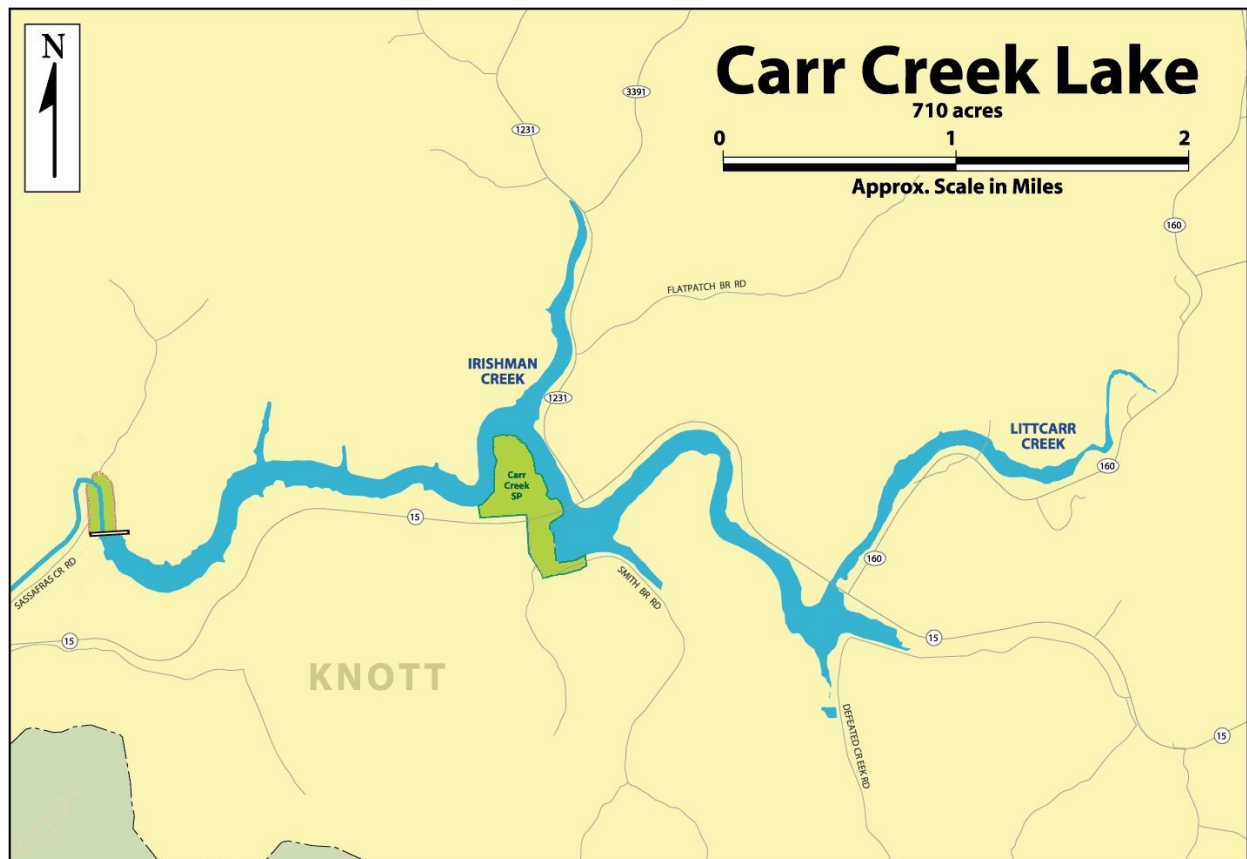


## Carr Creek Lake Bass Assessment 2016

Carr Creek Lake, located in Knott County, is a 710 acre multipurpose reservoir on Carr Fork. The majority of anglers using this lake target largemouth bass. This lake is unique to others of its size because it contains a large population of alewives which were first documented in 2000. Alewives can have a detrimental impact on sport fish species since they compete excessively with small fish for resources. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment.

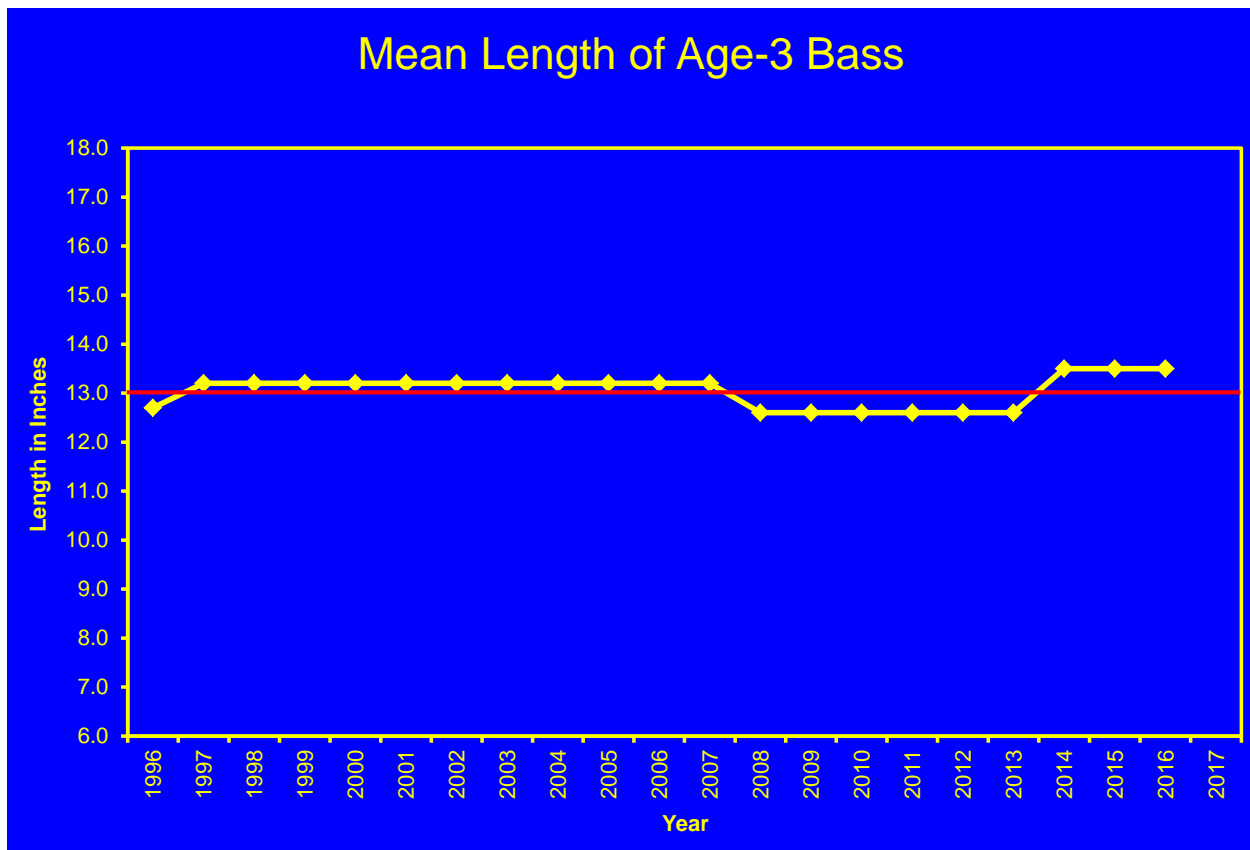
Please see the [Sportfish Assessments](#) page for an explanation of how the assessment works and for a list of other lakes with largemouth bass assessments.

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



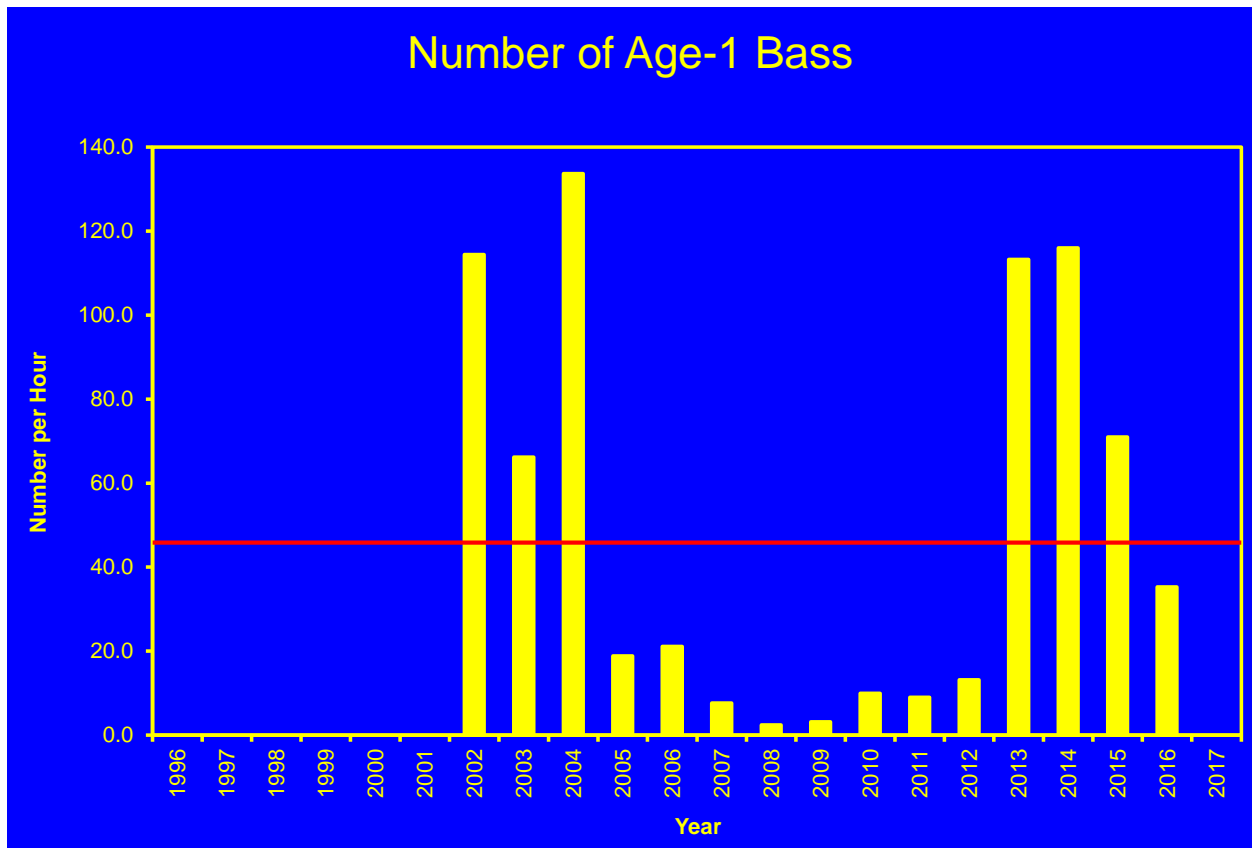
## Parameter 1 – Length at age-3 (growth rate)

At Carr Creek Lake, the length of an age-3 largemouth bass has averaged 13.0 inches (see red line). Compared to other reservoirs of similar size, largemouth bass generally exhibit excellent growth at Carr Creek Lake. Growth rates can be variable and are generally related to factors such as population density, food resources, and weather patterns. The most recent aging of largemouth bass at Carr Creek Lake was in 2014 and found that 3 year old largemouth experienced excellent growth, averaging 13.5 inches.



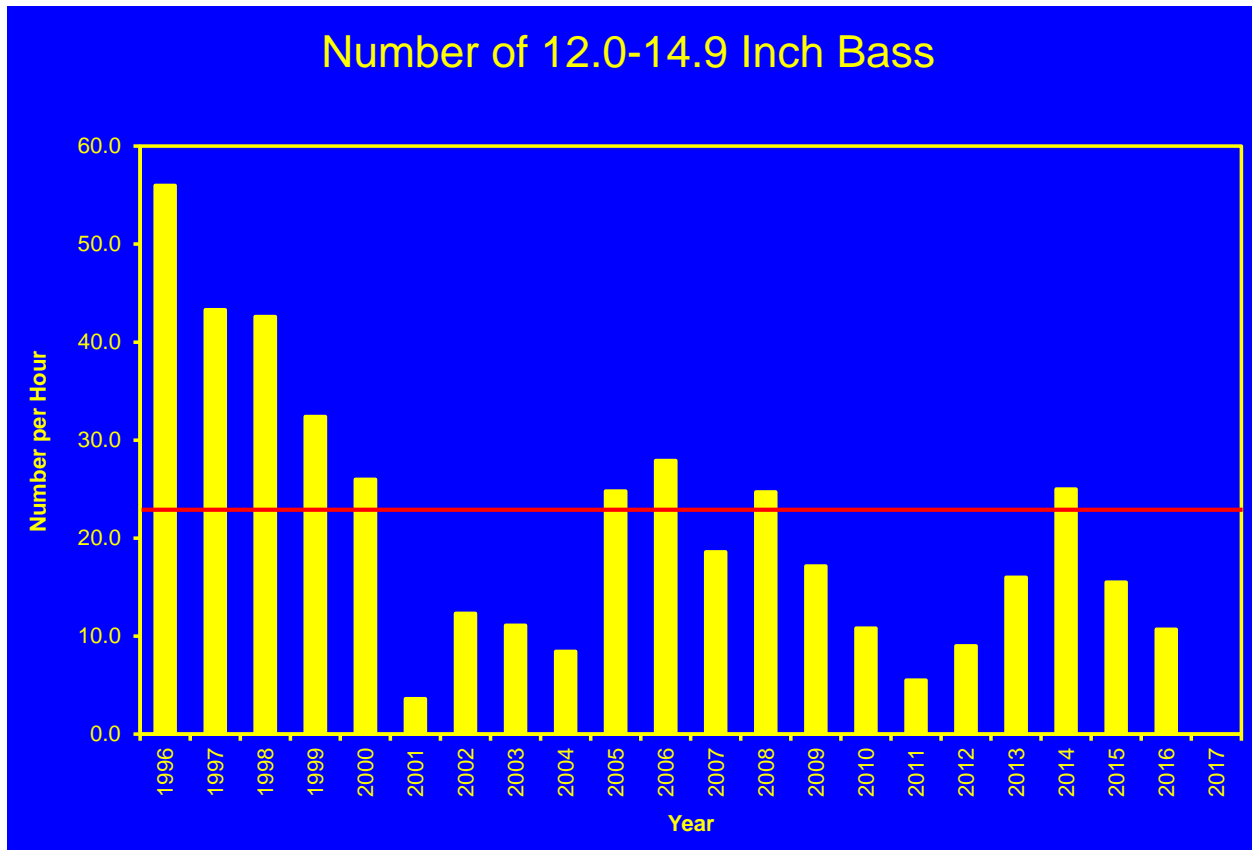
## Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the spring 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. Age-1 catch rate has averaged 46.7 fish per hour at Carr Creek Lake (red line). The combined catch rate of wild and stocked age-1 largemouth bass averaged 70.9 fish per hour of electrofishing from 2002 to 2006 which is considered “excellent” compared to similar sized lakes. However, from 2007 to 2012 the age-1 catch rate averaged only 7.6 fish per hour, which is considered the low end of “fair.” Recruitment is often a problem at Carr Creek Lake. Recent years with low catch rates were influenced largely by inconsistent fertilization effectiveness as a result of spring flooding. Largemouth bass fingerlings have been stocked every year since 1999 to increase numbers of bass in the lake. During 2013, age-1 catch rate was excellent at 113.3 fish per hour. This was influenced by an early spring stocking versus previous fall stockings. The 2014 catch rate was also rated excellent due to continued spring stocking. 2016 made the first year since 1999 that bass were not stocked in Carr Creek Lake. Catch rates for 2016 fell back down to 35.3 fish per hour however, the long term average maintains a “good” rating.



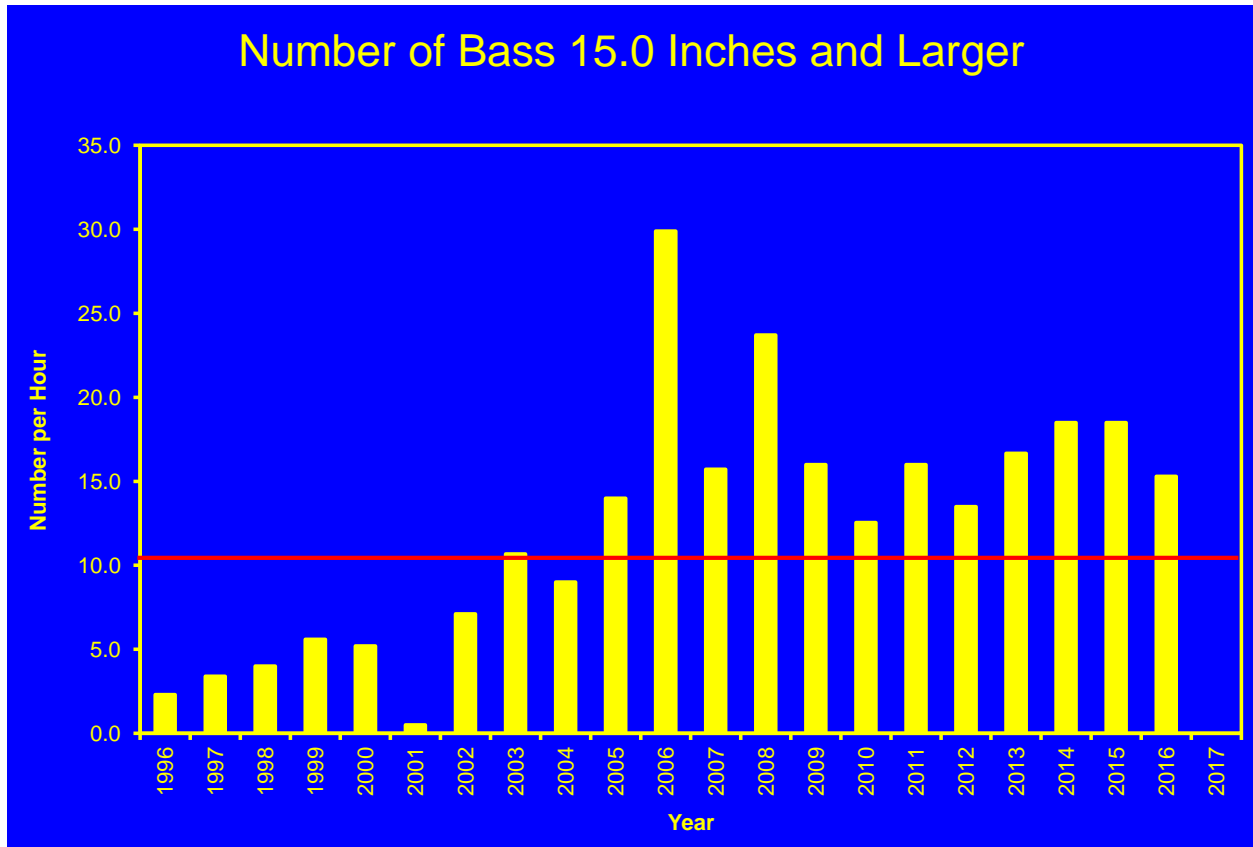
### Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 22.6 fish per hour over the years as indicated by the red line. As compared to other lakes, this is a “fair” catch rate for this size group of bass. Higher, historical catch rates declined to an average of 8.9 fish per hour (“poor”) from 2001-2004. Since then catch rates have averaged 17.1 fish per hour (“fair”) with two peaks and a valley. This number is important because these fish will soon grow to exceed the 15.0 inch legal size limit at the lake, and is a good predictor how bass fishing will be in years to come.



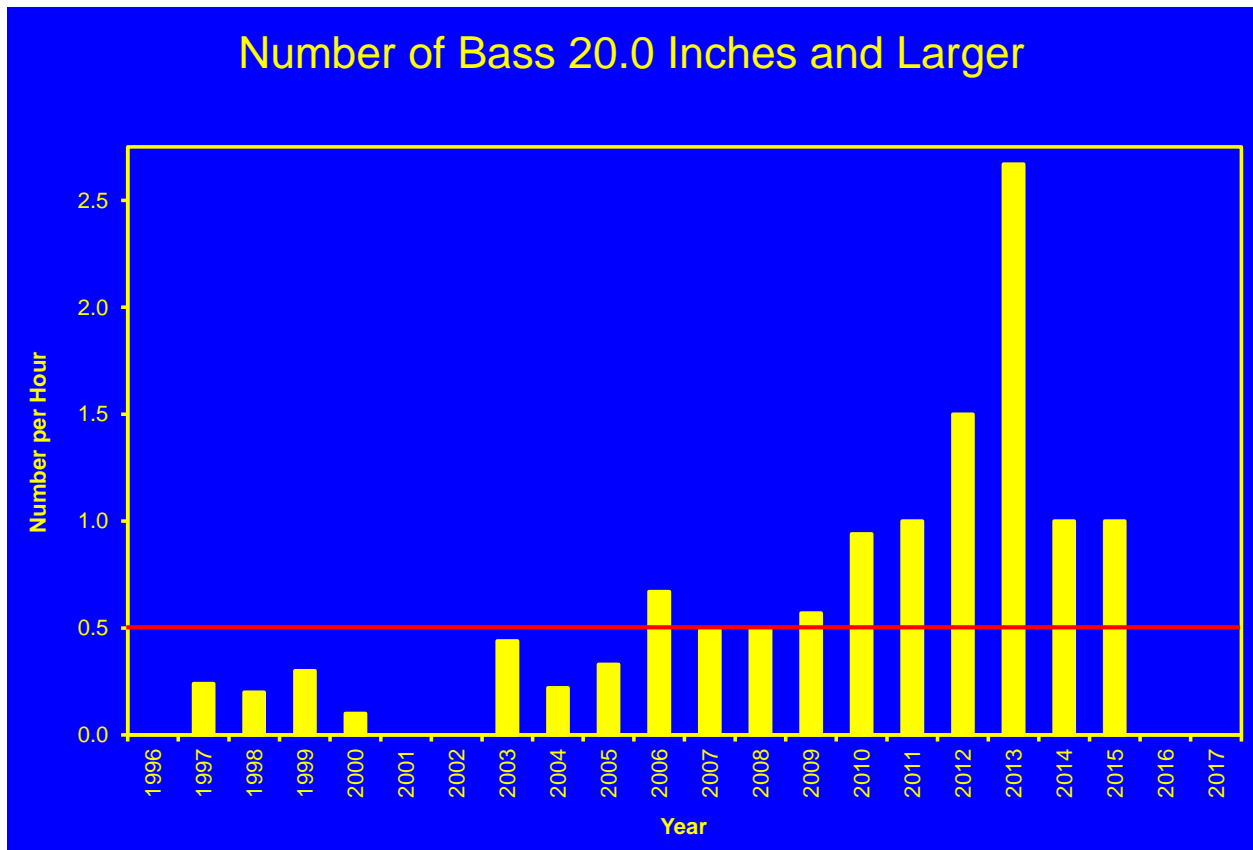
## Parameter 4 – Numbers of 15.0 inch and larger bass

The overall catch rate of 15.0 inch and larger largemouth bass at Carr Creek Lake has averaged 10.3 fish per hour of electrofishing (red line). Again, as compared to other lakes, this is a “fair” catch rate for this size group. Recent catch rates from 2013-2016 averaged 17.2 fish per hour, showing slow yet steady improvement moving up to a “good” rating. These catch rates have been above average since 2005 and have remained fairly stable.



## Parameter 5 – Numbers of 20.0-inch and larger bass

The overall catch rate of 20.0 inch and larger largemouth bass has averaged 0.5 fish per hour at Carr Creek Lake (red line). This number averaged over the past twenty years achieves a rating of “fair”. These catch rates bottomed out in the early 2000’s but have shown some improvement from 2010-2016 averaging 1.2 fish per hour. Even though numbers of 20.0 inch and greater fish are low overall, growth rates at Carr Creek lake continue to be very good. Fish achieve a larger size at a younger age and with increased recruitment, more of these fish should become available for anglers in the next few years.



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

Overall, the largemouth bass fishery at Carr Creek Lake has averaged a “good” rating. This assessment score has been fairly stable until recent years, where it showed improvement. From 2013-2015, the assessment rating for the largemouth bass population at Carr Creek Lake was above average with a rating of “good”; yet components of the score remain highly variable. While there are still above average numbers of fish 15.0 inches and larger and 20.0 inches and larger in the lake, low numbers of smaller fish could cause those size classes to decline. Natural recruitment continues to be a problem at Carr Creek Lake. Efforts at increasing year class strength with higher stocking rates and with stocking fingerlings in the spring have helped to improve the assessment score. Continued work to aid recruitment of young fish to the population will likely improve the overall score and help to stabilize the population of largemouth bass as a whole. Supplemental stockings and the addition of crucial, winter habitat will be used as needed to help accomplish this task.

