



Beaver Creek Reservoir 2021

Located in Albemarle County, Beaver Creek Reservoir is a 104-acre water supply impoundment for the town of Crozet. The reservoir contains self-sustaining populations of Largemouth Bass, Bluegill, Redear Sunfish, and Black Crappie. Additionally, the lake is stocked annually with Channel Catfish to maintain a fishery. The lake has traditionally provided excellent Largemouth Bass and panfish fisheries. In the spring of 2020, the fish community of Beaver Creek was sampled by boat electrofishing and trapnets. This report summarizes the results of these surveys and what anglers can expect to catch in Beaver Creek.

Beaver Creek Reservoir's fish community is diverse with a total of nine fish species collected in the 2020 surveys (Table 1). Largemouth Bass and Bluegill were by far the most abundant species collected in the electrofishing survey, while Black Crappie and Bluegill were the most abundant species collected in the trapnet survey (Table 1). Beaver Creek's Largemouth Bass population is poor based on the size of bass collected. Bass catch rates were very high for the area, but the bass population is dominated by small individuals (Figure 1). Bass are very stunted in growth and are stockpiling below 13 inches, this is a continued trend for Beaver Creek since the early 2000. The reservoir is in dire need of small bass (< 13 inches) harvest. Anglers should harvest bass under 13 inches within the 5 bass per statewide creel limit. A handful of bass over 20 inches were collected (Figure 1), but stockpiling is limiting the trophy bass potential of the lake. The largest bass collected measured slightly above 20 inches and weighed 5.1 lbs. The most productive areas for bass were the points and woody structures throughout the lake.

Sunfish electrofishing catch rates were somewhat low with Bluegill comprising the majority of sunfish collected. The bulk of sunfish collected were small (< 9 inches); only a few Bluegill and Redear Sunfish between 9 and 10 inches were collected (Figure 2). The low catch rates are likely a function of predation by the abundant smaller bass. Anglers determined to catch quality sunfish should concentrate their efforts on around woody structure throughout the lake or on the sunny flats around the dam spillway.

Crappie catch rates were good with all the crappie catch composed of Black Crappie. Beaver Creek supports a quality crappie fishery with the majority of crappie collected in the 9 to 12 inch range (Figure 3). The lake is regulated under a 9-inch minimum size limit for crappie and the individuals in this fishery are exhibiting fast growth; on average crappie are exceeding 10.5 inches by age-3 (Figure 4). Very fast growth combined with a young population (85% of crappie collected were younger than age-4) indicates overexploitation of the crappie fishery; the overharvest is also exhibited in a slightly high annual mortality rate of the crappie population (around 66%). The minimum size limit should be increased to 10 inches to allow young, fast-growing fish time to survive and reproduce. This change should help maintain this exceptional Black Crappie fishery.

A limited number of Channel Catfish were collected during the surveys, ranging in size between 13 and 21 inches. Catfish collected were all plump and the perfect size for a good meal. Anglers looking for an excellent crappie lake that is in the Charlottesville area should visit Beaver Creek Reservoir. The lake offers good numbers of Largemouth Bass, Channel Catfish, and smaller panfish for anglers to enjoy. There is a concrete boat ramp, courtesy piers, bathrooms, and numerous areas for bank fishing. Gas powered motors are prohibited in the reservoir.

For more information on Beaver Creek, please contact:
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Table 1. Species account and catch rates for fish collected throughout Beaver Creek Reservoir in 2020.

Species	Electrofishing			Trapnets		
	Number Collected	Catch Rate (fish/hour electrofishing)	Percentage of Catch	Number Collected	Catch Rate (fish/net night)	Percentage of Catch
Black Crappie	12	8	3	120	4.1	51
Bluegill	94	62	22	59	2.0	25
Brown Bullhead	None Collected			9	0.3	4
Channel Catfish	2	1	1	3	0.1	1
Golden Shiner	None Collected			2	0.1	1
Largemouth Bass	301	200	72	3	0.1	1
Redear	10	7	2	1	< 0.1	1
White Perch	None Collected			29	1.0	12
Yellow Bullhead	None Collected			9	0.3	4

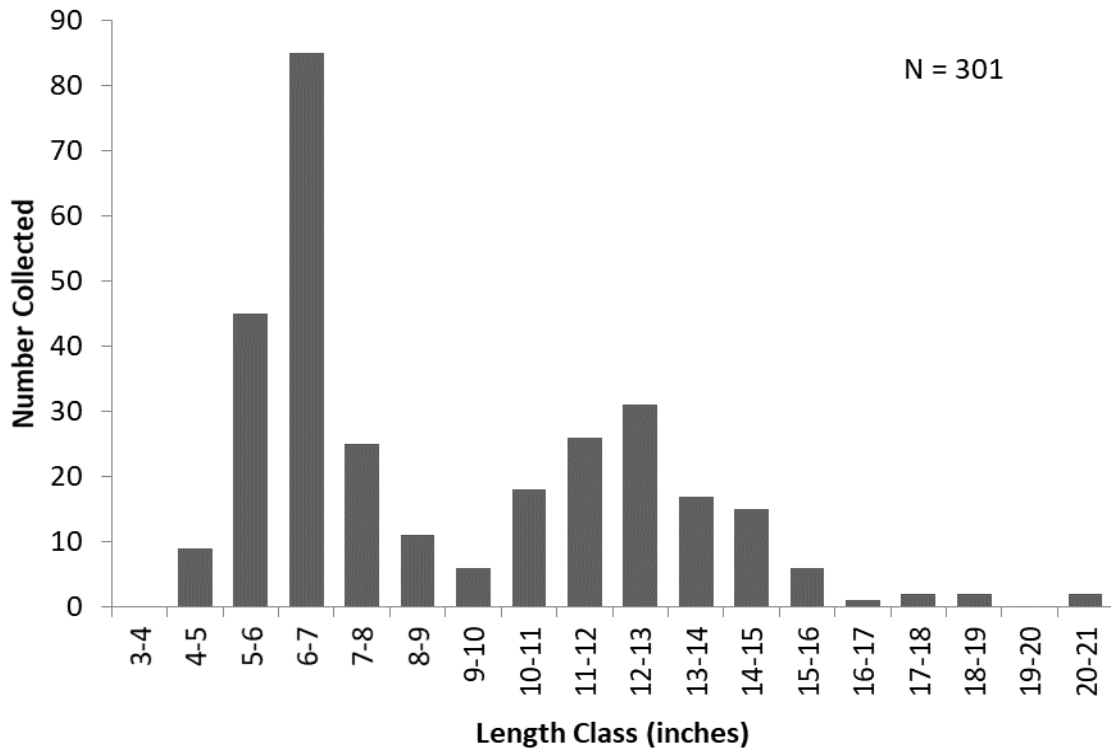


Figure 1. Length distribution of Largemouth Bass collected with electrofishing gear throughout Beaver Creek Reservoir in 2020.

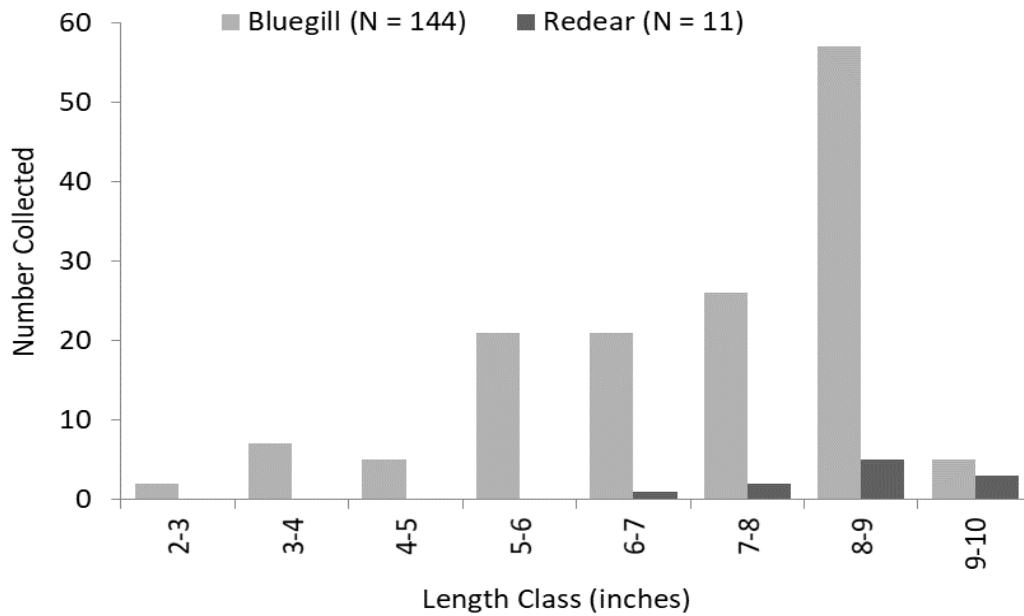


Figure 2. Length distribution of sunfish collected with electrofishing gear throughout Beaver Creek in 2020.

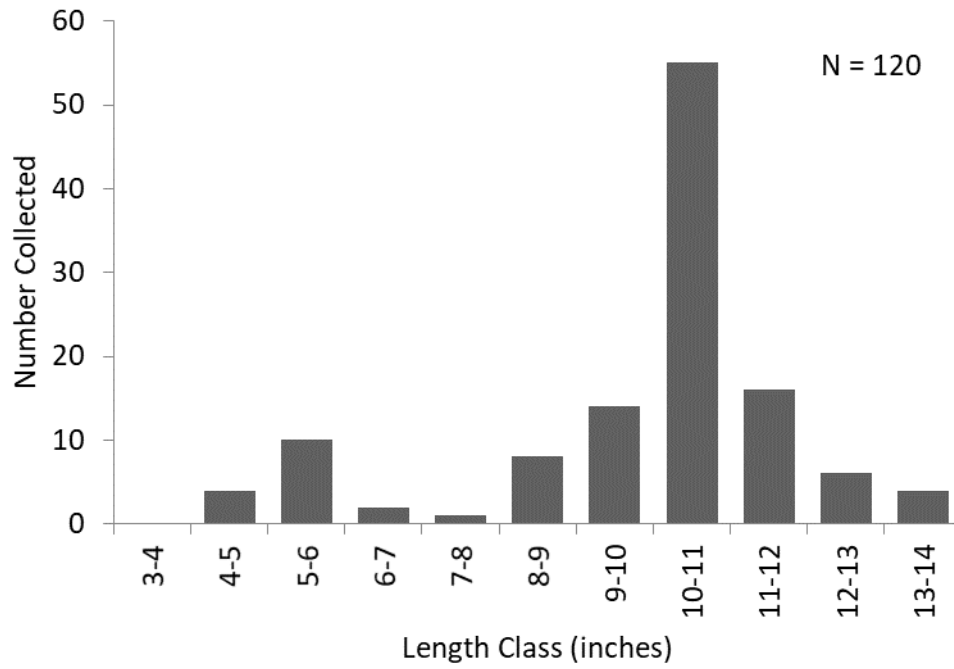


Figure 3. Length distribution of Black Crappie collected with trapnets throughout Beaver Creek Reservoir in 2020.

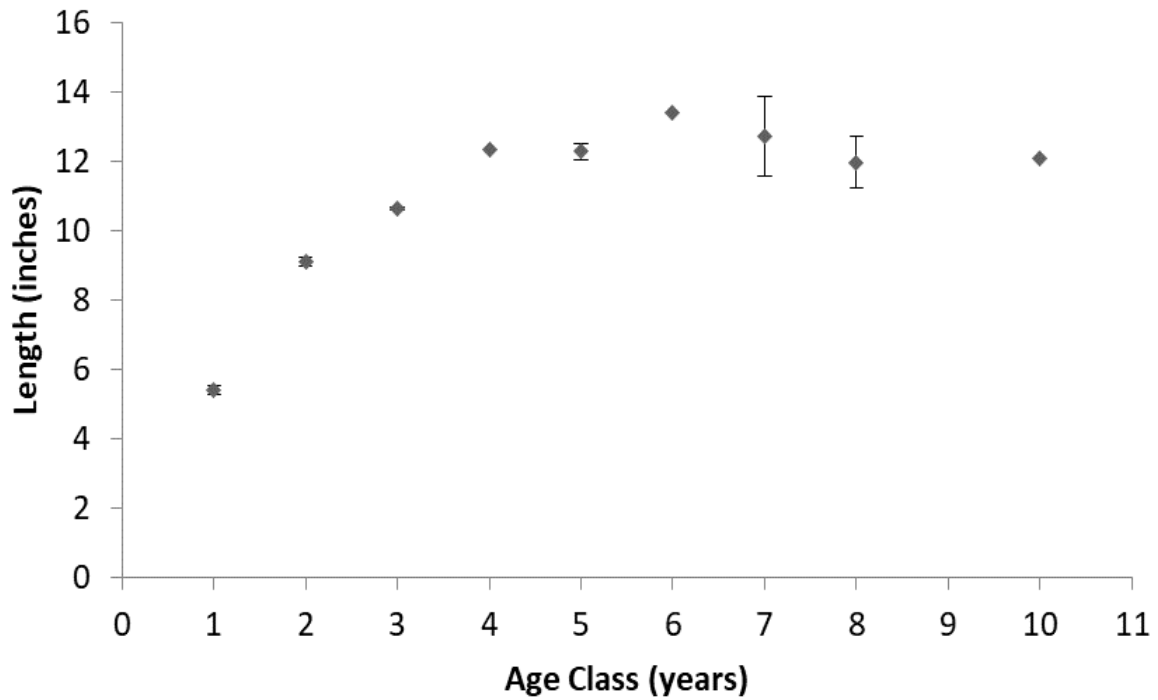


Figure 4. Average length-at-age of crappie collected throughout Beaver Creek Reservoir in 2020. Error bars indicate standard error.