

Hopewell Lake

Berks County

2023 Warmwater Fishery Survey



A view of a trap net set in Hopewell Lake during October 2023.

Hopewell Lake is a 68-acre impoundment located within the French Creek State Park complex in Berks County and is owned by the Pennsylvania Department of Conservation and Natural Resources. Its sister lake, Scotts Run Lake, is located upstream and also offers fantastic fishing opportunities, including stocked trout. Management of Hopewell Lake includes [Big Bass regulations](#), which allows for the harvest of 4 Largemouth Bass ≥ 15 in during the statewide open season for black bass. All other species are managed

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under [Commonwealth Inland Regulations](#). Biologists from the Pennsylvania Boat and Commission’s Area 6 fisheries management office conducted a nighttime boat electrofishing survey and a trap net survey in 2023 to evaluate the warm-water fishery resources of Hopewell Lake. The nighttime boat electrofishing survey targeted the Largemouth Bass population in the lake while the trap net survey focused on panfish populations. Results from these surveys are presented below.

Staff conducted the nighttime boat electrofishing survey on June 6, 2023, sampling six, randomly-selected shoreline transects around the lake. Each site was approximately 300 – 400 m in length and 10 minutes of electrofishing effort occurred at each site. Due to the high density of the emergent vegetation around a large proportion of the lake, staff were limited to sampling the edge of the vegetation, which was sometimes deeper water than usually sampled using electrofishing. All Largemouth Bass and Chain Pickerel were netted during this survey. A total of 72 Largemouth Bass were collected, ranging in length from 4 to 16 inches (Figure 1).

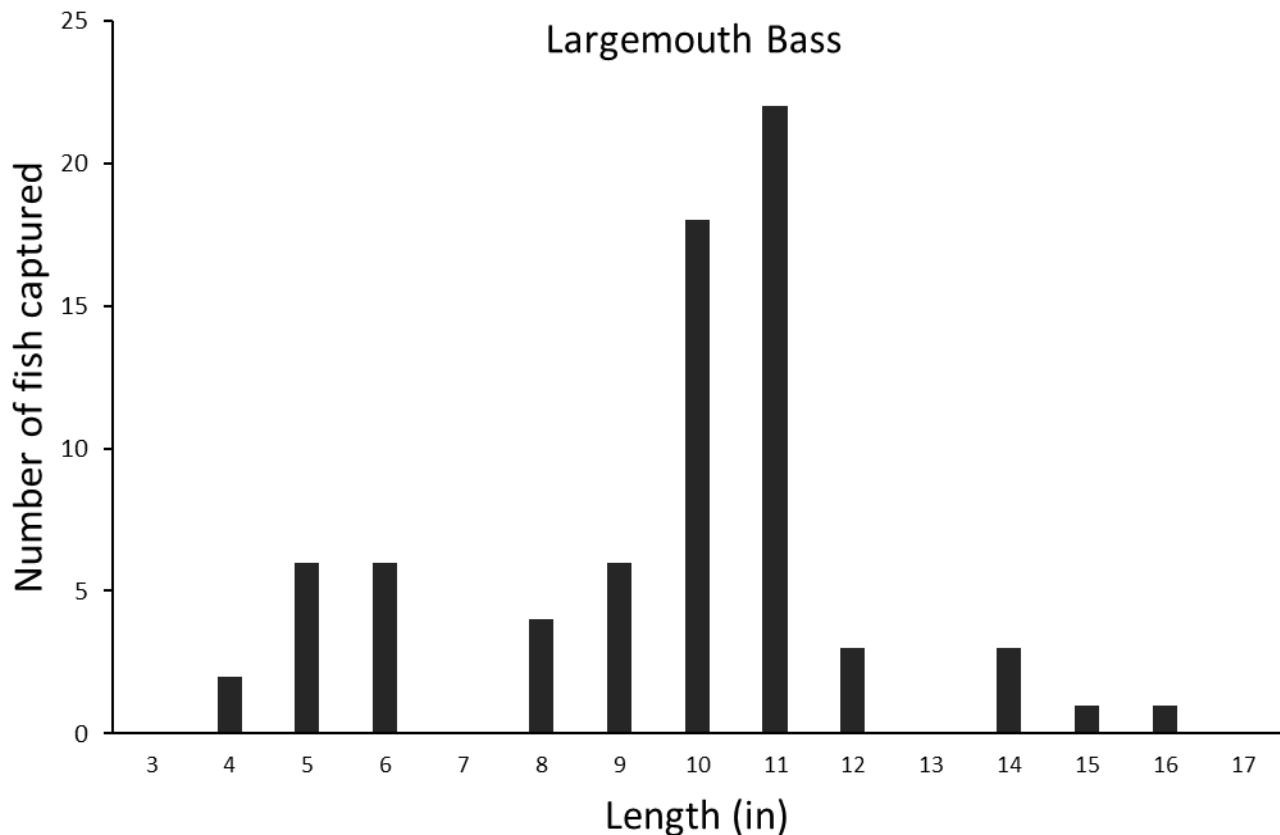


Figure 1. Length-frequency of Largemouth Bass captured during the June 6th, 2023, nighttime boat electrofishing survey at Hopewell Lake.

One 15-inch Chain Pickerel was also collected during this survey. The total catch rate of Largemouth Bass was 72 fish/hr, catch rate of Largemouth Bass ≥ 12 in was 8 fish/hr, and the catch rate of Largemouth Bass ≥ 15 in was 2 fish/hr. The total catch rate and catch rate of fish ≥ 12 inches exceed Big Bass program objectives. The catch rate of fish ≥ 15 inches met the program’s objective catch rate (Figure 2).

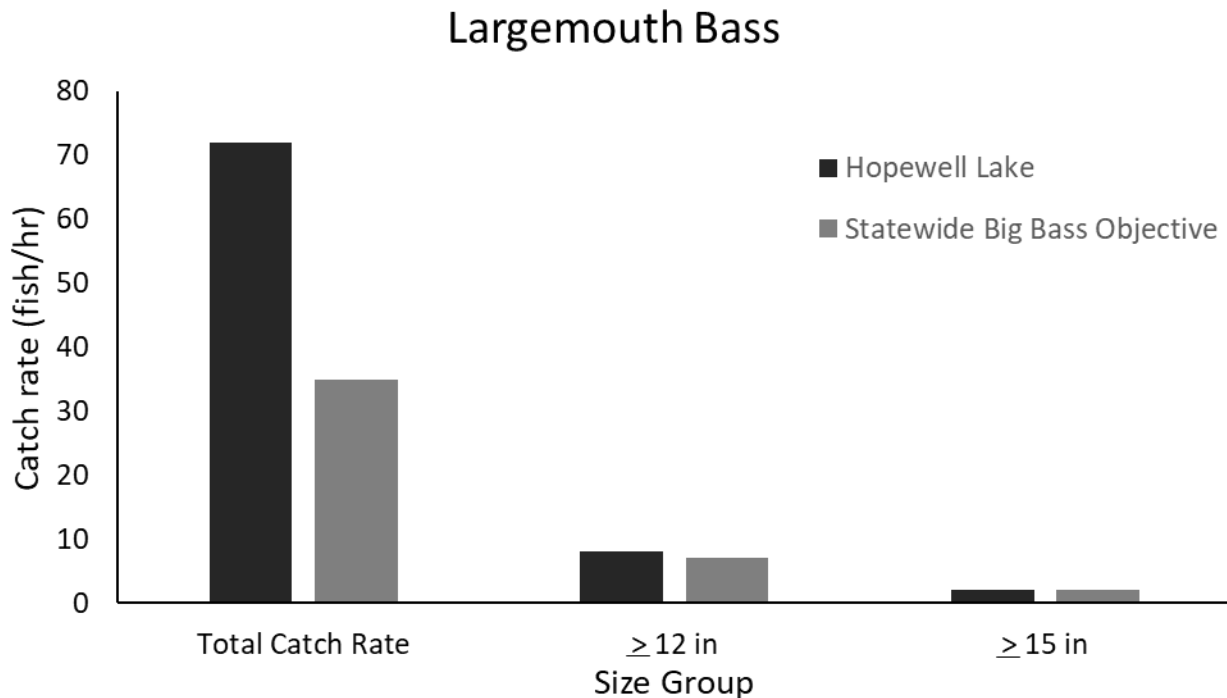


Figure 2. Catch rates of three size classes of Largemouth Bass collected from Hopewell Lake during June 2023 compared to statewide Big Bass Program objectives. The Big Bass Program catch rate objectives are 35, 7, and 2 fish/hr for total catch, catch ≥ 12 in, and catch ≥ 15 in, respectively.

Historical surveys from Hopewell Lake found a greater number of fish exceeding 15 inches, but a lower total catch rate, when compared to the 2023 survey. The disparity in results could be attributed to the establishment of dense emergent vegetation around much of the perimeter of the lake. Our ability to effectively capture some size classes of Largemouth Bass may have been hindered by the dense vegetation. Additionally, Largemouth Bass growth rates may be negatively affected by dense vegetation as foraging behaviors change (i.e., forage on invertebrates rather than transitioning to fish prey) and small fish are able to avoid predation, thereby increasing survival rates of small fish and resulting in a larger population. However, this is speculative and future surveys will continue to monitor this population to determine if management actions are needed. Nevertheless, anglers can expect to catch a fair number of intermediate-length (i.e., 10- 12 inch) Largemouth Bass.

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Area 6 staff conducted a fall trap net survey between October 16-18, 2023, on Hopewell Lake, deploying eight Pennsylvania style trap nets at historical sites around the perimeter of the lake. These nets were allowed to fish overnight for approximately 24 hours. Upon retrieval, most fish captured in the net were measured and released (Table 1). Those species not measured included Golden Shiner and Common Carp, which were counted and released.

Table 1. Length-frequency distribution or counts by species of fish encountered during the October 16-18, 2023 trap net survey at Hopewell Lake.

Length (in)	Species									
	Common Carp	Golden Shiner	Yellow Bullhead	Brown Bullhead	Chain Pickerel	Pumpkinseed	Bluegill	Largemouth Bass	Black Crappie	Yellow Perch
1	-	-	0	0	0	0	0	0	0	0
2	-	-	0	0	0	0	2	0	0	0
3	-	-	0	0	0	0	7	0	3	0
4	-	-	0	0	0	0	3	0	1	0
5	-	-	0	0	0	0	2	1	19	0
6	-	-	0	0	0	0	23	0	5	0
7	-	-	1	1	0	0	118	0	0	0
8	-	-	4	2	0	1	54	0	174	2
9	-	-	7	0	0	0	0	0	166	4
10	-	-	13	4	0	0	0	0	11	10
11	-	-	18	7	0	0	0	0	1	12
12	-	-	4	4	0	0	0	0	0	2
13	-	-	0	4	0	0	0	1	1	0
14	-	-	0	0	0	0	0	1	0	0
15	-	-	0	0	0	0	0	0	0	0
16	-	-	0	0	0	0	0	0	0	0
17	-	-	0	0	3	0	0	0	0	0
18	-	-	0	0	2	0	0	0	0	0
19	-	-	0	0	1	0	0	0	0	0
20	-	-	0	0	0	0	0	0	0	0
21	-	-	0	0	1	0	0	0	0	0
22	-	-	0	0	0	0	0	0	0	0
23	-	-	0	0	0	0	0	0	0	0
24	-	-	0	0	0	0	0	0	0	0
25	-	-	0	0	0	0	0	0	0	0
	1	23	47	26	7	1	209	3	383	30



Figure 1: Bluegill (top), Black Crappie (middle), and Yellow Perch (bottom) typical of those collected during the trap net survey at Hopewell Lake in October 2023.

Based on survey results, Hopewell Lake continues to produce a good number of quality-length sunfish with a fair number reaching preferred length. Of the 209 Bluegills captured, 93% were quality length (≥ 6 inches) while 26% were ≥ 8 inches, which is the preferred length. The Black Crappie population also appears to be adequate, as a substantial number of fish (93%) were ≥ 8 inches (quality length); however, only 3% of fish were of preferred length (10 inches). Finally, while not encountered in high abundance, a few preferred-length Yellow Perch (≥ 10 inches) were collected. Other species encountered but at lower numbers were Brown and Yellow bullheads, Chain Pickerel, and Pumpkinseeds.

Hopewell Lake offers anglers moderate Largemouth Bass fishing opportunities and high-quality panfishing opportunities, whether that be from a boat or the numerous shoreline access areas. Anglers and boaters are reminded that Hopewell Lake is restricted to unpowered boats and boats powered by electric motors

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only and the sole boat ramp is located on the southwest side of the lake. In addition to the fishing opportunities, the scenery around the lake, along with numerous aquatic and terrestrial species that can be seen while traversing the lake, can make for an enjoyable time on the water.

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