

Twin Lakes Number One Reservoir (Lower Twin Lake)

Westmoreland County

May 2019 Electrofishing, Trap Net, and Hoop Net Survey

Lower Twin Lake is a fertile 30-acre lake that is located east of Greensburg, PA. The lake is part of Twin Lakes Park and is owned and operated by Westmoreland County and managed for fishing by the Pennsylvania Fish and Boat Commission. The park retains a natural setting amidst several suburbs with a large wooded area adjacent to the lake. [Big Bass Regulations](#) and [Panfish Enhancement Regulations](#) for crappie are in effect at Lower Twin Lake. Lower Twin Lake, [like Upper Twin Lake](#), is part of the Approved Trout Waters Open to Year Round Fishing Program. A high number of catchable size trout are stocked into both Upper and Lower Twin lakes making them very popular for trout fishing. Private boating is prohibited however, boat rentals are available at the concession area.

Fisheries Management personnel of the Pennsylvania Fish and Boat Commission (PFBC) surveyed Lower Twin Lake in early May. The two primary purposes of the survey were to 1) evaluate the Largemouth Bass population through night electrofishing to determine if changes to the bass regulations are warranted at this impoundment, and 2) evaluate or compare survival of Channel Catfish stocked as yearling (Age 1) vs fingerling (Age 0 or young-of-year) through night electrofishing, trap netting, and hoop netting. The PFBC has been stocking fingerling Channel Catfish in Lower Twin Lake for many years with little success in creating a fishery. Beginning in 2014 the PFBC began stocking equal numbers of yearling (8-10") and fingerling (2-3") catfish in the lake. In order 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 determine which size of catfish were surviving better.

Night electrofishing for bass was performed in May 2017, 2018, and 2019. Table 1 below shows the total catch of bass from night electrofishing. We captured over 350 bass in 2017, close to 300 in 2018, and 315 in 2019. All catch rates have exceeded 300 fish/hr during all night electrofishing surveys at this lake, which is one of the highest catch rates in the state (Figure 1). Catch rates of bass over 12 inches and 15 inches have also increased during the most recent survey years, although a slight decline was noted in 2019. Trophy sized bass over 20 inches and 5 lbs were collected during the surveys from 2017 through 2019.



Area Fisheries Manager Gary Smith with a nice Largemouth Bass captured from Lower Twin Lake

Table 1. Largemouth Bass night electrofishing catch					
Length (inches)	1998	2010	2017	2018	2019
3	0	1	4	0	4
4	3	2	6	1	28
5	1	3	15	1	35
6	3	1	12	1	32
7	28	23	9	10	3
8	18	32	29	34	7
9	56	35	35	31	15
10	28	91	35	43	38
11	24	56	80	52	70
12	16	20	84	69	43
13	5	3	24	30	22
14	7	0	12	7	11
15	2	0	2	4	0
16	0	1	2	2	1
17	1	1	2	3	0
18	2	0	3	2	3
19	2	0	1	2	2
20	1	0	0	2	1
21	1	0	1	0	0
22	0	0	0	1	0
Total	198	269	356	295	315

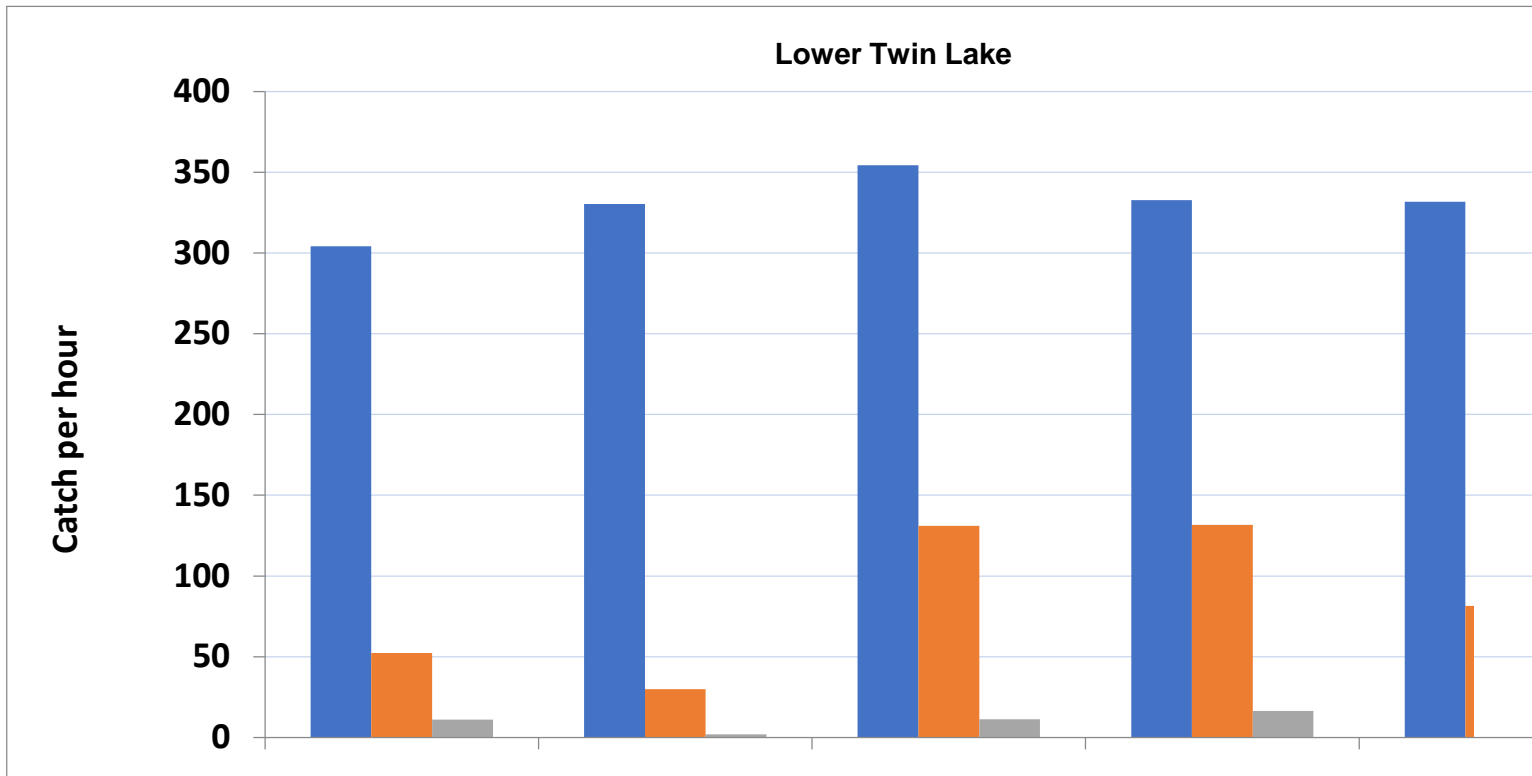


Figure 1. Catch rates of Largemouth Bass from night electrofishing at Lower Twin Lake.

Upper Twin Lake and Lower Twin Lake are both managed under the same regulations to ensure consistency at these heavily used impoundments. Both lakes are managed under Big Bass Regulations, following previous surveys in 2009 and 2010, both Lakes were noted to contain extremely dense bass populations consisting of mainly small, stunted bass in the 8 - 11inch size range. Since those survey years, we have seen an improvement in the size structure of bass at Lower Twin Lake. Although numbers of bass remain the same, we have seen a sharp increase in the abundance of fish between 12 and 15 inches and a fair increase in the number over 15 inches. Therefore, a change in regulation may not be warranted at this time for either lake. We will continue to monitor bass populations at each lake via night electrofishing.

Channel Catfish numbers at Lower Twin Lake are also increasing. In our study in 2010, we captured one Channel Catfish. In 2018, we captured 39 catfish, with fish ranging from 8 – 27 inches. Of the 39 fish captured, 32 fish were determined to have been fin clipped and 31 were stocked as yearlings. Round two of our study in 2019 yielded 64 Channel Catfish, with 59 fish having been clipped. Of those 59 fin clipped fish, 56 were stocked as yearlings, indicating much better survival of yearlings than fingerlings in this small impoundment. Trophy sized catfish of over 28 inches and 10 lbs were present and were the result of our 2014 yearling planting, indicating excellent growth in this fertile impoundment.

Other fish species captured in the trap net portion of our survey at Lower Twin Lake included panfish such as Black Crappie and White Crappie, Bluegill, Pumpkinseed, and Yellow Perch (Table 2). Crappie numbers were good with some very large specimens up to 14 inches available to anglers. Bluegill numbers and sizes were also good with about a third of the Bluegill over 7 inches and some nicer fish that were between 8 and 9 inches. Stocked trout were also recorded in decent numbers during our survey, although not targeted in this assessment.

Table 1. Fish species captured from trap netting at Lower Twin Lake during May 2019.

Fish Species	Number Collected	Size Range (inches)	Additional Comments
Black Crappie	58	3-14 in	59% over 9 in
White Crappie	34	3-15 in	68% over 9 in
Yellow Perch	5	6-9 in	20% over 9 in
Bluegill	195	2-8 in	39% over 7 in
Pumpkinseed	15	5-7 in	66% over 7 in
Hybrid Sunfish	1	6 in	
Channel Catfish*	64	7-28 in	
Largemouth Bass	3	6-11 in	
Brown Bullhead	3	11-13 in	
Yellow Bullhead	1	7 in	
Brown Trout	2	Not measured	
Rainbow trout	41	Not measured	
White Sucker	1	Not measured	

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



A big Channel Catfish captured electrofishing at Lower Twin Lake

***Mike Depew
Area 8 Fisheries Biologist***