



Chris Greene Reservoir 2015



Located in Albemarle County, Chris Greene Reservoir is a 66-acre water supply impoundment for the City of Charlottesville. 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 average largemouth bass and panfish fisheries. In the spring of 2014, the fish community of Chris Greene was sampled by boat electrofishing and trapnets. This report summarizes the results of these surveys and what anglers can expect to catch in Chris Greene.

Chris Greene Reservoir's fish community is diverse with a total of eleven fish species collected in the 2014 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). Currently the bass fishery is managed under a 12-15 protective slot limit. The bass size distribution indicates a population that is dominated by small individuals (<12 inches, Figure 1). Bass are stockpiling below 12 inches which limits the effectiveness of the protective slot limit. The reservoir is in dire need of small bass (< 12 inches) harvest. Anglers should harvest every bass caught under 12 inches within the 5 bass per statewide creel limit. Once harvest is increased, bass growth will improve and more bass will grow to protected slot lengths. 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 21 inches and weighed 6 lbs.

Crappie catch rates were high with 98% of the crappie catch composed of black crappie. Chris Greene supports an average crappie fishery with the majority of crappie collected in the 7 to 10 inch range (Figure 2). Crappie growth is slow and levels off around 9 inches (Figure 3). The crappie population experience high annual survival (around 75%), 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.

Other populations of fish are fairly average and are probably limited by the overabundant bass and crappie populations. Channel catfish are stocked annually and routinely caught from the fishing pier. Chris Greene is recommended as a family fishery less than 10 minutes from Charlottesville's city limits. The park has great amenities including an improved boat launch, a fishing pier, plenty of bank fishing areas, and a swimming beach. Gas powered motors are prohibited in the reservoir.

For more information on Chris Greene, please contact:

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Table 1. Species account and catch rates for fish collected throughout Chris Greene Reservoir in 2014.

| Species | Trapnets | | | Electrofishing | | |
|-----------------|------------------|-----------------------------|---------------------|------------------|--|---------------------|
| | Number Collected | Catch Rate (fish/net-night) | Percentage of Catch | Number Collected | Catch Rate (fish/hour of electrofishing) | Percentage of Catch |
| Black Crappie | 129 | 12.9 | 51 | 32 | 20 | 8 |
| Bluegill | 73 | 7.3 | 29 | 160 | 98 | 41 |
| Brown Bullhead | 7 | 0.7 | 3 | None Collected | | |
| Channel Catfish | 16 | 1.6 | 6 | 5 | 3 | 1 |
| Golden Shiner | None Collected | | | 1 | 1 | 0 |
| Green Sunfish | 2 | 0.2 | 1 | 1 | 1 | 0 |
| Largemouth Bass | 1 | 0.1 | 0 | 140 | 86 | 36 |
| Redear | 15 | 1.5 | 6 | 36 | 22 | 9 |
| Warmouth | 3 | 0.3 | 1 | 9 | 6 | 2 |
| White Crappie | 3 | 0.3 | 1 | 4 | 2 | 1 |
| White Sucker | 3 | 0.3 | 1 | 1 | 1 | 0 |

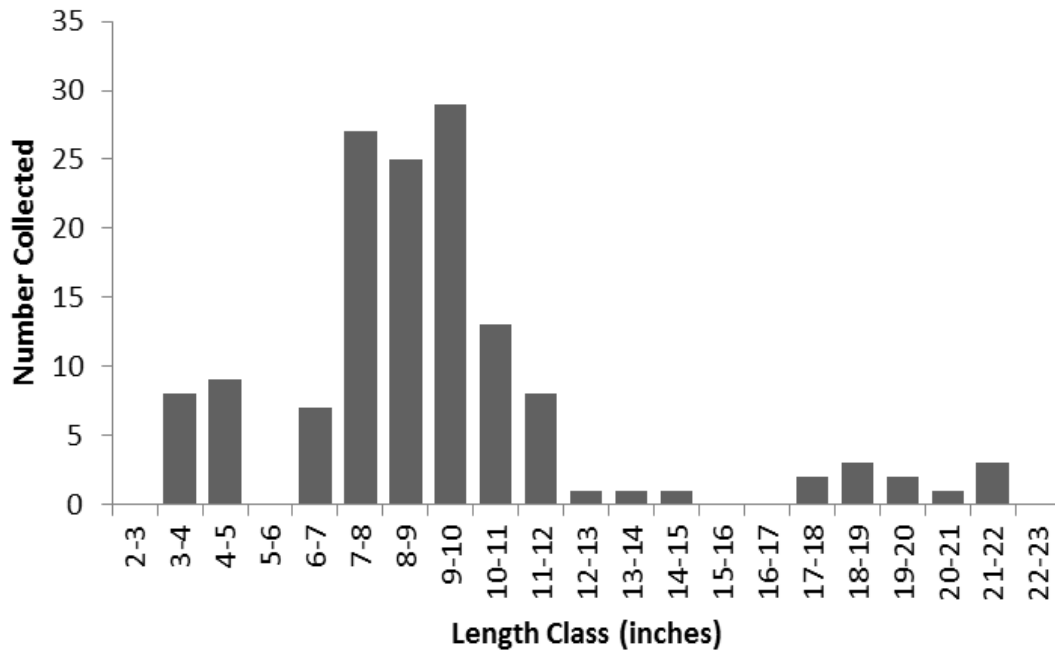


Figure 1. Length distribution of largemouth bass collected with electrofishing gear throughout Chris Greene Reservoir in 2014.

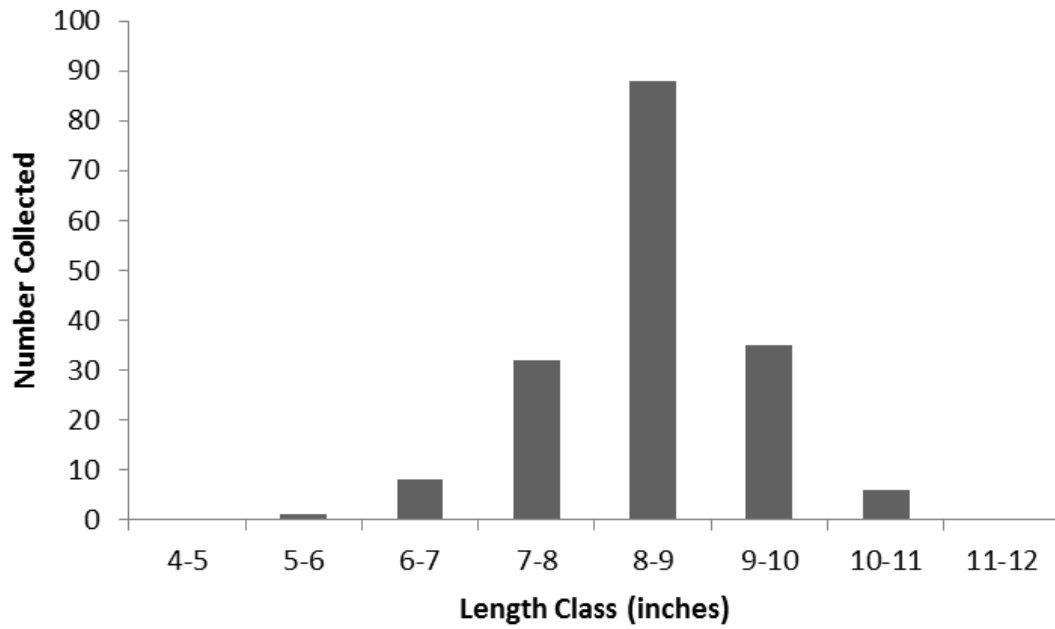


Figure 2. Length distribution of black crappie collected with trapnets throughout Chris Greene Reservoir in 2014.

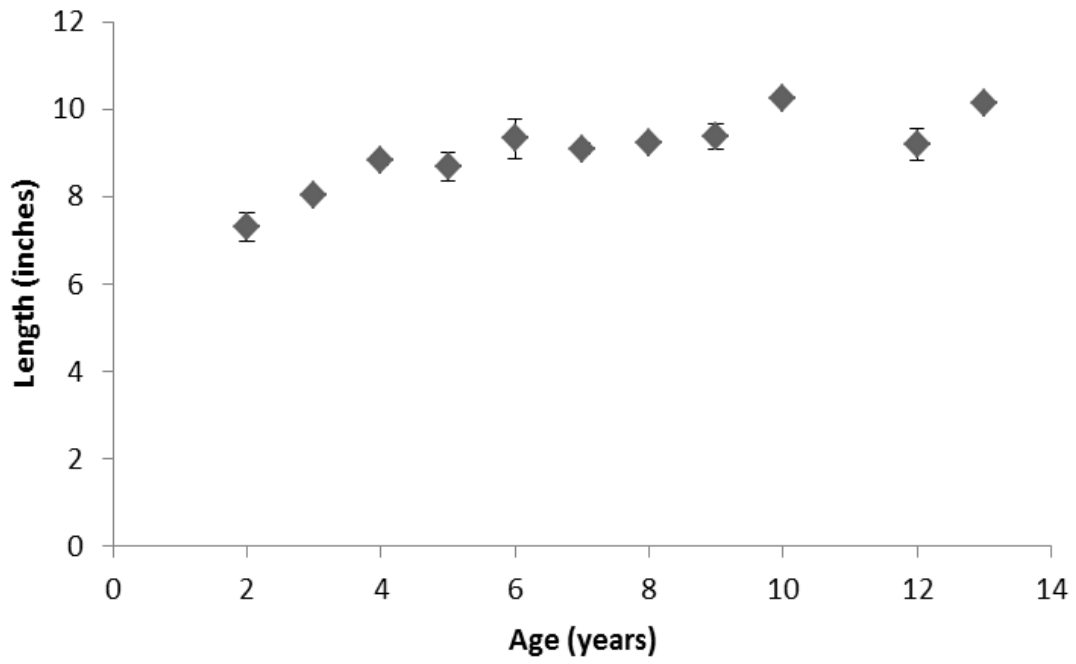


Figure 3. Average length-at-age of crappie collected throughout Chris Greene Reservoir in 2014. Error bars indicate standard error.