



Lake Wilma, Greene County

2024 Trap Net and Night Electrofishing Survey

Introduction

Lake Wilma is a 19-acre impoundment located in Greene County on an unnamed tributary to Dunkard Creek, south of Waynesburg, PA. The impoundment is owned by Consol Energy and open to the public for recreational use. The Pennsylvania Fish and Boat Commission (PFBC) in turn manages the fishery. Lake Wilma is a small, steep sided water body with most of the lake easily accessible from the bank. The major habitat types include woody debris, submerged shoreline vegetation and drop offs. The lake is very clear and moderately productive (alkalinity of 50 parts per million in 2024). Currently Lake Wilma is managed with Commonwealth Inland Waters regulations and in the Stocked Trout Waters program. The PFBC currently stocks Lake Wilma with adult trout once prior to season and once during the season.

The primary purpose of our 2024 surveys was to measure the size structure and quality of the lake's resident gamefish and panfish populations. This data will be used to update the fisheries management plan for the lake.

Methods

Three overnight trap net sets for 42.25 hours of effort and two night electrofishing runs for 0.82 hours of effort were used to sample the fish populations at Lake Wilma in 2024.

Results

A total of 208 individuals from six species were captured trap netting in 2024 (Table 1). Black Crappie were the most abundant species captured with 197 individuals sampled. Crappie catch rates declined for larger fish (>8 inches) in 2024. Crappie abundance was high for such a small lake but consisted of mainly smaller fish (Figure 1). This should hopefully lead to good crappie fishing in a few years as these fish grow larger. Bluegills were not captured in our nets during our survey; however, numerous Bluegills were observed at night during our electrofishing survey. The steep sides to the lake may limit effectiveness of the trap nets for Bluegill.

Table 1. Species, number, and length range of fish caught during 2024 trap net survey at Lake Wilma.

Species	Number	Length (in.)
White Catfish	1	19
Channel Catfish	5	12 - 22
Rainbow Trout - Hatchery	3	Not measured
Largemouth Bass	1	17
Black Crappie	197	2 – 12
Walleye	1	18

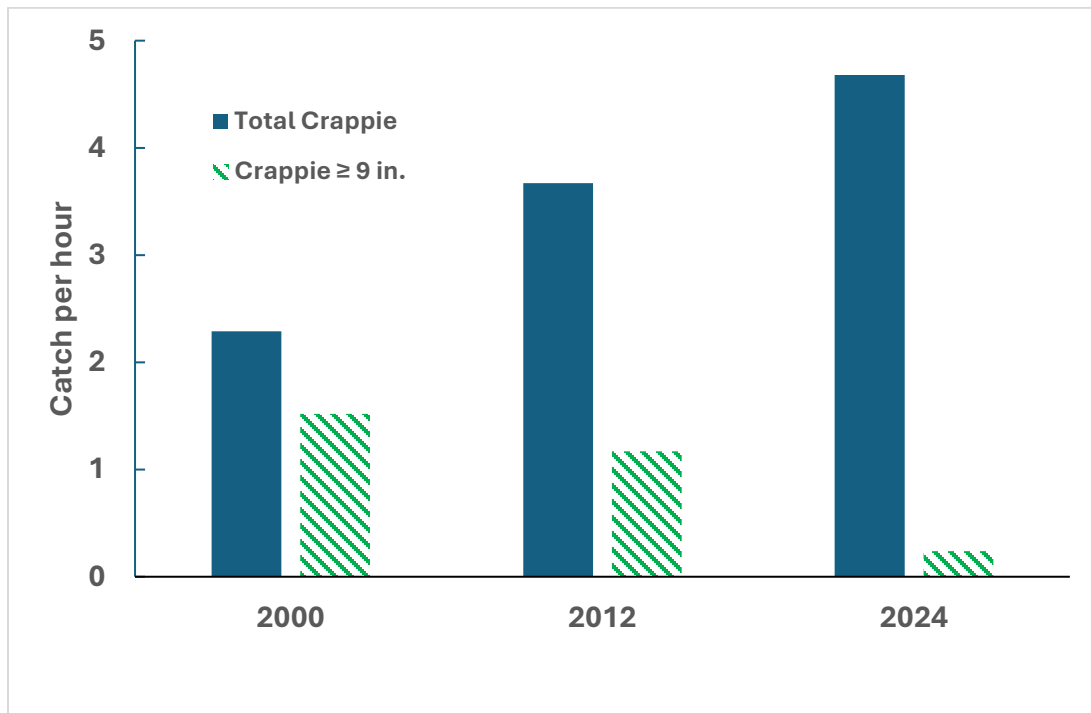


Figure 1. Graph for catch rates of Black Crappie under and over 9 inches in three survey years. Total fish caught per hour was 2.29 in 2000, 3.67 in 2012, and 4.68 in 2024 fish, respectively. Catch per hour of crappie over 9 inches was 1.52 in 2000, 1.17 in 2012, and 0.24 in 2024, respectively.

Largemouth Bass catch was excellent during the 2024 night electrofishing survey. We captured 247 bass ranging from 4 to 22 inches, which well exceeded our catches in previous years. This survey caught a whopping 226 fish/h 12 inches long and longer and 27 fish/h 15 inches long and longer (Figure 2). The catch rate for bass ≥ 12 inches of 226 fish/h at Lake Wilma was the highest ever recorded in Area 8.

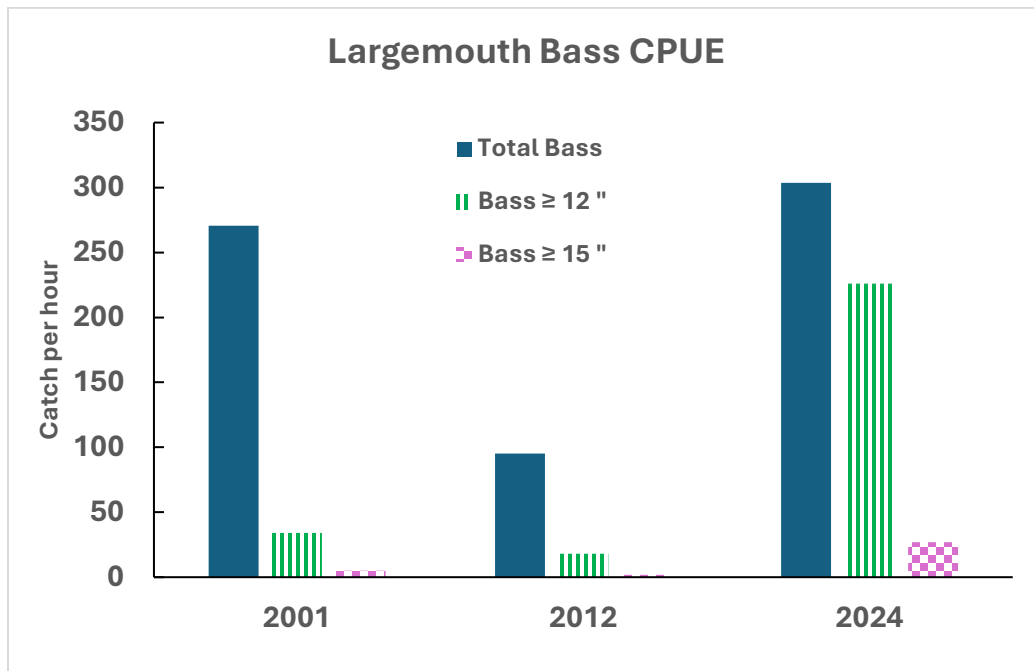


Figure 2. Graph of catch rates of Largemouth Bass from three survey years. Total catch per hour was 270.7 in 2001, 95.17 in 2012, and 303.52 in 2024, 2012. Catch per hour of bass 12 inches long and longer was 34.1 in 2001, 18.06 in 2012, and 226.1 in 2024. Catch per hour of bass 15 inches long and longer was 5 in 2001, 1.72 in 2012, and 26.85 in 2024.



A pair of big Largemouth Bass captured electrofishing at Lake Wilma in 2024.

Discussion

Lake Wilma provides good opportunities for stocked trout, Black Crappie, and Largemouth Bass. A few large catfish are also available to anglers. Our high catch rates of Largemouth Bass 12 inches long and longer and 15 inches long and longer exceeded Big Bass Program guidelines of 7 fish/h and 2 fish/h, respectively, indicating a high-quality bass population is present. Lake Wilma may be small, but its rural location and crystal-clear water make it one of the more scenic lakes in Area 8. On behalf of all anglers, we'd like to thank Consol Energy for making Lake Wilma available to the public.

Fisheries Management Area 8