## **Scotts Run Lake**

## **Berks County**

## 2021 – Trap Net and Night Boat Electrofishing Survey

Scotts Run Lake is a 22-acre impoundment located in French Creek State Park, Berks County. The Pennsylvania Fish and Boat Commission (PFBC) manages Scotts Run Lake primarily as a stocked trout fishery. In addition to the traditional spring stocking of trout, Scotts Run Lake also receives trout in the fall, providing anglers with fall and winter trout fishing opportunities. Additionally, Scotts Run Lake supports warmwater fish populations, including large panfish (Black Crappie, Bluegill, Pumpkinseed, and Yellow Perch), Chain Pickerel and Largemouth Bass. Biologists from the PFBC's Area 6 fisheries management office conducted a comprehensive survey of Scotts Run Lake that included a trap net survey during April 26-27, 2021 and a nighttime boat electrofishing survey on June 17, 2021. Results from these surveys are presented below.



A view of Scotts Run Lake from the dam.

A total of four trap nets were set and allowed to fish overnight for approximately 24 hrs. Upon capture, fish were counted, measured, and released. Black Crappie and Bluegill were the most abundant sportfish species encountered during the trap net survey (Table 1). Other species captured included Brook Trout (hatchery), Brown Bullhead, Brown Trout (hatchery), Chain Pickerel, Largemouth Bass, Pumpkinseed, Rainbow Trout (hatchery), Yellow Bullhead, and Yellow Perch.

Table 1. Species, number (n), and length range of fish captured at Scotts Run Lake during April 1994 and 2021 trap net surveys. Asterisks (\*) indicate fish of hatchery origin.

	-	1994	2021		
Species	n	Length	n	Length Bango (in)	
species	n	Range (in)	n	Range (in)	
Yellow Bullhead	13	9-14	2	10-12	
Brown Bullhead	6	7-15	22	11-17	
Rainbow Trout*	0	0 -		8-15	
Brown Trout*	23	9-15	12	10-16	
Brook Trout*	3	11-12	11	10-12	
Chain Pickerel	6	8-21	11	14-25	
Pumpkinseed	29	3-8	22	5-8	
Bluegill	104	2-8	45	5-10	
Largemouth Bass	4	3-10	3	13-20	
Black Crappie	0	-	113	4-14	
Yellow Perch	6	8-14	27	5-12	

The most obvious difference between the 1994 and 2021 surveys is the presence of Black Crappie. A total of 113 Black Crappie ranging in length from 4 to 14 in were collected (Table 1 and 2). Approximately one-third (36 fish; 32%) of the Black Crappie captured exceeded 9 in, which are the sizes most preferred by anglers. However, The Pennsylvania Fish and Commission has never stocked Black Crappie into Scotts Run Lake; indicating that the introduction of Black Crappie was more than likely the result of angler introduction. While anglers may enjoy the addition of new species, the stocking of fish should be left to agency personnel, as crappies (Black Crappies and White Crappies) tend to become overabundant and slow growing in small impoundments.

A total of 45 Bluegills were collected in 2021, ranging in length from 4 to 10 in (Table 1 and 2). When comparing the Bluegill population to the 1994 survey, a marked decrease in abundance can be noted, especially in sizes preferred by anglers ( $\geq$  6 inches). In 1994, a total of 81 Bluegills greater than 6 in were collected, whereas only 44 were collected in 2021; a decrease of 45%. Conversely, Brown Bullhead, Chain Pickerel, and Yellow Perch, appeared to have increased in abundance, and size structure of Chain Pickerel and Brown Bullhead increased. However, with only two data points for comparison, it is impossible know if this represents an actual change in population abundance or is attributed to sampling variability.

Largemouth Bass are not sampled well using trap nets. Therefore, biologists conduct nighttime electrofishing in the spring when Largemouth Bass are most susceptible to capture. During the June survey, four 10-min transects were conducted along the perimeter of Scotts Run Lake. Upon capture, fish were counted, measured, and released. A total of 31 Largemouth Bass were collected, ranging in length from 2 to 16 in (Figure 1). This equates to catch rate of 48.3 fish/h. While this catch rate and size structure is lower than other lakes in the region, it is possible that survey results were affected by sampling efficiency (presence of dense macrophyte beds around the perimeter of the lake, especially in the upper portion, where sampling could not occur). Additionally, our trap net results indicate the presence of larger individuals in the lake, but fish of that size were not encountered during the electrofishing survey.

						Spec	ies				
Length	Yellow	Brown	Rainbow	Brown	Brook	Chain			Largemouth	Black	Yellow
(in)	Bullhead	Bullhead	Trout*	Trout*	Trout*	Pickerel	Pumpkinseed	Bluegill	Bass	Crappie	Perch
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	10	0
5	0	0	0	0	0	0	1	1	0	42	1
6	0	0	0	0	0	0	1	2	0	14	0
7	0	0	0	0	0	0	17	34	0	1	0
8	0	0	1	0	0	0	3	7	0	10	0
9	0	0	0	0	0	0	0	0	0	11	0
10	1	0	0	3	2	0	0	1	0	9	0
11	0	2	3	3	5	0	0	0	0	10	0
12	1	3	6	0	4	0	0	0	0	5	0
13	0	1	5	1	0	0	0	0	1	0	0
14	0	7	1	2	0	1	0	0	1	1	0
15	0	6	1	2	0	4	0	0	0	0	0
16	0	2	0	1	0	0	0	0	0	0	0
17	0	1	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	1	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	1	0	0	1	0	0
21	0	0	0	0	0	2	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	1	0	0	0	0	0
25	0	0	0	0	0	1	0	0	0	0	0
	2	22	17	12	11	11	22	45	3	113	1

Table 2. Length-frequency distribution by species captured during trap net surveys at Scotts Run Lake during April 26-27, 2021.

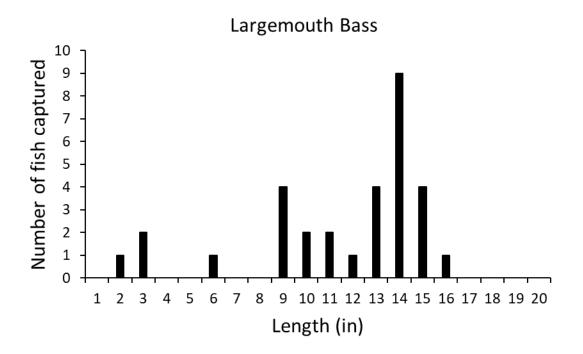


Figure 1. Length frequency distribution of Largemouth Bass captured at Scotts Run Lake on June 17, 2021.

Scotts Run Lake provides excellent fishing opportunities for coldwater and warmwater fishes. Besides angling, there are numerous activities within French Creek State Park, including a swimming pool, hiking trails, playground, and primitive camping. French Creek State Park also attracts outdoor enthusiasts interested in nature watching, hunting, boating, and kayaking. Hopewell Lake, which is also located within French Creek State Park, also provides excellent fishing opportunities. Anglers and boaters visiting Scotts Run Lake are advised that only electric motors can be used. One boat ramp exists on Scotts Run Lake and is accessible via Scotts Run Road. A fairly detailed contour map, provided by the Pennsylvania Department of Conservation and Natural Resources, can be found <u>here</u>. The state park allows seasonal boat mooring from April 1<sup>st</sup> to November 1<sup>st</sup> with park office approval. Overall, anglers should expect seasonal opportunities to catch hatchery-produced trout and quality-length panfish, Chain Pickerel, and Largemouth Bass. All species are managed with <u>Commonwealth Inland Waters Regulations</u>.

## Area 6 Fisheries Management Staff

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