

## Paintsville Lake Bass Assessment 2016

Paintsville Lake is a 1,150 acre multipurpose reservoir on Paint Creek in Johnson and Morgan Counties. In addition to largemouth bass, the lake offers good and improving opportunities for rainbow trout and walleye. Summer coldwater discharge was recently reduced so that the target discharge temperature was increased from 55°F to 68°F. This should help the trout and walleye in the lake. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment.

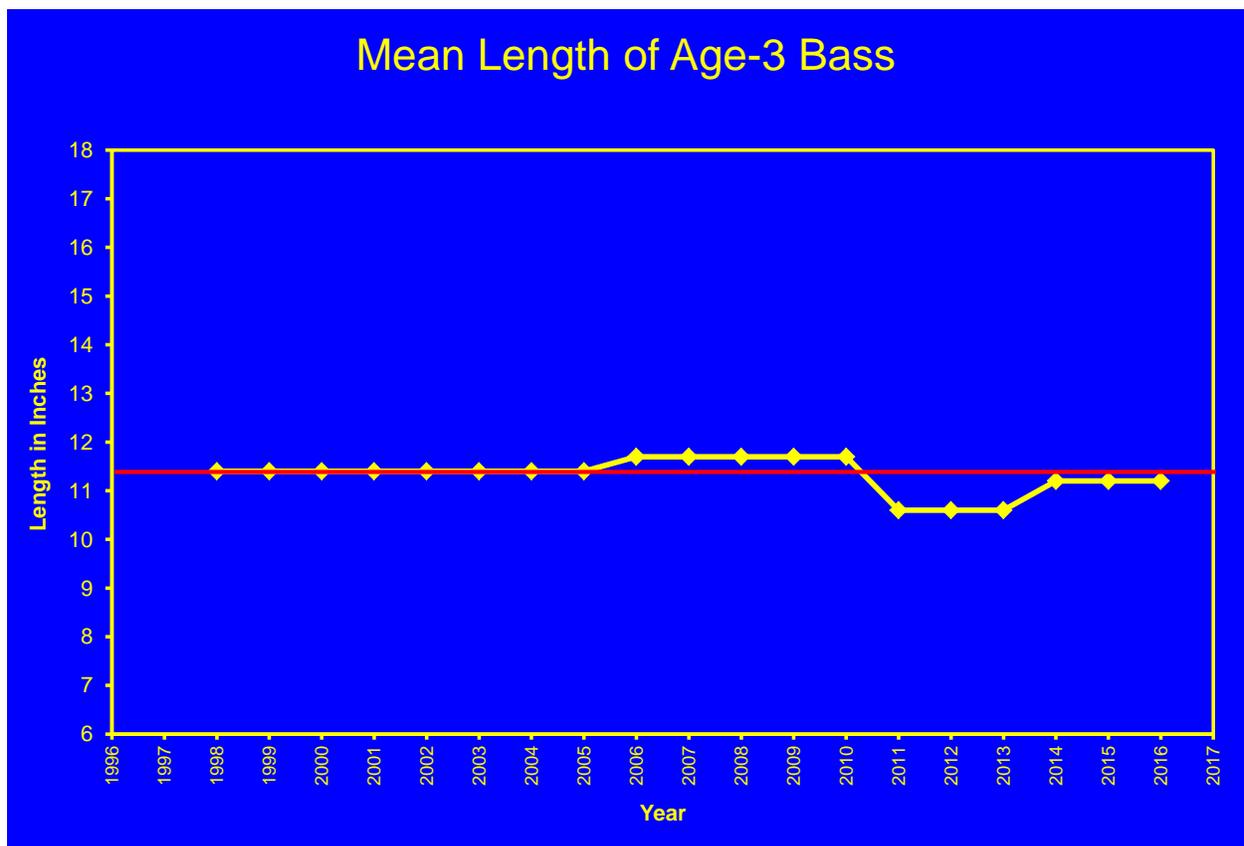
Please see the [Sportfish Assessments](#) page for an explanation of how the assessment works and for a list of other lakes with largemouth bass assessments.

*Please note that a 12.0-15.0 inch slot limit was placed on largemouth bass in 2002 to reduce competition, increase growth rates, and increase the number of bass in excess of 15.0 inches.*



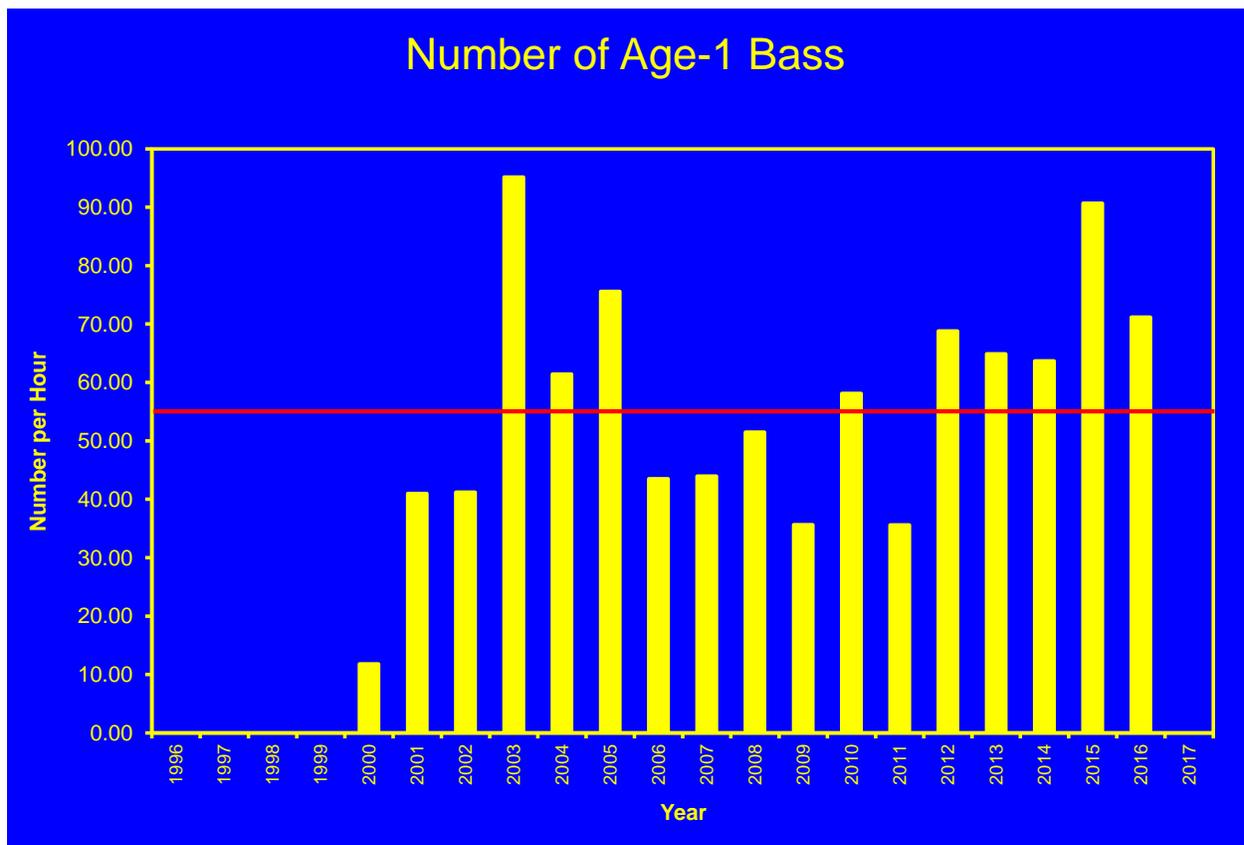
## Parameter 1 – Length at age-3 (growth rate)

At Paintsville Lake, the length of an age-3 largemouth bass has averaged 11.3 inches at the lake since 1998 (represented by the red line). When compared to other lakes of this size, this is considered to be fair growth for largemouth bass. Growth has been relatively stable with the last assessment occurring in 2014. Growth rates are generally related to factors such as population density, food resources, and weather patterns. A 12-15 inch protective slot limit was established in 2002 and has remained in place to present. From 2011 to 2016, largemouth bass averaged 10.9 inches at age-3, which is considered “poor” compared to other lakes of similar size. This is likely due to very strong year classes in the past that caused increased competition for resources.



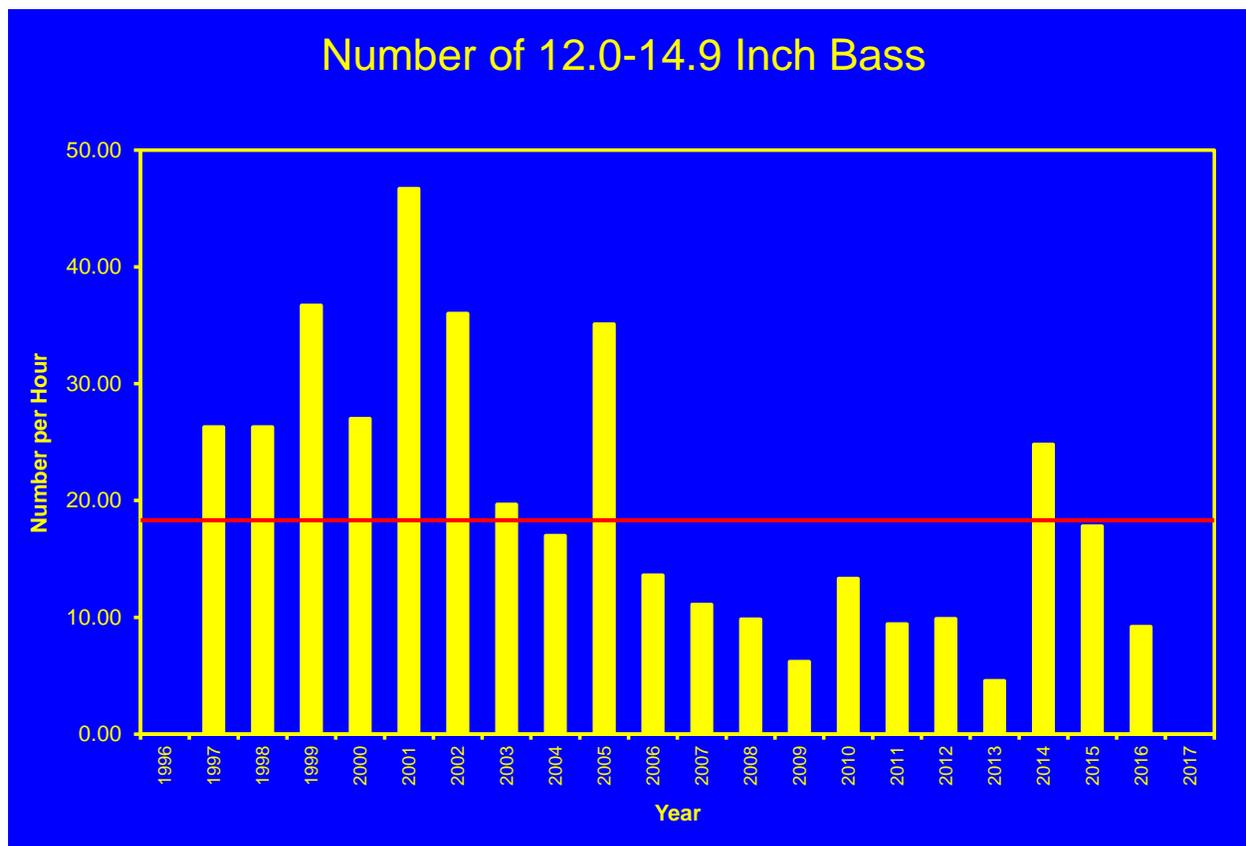
## Parameter 2 – Numbers of age-1 bass (how good the spawn was)

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 Paintsville Lake, age-1 largemouth bass catch rates have averaged 56.1 fish/hour of electrofishing since 2000 (see red line). When compared to other lakes in this size range, this is considered to be an excellent age-1 catch rate. Spring catch rates of age-1 largemouth bass have vastly fluctuated since 2000. Paintsville Lake typically sees excessive largemouth bass production. Abundant summer-time vegetation and a very slight (1 foot) elevation change from summer pool to winter pool occur here. This encourages high levels of natural recruitment of young fish to the population. A few poor years could improve growth and the overall size structure in years to come.



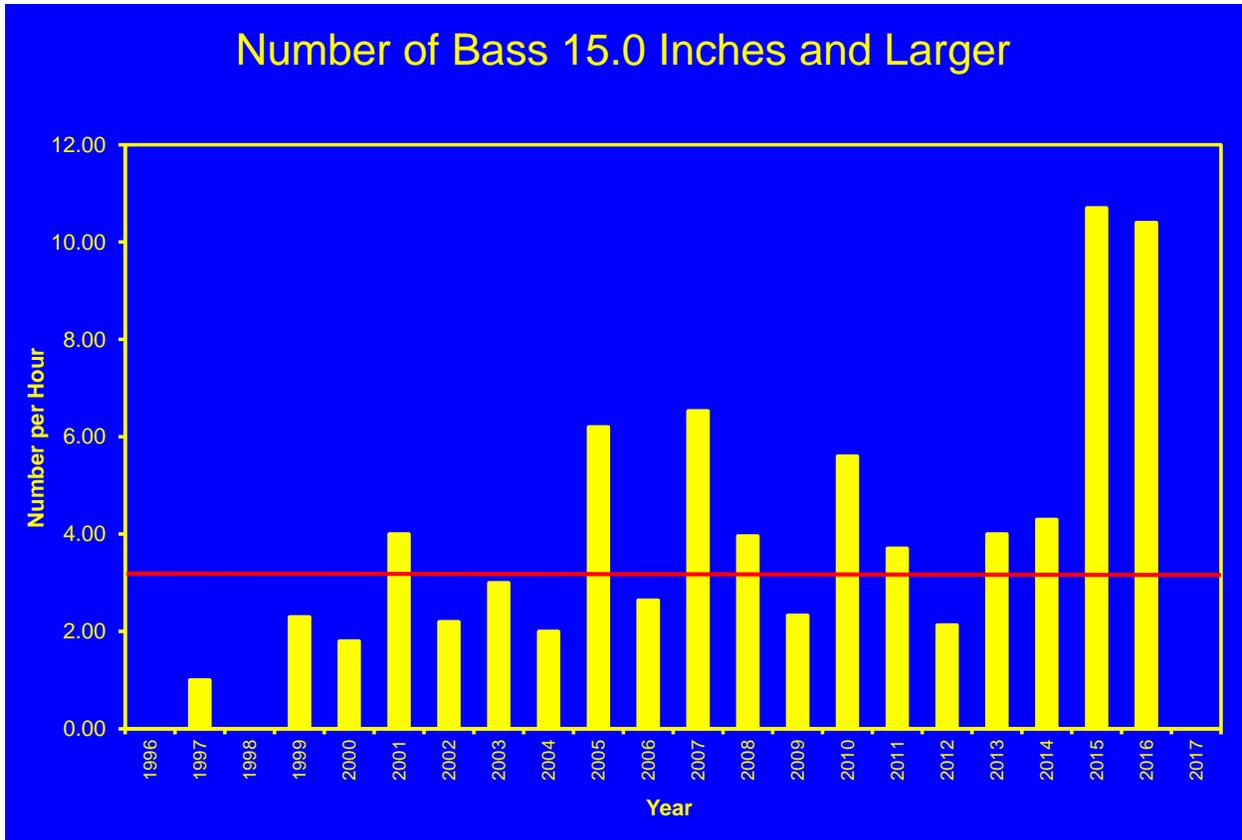
### Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass averaged 22.2 fish/hr from 1988 - 2002, which gave Paintsville Lake a fair rating when compared to other lakes its size. The protective slot limit was imposed in 2002. From 2003 to 2016, the catch rate of 12.0-14.9 inch largemouth bass averaged only 14.3 fish per hour and is considered a “poor” catch rate. The slot limit imposed in 2002 should have improved fish numbers in this category by now. This statistic is important because these fish represent those that will be available for harvest in the next year or two. The declining trend indicates that increased competition for resources exists and is likely having an impact on this fishery, at least on these younger age classes of fish.



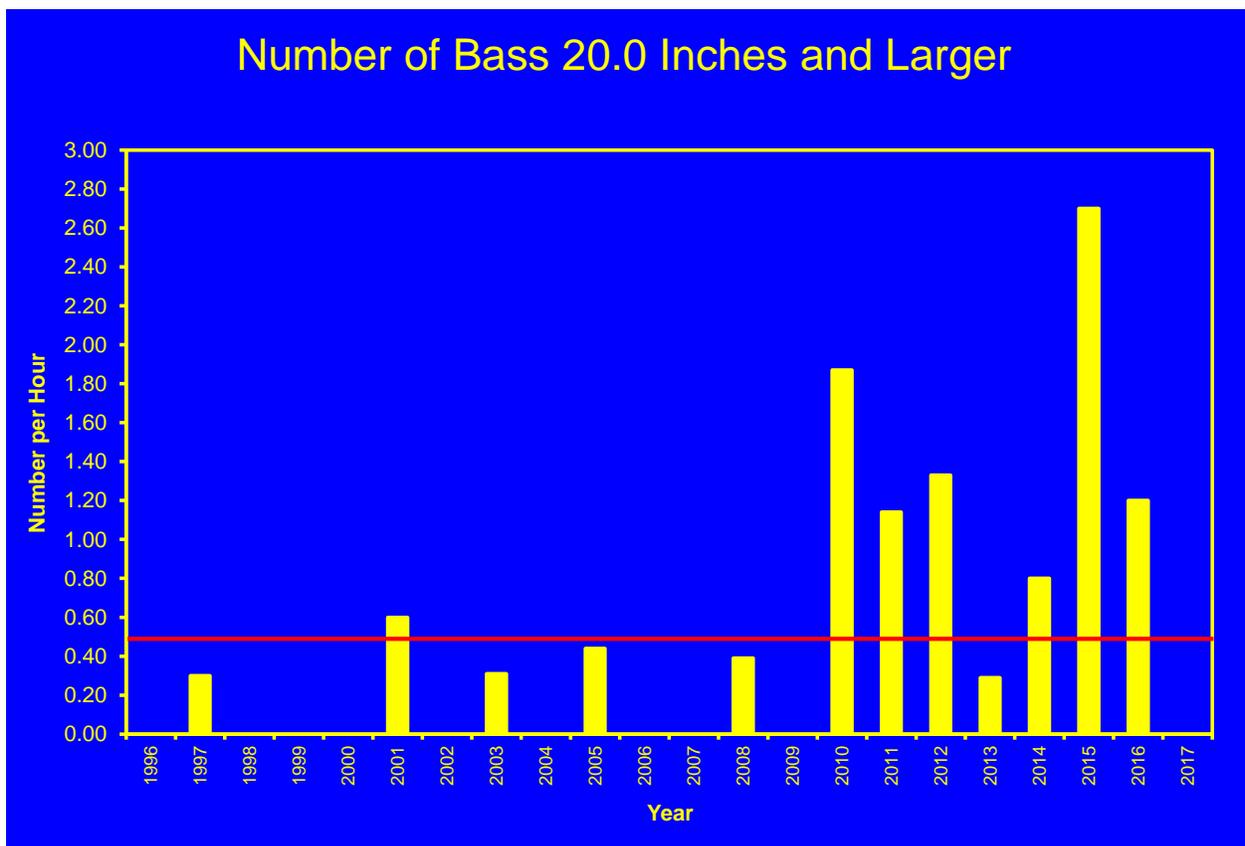
## Parameter 4 – Numbers of 15.0 inch and larger bass

The catch rate of 15.0 inch and larger largemouth bass at Paintsville Lake has averaged 3.3 fish/hour of electrofishing since 1988. Compared to other lakes, this is a poor catch rate for this size group. Since the slot limit was imposed in 2002, the number of available largemouth bass 15.0 inches or larger has shown little change until recently with the 2014 and 2015 catch rates going above 10 fish/hr receiving a “fair” rating.



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

The electrofishing catch of 20.0 inch and larger largemouth bass has averaged 0.5 fish per hour for Paintsville Lake since 1988. This catch rate gives the lake a good rating when compared to other lakes in its size range. From 2010-2016, biologists observed the highest catch rates in over 20 years for fish larger than 20.0 inches in Paintsville Lake with 2015 being a stand-out year at 2.7 (excellent). This parameter should be read with caution, however, because the difference of one fish either way can make the difference between a good and fair score. Although Paintsville Lake is not currently known as a quality largemouth bass lake, an increasing number of trophy fish are becoming available to anglers.



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

Overall, the largemouth bass fishery at Paintsville Lake has averaged a “fair” rating (10.0) over the past 14 years. The largemouth bass population at this lake has been very inconsistent. In 2000, the largemouth population rated “poor”, but by 2001 the score had improved to good only to drop to “fair” in each of the next three years. In 2005, the score had rebounded to 13 for a “good” score. This was the best largemouth bass assessment ever recorded for Paintsville Lake up to that point; however, the next year resulted in one of the lowest assessment values for the lake. The “poor” assessment score of 8 in 2009 is misleading due to a poor sample that year due to equipment failure. The last three years have shown a note-worthy improvement in overall score. Hopefully, this trend will continue. It is unclear at this time whether the protective slot limit is having the desired effect as the 12.0-14.9 inch size classes continue to show signs of competition for resources. The 12 – 15 inch slot limit is under examination and could eventually return to the statewide 12 inch minimum regulation.

