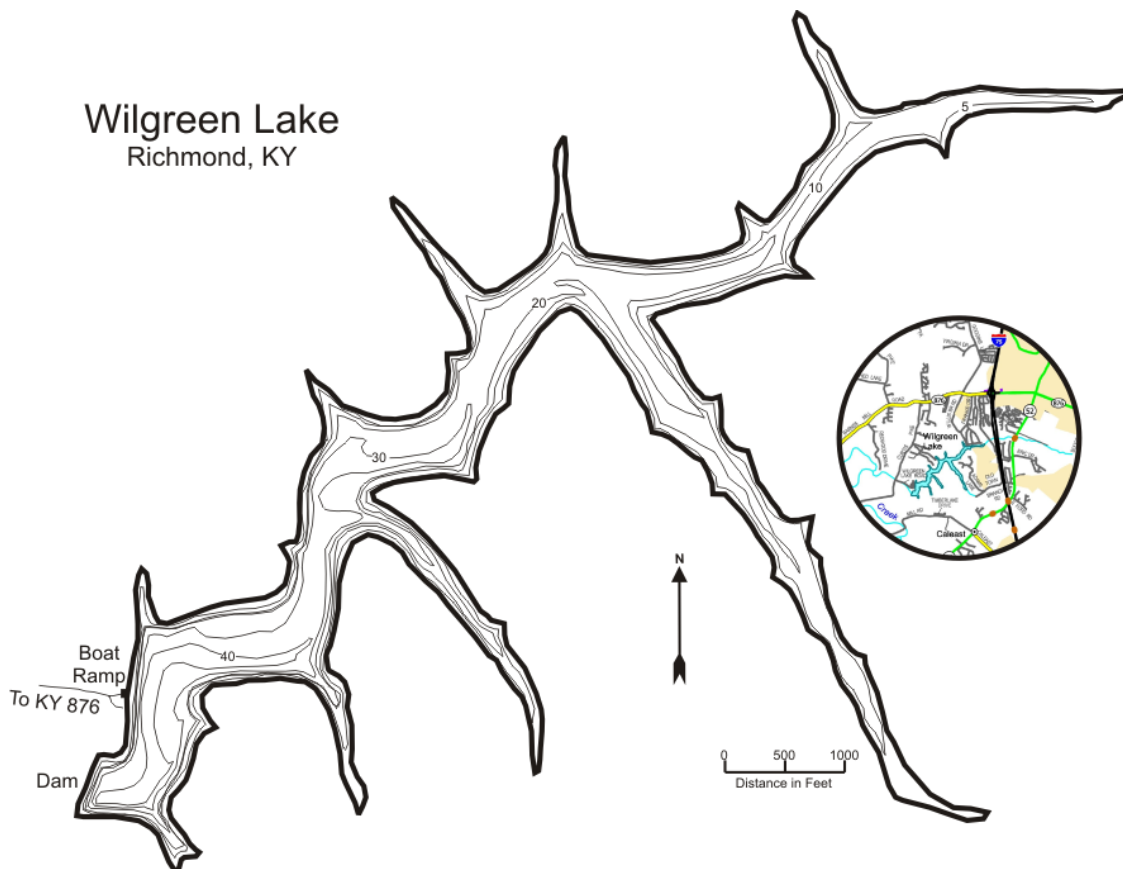


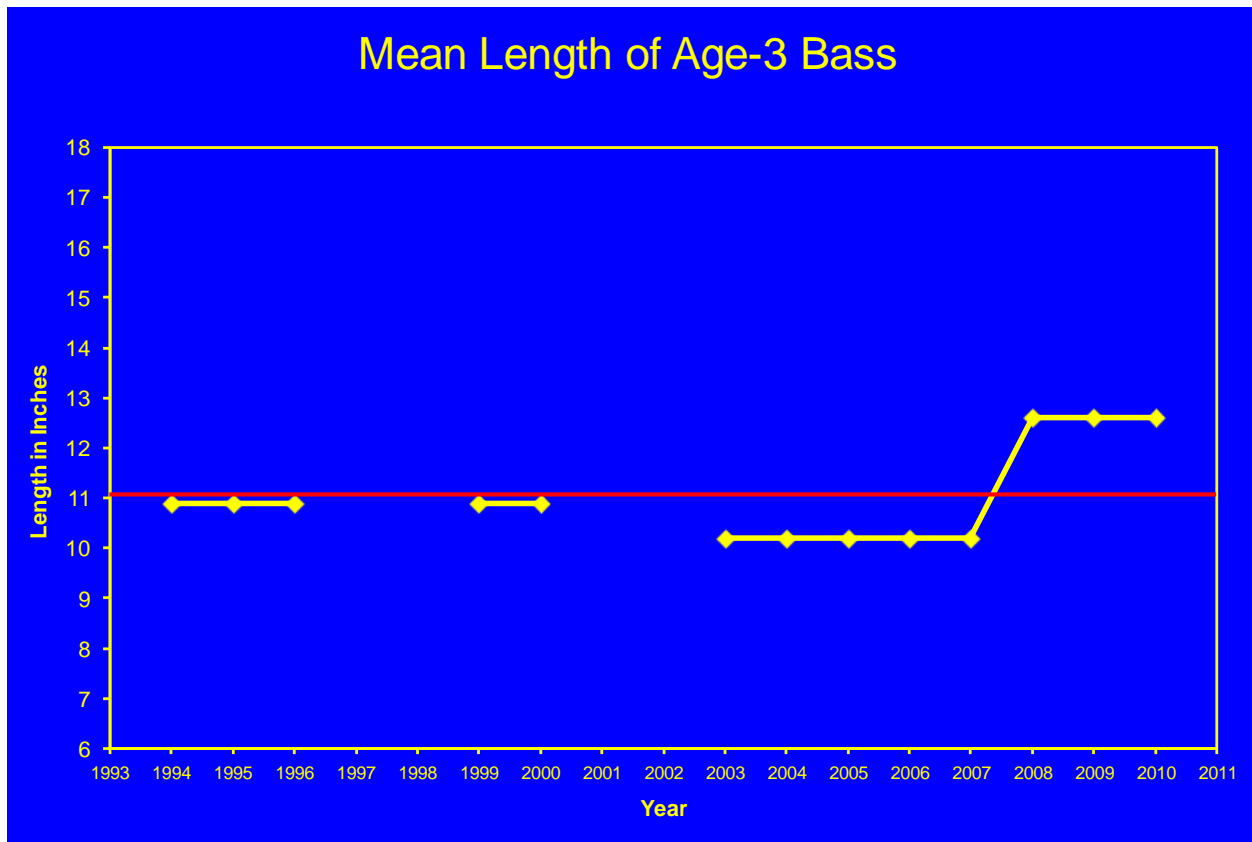
Wilgreen Lake Bass Assessment 2011

Wilgreen Lake (also called Taylor Fork Lake or Taylor Valley Lake) is a 169 acre reservoir located about 2 miles to the west of Richmond in Madison County. It was created in 1966 on Taylor Fork, a tributary to Silver Creek. The primary use of the drainage surrounding the lake is agriculture; however it is being encroached upon by urban development. It is a popular destination for anglers fishing for largemouth bass, channel catfish, sunfish species (namely bluegill and redear sunfish) and crappie. Please see "Understanding the Largemouth Bass Assessment" article for an explanation of how the assessment works. *Please note there are no specific regulations on Wilgreen Lake, it falls under the "Statewide Regulations" category of a minimum size limit of 12.0 inches and 6 fish daily creel limit for largemouth bass.*



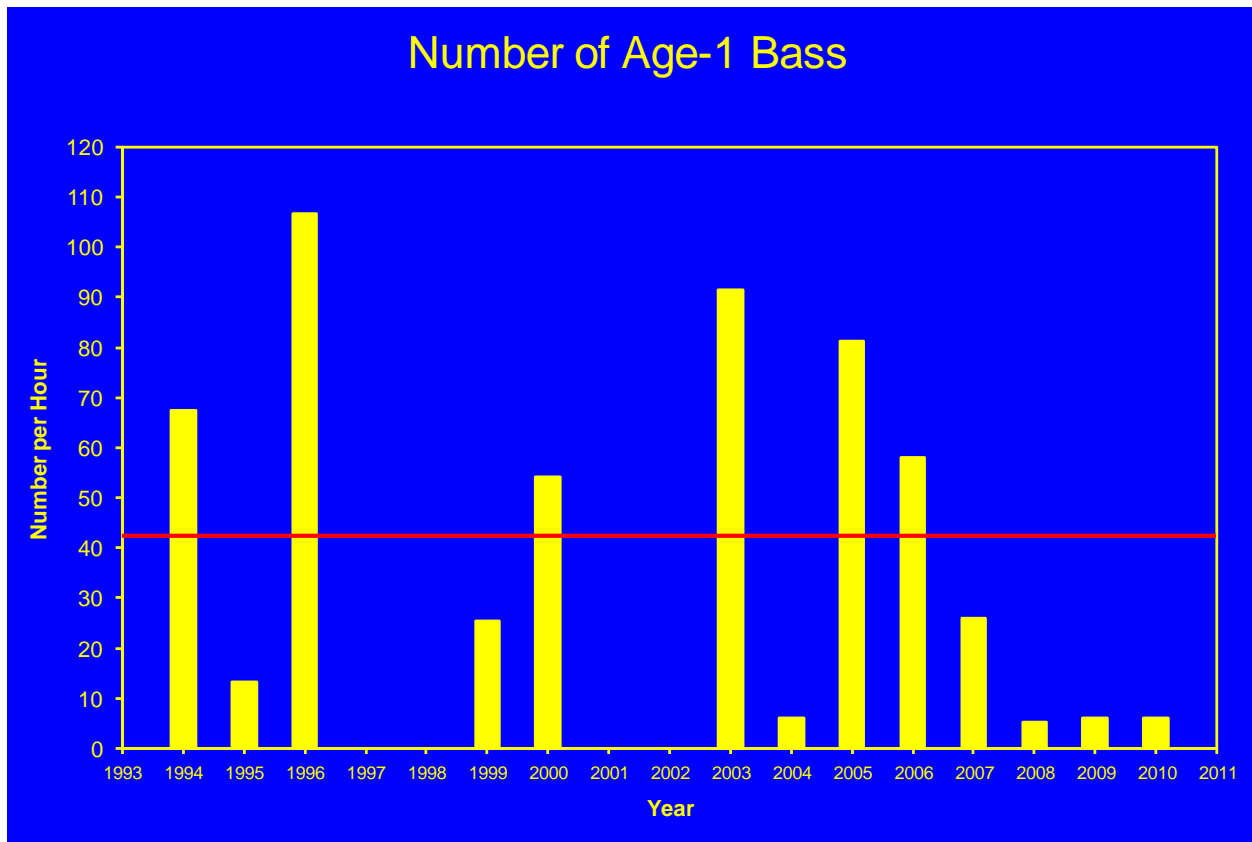
Parameter 1 – Length at age-3 (growth rate)

At Wilgreen Lake the length of bass at age 3 has averaged 11.0 inches since 1994, which is considered to be good when compared to other lakes of its size in Kentucky. After holding steady at 10.2 inches from 2003 to 2007, the length of age 3 fish jumped to 12.8 inches in 2008 which is considered to be excellent. Growth rates are generally related to factors such as population density, food resources and weather patterns. The last year that KDFWR aged largemouth bass at the lake was 2008.



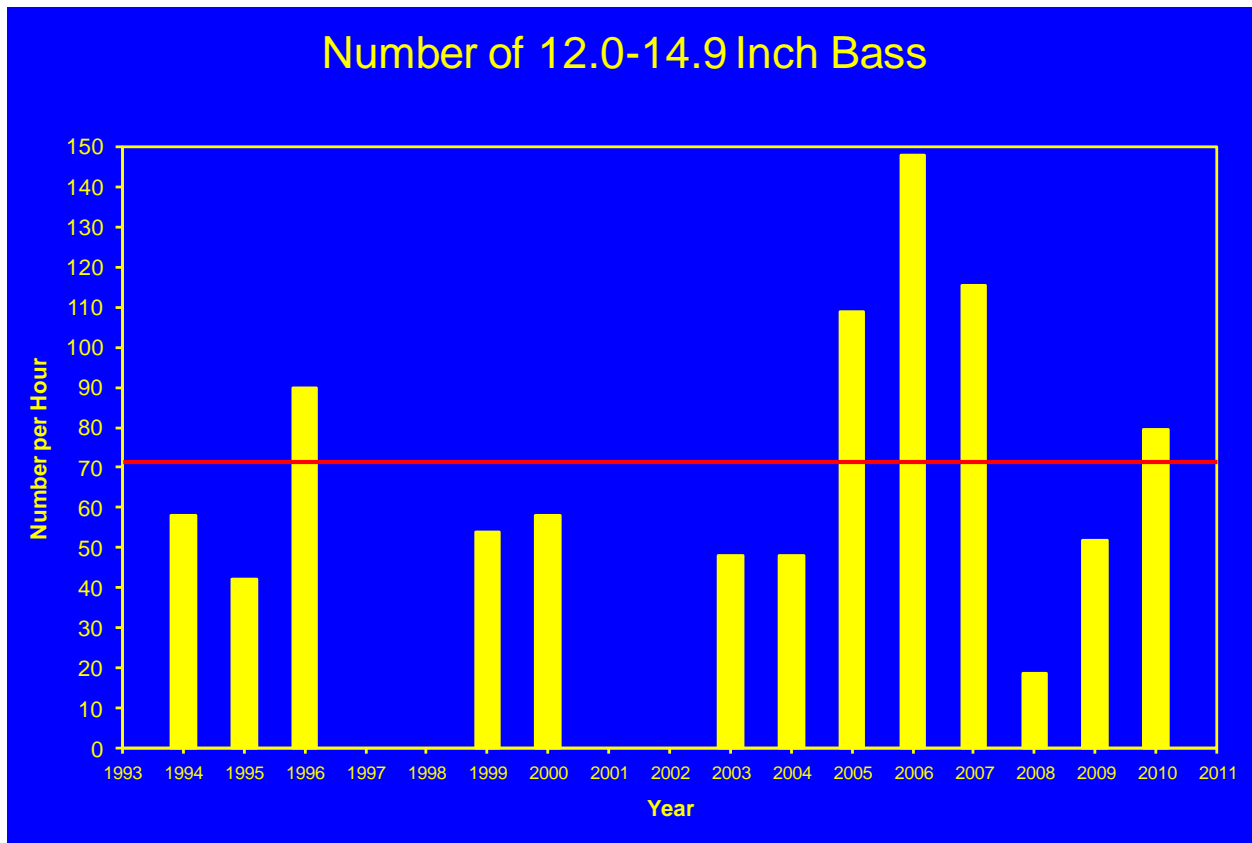
Parameter 2 – Numbers of age-1 bass (how good the spawn was)

KDFWR looks at the 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 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. In Wilgreen Lake, the catch of age-1 bass has averaged 42.10 fish captured per hour since 1994. This is fair for lakes of this size in Kentucky. Since 2007, these numbers have been below the 15 year average for the lake, and since 2008, these numbers have been in the poor range for lakes of this size. These low numbers are most likely related to competition of these young fish with the high numbers of gizzard shad within the lake. Both fish at smaller sizes will eat the same food source, and if the gizzard shad out-compete the largemouth bass, this will result in a lowering of the numbers of age-1 largemouth bass.



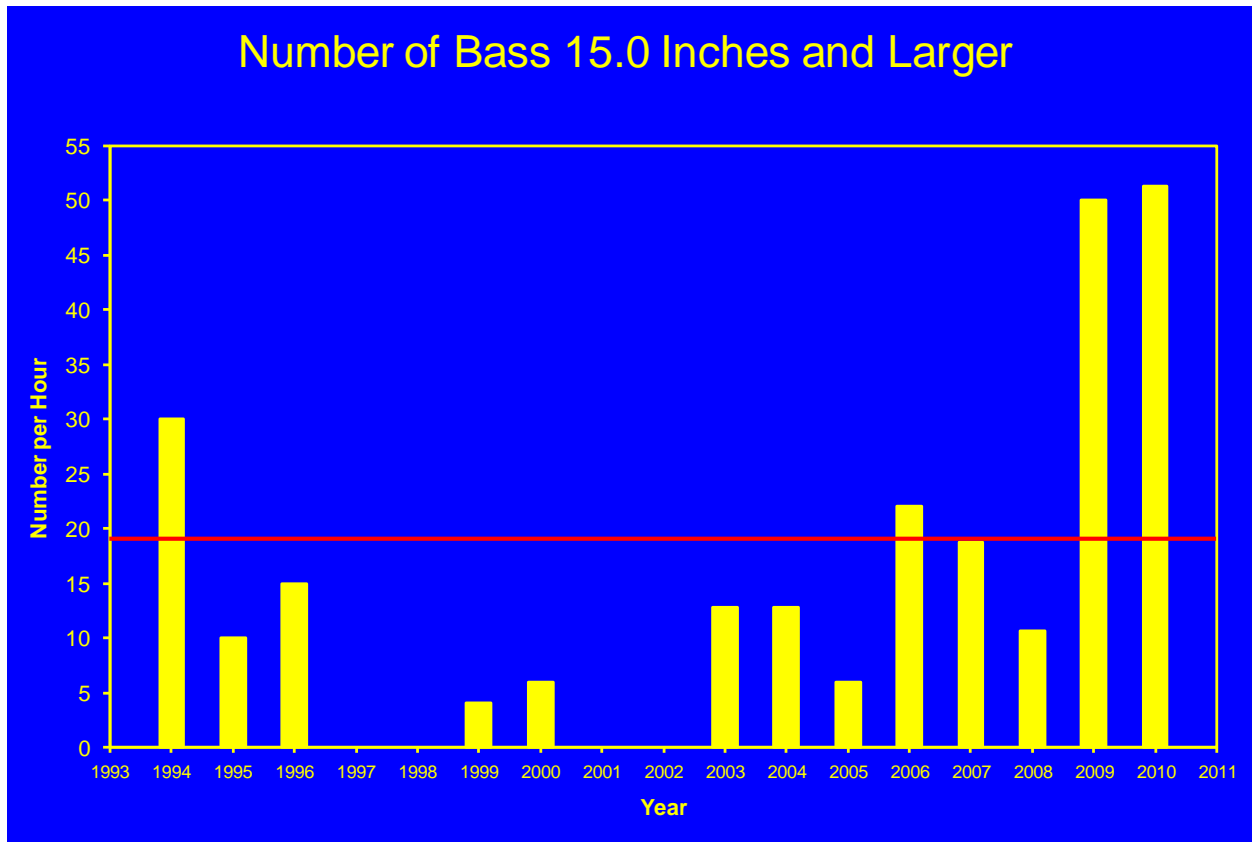
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch of 12.0-14.9 inch largemouth bass has averaged 70.80 fish/hour since 1994; this is considered to be excellent for lakes of this size. From 2005 to 2007, these numbers were well above average and this was probably related to the excellent spawns of 2003 and 2005. There was plenty of forage available for fish to reach this size quickly. In 2008 and 2009, these numbers dropped below the average. This could have been attributed to drought conditions or competition with gizzard shad. In 2010, these numbers rebounded to a level above the mean, and could be due to the fact that some of the fish within this size class began to prey on the abundance of gizzard shad which would increase numbers within this size category of fish.



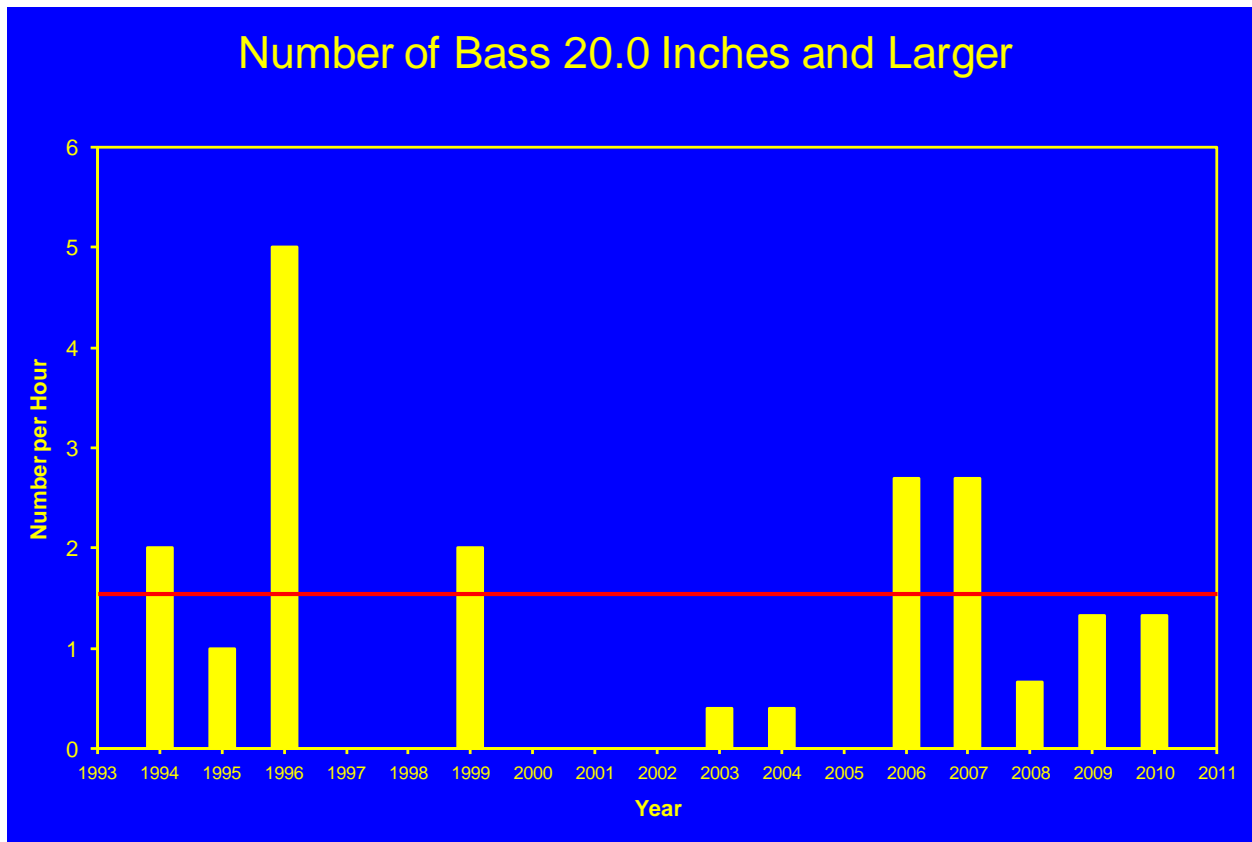
Parameter 4 – Numbers of 15.0 inch and larger bass

The electrofishing catch rate of 15.0 inch and larger largemouth bass has averaged 19.20 fish/hour since 1994 which is considered to be good for lakes of this size. In 2009 and 2010, this number jumped considerably to 50+ fish/hour which is excellent, and a reflection of the high numbers of 12.0-15.0 inch fish that were present from 2005 to 2007. Numbers of 15.0 inch and larger bass may decrease in the coming years due to the low number of 12.0-15.0 inch bass from 2008-2009.



Parameter 5 – Numbers of 20.0 inch and larger bass

The electrofishing catch rate of 20.0 inch and larger largemouth bass has averaged 1.50 fish captured per hour since 1994, which is fair for lakes of this size. Since 2006, we have sampled between 1.00 and 4.00 fish greater than 20.0 inches per hour meaning that there should be a fair chance to catch a 20.0 plus inch fish from this lake. In the next couple of years these chances should be similar, but once the lower numbers of 12.0-15.0 inch fish reach this size, these numbers could drop.



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

Overall, when compared to other lakes in Kentucky, the largemouth bass fishery at Wilgreen Lake has averaged a good score. In 1994 and 1996, the lake was rated as excellent and only one year dropped below good (2008). Overall, the lake is in a precarious situation with the introduction of gizzard shad. This introduction could lead to a detrimental effect on the sport fish in the lake, especially bluegill.

