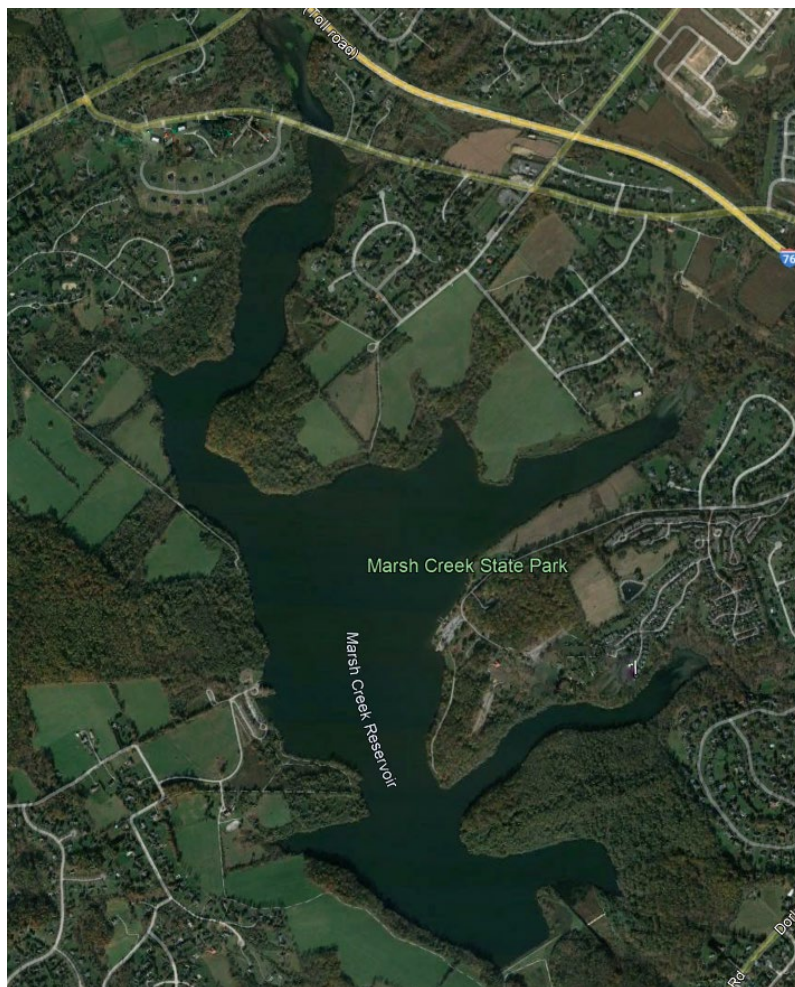


Marsh Creek Lake

Chester County

2022 Largemouth Bass Survey

Marsh Creek Lake is a 535 acre reservoir located approximately four miles north of Downingtown in Marsh Creek State Park, Chester County. Marsh Creek Lake supports several warmwater and coolwater species, including Largemouth Bass, Muskellunge, and panfishes. The Marsh Creek Lake black bass population is managed with [Big Bass Program Special Regulations](#), which has a minimum length limit of 15 in and a daily creel limit of 4 fish (Largemouth Bass and/or Smallmouth Bass). Marsh Creek Lake supports a very popular Largemouth Bass fishery.



Pennsylvania Fish and Boat Commission Biologist Report

Biologists from the Pennsylvania Fish and Boat Commission's (PFBC) Area 6 fisheries management office conducted a nighttime electrofishing survey of the Marsh Creek Lake Largemouth Bass population during May 24-25, 2022. Twelve sites of approximately 300 – 400 m in length were randomly selected and 10 minutes of electrofishing time was conducted at each site, totaling 2 hours of sampling effort. All Largemouth Bass captured were weighed, measured, and released alive. A total of 115 Largemouth Bass were collected, ranging in length from 5 to 19 in (Figure 1) and weighing up to 3.9 lbs. One Smallmouth Bass measuring 9 in was also collected. Other fish species encountered included Black Crappie, Bluegill, Brown Bullhead, Common Carp, Golden Shiner, Green Sunfish, Northern Snakehead, Pumpkinseed, White Crappie, and Yellow Perch.

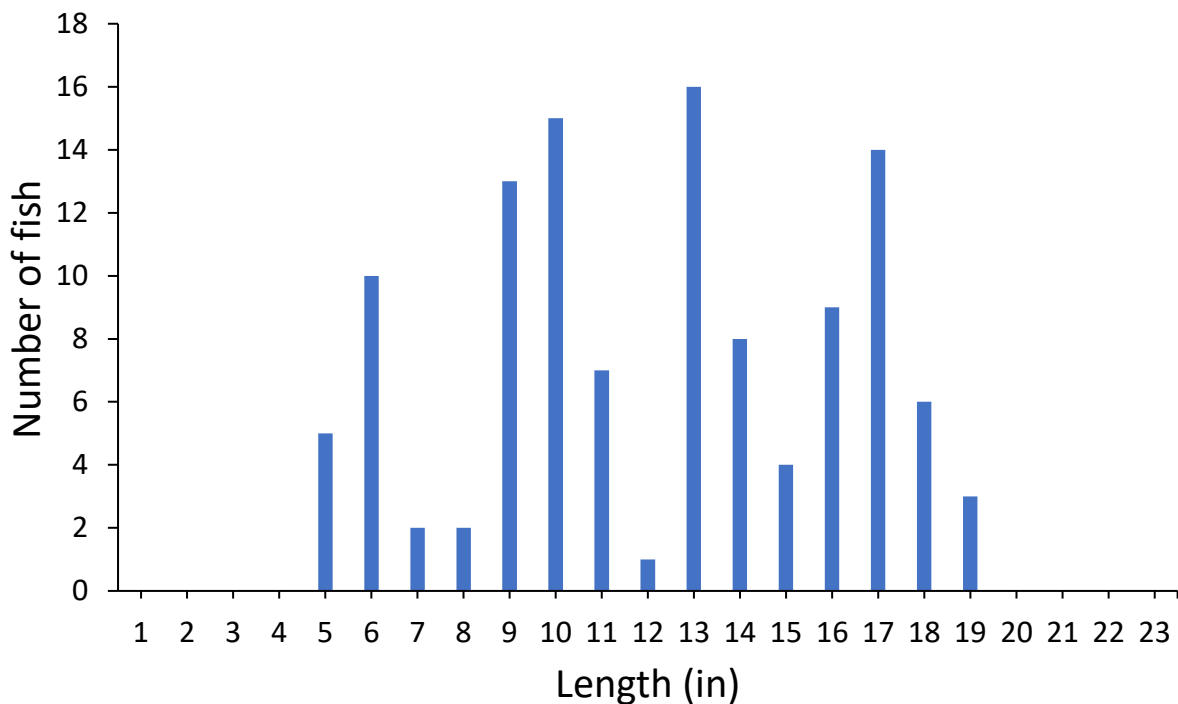


Figure 1. Length frequency distribution of Largemouth Bass collected at Marsh Creek Lake during May 24- 25, 2022.

The catch rates of Largemouth Bass (all sizes total catch 57.5 fish/hr, ≥ 12 in catch 31 fish/hr, and ≥ 15 in catch 18.5 fish/hr) all exceeded the Big Bass Program benchmarks in 2022 (Figure 2). The population of legal-sized Largemouth Bass (≥ 15 in) has increased substantially in Marsh Creek Lake since the late 1990's (Figure 3). The catch rate of Largemouth Bass ≥ 15 inches was 18.5 fish/hr in 2022, slightly higher than the 17.3 fish/hr observed in 2011. It appears the Big Bass Program, paired with a high rate of voluntary catch-and-release angling, has been effective in producing higher densities of large fish.

Pennsylvania Fish and Boat Commission Biologist Report

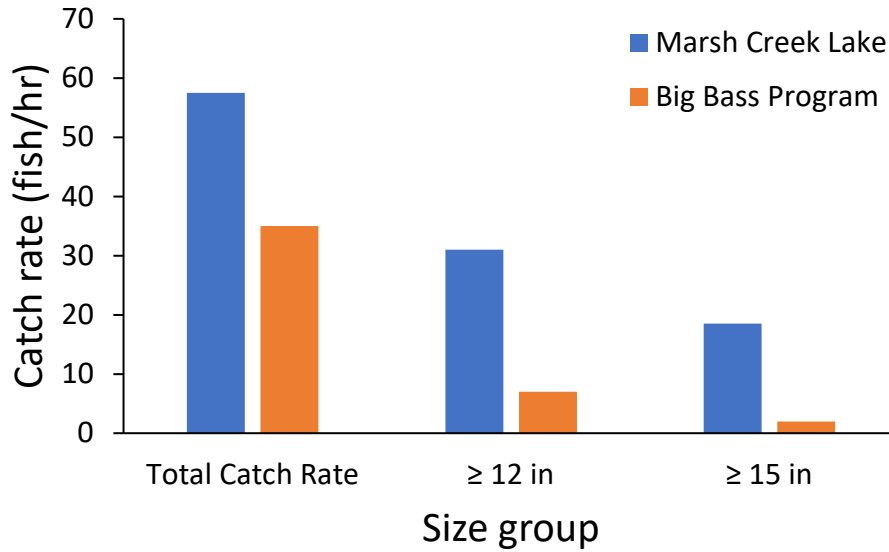


Figure 2. Catch rates of three size classes of Largemouth Bass collected from Marsh Creek Lake during May 2022 compared to statewide Big Bass Program benchmarks. The Big Bass Program catch rate benchmarks are 35, 7, and 2 fish/hr for total catch, catch \geq 12 in, and catch \geq 15 in, respectively.

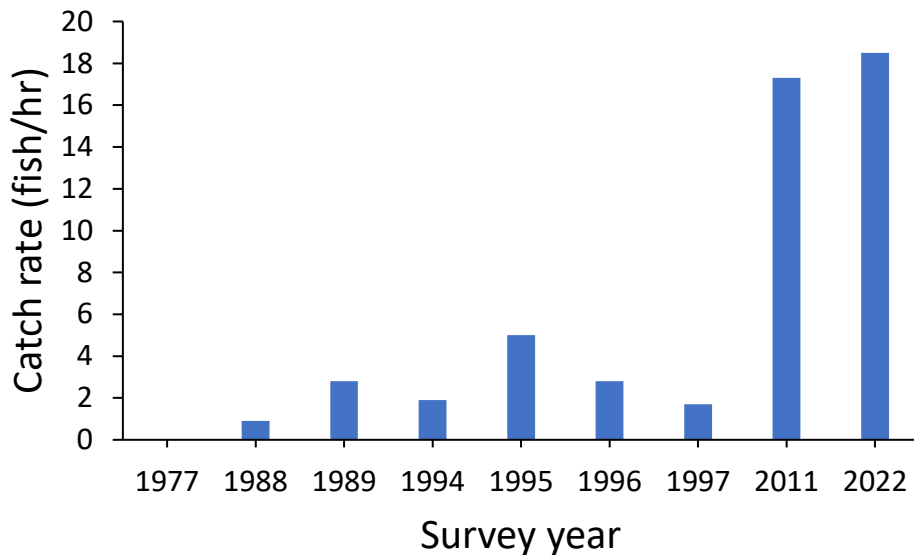


Figure 3. Catch rates of Largemouth Bass \geq 15 in from Marsh Creek Lake 1977-2022.

Notes: Minimum size limits for Largemouth Bass were as follows: 9 inches in 1977; 12 inches in 1988 and 1989; and 15 inches since 1991 (Big Bass Program). Average catch rates from 1977, 1988, and 1989 were from daytime boat electrofishing, while average catch rates from 1994, 1995, 1996, 1997, 2011 and 2022 were from nighttime boat electrofishing.

Pennsylvania Fish and Boat Commission Biologist Report

A population of Northern Snakehead, a non-native fish species, now exists in Marsh Creek Lake. Due to similarities in habitat preference and diet, Northern Snakeheads may compete with Largemouth Bass (and other fish species). Therefore, anglers that catch a Northern Snakehead are encouraged to harvest these fish to help keep this population stable, as it is unknown how this species may affect the Marsh Creek Lake fish community. If anglers choose to harvest a Northern Snakehead, they are reminded that it is unlawful to transport these fish from the lake alive, meaning they must be killed prior to leaving. Recommended techniques for killing Northern Snakeheads include decapitating, eviscerating, or filleting the fish. Simply throwing a Northern Snakehead on the shoreline is not a good method to kill these fish, because this species can breathe atmospheric oxygen outside of the water. Anglers choosing to not keep these fish may release them at the exact location that they were caught. Anglers are encouraged to [report](#) Northern Snakeheads that they catch to the PFBC.

Marsh Creek Lake has ample shoreline angling access, and two boat launches. Boaters are reminded that only electric motors are permitted on Marsh Creek Lake. Angling and boating are permitted at night, however only the west shore boat ramp should be used at night. View DCNR's [website](#) for the full range of other recreational activities offered at Marsh Creek State Park.

Area 6 Fisheries Management Staff

**Cooper Barshinger and Tyler Grabowski– Area 6 Fisheries Biologists,
and Mike Porta – Area 6 Fisheries Manager**