## North Park Lake

## Allegheny County

## April 2022 Trap Net and Night Electrofishing Survey

North Park Lake is a 75-acre impoundment located in suburban Allegheny County within the Allegheny County Parks System. The lake was drained in 2009 for a restoration project that included dredging of the lake and placement of fish habitat structures throughout the lake. In 2011, the lake was refilled, and the Pennsylvania Fish and Boat Commission began restocking the lake with warmwater species to reestablish the lake's fish populations. Bluegill and Largemouth Bass fingerlings were stocked in 2011 and Bluegill, Channel Catfish, Largemouth Bass, and White Crappie were stocked in 2012. Currently, only Channel Catfish yearlings are being stocked on an annual basis. Bass at North Park Lake are managed under the <u>Big Bass Program</u>. In addition to warmwater species, North Park Lake provides seasonal fishing opportunities for stocked trout as the lake is a <u>Stocked Trout Water Open to Year-Round Fishing</u>. <u>Commonwealth Inland Waters regulations</u> are used to manage all other fish populations in the lake.

Biologists from the Area 8 Fisheries Management Office in Somerset surveyed North Park Lake in April 2022 using trap nets and night electrofishing. The purpose of the survey was to evaluate the recovery of the warmwater gamefish and panfish populations eleven years after refilling and restocking the lake.

A total of 13 fish species were captured from nine trap net sets in 2022 (Table 1).

Species	Number caught	Size range (inches)	Comments
Black Crappie	166	3 - 15	5% ≥ 9 inches
Bluegill	154	2 - 6	0% ≥ 7 inches
Brook Trout - Hatchery	2	Not Measured	
Brown Bullhead	40	8 - 13	
Channel Catfish	17	3 - 26	59% ≥ 16 inches
Common Carp	12	Not Measured	
Gizzard Shad	187	Not Measured	
Largemouth Bass	2	11 - 13	
Pumpkinseed	3	3 - 4	
Rainbow Trout - Hatchery	12	Not Measured	
White Crappie	876	3 - 14	7% ≥ 9 inches
White Sucker	99	Not Measured	
Yellow Bullhead	7	7 - 11	

 Table 1. Number and size range of fish species captured from trap nets at North Park Lake in April 2022.

Crappies were the most abundant species captured with over 1,000 White Crappie and Black Crappie caught combined. The quality-sized crappie catch (fish  $\geq$  9 inches) in 2022 was 0.39 fish per hour and was higher than any other survey at North Park Lake (Figure 1). The statewide panfish guideline for a good quality crappie population is 0.25 crappie  $\geq$  9 inches per hour of trap netting. Crappies should provide good fishing opportunities for anglers.

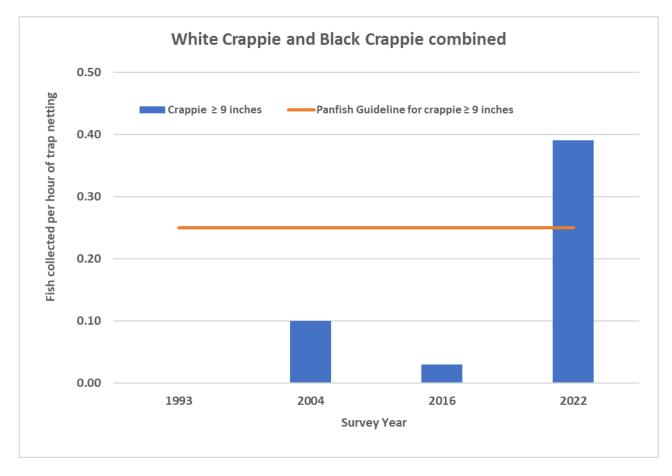


Figure 1. Trap net catch rate of crappie ≥ 9 inches in length from North Park Lake in 1993, 2004, 2016, and 2022.

The abundance of Bluegills in our 2022 trap nets was high; however, the size distribution was poor. No fish reached 7 inches in length, which is a desirable size for anglers. The Bluegill population in North Park Lake before and after the lake restoration project has been abundant but quality-sized fish are lacking. Competition with Gizzard Shad is likely the cause for the poor size structure of the Bluegill population.

Catfish present at North Park Lake included populations of Yellow Bullhead, Brown Bullhead, and Channel Catfish. Before the lake was drained for restoration, North Park Lake supported a quality population of Channel Catfish, with a few large individuals present. In 2022, we captured 17 individuals from 3 to 26 inches in length. The 2022 trap net catch rate of Channel Catfish  $\geq$  16 inches in length was over two times greater than in any previous surveys at the lake (Figure 2).

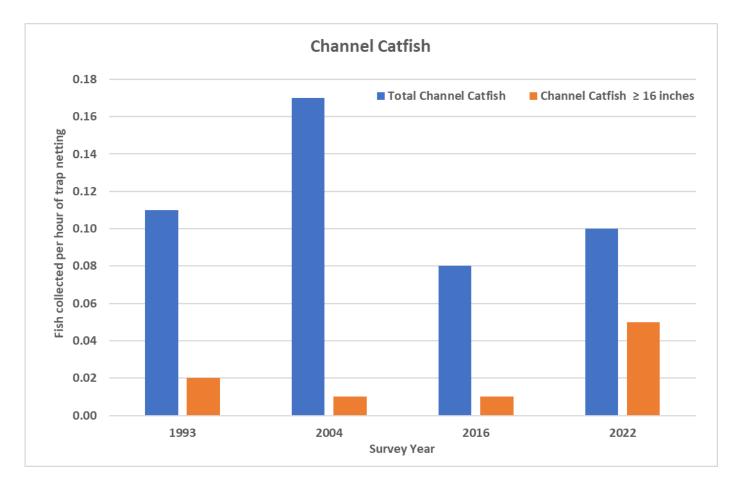


Figure 2. Trap net catch rate of Channel Catfish from North Park Lake in 1993, 2004, 2016, and 2022.



Area 8 Fisheries Biologist Mike Depew with a nice Channel Catfish

A total of 138 largemouth bass ranging from 4 to 20 inches in length were captured during night electrofishing in 2022 (Table 2). Mean total Catch Per Unit Effort (CPUE) in 2022 was equal to the 2016 total CPUE (Figure 3). In 2022, Largemouth Bass CPUE  $\geq$  12 inches, and CPUE  $\geq$  15 inches were lower than in 2016 but near the catch rates prior to the restoration project. The Largemouth Bass population at North Park Lake after the restoration project is as good or better than it was prior to the project.

Table 2. Total catch of Largemouth Bass from night electrofishing at North Park Lake in 2022.

Species	Number caught	Size range (inches)	Comments
Largemouth Bass	138	4 - 20	42% over 12 inches 17% over 15 inches

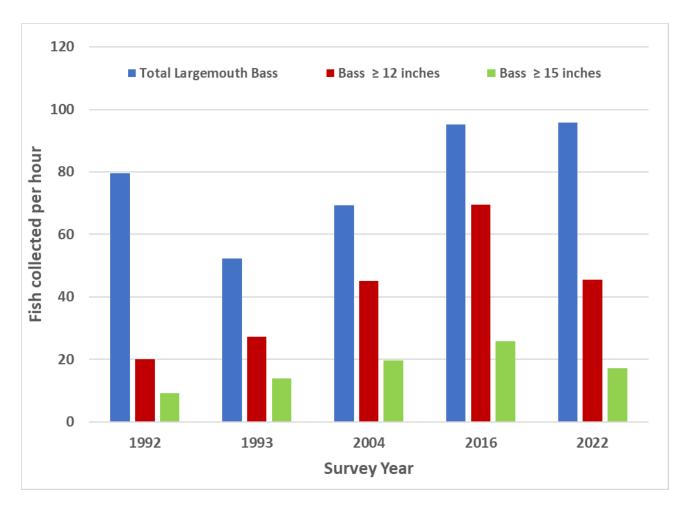


Figure 3. Largemouth Bass collected per hour during night electrofishing at North Park Lake in 1992, 1993, 2004, 2016, and 2022.

Overall, North Park Lake provides a good fishing experience for Largemouth Bass, crappie, and stocked trout. The Bluegill population is abundant but has poor size structure. Channel Catfish fishing should improve in the future as we continue to stock yearling Channel Catfish to bolster the population.

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