North Park Lake

Allegheny County

May 2016 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 were stocked in 2011 and Bluegill, Channel Catfish, Largemouth Bass, and White Crappie were stocked in 2012. Currently, only Channel Catfish fingerling, are stocked on an annual basis. In addition to warmwater species, North Park Lake provides seasonal fishing opportunities for stocked trout as the lake is a Stocked Trout Water Open to Year-Round Fishing.

Biologists from the Area 8 Fisheries Management Office in Somerset surveyed North Park Lake in May 2016 using trap nets and night electrofishing. The purpose of the survey was to evaluate the recovery of the warmwater gamefish and panfish populations five years after refilling and restocking the lake.

Trap netting of North Park Lake consisted of nine trap net sets fished during the week of May 2nd. Table 1 below shows the total catch and size distribution of the fish captured trap netting.

Table 1. Length and frequency distribution of sampled fish.

Species	Number caught	Size range (inches)	Comments
White Crappie	512	3-10"	99% under 9 inches
Black Crappie	300	3-10"	99% under 9 inches
Bluegill	187	3-6"	No Bluegill over 7 inches
Pumpkinseed	15	3-5"	No Pumpkinseed over 7 inches
Hybrid Sunfish	1	4"	
Brown Bullhead	235	6-15"	3% over 12 inches
Yellow Bullhead	27	6-10"	
Channel Catfish	14	6-21"	21% over 15 inches
Common Carp	9	Not Measured	
White Sucker	61	Not Measured	
Golden Shiner	1	Not Measured	
Hatchery Brown Trout	2	Not Measured	
Hatchery Rainbow Trout	18	Not Measured	
Gizzard Shad	345	Not Measured	

Crappie were the most abundant species captured with over 800 combined White Crappie and Black Crappie captured. However, the size distribution of crappie species was exceptionally poor with only 1% of the fish reaching 9 inches in length. Age and Growth analysis of crappie lateral scales indicated growth of both Black Crappie and White Crappie was poor with fish mean length at age well below

the state average. Competition with Gizzard Shad is likely the cause for the poor size structure in this panfish population.

Similar to the crappie population the abundance of bluegill in our trap nets was high, however the size distribution was poor. No fish reached 7 inches in length, which is considered to be a desirable size for anglers. Age and Growth analysis of Bluegill lateral scales also indicated growth was poor with fish mean length at age well below the state average. As mentioned with crappie, competition with Gizzard Shad is likely the cause for the poor size structure of the Bluegill population.

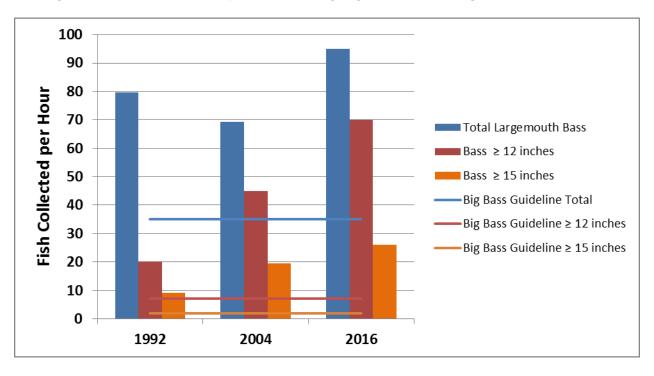
Catfish present at North Park Lake included populations of Yellow Bullhead, Brown Bullhead, and Channel Catfish. Before the lake was drained for restoration, North Park Lake supported a quality population of Channel Catfish, with many large individuals present. In 2016, we captured 14 individuals from 6 to 21 inches in length, which indicates multiple year classes of the fish we have recently stocked have survived and will contribute to the fishery in the future. Channel Catfish are a long-lived species in Pennsylvania waters that exhibit variable growth rates, so it will likely take a few more years to establish a high-quality population in North Park Lake.

Night electrofishing for Largemouth Bass was conducted on May 2, 2016. A total of 120 Largemouth Bass ranging from 3-19 inches were captured (Table 2). Mean Total Catch Per Unit Effort (CPUE), CPUE \geq 12 inches, and CPUE \geq 15 inches were 95 fish/hr, 70 fish/hr, and 26 fish/hr respectively, and exceeded Big Bass Guidelines of 35 Total fish/hr, 7 fish/hr over 12 inches, and 2 fish/hr over 15 inches (Figure 1).

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

Species	Number caught	Size range (inches)	Comments
Largemouth	120	3-19	73% over 12 inches
Bass			26% over 15 inches

Figure 1. Largemouth Bass collected per hour during night electrofishing runs at North Park Lake.





-Allegheny County Conservation District Senior Resource Conservationist Matt Gordon with a 19.5" Largemouth Bass captured during night electrofishing at North Park Lake

Overall, North Park Lake provides a good fishing experience for Largemouth Bass and stocked trout. Panfish populations are abundant but have poor size structure. Channel Catfish fishing should improve in the future as we continue to stock fingerling Channel Catfish to bolster the population.

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