



Walnut Creek Reservoir 2021



Located in Albemarle County, Walnut Creek Reservoir is the youngest public impoundment in the area. The 45-acre reservoir was filled in 1990 and its primary use is recreation. 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. In the spring of 2020, the fish community of Walnut Creek was sampled by boat electrofishing and trapnets. This report summarizes the results of these surveys and what anglers can expect to catch in Walnut Creek.

Walnut Creek Reservoir contained a typical fish community for a central Virginia impoundment with a total of six fish species collected in the 2020 surveys (Table 1). Largemouth Bass and Black Crappie were the most abundant species collected in the electrofishing survey, while Black Crappie and Redear Sunfish were the most abundant species collected in the trapnet survey (Table 1). Walnut Creek provides a decent Largemouth Bass fishery based on the size distribution of bass collected (Figure 1). Bass catch rates were average for the area, but there were adequate numbers of young and adult bass present in the population. The 12-18 inch slot limit appears to protect a good portion of the adult bass population (Figure 1). Anglers looking to harvest bass should keep smaller bass (< 12 inches) so they do not become over abundant. The largest bass collected in 2020 measured 19 inches and weighed 3 lbs. The most productive areas for Largemouth Bass were the points and woody structures.

Sunfish catch rates were low with Redear and Bluegill comprising all the sunfish collected. The low numbers of sunfish are due to the low productivity of the watershed. The bulk of sunfish collected were small (< 8 inches), but there were a limited number of sunfish over 9 inches collected (Figure 2). Redear were more abundant than most waters in the Charlottesville area and can offer a unique fishing experience for the area. Anglers determined to catch quality sunfish should concentrate their efforts around woody structure or the flats in the upper end of the lake during the spring spawning period.

Walnut Creek contain an excellent crappie fishery based on the numbers and size of crappie collected in the 2020 surveys. The crappie (all Black Crappie) catch rate was excellent and nearly four times the low experienced in 2011. The majority of crappie collected measured in the 10 to 12 inch range (Figure 3). The 9-inch minimum size limit for crappie has worked to bolster the population and reduce annual mortality more than 50% since 2011. Crappie are exhibiting fast growth; on average crappie are surpassing 9 inches by age-2 and 10 inches by age-3 (Figure 4). The largest crappie collected measured 13.5 inches and weighed 1.2 pounds.

Anglers looking for a decent bass and excellent crappie lake that is in the Charlottesville area should visit Walnut Creek Reservoir. The lake offers good numbers of Channel Catfish and smaller panfish for anglers to enjoy. The park has great amenities including an improved boat launch, plenty of bank fishing areas, and a swimming beach. Gas powered motors are prohibited in the reservoir.

For more information on Walnut Creek, please contact:
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Table 1. Species account and catch rates for fish collected throughout Walnut 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	64	56	27	211	11	69
Bluegill	31	27	13	37	2	12
Channel Catfish	3	3	< 1	None Collected		
Green Sunfish	1	1	1	2	< 1	< 1
Largemouth Bass	112	98	48	2	< 1	< 1
Redear Sunfish	24	21	10	52	3	17

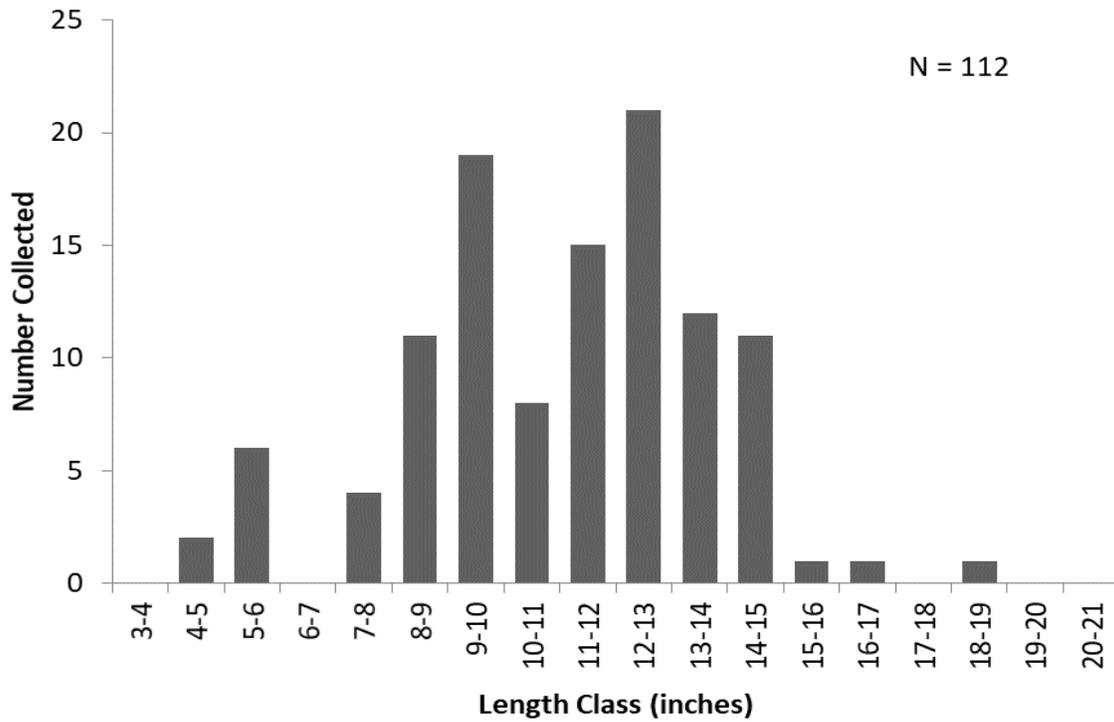


Figure 1. Length distribution of Largemouth Bass collected with electrofishing gear throughout Walnut Creek Reservoir in 2020.

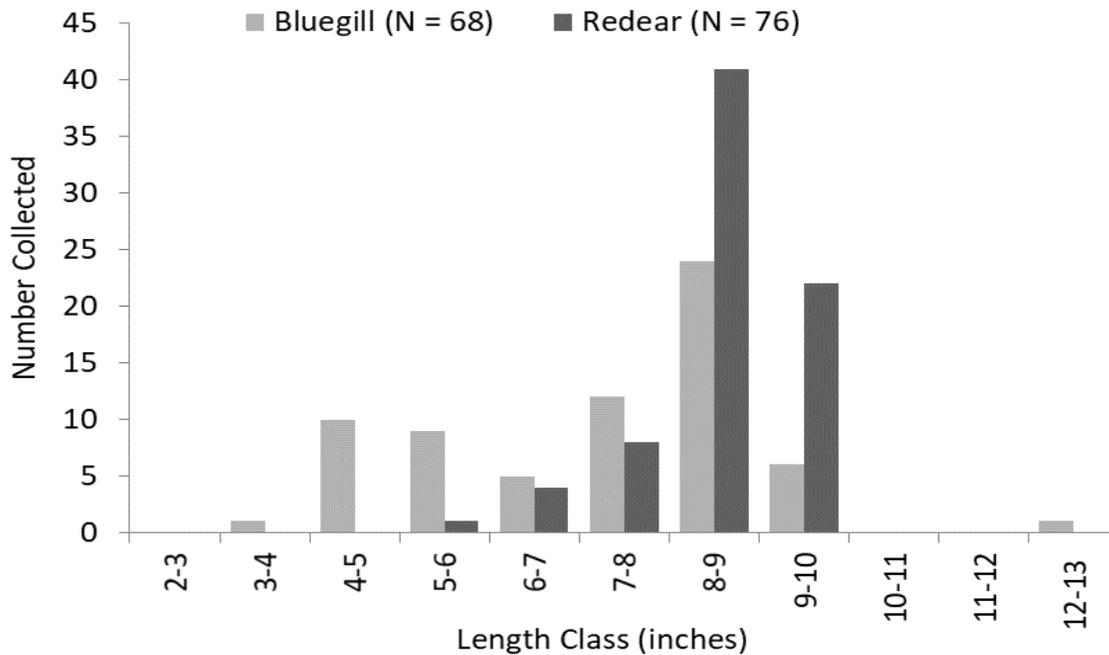


Figure 2. Length distribution of sunfish collected with electrofishing gear throughout Walnut Creek in 2020.

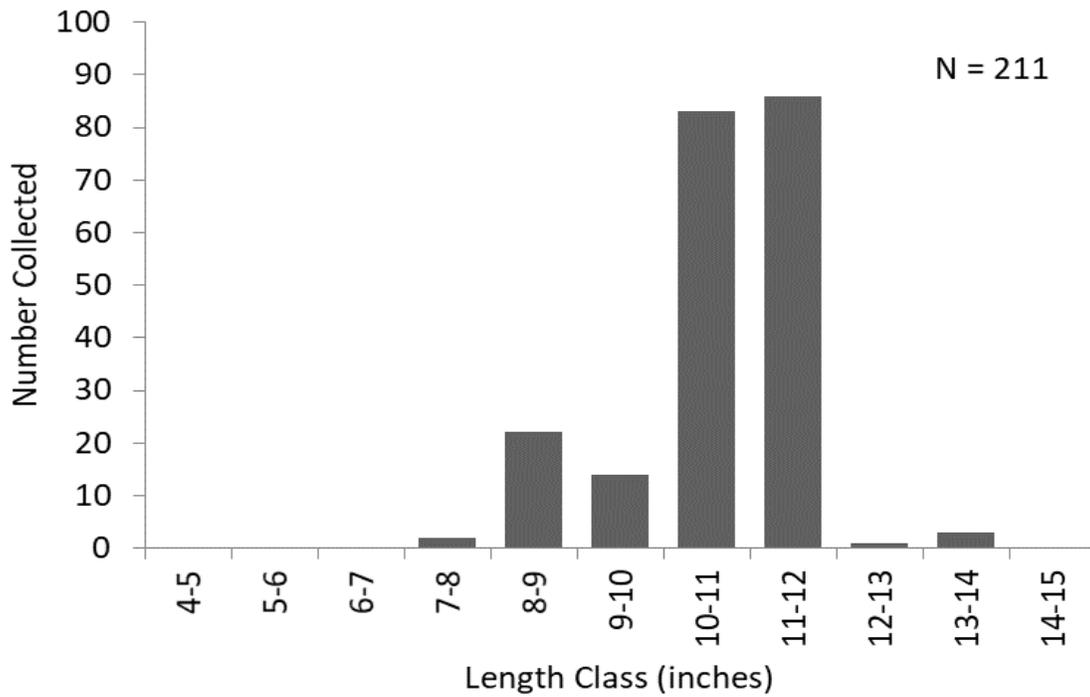


Figure 3. Length distribution of Black Crappie collected with trapnets throughout Walnut Creek Reservoir in 2020.

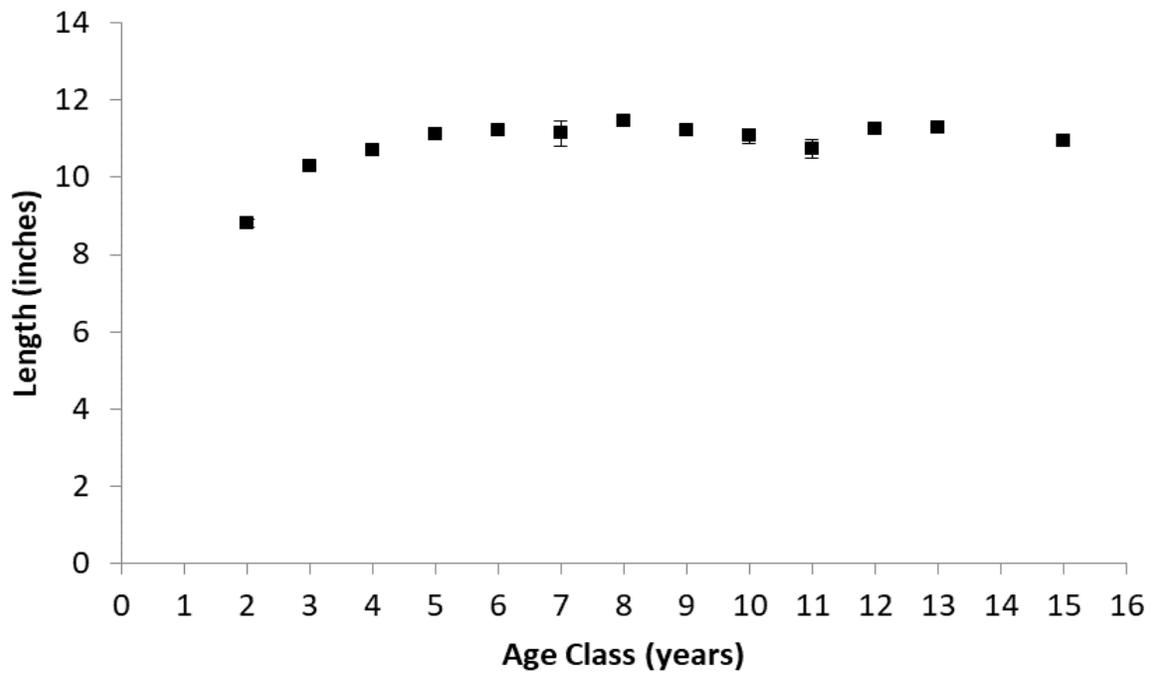


Figure 4. Average length-at-age of crappie collected throughout Walnut Creek Reservoir in 2020. Error bars indicate standard error.