

Twin Lakes Number One Reservoir (Lower Twin Lake)

Westmoreland County

May 2018 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 the success of yearling vs fingerling stocking of Channel Catfish 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 catfish (2-3") in the lake. To identify the size and year each lot of fish was stocked, each catfish lot 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 both May 2017 and May 2018. Table 1 below shows the total catch of bass from night electrofishing. We captured over 350 bass in 2017 and close to 300 in 2018. 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. Trophy sized bass over 20 inches and 5 lbs were collected during surveys in 2017 and 2018.



Fisheries Biologist Mike Depew with an 8 lb and 5 lb Largemouth Bass captured from Lower Twin Lake

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

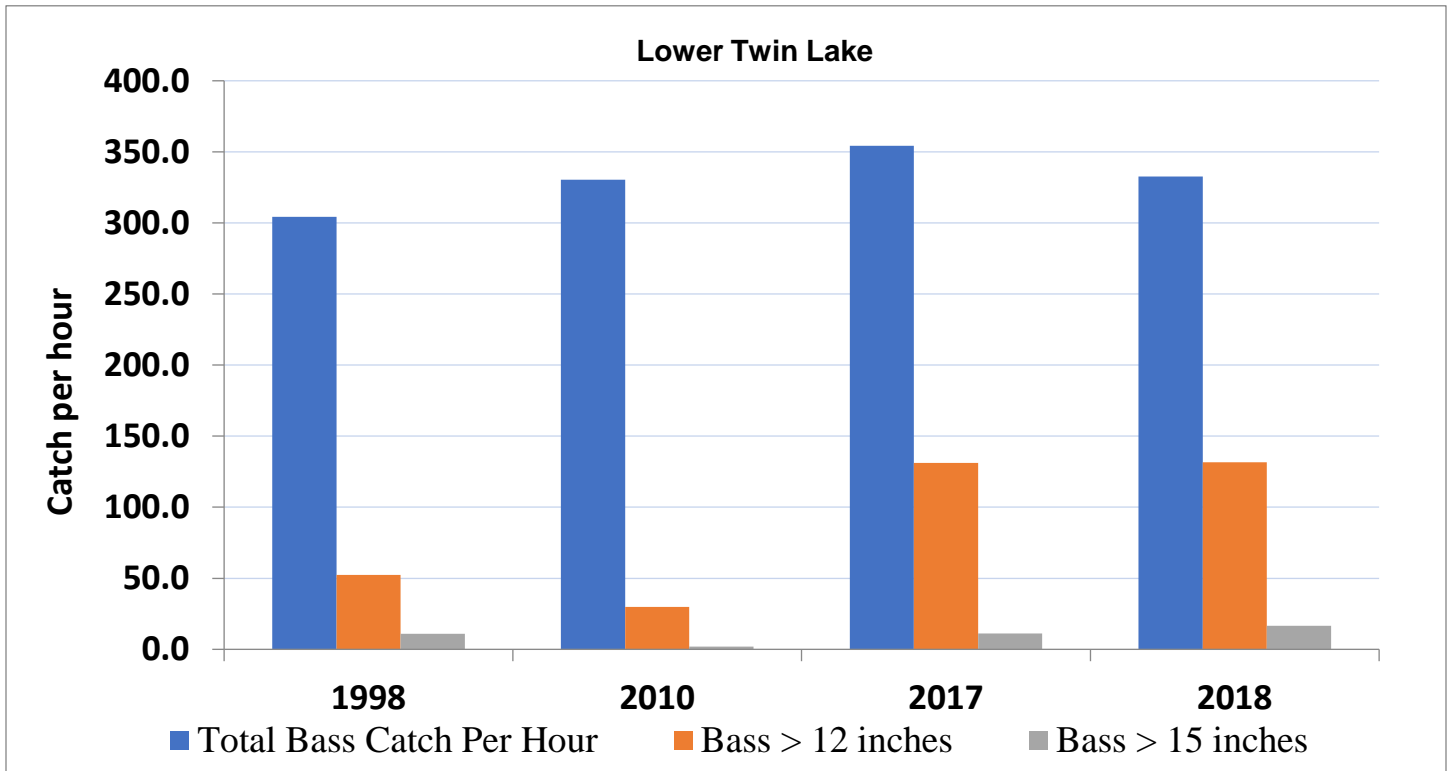


Figure 1. Catch rates of Largemouth Bass from night electrofishing at Lower Twin Lake.

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 and after the previous

surveys in 2009 and 2010 at Upper and Lower Twin Lakes, respectively, both had extremely dense bass populations consisting of mainly small, stunted fish in the 8-11 inch size range. Since that time, we have seen an improvement in the size structure 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 of fish over 15 inches. Therefore, a change in regulation will not be recommended for either lake, at this time. We will continue to monitor the bass populations at each lake via night electrofishing in the future.

Channel Catfish numbers at Lower Twin Lake are also increasing. In our previous study in 2010, we captured one Channel Catfish. This year, we processed a catch of 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. As at the Upper Lake, many of the yearlings from the 2014 – 2015 stockings were in the 16 – 20 inch size range with some of the 2014 yearlings having grown into the 25 – 27 inch size range. The other fish captured may have been stocked as fingerlings prior to the beginning of the study or may have resulted from natural reproduction. We will return to the lake in 2019 for round two sampling for our catfish study and will gather additional information on ages and origins of catfish in Lower Twin Lake.

Other fish species captured in the trap net portion of our survey at Lower Twin Lake included panfish such as Black Crappie, 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 also showed up in decent numbers during our survey.

Table 1. Fish species captured from trap netting at Lower Twin Lake during May 2018.

Fish Species	Number Collected	Size Range (inches)	Additional Comments
Black Crappie	49	4-14 in	33% over 9 in
White Crappie	81	3-14 in	25% over 9 in
Yellow Perch	28	6-10 in	64% over 9 in
Bluegill	166	2-8 in	36% over 7 in
Pumpkinseed	25	4-8 in	52% over 7 in
Green Sunfish	1	7 in	
Channel Catfish*	39	8-27 in	
Largemouth Bass	4	12–22 in	
Brown Bullhead	1	11 in	
Yellow Bullhead	1	8 in	
Common Carp	1	Not measured	
Golden Shiner	1	Not measured	
Brown Trout	5	Not measured	
Brook Trout	16	Not measured	
Rainbow trout	36	Not measured	
White Sucker	4	Not measured	

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



Black Crappie (right hand) and White Crappie from Lower Twin Lake



A couple of Golden Rainbow Trout captured while netting at Lower Twin Lake

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