Cross Creek Lake

Washington County

2024 Night Boat Electrofishing and Trap Net Survey

Cross Creek Lake is a 244-acre impoundment located in western Washington County, a few minutes south of the village of Rea and Route 50. The lake is owned by Washington County and maintained by their Department of Parks and Recreation. Cross Creek Lake has a maximum depth of approximately 58 ft and an average depth of 21 ft. Three boat launches provide access to the lake along with a large fishing pier along the shoreline of the main launch. Fish can be found throughout the lake's various points and coves, but the Pennsylvania Fish and Boat Commission (PFBC) has also placed an assortment of habitat features throughout the impoundment that can be potential fishing hotspots. A map of Cross Creek's habitat improvements can be found on the PFBC website. To further benefit the fishing opportunities at Cross Creek Lake, the PFBC manages the lake with Big Bass Program Special Regulations and Panfish Enhancement Special Regulations.

In April and May of 2024, PFBC fisheries biologists performed Pennsylvania style trap net and night electrofishing surveys on Cross Creek Lake to evaluate the warmwater and coolwater fish populations of Cross Creek Lake. Sixteen trap nets were set over the course of four days and the catch results were recorded.

A total of sixteen different species of fish were captured in the nets, with Bluegills making up the majority of the catch with 895 individuals that ranged in size from two inches to eight inches. Seventy-one percent were quality-sized specimens 7 or more inches in length (Table 1).

Table 1. Frequency and size range of fish species captured in trap nets at Cross Creek Lake in April of 2024.

Fish Species	Frequency	Size (Inches)	Comments
Black Crappie	664	3 – 14	82% ≥ 9 inches
Bluegill	895	2-8	71% ≥ 7 inches
Brown Bullhead	4	10 – 13	
Channel Catfish	3	11 – 34	32 & 34 inches
Common Carp	24	Not Measured	
Golden Shiner	38	Not Measured	

Green Sunfish	1	6	
Largemouth Bass	2	19 – 21	
Pumpkinseed	1	7	
Redear Sunfish	127	3 – 9	91% ≥ 7 inches
Sunfish Hybrids	7	6 – 9	
Walleye	6	20 – 29	
White Crappie	26	2 – 15	92% ≥ 9 inches
White Sucker	89	Not Measured	
Yellow Bullhead	7	10 – 12	
Yellow Perch	2	4 – 9	

Cross Creek Lake offers the unique opportunity to harvest Redear Sunfish also known as "Shellcrackers". These brilliantly colored sunfish grow larger than their Bluegill relatives and were stocked in Cross Creek Lake from 1985 to 2006. Currently, the lake's Redear population is supported by successful natural reproduction. In the 2024 trap net survey, 91 percent of the 127 captured Redear Sunfish were 7 or more inches in length. The largest of the Redear Sunfish captured were 9 inches in length but, historically, the lake has produced Redear Sunfish up to 11 inches in length.



Fisheries Biologist Aide Rhett Pletcher with two nice Redear Sunfish.

The 2024 trap net survey showed the overall sunfish population (Bluegills and Redear Sunfish) of Cross Creek Lake is in good condition. The total mean sunfish CPUE in 2024 was 2.78 fish/hr and the mean CPUE for sunfish 7 inches or more in length was 2.05 fish/hr, which exceeded the Panfish Enhancement Guidelines of 0.51 sunfish ≥ 7 inches/hr. The total catch in 2024 was lower than previous surveys, but the catch rate of fish 7 inches or more in length remained comparable. Cross Creek Lake continues to provide great fishing for sunfish with abundant quality-size fish.

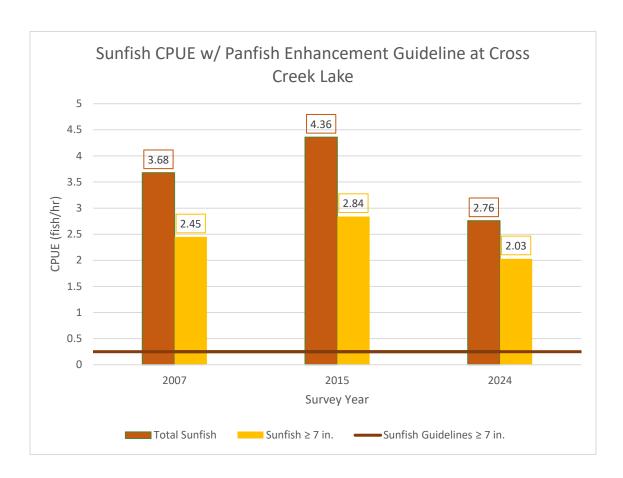


Figure 1. Sunfish Catch per Unit Effort during the 2024 trap net survey on Cross Creek Lake with a comparison to statewide guidelines.

The crappie catch was one of the highlights from the trap net survey as 664 Black Crappie and 26 White Crappie were captured. Of the captured crappies, 82% of the Black Crappie and 92% of the White Crappie were 9 inches or greater in length, which are harvestable under the Panfish Enhancement Special Regulations. Furthermore, crappies in the upper echelon in size were pushing 14 and 15 inches in length. In comparison to the 2007 and 2015 surveys on Cross Creek Lake, the overall Catch per Unit Effort (CPUE) in 2024 was lower, but the CPUE for fish \geq 9 inches was the highest of the three surveys at 1.52 fish/hr (Figure 2). This well exceeded the Panfish Enhancement Guidelines of 0.25 crappie \geq 9 inches/hr, which emphasizes the exemplary crappie fishery at Cross Creek Lake.

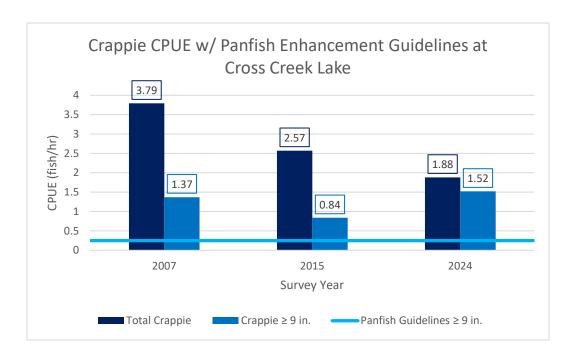


Figure 2. Crappie Catch per Unit Effort on Cross Creek Lake during the April 2024 trap net survey with a comparison to statewide guidelines.

Cross Creek Lake has historically been stocked with Channel Catfish fingerlings and Walleye fingerlings. Walleye fingerlings were last stocked 2014 and Channel Catfish fingerlings were last stocked in 2017. However, surveys in previous years to determine the success of these stockings had shown low success rates resulting in the termination of stockings. Our Walleye catch rates did not exceed Walleye Plan objectives in either 2015 or 2016 using different gear types despite consistent stocking. Therefore, the stocking of Walleye fingerlings was discontinued. Our hatcheries have switched from raising Channel Catfish fingerlings to yearlings in recent years. We may add Channel Catfish yearling stockings in Cross Creek Lake to attempt to establish a catfish fishery. A few old individuals remain from past stockings and are rather large. Three Channel Catfish were captured during the 2024 trap net survey, one of which was 32 inches in length while another was 34 inches in length. The Walleye captured during the 2024 survey were also impressive with all 6 individuals measuring from 20 inches up to 29 inches in length.





Fisheries Biologist Aide Lucas Hartman (left) and Area 8 Fisheries Manager Gary Smith (right) with the largest Channel Catfish (left) and largest Walleye (right) of the 2024 trap net survey.

A night flatbottom boat electrofishing survey was conducted in May 2024 to target the Largemouth Bass population of Cross Creek Lake. Eight electrofishing runs were completed and a total of 645 Largemouth Bass were collected (Table 2). The bass ranged in size from 3 inches to 21 inches in length. Twenty percent were 12 inches or more in length and 10 percent were 15 or more inches in length. The mean total bass CPUE for the 2024 electrofishing survey was 216.31 fish/hr (Figure 3). This is higher than the two previous surveys conducted in 2007 and 2015 on Cross Creek Lake. However, the CPUE for fish 12 or more inches in length (41.12 fish/hr) and for fish 15 or more inches in length (21.32 fish/hr) were lower than the two previous surveys. The CPUE for bass \geq 12 inches in length and \geq 15 inches in length still greatly exceeded the statewide guidelines. Thus, Cross Creek Lake is still a top Largemouth Bass fishery in Southwest PA with large numbers of Largemouth Bass and plenty of quality and trophy sized bass residing in the lake.

Table 2. Largemouth Bass catch frequency and size range from the May 2024 electrofishing survey at Cross Creek Lake.

Species	Number caught	Size range (inches)	Comments
Largemouth Bass	645	3 – 21	20% ≥ 12 inches
			10% ≥ 15 inches



Fisheries Biologist Aide Rhett Pletcher with a 21" Largemouth Bass captured in a trap net.

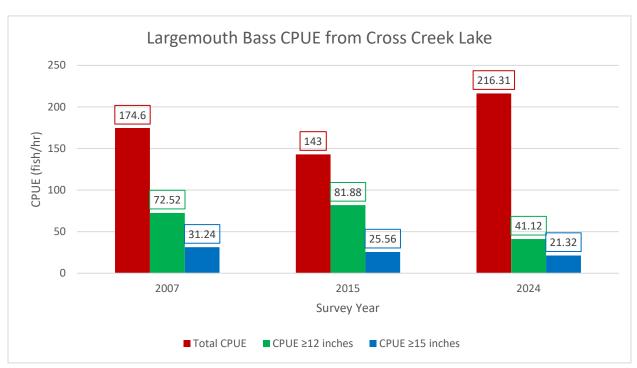


Figure 3. Largemouth Bass CPUE comparison from 2007, 2015, and 2024 night electrofishing surveys on Cross Creek Lake.

The results from the 2024 survey of Cross Creek Lake showed that the lake remains an excellent sunfish, crappie, and Largemouth Bass fishery consisting of robust and healthy populations with

an ample number of larger individuals. Cross Creek Lake also offers the unique opportunity to target Redear Sunfish. Overall, Cross Creek Lake is a notable fishery in Southwest PA that can reward anglers with potential trophy-sized specimens of multiple species.

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