Taylorsville Lake Bass Assessment 2019

Taylorsville Lake is a 3,050-acre multipurpose reservoir on the Salt River and was impounded in the early 1980’s. The lake has a very popular bass fishery due to its close proximity to Louisville and Lexington. Past creel surveys have shown there is substantial fishing pressure for largemouth bass at Taylorsville Lake. The following graphs show trends and rankings for each of the five population parameters used in the largemouth bass assessment. There was no spring sample collected in 2011 at Taylorsville Lake due to prolonged flood conditions. Biologists sampled and assessed the lake in 2019 and will continue on a yearly basis, when conditions allow. Taylorsville Lake assessments range over a period of twenty 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.
Parameter 1 – Length at age-3 (growth rate)

At Taylorsville Lake, the length of an age-3 largemouth bass has averaged over 12 inches since impoundment and is represented by the red line. On average, largemouth bass exhibit very good growth at Taylorsville Lake. Growth rate can be variable and is related to factors such as population dynamics, food resources, and weather patterns. The last year that KDFWR aged largemouth bass at the lake was 2018. Growth during 2018 was ranked as being excellent. KDFWR biologists are planning to re-evaluate the growth rates of largemouth bass at Taylorsville Lake during the 2022 fall sampling efforts.
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 age-1 bass produced represents how good the fishing will be once these fish grow large enough for anglers to catch. At Taylorsville, age-1 largemouth bass catch rates have averaged slightly over 20 bass/hr of electrofishing as indicated by the red line, and overall, is ranked as being fair compared to other lakes of similar size. Poor recruitment has been a historic problem at Taylorsville Lake and has been buffered by supplemental stocking of largemouth bass over the years. In 2019, the spring catch of age-1 largemouth bass (2018 spawn) increased to 42.8 bass/hr which is significantly higher than the lake’s average. Biologists will continue to monitor this parameter to see how it affects bass populations in the future.
Parameter 3 – Numbers of 12.0-14.9 inch bass

The electrofishing catch rate of 12.0- to 14.9-inch largemouth bass has averaged around 35 bass/hr over the years as indicated by the red line. As compared to other lakes, this is a good catch rate for this size group of largemouth bass. KDFWR biologists have recorded very good catch rates of this size group at Taylorsville Lake over the last several years. This is important because above average number of fish will grow to exceed the 15.0-inch legal size limit at the lake in the upcoming years. Fishing at the lake is expected to remain stable or improve slightly over the next several years due to the good numbers of 12.0- to 14.9-inch fish observed recently.
Parameter 4 – Numbers of 15.0 inch and larger bass

Electrofishing catch rate of 15.0-inch and larger largemouth bass has averaged slightly less than 20 fish/hr as indicated by the red line. Again, as compared to other lakes, this is a very good catch rate for this size group. In 2019, biologists observed an average catch rate of largemouth bass in this size group, but the three years prior to 2019 were the highest in the history of Taylorsville Lake. This should translate into a stable largemouth bass fishery at Taylorsville Lake over the next couple of years.
Parameter 5 – Numbers of 20.0 inch and larger bass

The electrofishing catch of 20.0-inch and larger largemouth bass has averaged 0.3 bass/hr over the history of Taylorsville Lake as indicated by the red line. As compared to other lakes, this is a poor catch rate for this size group. On a positive note, five of the last eight years showed above-average numbers of bass 20.0 inches and over.
Overall – Total Assessment Score (All five parameters added together)

Overall, the largemouth bass fishery at Taylorsville Lake has rated “Good” over its history as indicated by the red line. The largemouth bass population at Taylorsville Lake has been very cyclic, ranging from poor to excellent. In 2019, the overall assessment rating for the largemouth bass population at Taylorsville Lake was excellent. Furthermore, KDFWR biologists believe the next couple of years look very promising for the largemouth bass fishery at Taylorsville Lake.