



Northeast Creek Reservoir 2014



Located in Louisa County, Northeast Creek Reservoir is a 170-acre water supply reservoir that is administered by the Louisa County Water Authority. The reservoir was constructed in 1983, open to fishing in 1987, and currently contains self-sustaining populations of largemouth bass, bluegill, redear sunfish, black crappie, and chain pickerel. To provide additional angling opportunities, the reservoir is annually stocked with channel catfish. In the spring of 2013, the fish community of Northeast Creek Reservoir was sampled by boat electrofishing and trapnet gear. This report summarizes the results of these surveys and what anglers can expect to catch in Northeast Creek.

Northeast Creek Reservoir contains a diverse fish community for a small impoundment with a combined thirteen fish species collected (Table 1). Largemouth bass was the most abundant species collected in the electrofishing survey while black crappie was the most abundant species collected in the trapnet survey (Table 1). The largemouth bass electrofishing catch rate was low (41 fish/hour) when compared to a typical Central Virginia impoundment, but similar to rates of previous surveys on the lake (52, 37, and 39 fish/hour in 2008, 2002, and 1998, respectively). Low bass catch rates in Northeast Creek are primarily a function of low lake productivity. The reservoir has a very small watershed supplying nutrients to the lake, and the reservoir has a large presence of aquatic vegetation that utilize nutrient that would be available to prey fish.

The largemouth bass population is showing signs of slow grow due to the limited productivity. Previous surveys have shown that, on average, bass in Northeast Creek are not reach 12 inches until age-5 and do not reach 16 inches until after age-7. Further evidence of low productivity is stockpiling of bass in the 8 to 12 inch range (Figure 1). The largest bass collected measured 22 inches and weighed 5.5 pounds; these large fish were rare in the collections. Additionally, bass appear to be in poor condition with the average relative weights below 84. Relative weight is a measure of fitness or plumpness, and in Central Virginia ideal relative weights should range between 90 and 100. Overcrowding in the smaller size classes combined with poor lake productivity is leading to poor bass growth and less potential for the lake to produce quality bass. Angler harvest of small bass (< 13 inches) within the statewide 5 bass per day creel limit is encouraged. Anglers fishing for bass should concentrate around the edge of the water shield and in the areas with standing timber.

Crappie catch rates were low, which was primarily a function of cooler than expected water temperatures during sampling. All crappie collected were black crappie. Northeast Creek supports an average crappie fishery with the majority of crappie collected in the 8 to 10 inch range (Figure 2). Crappie growth is slow and seems to level off around 10 inches (Figure 3). The crappie population experience high annual survival (around 70%), and could benefit from angler harvest. Anglers should harvest all crappie caught < 9 inches within the statewide creel limit. A reduction in the number of the smaller crappie will increase growth of the remaining fish and create a better crappie fishery.

Northeast Creek Reservoir offers decent bluegill and redear sunfish fisheries. These panfish are not extremely abundant but there are numerous harvestable-sized fish (> 6 inches) available to anglers. The majority of sunfish collected were between 5 and 9 inches (Figure 4). Catches of panfish > 9 inches were rare except for the occasional big redear. Anglers searching for panfish should concentrate efforts around the sandy flats and brush piles in the spring and the deeper timber structure during the summer. A good area to start is the brush piles in the eastern arm of the reservoir or the sandy banks on the western shore, just above the boat launch.

Channel catfish and chain pickerel offer anglers a different variety of fishing experience. Channel catfish are stocked annually, but none were captured in our electrofishing sample. The absence of catfish in the catch is due to our sampling gear rather than a lack of fish. Very few pickerel were collected in the 2013 surveys (Table 1), but the abundance of vegetation offers these fish plenty of suitable habitat and numerous places to hide. Fishing around the vegetation beds with rooster-tailed spinner or beetle spin baits should give anglers a chance to catch a pickerel.

Anglers looking for a scenic experience with little interference from other anglers should visit Northeast Creek Reservoir. There is ample parking and a gravel ramp that accommodates most boats. The entrance to the lake is an unmarked gravel road directly off Route 33 (approximately 5 miles east of Louisa). The reservoir is open 0.5 hour before sunrise till 0.5 hour after sunset, and gas powered motors are prohibited. If you plan to make a day on the lake, be aware that a fishing permit, issued by Louisa County Water Authority, is required to fish the lake. Permits are \$2.00 daily, \$10.00 annual, \$8.00 for senior citizens (calendar year), and can be obtained by contacting The Water Authority (540.967.1122).

For more information on Northeast Creek Reservoir, please contact:

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Table 1. Species account and catch rates for fish collected throughout Northeast Creek Reservoir in 2013. The notation 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	2	1	1	NC	NC	NC
Black Crappie	49	31	19	121	2.42	33
Bluegill	55	35	21	70	1.40	19
Brown Bullhead	1	1	0	3	0.06	1
Channel Catfish	5	3	2	9	0.18	2
Creek Chubsusker	NC	NC	NC	20	0.40	6
Chain Pickerel	16	10	6	22	0.44	6
Golden Shiner	4	3	2	4	0.08	1
Largemouth Bass	65	41	25	4	0.08	1
Redear	62	39	24	66	1.32	18
Warmouth	2	1	1	4	0.08	1
White Perch	NC	NC	NC	38	0.76	10
Yellow Bullhead	NC	NC	NC	2	0.04	1

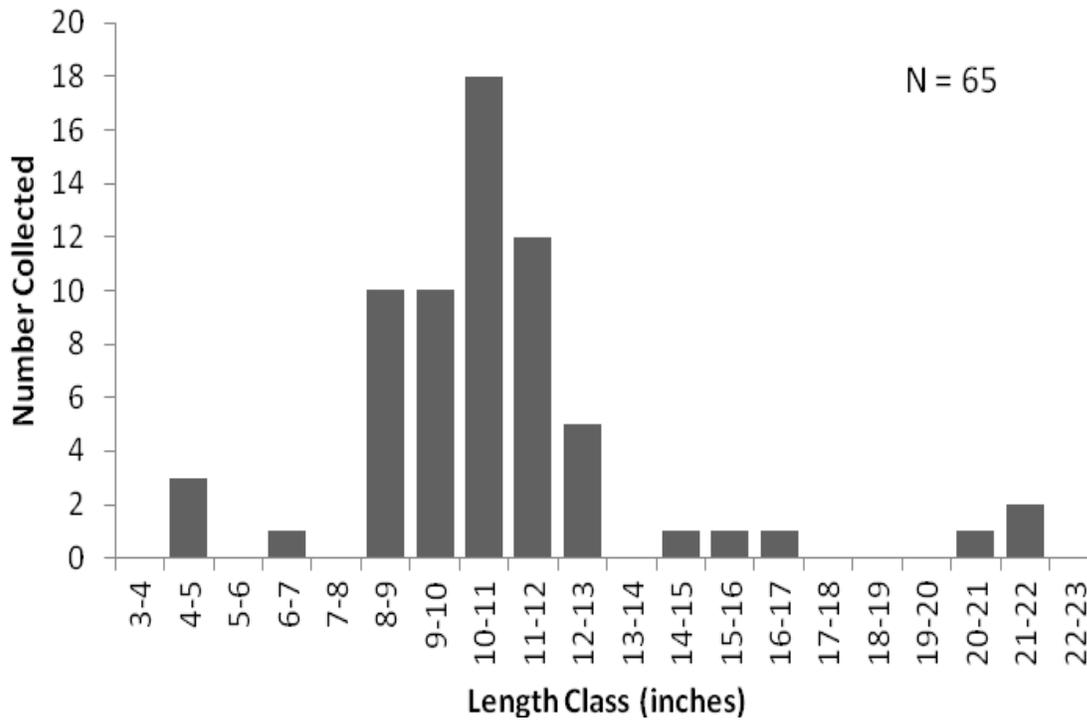


Figure 1. Length distribution of largemouth bass collected throughout Northeast Creek Reservoir in 2013.

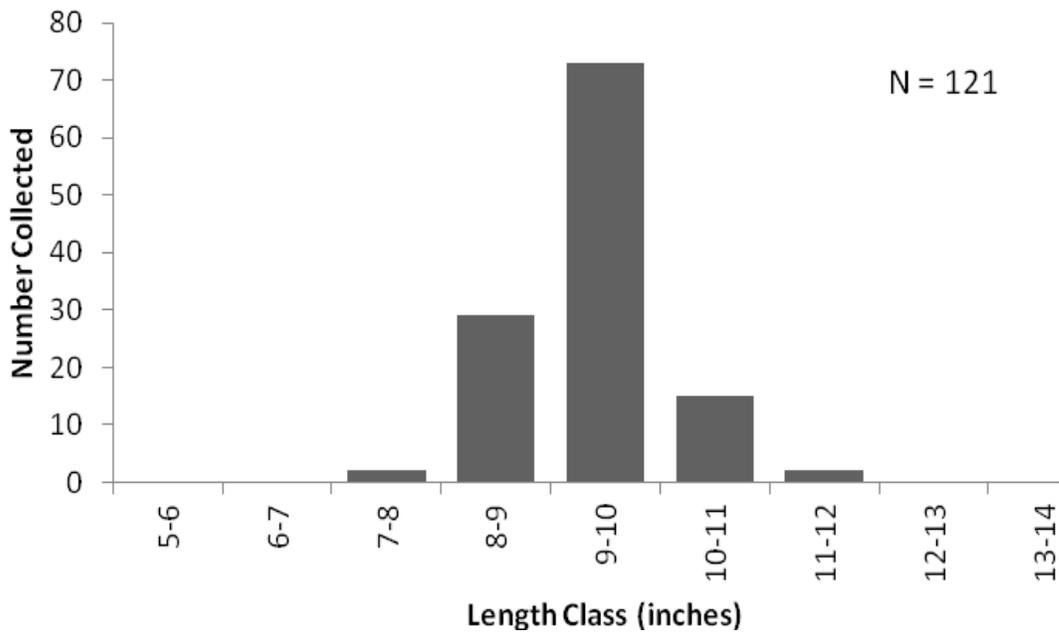


Figure 2. Length distribution of black crappie collected with trapnets throughout Northeast Creek Reservoir in 2013.

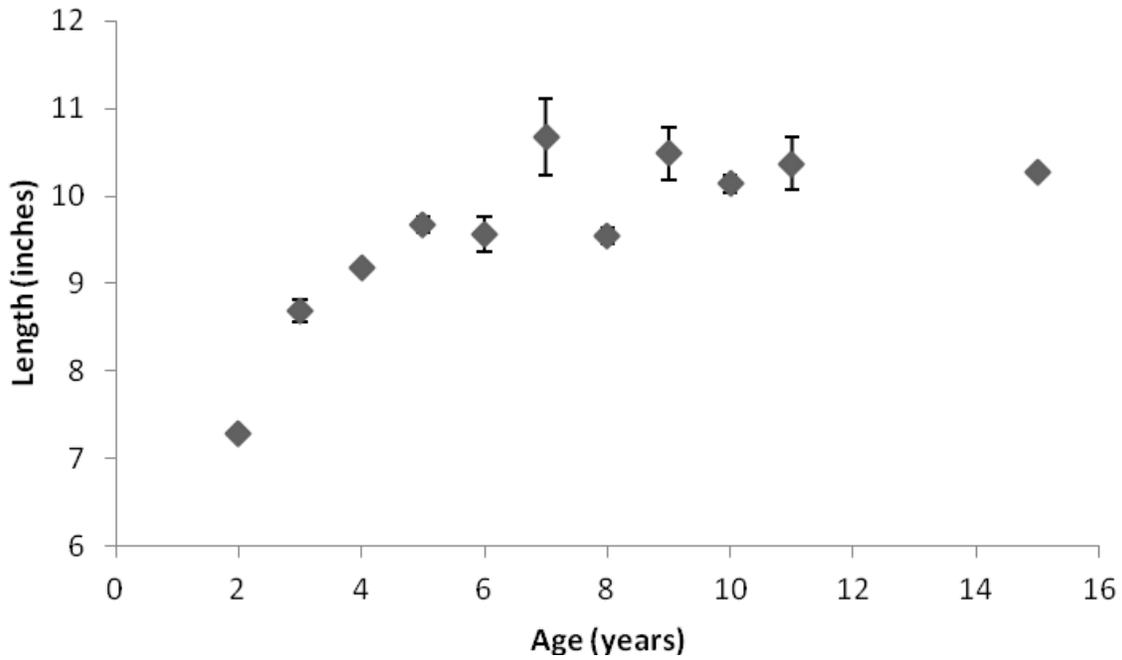


Figure 3. Average length-at-age of crappie collected throughout Northeast Creek Reservoir in 2013. Error bars indicate standard error.

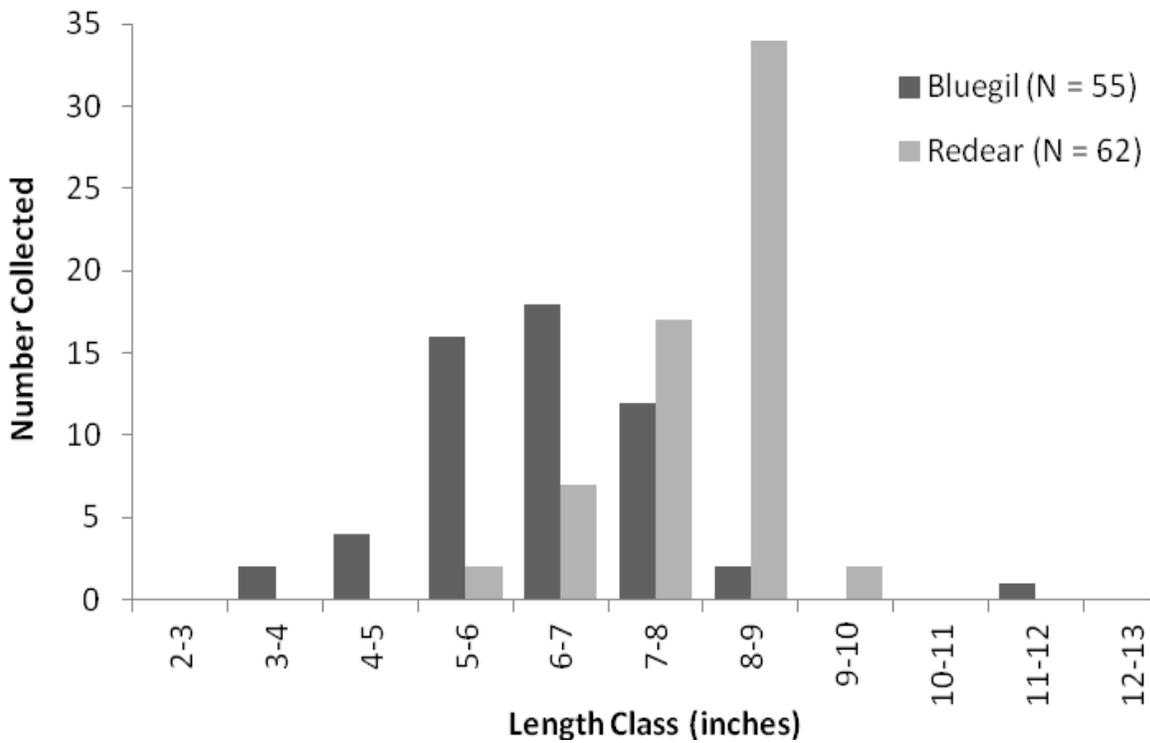


Figure 4. Length distribution of bluegill and redear collected with electrofishing gear throughout Northeast Creek Reservoir in 2013