



Rivanna Reservoir 2020



Located in Albemarle County, the Rivanna Reservoir is a 450-acre water supply impoundment owned and managed by the Rivanna Water and Sewer Authority. The reservoir contains self-sustaining populations of Largemouth Bass, Bluegill, Redear Sunfish, Black Crappie, and Channel Catfish. The lake has traditionally provided excellent Largemouth Bass and panfish fisheries. In the spring of 2019, the fish community of the Rivanna Reservoir was sampled by boat electrofishing and trapnets. This report summarizes the results of these surveys and what anglers can expect to catch in the Rivanna Reservoir.

The reservoir's fish community is very diverse with twenty fish species collected in the 2019 surveys (Table 1). Bluegill and Largemouth Bass were by far the most abundant species collected in the electrofishing survey, while Bluegill, Black Crappie, and Redear were the most abundant species collected in the trapnet survey (Table 1). Rivanna Reservoir continues to provide an exceptional Largemouth Bass fishery for central Virginia. Bass catch rates were good for a larger reservoir and were similar to rates from previous surveys. The bass population contains good portions of juvenile and adult fish (Figure 1), with exceptional numbers of bass in the 10 to 21 inch range. The reservoir has good trophy potential for Largemouth Bass due to the diversity and abundance of forage and limited fishing pressure. This potential was evident by our collection of eleven bass measuring over 20 inches. The largest bass collected in the 2019 survey measured nearly 23 inches and weighed approximately 7 pounds. The most productive areas for bass were the upper end of the reservoir around the flats, points, and woody structure and in the lower end of the lake (below the Rt. 743 Bridge) around the emergent water willow.

Sunfish catch rates were good with Bluegill comprising the majority of sunfish collected (Table 1). The bulk of sunfish collected were small (< 7 inches); only a few Bluegill and Redear Sunfish over 8 inches were collected (Figure 2). The 2019 surveys, along with previous electrofishing surveys and angler reports, indicate that there are some large Bluegill and Redear (up to 12 inches) in the upper end of the reservoir, especially during the spring (April-May). Anglers determined to catch quality sunfish should concentrate their efforts on big Redear during the spring and early summer. The best place to fish for the big Redear is in the upper lake around the sandy flats that these fish frequent during spawning.

Crappie catch rates were very high with the majority of the crappie catch (> 91%) composed of Black Crappie. Although catch rates were high, the majority of crappie collected were less than the preferred angler size of 10 inches (Figure 3). The lack of preferred-sized fish is not due to low survival (annual survival near 85%) with crappie up to age-16 collected in the sample (Figure 4). The lack of larger crappie is due to overpopulation and stunting. On average, crappie growth slows at age-5 when the fish approach 9 inches, and crappie rarely grow in excess of 10 inches (Figure 4). The crappie population is in need of considerable angler harvest of fish in the 7-9 inch range to increase average growth. Crappie up to 18 inches were collected, but these larger fish are very rare and anglers should expect to catch fish in the 7 to 9 inch range.

Anglers looking for an excellent bass lake that is in the Charlottesville area should visit the Rivanna Reservoir. The lake offers good numbers of catfish and smaller panfish for anglers to enjoy. One problem is that the access to the reservoir is limited and only located in the lower half of the lake. One concrete boat ramp exists (on Rt. 659, off of Rt. 631, aka Rio Road), and parking is limited. The other main access point, off of Route 676 on the Ivy Creek arm of the

reservoir, is an informal access that has a gravel bank launch and very limited parking. Both access areas have well defined trails nearby for bank anglers with the Ivy Creek access being adjacent to Ivy Creek Park. The Department of Wildlife Resources and Albemarle County continue to look for opportunities to improve and develop boat access at this lake. Gas powered motors are prohibited in the reservoir, and anglers should make sure they have a good trolling motor and a well charged batteries to get around the large reservoir.

For more information on the Rivanna Reservoir, please contact:

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Table 1. Species account and catch rates for fish collected throughout Rivanna Reservoir in 2019. NC means none collected.

Species	Electrofishing			Trapnets		
	Number Collected	Catch Rate (fish/hour electrofishing)	Percentage of Catch	Number Collected	Catch Rate (fish/net night)	Percentage of Catch
American Eel	1	1	0.2	1	0.0	0.2
Black Crappie	30	18	5.2	111	3.7	18.2
Bluegill	195	117	33.6	286	9.5	46.9
Brown Bullhead	1	1	0.2	43	1.4	7.0
Channel Catfish	2	1	0.3	5	0.2	0.8
Golden Shiner	10	6	1.7	None Collected		
Grass Carp	1	1	0.2	None Collected		
Green Sunfish	5	3	0.9	None Collected		
Gizzard Shad	91	55	15.7	12	0.4	2.0
Koi Carp	1	1	0.2	None Collected		
Largemouth Bass	173	104	29.8	2	0.1	0.3
Quillback Carpsucker	1	1	0.2	1	0.0	0.2
Redear Sunfish	53	32	9.1	106	3.5	17.4
Rosyface Shiner	2	1	0.3	None Collected		
Warmouth	7	4	1.2	15	0.5	2.5
White Catfish	None Collected			3	0.1	0.5
White Crappie	1	1	0.2	11	0.4	1.8
White Sucker	6	4	1.0	3	0.1	0.5
Yellow Bullhead	1	1	0.2	9	0.3	1.5
Yellow Perch	None Collected			2	0.1	0.3

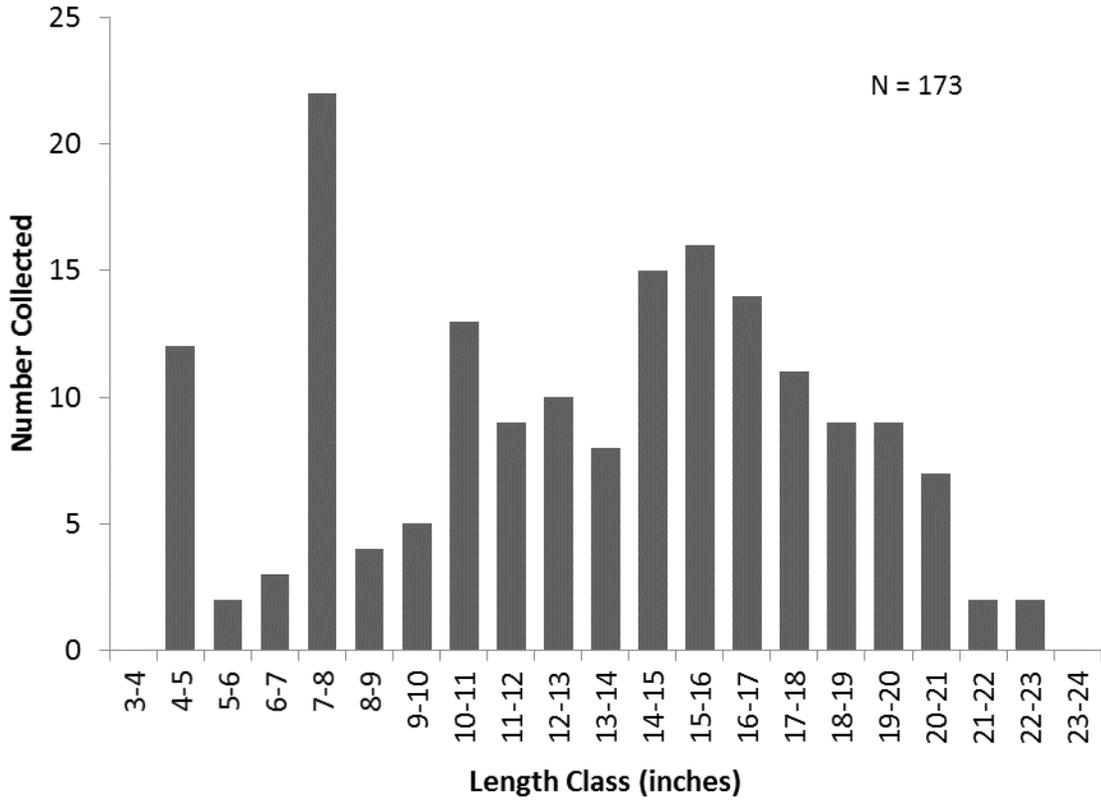


Figure 1. Length distribution of Largemouth Bass collected with electrofishing gear throughout Rivanna Reservoir in 2019.

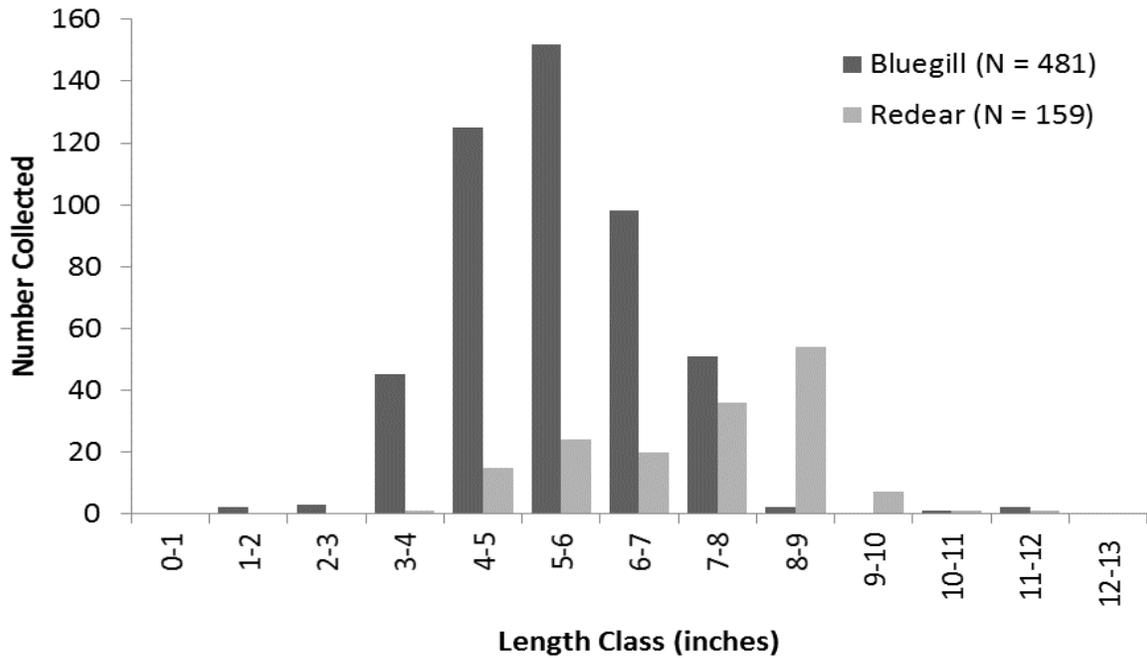


Figure 2. Length distribution of sunfish collected during the spring surveys throughout Rivanna Reservoir in 2019.

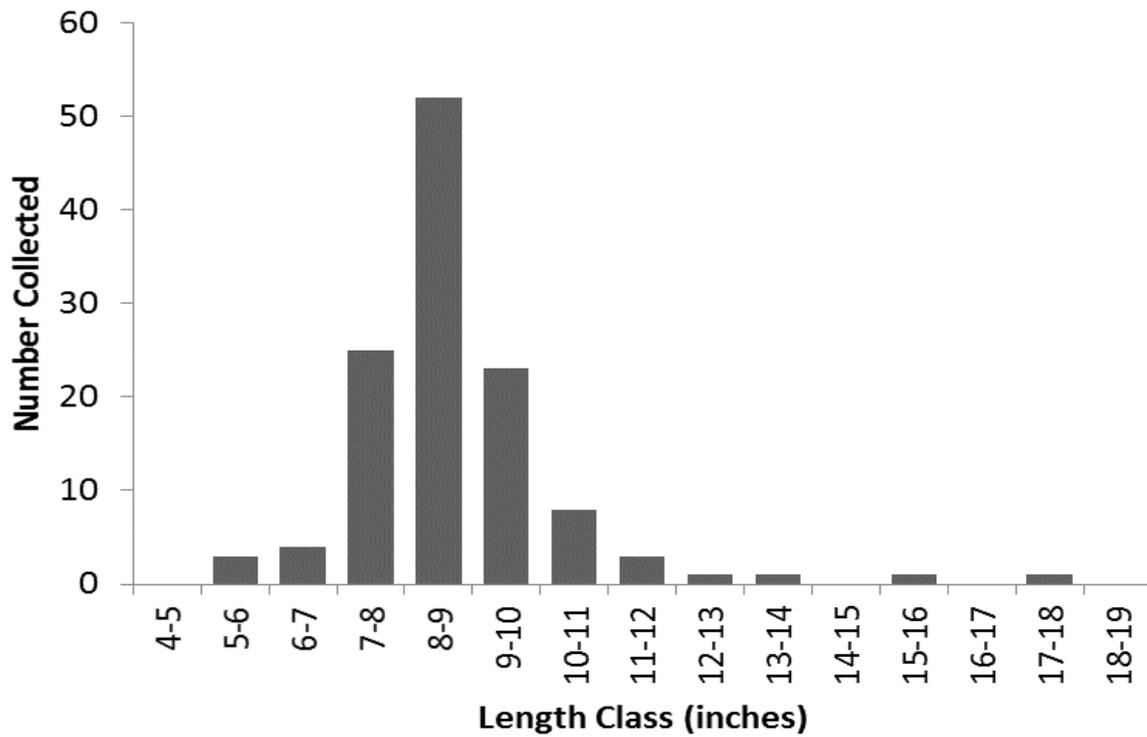


Figure 3. Length distribution of crappie collected with trapnets throughout Rivanna Reservoir in 2019.

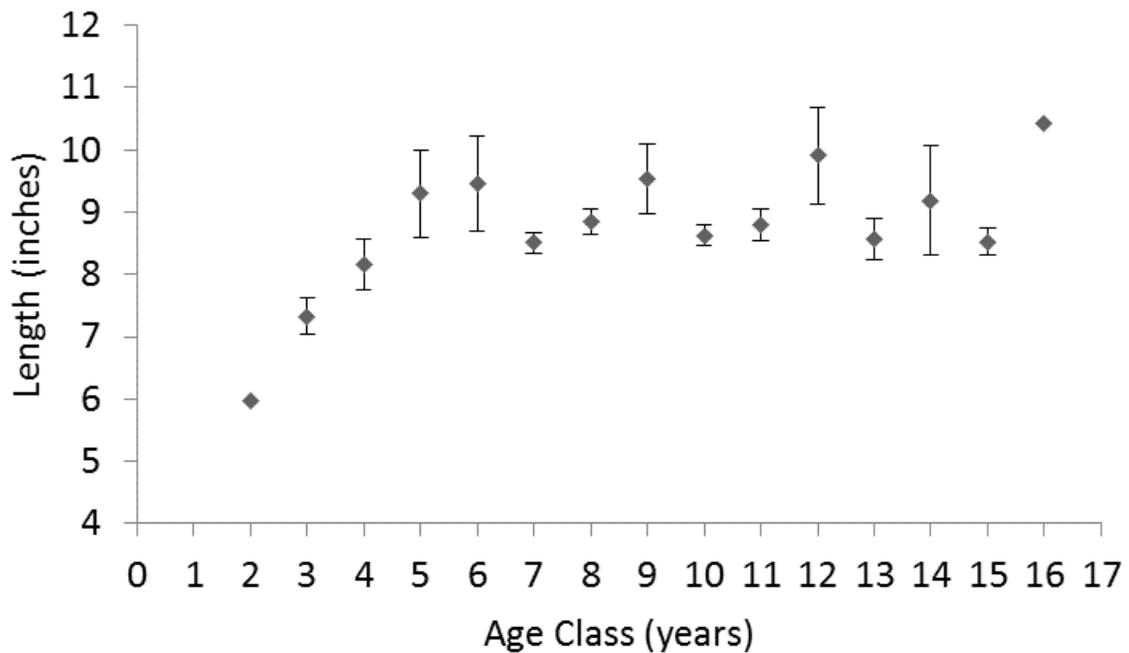


Figure 4. Average length-at-age of crappie collected throughout Rivanna Reservoir in 2019. Error bars indicate standard error.