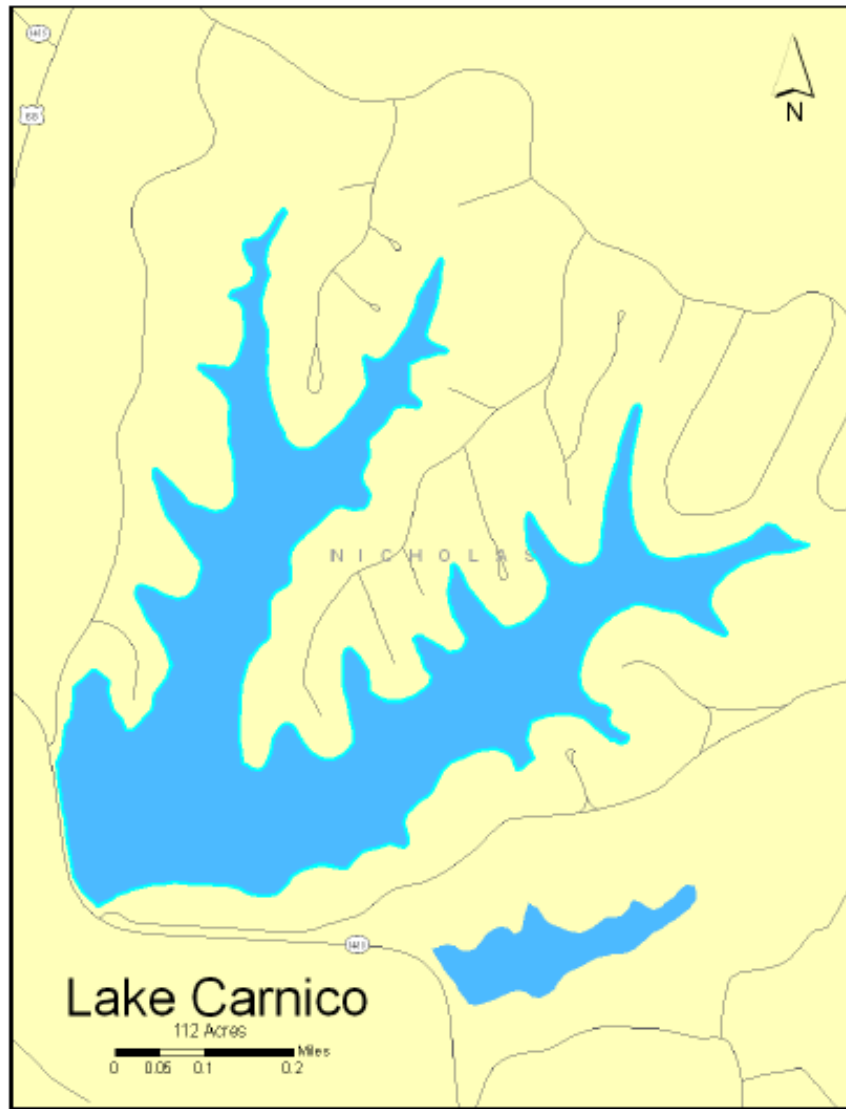


Lake Carnico Largemouth Bass Assessment 2022

Lake Carnico is a 114-acre multipurpose reservoir created by damming several unnamed tributaries to Brushy Fork Creek (Licking River Drainage) in Nicholas County. Several sport fishes, including largemouth bass, bluegill, redear sunfish, flathead catfish, and black and white crappie are found in this lake. The following graphs show data trends and rankings for each of the five parameters used in the largemouth bass assessment.

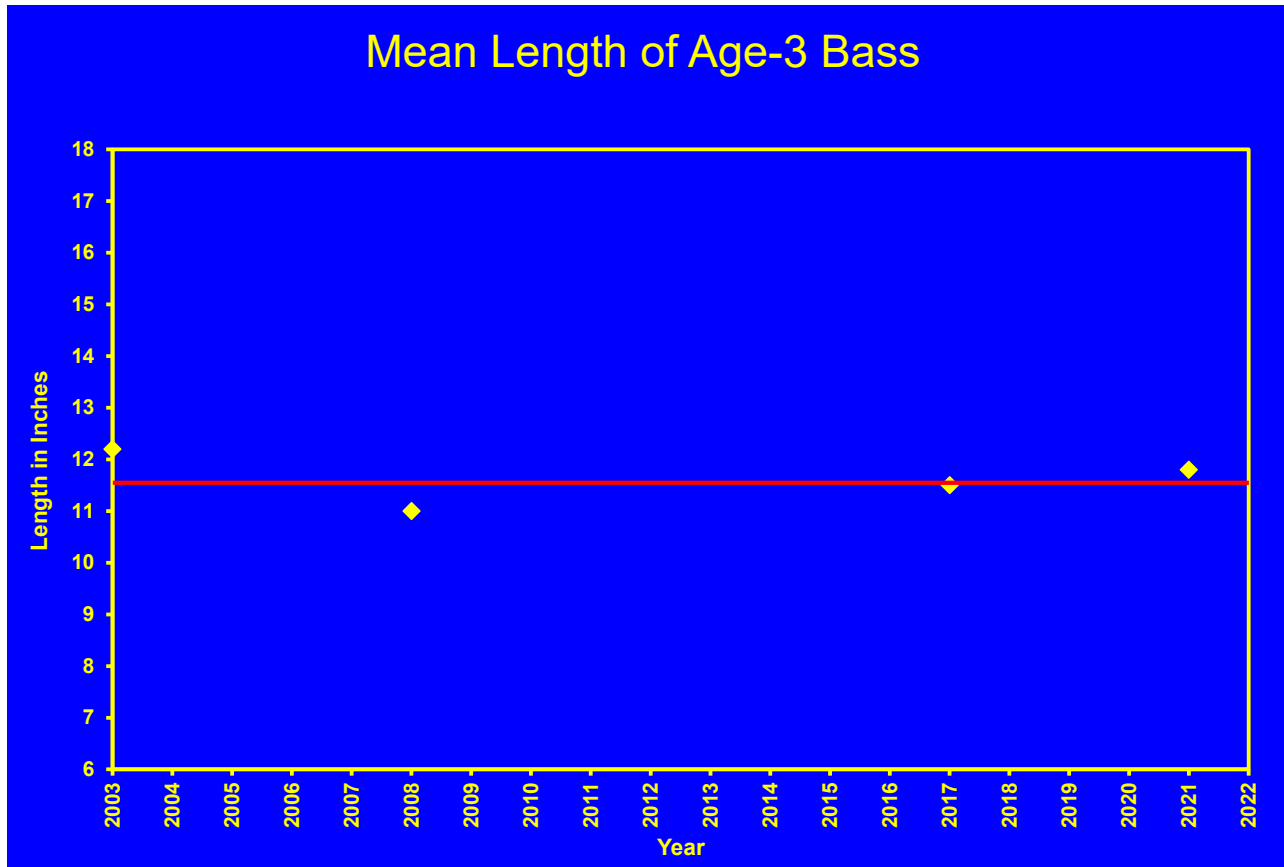
Please see the [Sportfish Assessments](#) page for an explanation of how the assessment works and for a list of other lakes with largemouth bass assessments.

Please note that the minimum size limit for largemouth bass on this lake is 15.0 inches.



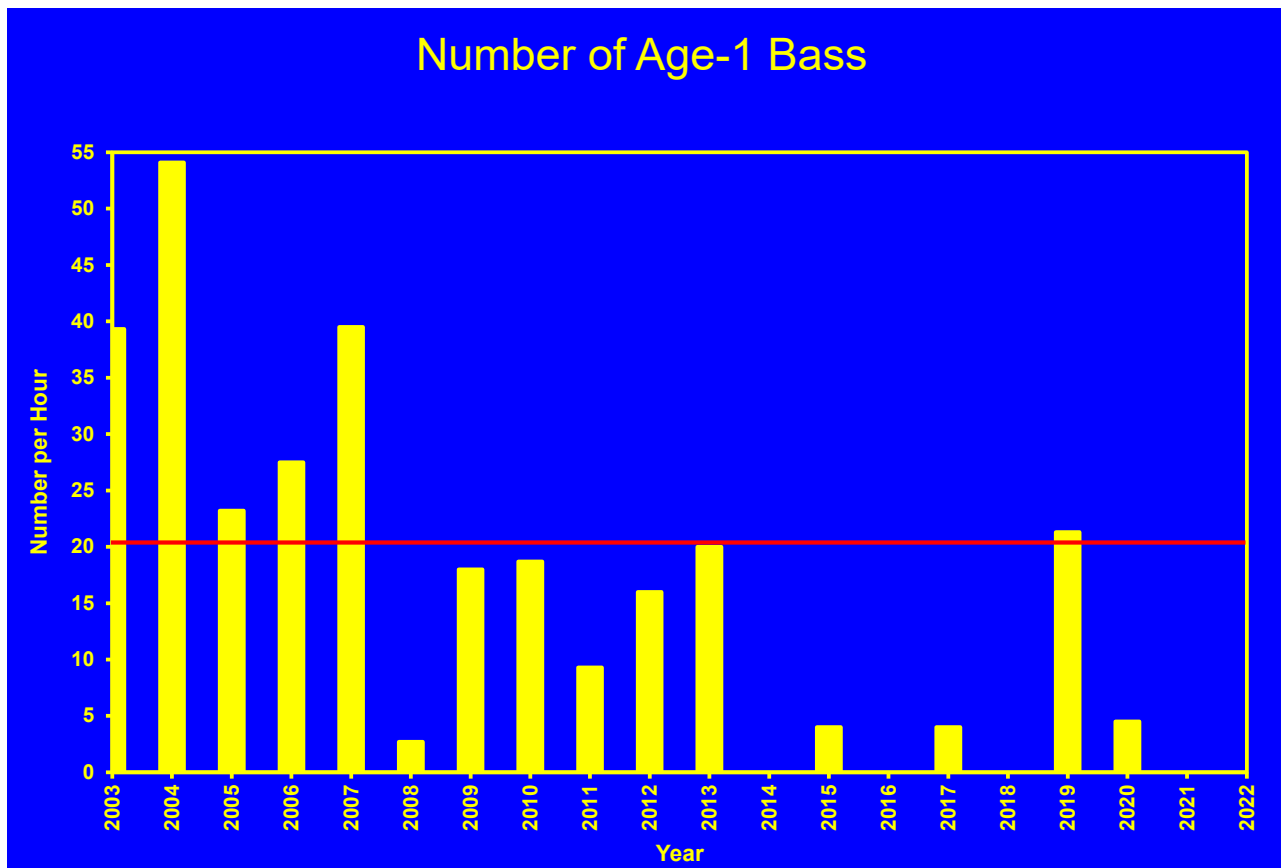
Parameter 1 – Mean Length at Age-3 (growth rate)

At Lake Carnico, the length of an age-3 largemouth bass has averaged 11.6 inches since 2003 (represented by the red line). When compared to other lakes of similar size, the average growth rate for largemouth bass at this lake is “Excellent”. Growth rates are generally related to factors such as population density, food resources, lake fertility, and weather patterns. The last year that largemouth bass were aged was 2021, and the length of age-3 largemouth bass was 11.8 inches.



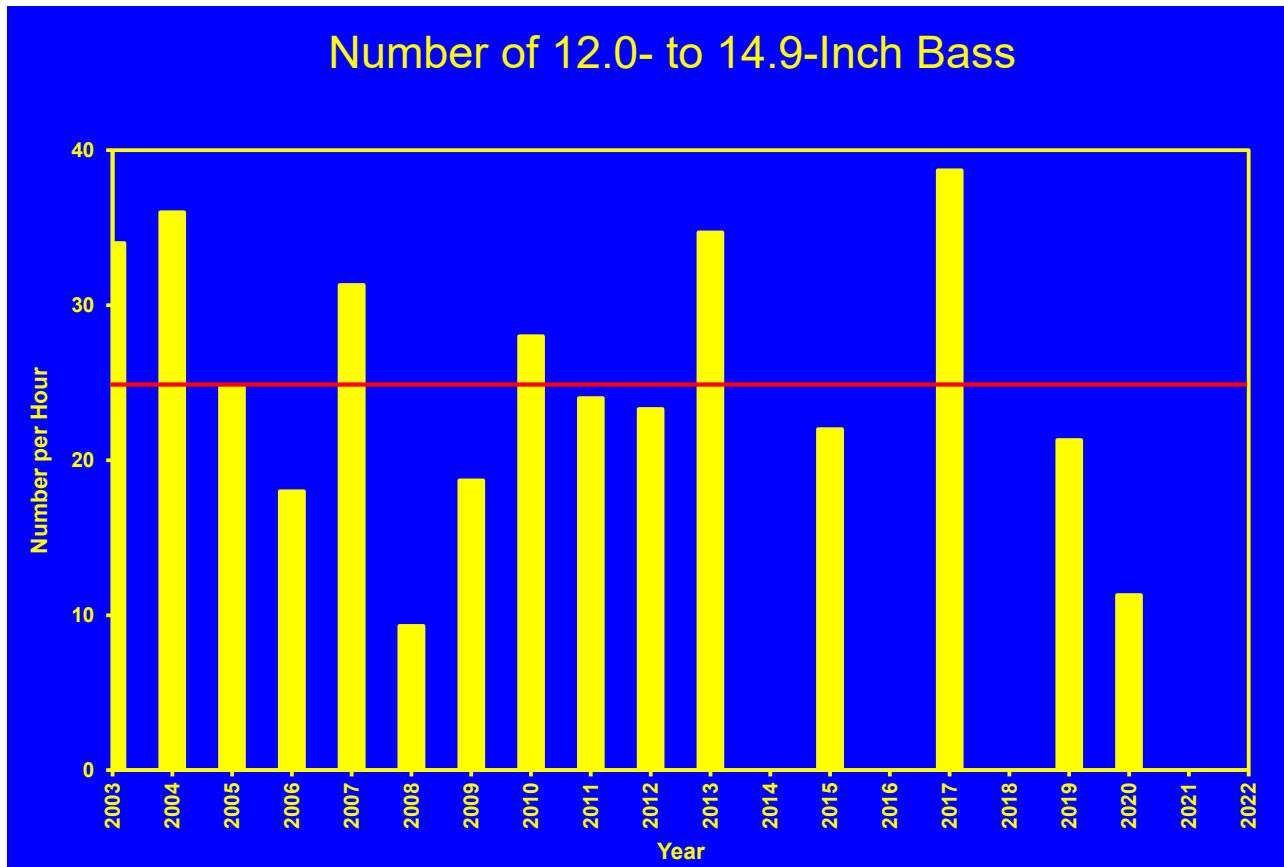
Parameter 2 – Number of Age-1 Bass (spawning success)

Catch rates of age-1 largemouth bass are used 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 Lake Carnico, age-1 largemouth bass catch rates have averaged 20.1 fish per hour (fish/hr) of electrofishing. When compared to other lakes of similar size, this is considered to be a “Fair” age-1 catch rate. Since 2009, catch rates of age-1 fish have been below average and hovered mostly in the “Fair” range with 2015, 2017, and 2020 assessed as “Poor.” To make up for these shortages, KDFWR has been stocking juvenile largemouth bass to help to offset the poor spawns and recruitment.



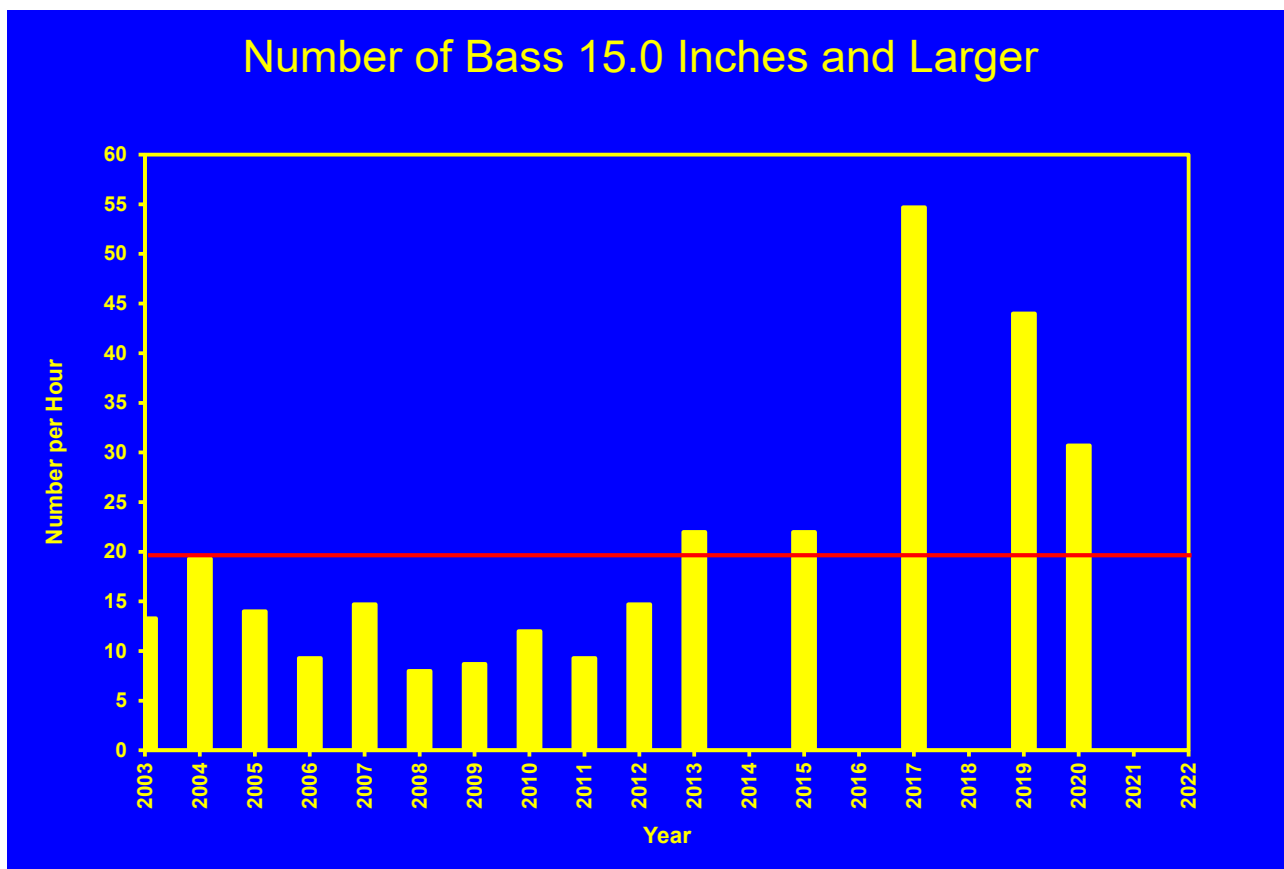
Parameter 3 – Number of 12.0- to 14.9-Inch Bass

The electrofishing catch rate of 12.0- to 14.9-inch largemouth bass since 2003 has averaged 25.0 fish/hr which puts Lake Carnico in the “Fair” rating when compared to other lakes of similar size. Since 2012 the lake has only produced values over the mean in 2 years (2013 and 2017) that were assessed as “Good.” This is likely due to poor spawns in the years prior, which creates less competition and provides more opportunity for fish to grow faster. However, the average catch rate since 2012 is only 0.3 fish/hr away from being considered “Good,” so Lake Carnico has slightly improved overall.



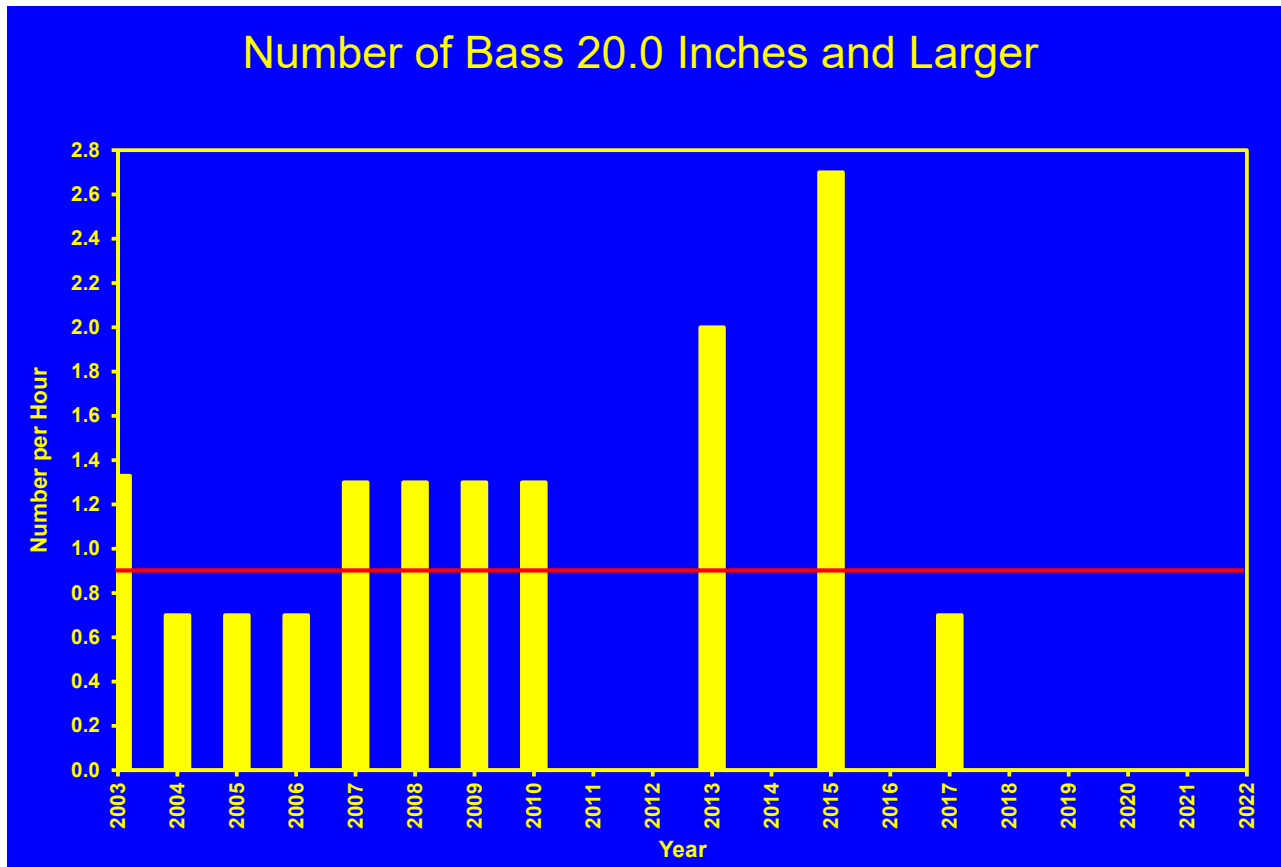
Parameter 4 – Number of Bass 15.0 Inches and Larger

The electrofishing catch rate of 15.0-inch and larger largemouth bass has averaged 19.7 fish/hr over the past 20 years. This is “Good” in comparison with other lakes of similar size. In the last 10 years, catch rates have averaged 31.4 fish/hr, putting Lake Carnico well into the “Excellent” category. We have seen a decline in catch rates of 15.0-inch and larger largemouth bass since 2017, but those remain two of the highest catch rates (assessed as “Excellent”) in the last 20 years. There was a decline of 12.0- to 14.9-inch largemouth bass in 2015 that may have boosted survival and growth creating more 15-inch and larger fish in the years following. In addition, the length of age-3 fish has increased by 0.8 inches since 2008.



Parameter 5 – Numbers of 20.0-inch and larger bass

Since 2003 the electrofishing catch rate of 20.0-inch and larger largemouth bass has averaged 0.9 fish/hr for Lake Carnico. As compared to other lakes of similar size, this is a “Fair” catch rate for this size group. The catch rates in 2013 and 2015 were some of the highest on record (average of 2.3 fish/hr, which would be considered “Good”). Fish of this size can be difficult to sample consistently, which often accounts for the variability in catch rates rather than indicating a significant change in the population. It is best to look at overall trends rather than focus on individual year comparisons. Overall, 20.0-inch and larger largemouth bass have improved in Lake Carnico since 2003.



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

Overall, the largemouth bass fishery at Lake Carnico has averaged a “Good” rating (12.2) over the past 20 years (as indicated by the red line). Since 2019 the total assessment score has ranked in the “Fair” range. Lake Carnico is a medium fertility lake which limits the abundance of available forage, which in turn may contribute to the lake having an average overall rating. Sampling data can be highly variable due to a multitude of factors; therefore, it is important to look at data over time as opposed to information collected in a single year when making management decisions.

