Rivanna Reservoir
2011

Located in Albemarle County, 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 2010, the fish community of 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 Rivanna Reservoir.

Rivanna Reservoir's fish community is very diverse with a total of twenty fish species collected in the 2010 surveys (Table 1). Bluegill and largemouth bass 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). Rivanna Reservoir continues to provide a quality largemouth bass fishery for Central Virginia. Bass catch rates remain above average for the area and were very stable when compared to previous surveys. The bass population contains good portions of juvenile and adult fish (Figure 1), but could benefit from some harvest of bass in the 8-12 inch range. Bass survival was high with bass up to age-12 collected (Figure 2). The reservoir has good trophy potential for largemouth bass due to the diversity and abundance of forage and limited fishing pressure. This potential was clearly evident by our collection of multiple bass measuring over 24 inches and weighing over 9lbs (see photo gallery section at our Rivanna Reservoir webpage). The trophy potential could only increase with added harvest of smaller bass (8-12 inches). 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 electrofishing catch rates were fairly high with bluegill comprising the majority of sunfish collected. The bulk of sunfish collected were small (< 7 inches); only a few bluegill and redear sunfish over 8 inches were collected (Figure 3). Our trapnet survey along with previous electrofishing surveys and angler reports indicate that there are numerous large redear sunfish (> 8 inches) in the upper end of the reservoir, especially during the spring (April-May). Anglers determined to catch quality sunfish should concentrated their efforts on these 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 (> 95%) 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 4). The lack off preferred-sized fish is not due to low survival (annual survival near 70%) with crappie up to age-15 collected in the sample (Figure 5). The lack of larger crappie is due to overpopulation and stunting. On average, crappie growth slows at age-3 when the fish approach 8 inches, and crappie rarely grow in excess of 9 inches (Figure 5). 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 17 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 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 Game & Inland Fisheries continues 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 Rivanna Reservoir, please contact:

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Table 1. Species account and catch rates for fish collected throughout Rivanna Reservoir in 2010.

Species	Trapnets			Electrofishing		
	Number Collected	Catch Rate (fish/net-night)	Percentage of Catch	Number Collected	Catch Rate (fish/hour electrofishing)	Percentage of Catch
American Eel	2	0.1	0.4	None	None	None
Black Crappie	255	12.8	52.0	55	33	8.9
Bluegill	77	3.9	15.7	228	136	36.7
Brown Bullhead	12	0.6	2.4	None	None	None
Chain Pickerel	1	0.1	0.2	None	None	None
Channel Catfish	None	None	None	3	2	0.5
Gizzard Shad	1	0.1	0.2	19	11	3.1
Golden Shiner	1	0.1	0.2	4	2	0.6
Grass Carp	None	None	None	1	1	0.2
Green Sunfish	None	None	None	7	4	1.1
Largemouth Bass	1	0.1	0.2	220	131	35.4
Quillback Sucker	2	0.1	0.4	None	None	None
Redbreast Sunfish	5	0.3	1.0	None	None	None
Redear Sunfish	55	2.8	11.2	35	21	5.6
Warmouth Sunfish	35	1.8	7.1	25	15	4.0
White Catfish	2	0.1	0.4	None	None	None
White Crappie	13	0.7	2.7	3	2	0.5
White Sucker	10	0.5	2.0	17	10	2.7
Yellow Bullhead	7	0.4	1.4	1	1	0.2
Yellow Perch	11	0.6	2.2	3	2	0.5

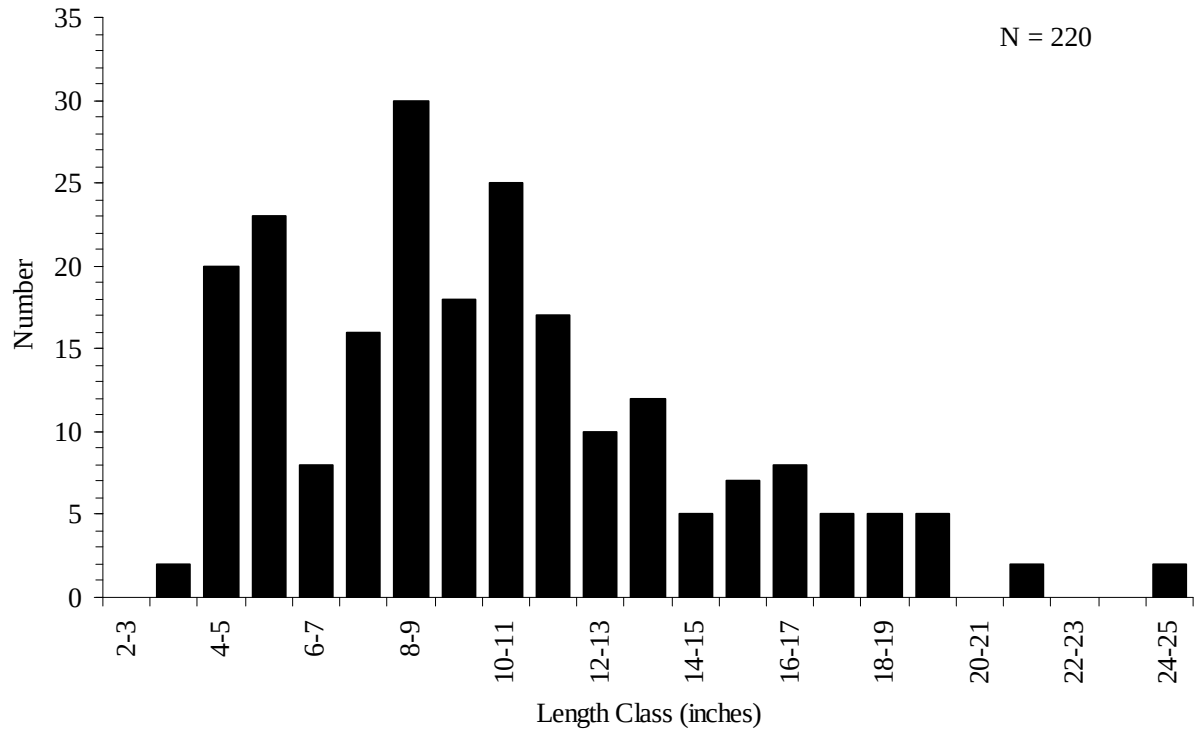

Figure 1. Length distribution of largemouth bass collected with electrofishing gear throughout Rivanna Reservoir in 2010.

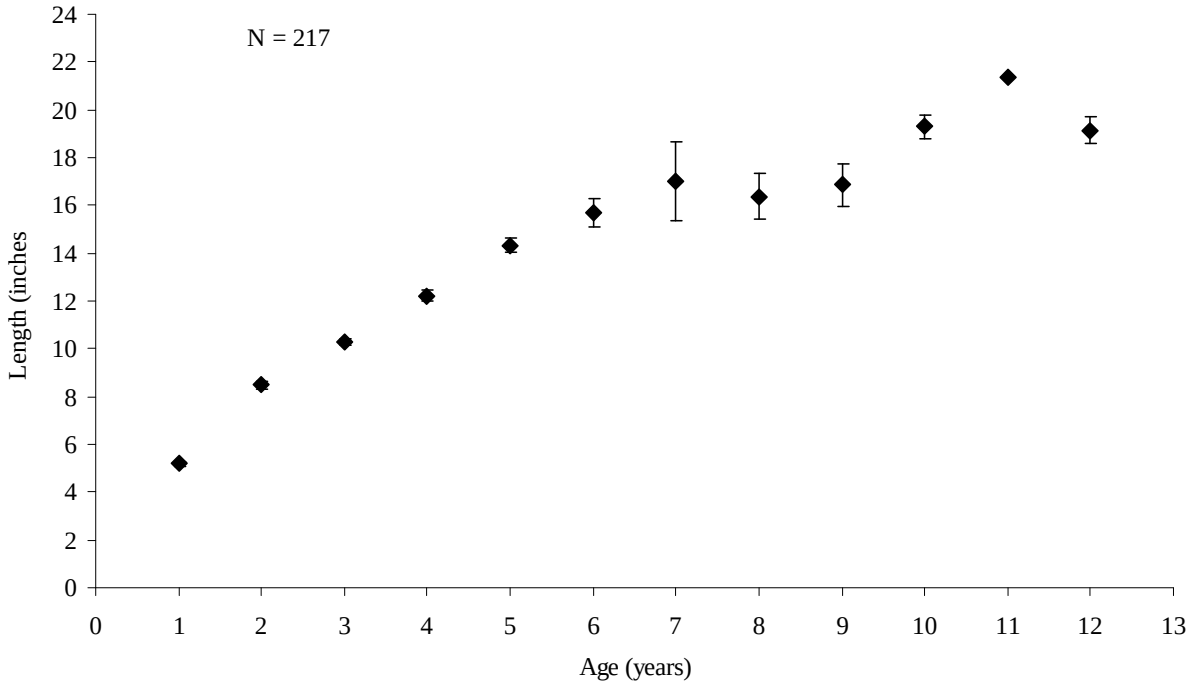

Figure 2. Average length-at-age of largemouth bass collected throughout Rivanna Reservoir in 2010. Error bars indicate standard error.

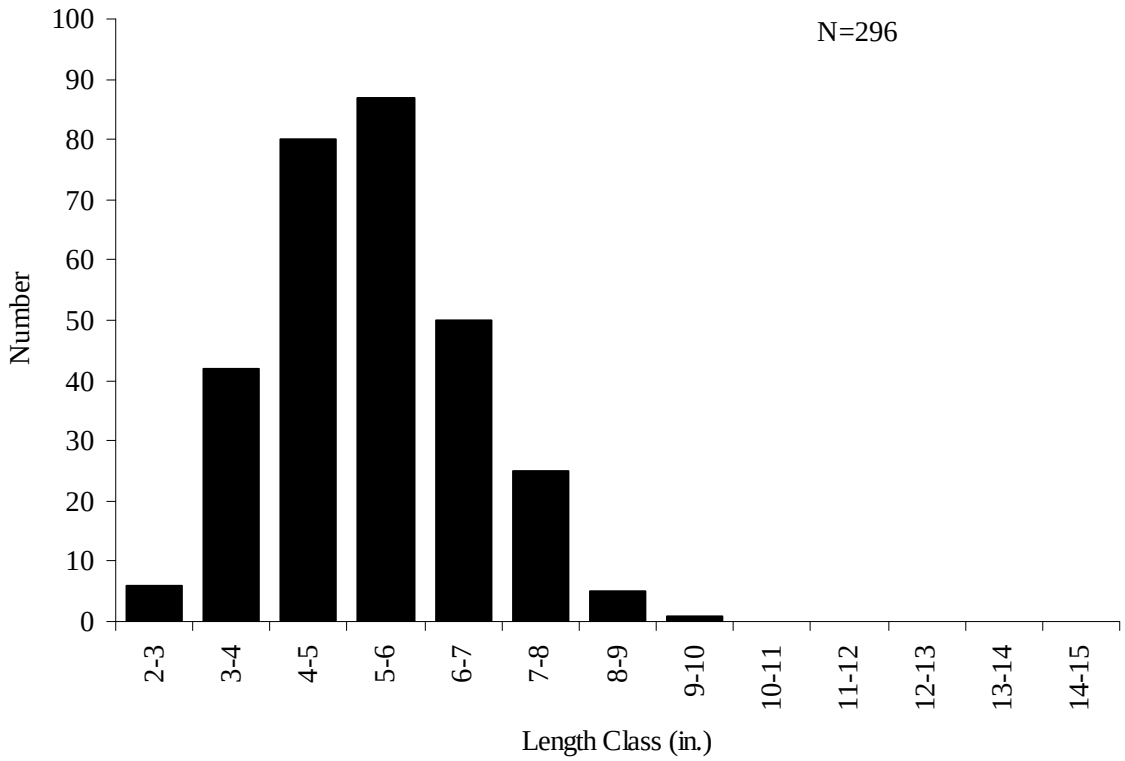

Figure 3. Length distribution of sunfish collected with electrofishing gear throughout Rivanna Reservoir in 2010.

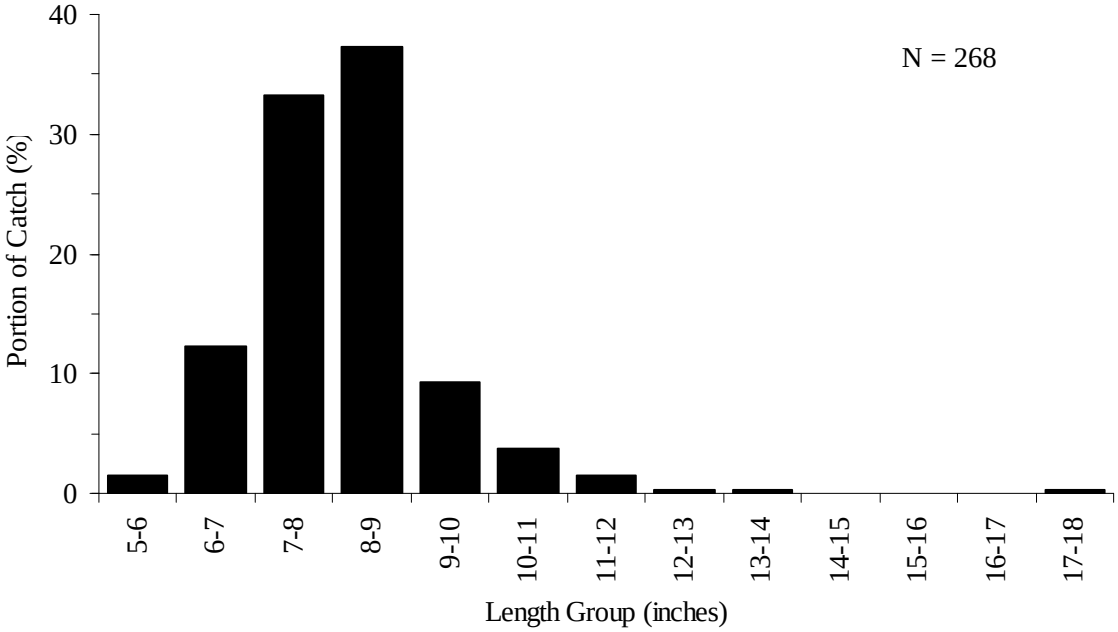

Figure 4. Length distribution of black crappie collected with trapnets throughout Rivanna Reservoir in 2010.

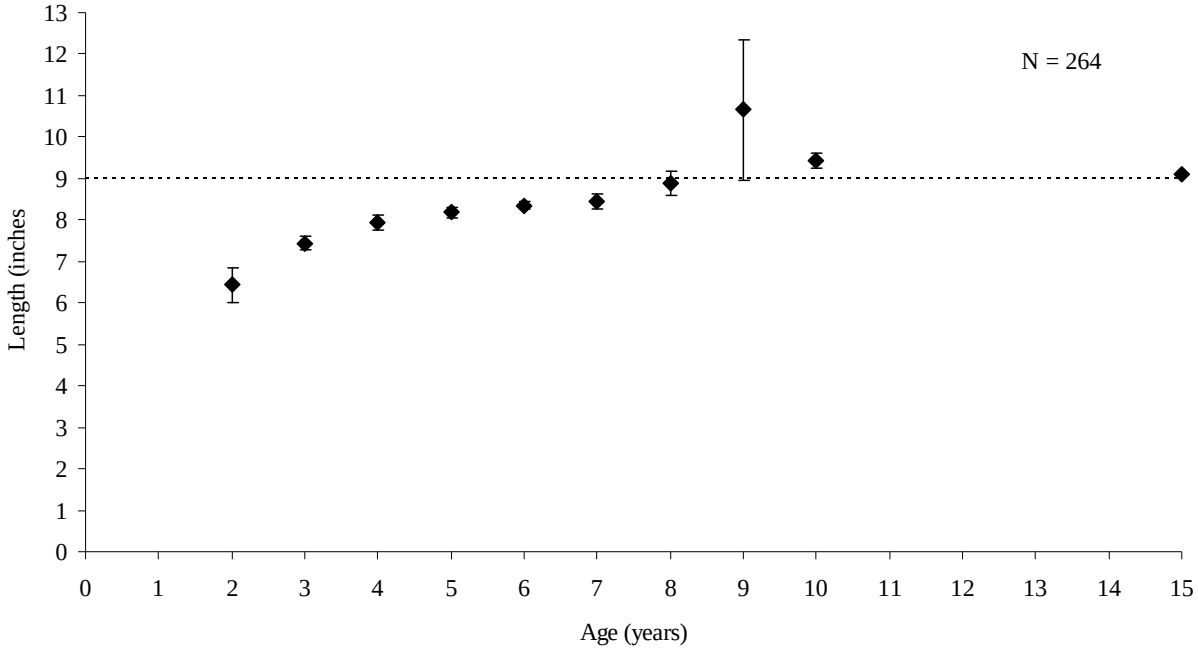

Figure 5. Average length-at-age of crappie collected throughout Rivanna Reservoir in 2010. Error bars indicate standard error while the dotted line indicates, on average, the size at which crappie growth slow near a stop.