

Canonsburg Lake

Washington County

April/May 2019 Electrofishing, Trap Net, and Hoop Net Survey

Canonsburg Lake is a 76 acre Pennsylvania Fish and Boat Commission (PFBC) owned impoundment located in Washington County on Little Chartiers Creek in Canonsburg, PA ([see the 2012 Biologist Report for additional information on Canonsburg Lake](#)). The lake is an Approved Trout Water Open to Year-Round Fishing and is stocked with catchable trout in the spring and fall. Additionally, Channel Catfish are stocked annually as fingerlings and yearlings at Canonsburg Lake.

Fisheries Management personnel of the PFBC surveyed Canonsburg Lake in late April/early May. The primary purpose of the evaluation was to evaluate the success of yearling vs fingerling stockings of Channel Catfish through night electrofishing, trap netting, and hoop netting. Channel Catfish are a popular component of the fishery at Canonsburg Lake and the PFBC has stocked fingerlings for years at this impoundment. In order to see if the fishery can be further enhanced the PFBC began stocking equal numbers of yearling (8-10") and fingerling (2-3") catfish in the lake in 2014. To identify the size at which the fish was stocked as well as the year, all catfish received a unique fin clip. For example, all yearling fish stocked in 2014 received an adipose fin clip. This would allow biologists to measure survival of each size of catfish stocked. This was the second year of this study (see 2018 biologist report for more information).

Night electrofishing targeting Largemouth Bass and Channel Catfish was performed in late April. Largemouth Bass are a significant predator of fingerling Channel Catfish and electrofishing catch rates of Largemouth Bass may be correlated with survival of Channel Catfish fingerlings, hence we often electrofish for bass when evaluating Channel Catfish stocking. Overall, a total of 78 Largemouth Bass were captured in 2019, with a total catch rate of 74 fish/hr (Table 1). Total catch and catch rates of Largemouth Bass were lower than previous surveys in 2000 and 2012, but slightly higher than the 2018 survey. At Cannonsburg Lake in 2019, bass catch rates well exceeded statewide Big Bass Guideline bench marks of 35 total bass/hr, 7 bass/hr over 12 inches, and 2 bass/hr over 15 inches and attained the following size specific rates: 73 bass/hr, 33 bass/hr, and 14 bass/hr respectively (Figure 1).



Largemouth Bass captured from Canonsburg Lake

Table 1. Largemouth Bass Night Electrofishing Catch				
Length (inches)	2000	2012	2018	2019
4	2	1	0	1
5	2	0	0	7
6	1	3	6	2
7	5	5	6	0
8	7	3	8	3
9	4	4	4	9
10	7	5	7	9
11	13	8	5	12
12	10	19	4	11
13	8	14	5	8
14	4	7	4	1
15	4	8	1	4
16	9	6	3	3
17	3	5	4	5
18	4	2	0	1
19	5	3	1	1
20	0	0	0	1
Total	88	93	58	78

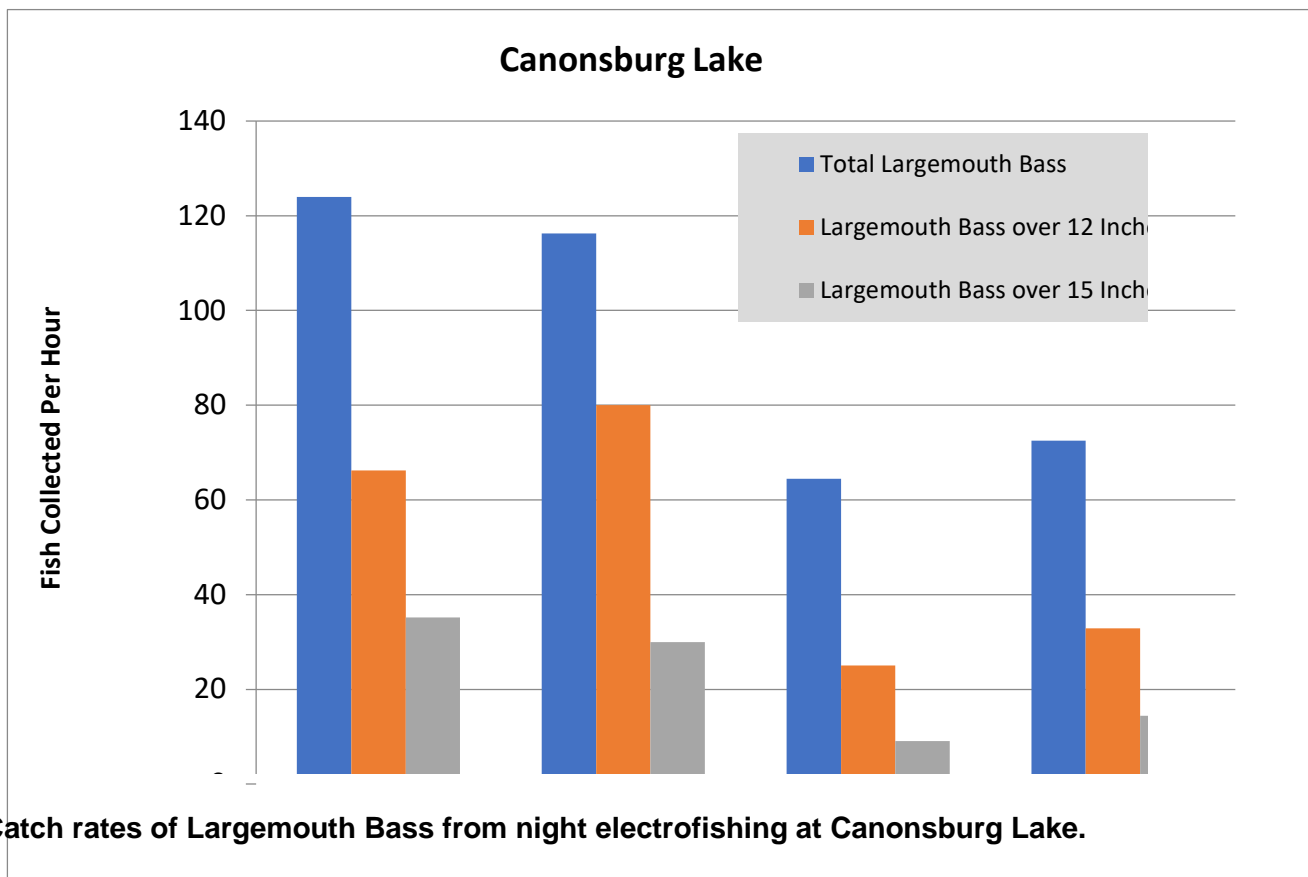


Figure 1. Catch rates of Largemouth Bass from night electrofishing at Canonsburg Lake.

Sampling for Channel Catfish provided more encouraging results. Our previous surveys in 2000 and 2012 yielded 23 and 31 Channel Catfish, respectively. In 2018 we captured 102 Channel Catfish, with fish ranging from 3 – 23 inches. In 2019, we captured 108 Channel Catfish, with fish ranging from 3 – 28 inches.

Furthermore, of the 108 fish captured, 102 were determined to have been fin clipped and 98 were stocked as yearlings. The future looks bright for anglers targeting Channel Catfish at Canonsburg Lake.



A nice Channel Catfish captured from Canonsburg Lake

Other fish species captured during the trap net portion of our survey at Canonsburg Lake included species such as Black Crappie and White Crappie, Bluegill, Pumpkinseed, Brown Bullhead, Gizzard Shad, White Sucker, and Hatchery Trout (Table 2). In general, panfish were abundant but size structure was poor, with few crappies over 9 inches and few Bluegill over 7 inches. Competition with Gizzard Shad for food resources is likely affecting the size structure of the panfish populations in Canonsburg Lake.

Table 2. Fish species captured from trap netting at Canonsburg Lake during April/May 2019.

<i>Fish Species</i>	<i>Number Collected</i>	<i>Size Range (inches)</i>	<i>Additional Comments</i>
Black Crappie	59	3 – 9 inches	1% over 9 inches
White Crappie	255	3 – 15 inches	13% over 9 inches
Yellow Perch	1	7 inches	None over 9 inches
Bluegill	62	2 – 7 inches	3% over 7 inches
Pumpkinseed	12	2 – 6 inches	None over 7 inches
Hybrid sunfish	1	6 inches	
Hybrid crappie	1	8 inches	
Channel Catfish*	108	3 – 28 inches	
Largemouth Bass	1	12 inches	
Brown Bullhead	5	10 – 12 inches	
Yellow Bullhead	1	11 inches	
Common Carp	11	Not Measured	
Gizzard Shad	106	Not Measured	
Golden Shiner	19	Not Measured	
White Sucker	48	Not Measured	
Golden Rainbow Trout	1	Not Measured	
Rainbow trout	19	Not Measured	

*Channel Catfish numbers are from trap nets, hoop nets, and night electrofishing

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