

Laurel Run Reservoir

Elk County

May 2021 Night Electrofishing Black Bass Survey



Aerial photo of Laurel Run Reservoir, courtesy of google earth.

Laurel Run Reservoir is a 100-acre, two-story, infertile (10 ppm alkalinity) lake located approximately 3 miles west of Saint Mary's, PA. The two-story characterization means that the lake sustains thermal habitats that support both coldwater and warmwater fish species and fishing opportunities year-round apart from the season closure noted below. The impoundment is owned by Saint Mary's Water Authority and all recreational fishing opportunities are managed by the Pennsylvania Fish and Boat Commission (PFBC). Boating is not permitted at the lake; therefore, anglers must fish along the shoreline and dam breast. The lake's coldwater and warmwater/coolwater fish populations are managed under [Statewide Regulations for Commonwealth Inland Waters](#). The lake receives annual spring stockings and a fall stocking of adult Brook Trout and Brown Trout that provides extended fishing opportunities throughout the year. Anglers should also be aware the lake

is not open to year-round fishing and does have a closed season. Please consult our PFBC Summary Booklet in reference to [Stocked Trout Waters](#) for more information.

Laurel Run Reservoir is a popular trout fishing destination that provides anglers with outstanding opportunities to catch and harvest a variety of stocked trout species. However, some anglers may not be aware that the lake also contains a high-quality bass population and modest panfish populations. Largemouth Bass have always been a part of the Laurel Run Reservoir fish community. Stockings of fingerling Smallmouth Bass were first initiated back in 1992 after staff determined that habitat conditions favored Smallmouth Bass more than Largemouth Bass. Since that time, the Smallmouth Bass population has seen both increases in total numbers and quality sized individuals and is now maintained entirely through natural reproduction. The Largemouth Bass population has remained consistent over the years, albeit at lower density than the Smallmouth Bass population.

During the night of May 10, 2021, staff from Fisheries Management Area 2 along with the assistance of Elk County Waterways Conservation Officer (WCO) Tom McMann and Elk County Conservation District Resource Conservation Technician Taylor Gillette, sampled and evaluated the black bass population. Prior to the 2021 assessment, the lake had not been surveyed since 1998. The entire shoreline was electrofished in three runs for a total of 1.33 hours of effort. Captured fish were measured for total length and released. The relative abundance of black bass was determined using catch per hour of electrofishing effort. Scales were retained from both Largemouth Bass and Smallmouth Bass for age and growth analysis.

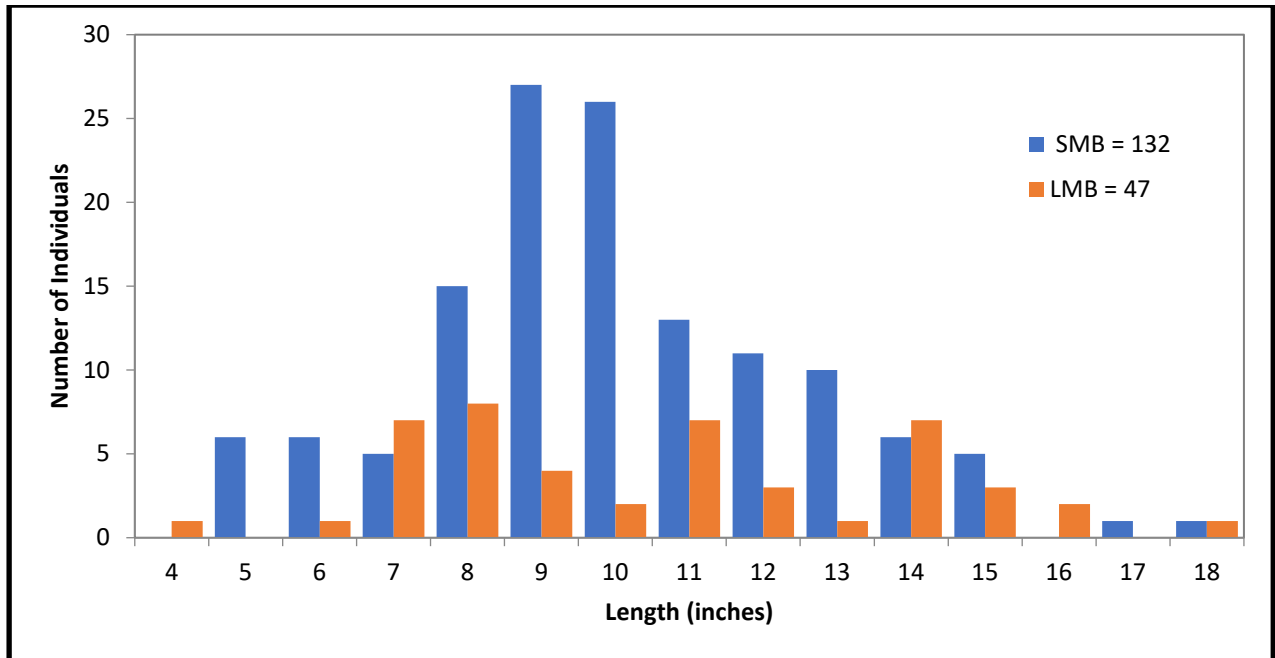


Photo 1. WCO Tom McMann and Taylor Gillette from the Elk County Conservation District with two nice size Largemouth Bass captured during night electrofishing at Laurel Run Reservoir.

Smallmouth Bass were the most frequently caught black bass species and greatly outnumbered Largemouth Bass by nearly a 3 to 1 ratio. During our assessment in 2021, we captured a total of 179 bass of which 132 were Smallmouth Bass and 47 were Largemouth Bass. Bass ranged in size from 4 to 18 inches in total length (Figure 1). Two of our largest bass captured were an 18.1 inch, 2.8-pound Smallmouth Bass and an 18.4 inch, 4.3-pound Largemouth Bass (see Photos 1 & 2). Both species exhibited similar size structure (Figure 1).

The combined catch rate for both bass species was 134 fish/hr for each species we collected 99 Smallmouth Bass/hr and 35 Largemouth Bass/hr (Figure 2). Both Smallmouth Bass and Largemouth Bass catch rates saw slight increases over the previous survey in 1998. The catch rates for Smallmouth Bass ≥ 12 inches (25.5 fish/hr) and for Smallmouth Bass ≥ 15 inches (5.3 fish/hr) exceeded the 1998 catch rates. For Largemouth Bass ≥ 12 inches the catch rate was 12.8 fish/hr and Largemouth Bass ≥ 15 inches was 4.5 fish/hr, which were much lower than the 1998 catch rates. Overall, abundance and catch rates of bass were comparable to other two-story trout stocked impoundments with low alkalinity levels (<10 ppm) that are similar in size and depth.

Figure 1: Length frequency distribution of Black Bass collected in Laurel Run Reservoir on the night of May 10, 2021.



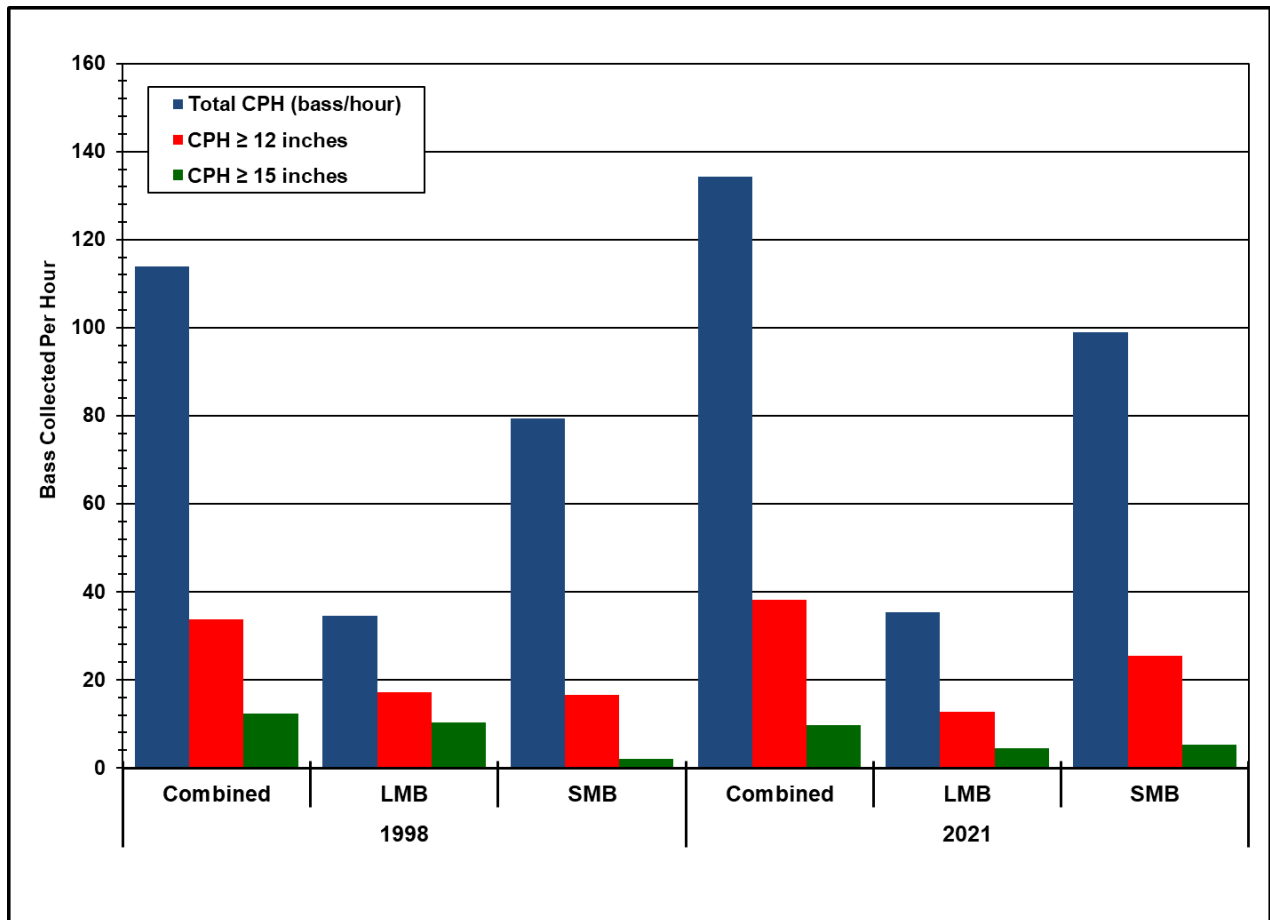


Figure 2. Catch rates of Black Bass collected in Laurel Run Reservoir in 1998 and 2021.



Photo 2. Elk County WCO Tom McMann with a Largemouth Bass at 18.4 inches that weighed 4.3 pounds captured during night electrofishing at Laurel Run Reservoir.

Anglers seeking Largemouth Bass will find them present throughout much of the lake, but they are particularly abundant in areas containing aquatic vegetation on the northern shorelines. Conversely, Smallmouth Bass tend to congregate in slightly deeper water along the steeper, rockier “rip rap” areas on the southern shore and the dam breast.

Also noteworthy is an abundant panfish population which is comprised primarily of Bluegill and Pumpkinseed that were observed during our electrofishing survey. Both species were present in good numbers with decent size structure.



Photo 2. Nice size Bluegill observed during our night electrofishing survey at Laurel Run Reservoir.

In summary, Laurel Run Reservoir's bass population is sustained through natural reproduction and offers anglers great opportunity to capture Smallmouth Bass and Largemouth Bass. Panfish are also present in good numbers with adequate quality sized individuals, based upon our cursory observations while collecting black bass. The lake continues to provide year-round fishing opportunities for adult stocked trout.

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