Pennsylvania Fish & Boat Commission Biologist Report

Wilmore Dam

Cambria County

April 2021 Trap Net and Night Electrofishing Surveys

Wilmore Dam is a 195-acre impoundment located in central Cambria County near the town of Portage. Prior to opening to the public 2000, the reservoir was privately owned. It is now owned by the Cambria-Somerset Authority (CSA) and open to the public for fishing, boating and other outdoor activities. Boats are restricted to electric motors only and ice fishing is not permitted. Fish harvest at Wilmore Dam is managed with Big Bass and Panfish Enhancement Regulations for sunfish, crappie and Yellow Perch. Statewide regulations are used to manage all other fish populations in the lake.

Wilmore Dam was previously surveyed in 1999 and 2011. In Spring of 2021, Fisheries Management Area 8 staff conducted a fish population survey on the lake. The purpose of the survey was to reassess the lake's fish populations. Staff used Pennsylvania style trap nets to target panfish and night boat electrofishing to sample for bass. A total of thirteen species were captured in our trap nets with White Crappie, Black Crappie and Bluegill being the most abundant (Table 1).

Table 1. Length and frequency distribution of sampled fish from trap nets.

Species	Number caught	Size range (inches)	Notes
Black Crappie	298	3 - 15 inches	35% over 9 inches
White Crappie	568	3 – 16 inches	67% over 9 inches
Bluegill	349	3 - 9 inches	83% over 7 inches
Pumpkinseed	5	5 – 6 inches	
Yellow Perch	169	3 – 12 inches	90% over 9 inches
Largemouth Bass	3	8 – 19 inches	
Brown Bullhead	25	9 – 15 inches	
Yellow Bullhead	23	6 – 14 inches	
Rock Bass	8	7 – 9 inches	
Hatchery Rainbow Trout	2	Not Measured	
Golden Shiner	37	Not Measured	
White Sucker	124	Not Measured	
Common Carp	2	Not Measured	

The 2021 survey yielded a total of 866 crappie (Black Crappie and White Crappie combined). The overall catch rate of crappie ≥ 9 inches was 2.58 fish per hour (Figure 1). This well exceeds the statewide guideline for a good quality crappie population of 0.25 fish ≥ 9 inches per hour. Wilmore Dam is on Pennsylvania Fish and Boat Commission's list of Best Fishing Waters for crappie in Pennsylvania.

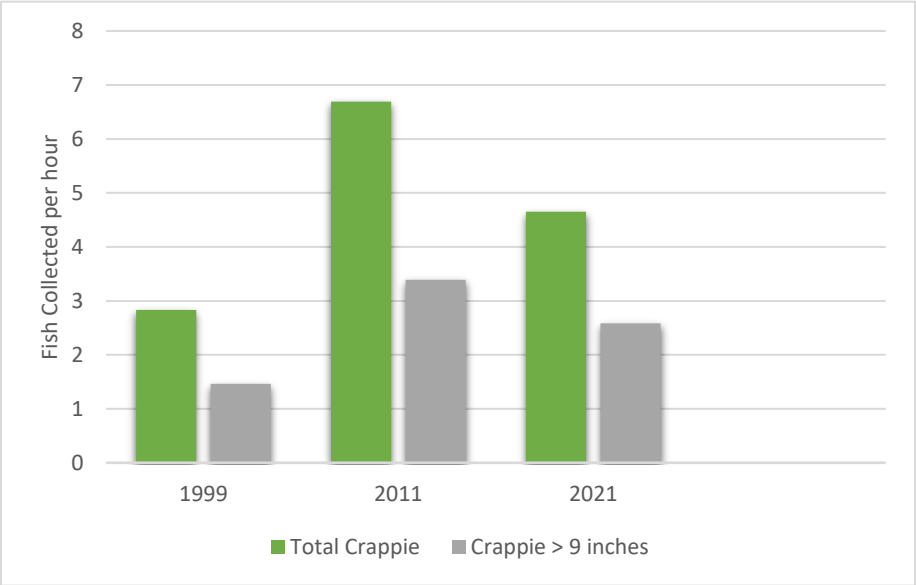

Figure 1. Trap net catch rates of White and Black Crappie at Wilmore Dam.

Catch rates of sunfish (Bluegill and Pumpkinseed combined) in 2021 significantly increased from the 2011 survey (Figure 2). The catch rate of quality sized (fish ≥ 7 inches) sunfish was 1.7 fish per hour. This catch rate is tripled the amount of the statewide guideline for a quality sunfish fishery (0.51 fish per hour ≥ 7 inches). Wilmore Dam is a good lake to fish for sunfish.

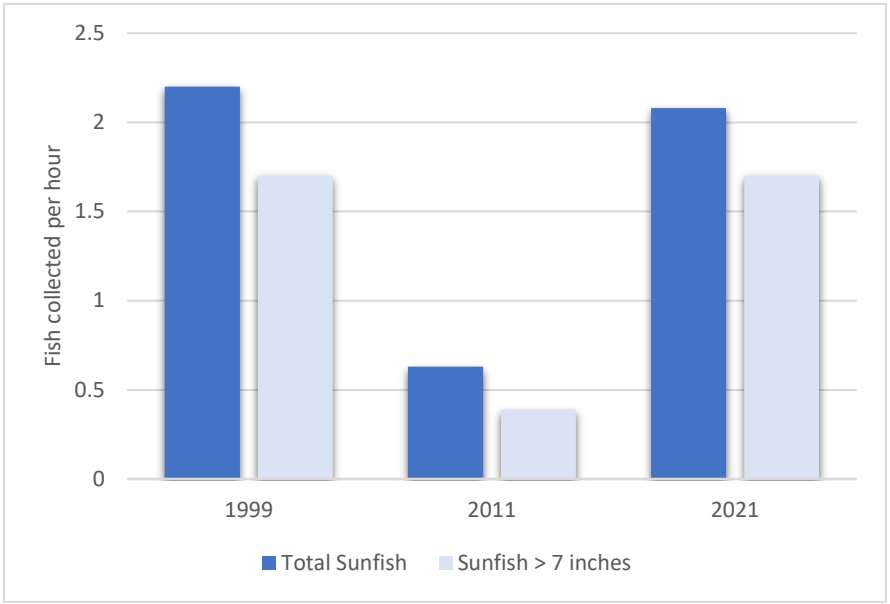

Figure 2. Trap net catch rates of sunfish at Wilmore Dam.

Yellow Perch were captured in good numbers and quality sizes. Yellow Perch catch rates have also significantly increased from the 2011 survey. Of the 169 individuals captured, 90% of them were over 9 inches.

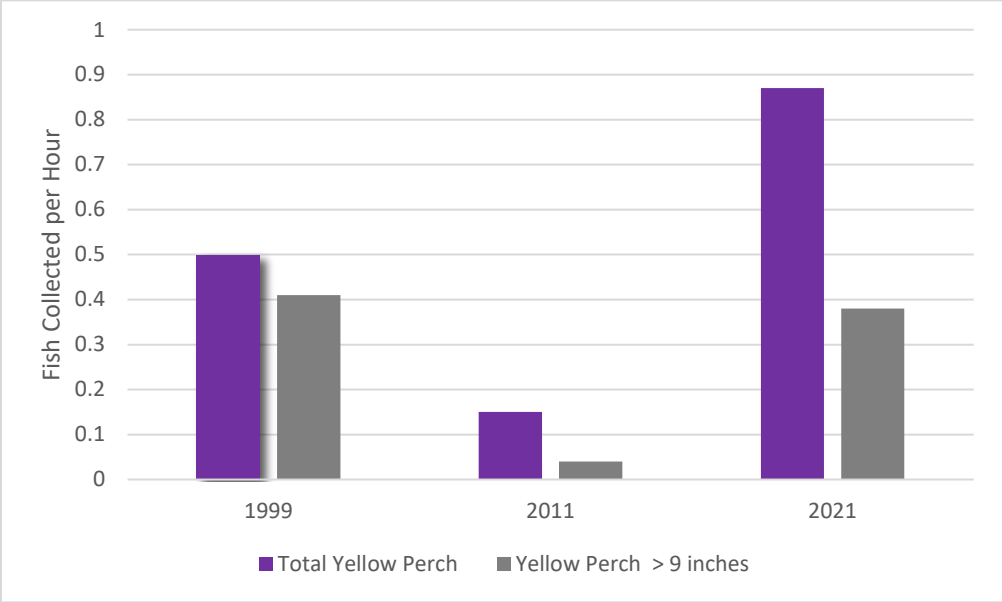

Figure 3. Trap net catch rates of Yellow Perch at Wilmore Dam.

Nice sized Black Crappie and White Crappie captured trap netting.

A total of 106 Largemouth Bass were collected during one hour and thirteen minutes of electrofishing (Table 2). The catch rate of bass ≥ 12 inches increased from 47.9 fish per hour in 2011 to 56.5 fish per hour in 2021 (Figure 4). State guidelines for black bass total catch per hour is 35 fish per hour, 7 fish per hour for bass over 12 inches, and 2 fish per hour for bass over 15 inches. Wilmore Dam well exceeds all the Big Bass Program guidelines.

Table 2. Length and frequency distribution of Largemouth Bass from night electrofishing.

Species	Number caught	Size range (inches)	Notes
Largemouth Bass	106	4 -20 inches	64% over 12 inches 20% over 15 inches

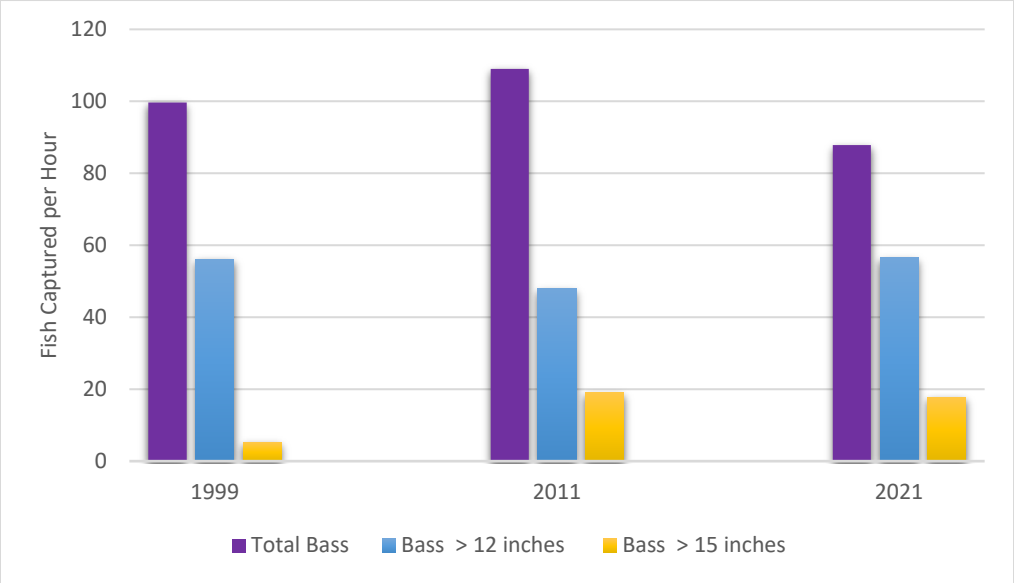

Figure 4. Night electrofishing catch rates of Largemouth Bass at Wilmore Dam.

Overall, Wilmore Dam has great fishing opportunities for a variety of warmwater fish species. The crappie, sunfish and bass populations are very good and make this lake a desirable fishing destination in Southwestern Pennsylvania.

Christina Edwards
Area 8 Fisheries Biologist Aide