

Silver Lake Centrarchid Survey (Survey #918102) Justin Brewer, Region 9 Fisheries

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Region 9 fisheries conducted a spring electrofishing survey of Silver Lake, Wyoming County to evaluate the black bass and sunfish populations. This eutrophic lake (836 acres) with a mean depth of 24 feet and a maximum depth of 37 feet supports a popular year-round warmwater recreational fishery. Silver Lake was last surveyed in 2009 and exhibited moderately abundant largemouth and sunfish populations. A total of 16 sites were electrofished on the nights of May 29th, 30th, and 31st, these sites encompassed basically the entire shoreline of Silver Lake to include all various habitat types.

In 2018, a total of 1,089 fish were collected in 5.33 hours of electrofishing. Preliminary results indicate that the largemouth bass population is healthy and stable. The largemouth bass catch rate from this years' survey (9/hour) was significantly lower than the 2009 catch rate (60/hour, highest catch rate in the last 30 years), but similar to the long-term average for Silver Lake. It is probable that this decreased catch rate is mostly the result of a difference in water temperature during sampling in 2009 and 2018, making a percentage of the black bass population less vulnerable to electrofishing. Although age data has not been analyzed, several year classes were collected including numerous fish in the 3 to 4lb class, with some fish reaching 20 inches and weighing over 5lbs. Smallmouth bass are also doing well and several quality fish up to 4lbs. were collected. Although the smallmouth bass catch rate (5/hour) indicates a low to moderate abundance, which is normal for Silver Lake, the size structure of the population should support quality fishing for anglers targeting smallmouth bass. Northern pike were not a target of the survey, but several quality fish were caught, including some fish over 34 inches. Walleyes were also collected (length range 11 -24.5 inches) but were not the target species of this survey because they are generally less vulnerable to electrofishing gear during the late spring. As a result, spring catch rates for walleye are misrepresentative of the actual population.

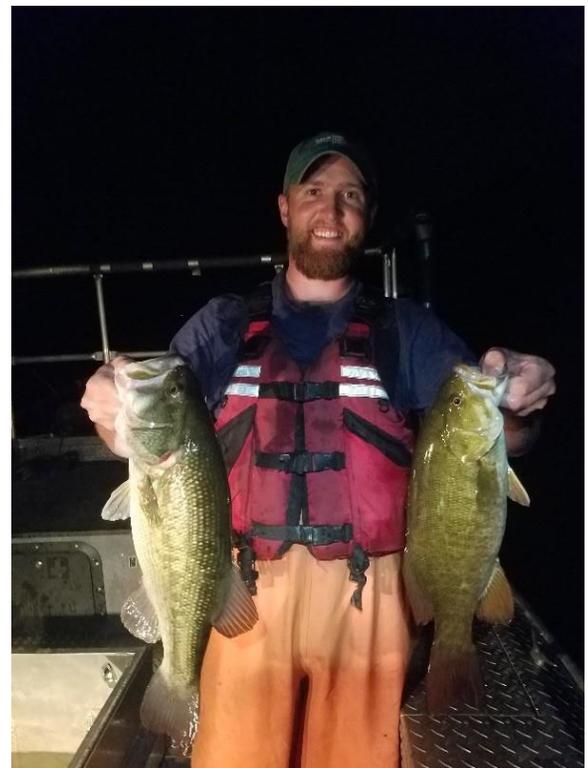


Figure 1. Quality largemouth and smallmouth bass from the 2018 Silver Lake spring electrofishing survey.

Yellow perch were by far the most abundant species collected (456/hour). Despite a decreasing catch rate from the 2009 survey (681/hour), this catch rate is indicative of an extremely abundant population. The lake isn't known for trophy yellow perch due to high abundance, but a large percentage of the yellow perch collected were over 7 inches with a good number of fish over 8 inches. It appears that

there are one or two very large year classes of yellow perch supporting most of the catchable yellow perch population, which should continue to provide quality fishing. A moderate abundance of younger yellow perch indicates that another strong year class is likely present in the fishery. Pumpkinseed were the second most abundant panfish collected (104/hour) and exhibit good growth rates. Pumpkinseed and bluegill catch rates have decreased slightly since the 2009 survey but both are still abundant and contribute to a popular recreational fishery. Black crappie and rock bass were also found in good numbers and the size structure is favorable, containing plenty of catchable size bluegill over 7 inches and healthy numbers of legal-size (>9 inch) black crappies. Overall, the bass and sunfish populations and the forage base in Silver Lake appear to be doing well and should provide quality angling in 2018.