LAKE REESE LARGEMOUTH BASS SURVEY, 2022

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Study Site: Lake Reese

Sample Date(s): April 13, 20, & 22, 2022

Species: Largemouth Bass

Gear: Boat Mounted Electrofishing

Effort: 4.7 hours

Sample Size: n = 226

RESULTS

Catch Per Unit Effort (Mean): 48 fish/hr (SE = 5)

Length (mm): Minimum = 77 Maximum = 580 Mean = 343

%≥356 mm = 52 %≥457 mm = 27 PSD = 76 PSD-P = 59

Condition: Mean *Wr* = 90 %≥2.3 kg = 9.3

Growth: Length at Age 2 (mm) = 269 Max Age (years) = 16

BIOLOGICAL OBSERVATIONS

As a one of the smaller lakes within the Piedmont Region, the Largemouth Bass population at Lake Reese in Asheboro, NC has not been surveyed since spring of 2009. The 2022 population size distribution is extraordinary for a small reservoir where 14% of the spawning stock were of memorable size (510 mm) or greater (Figure 1). This can be typical of a small, stable, reservoir with a satisfactory amount of Largemouth Bass spawning habitat (Figure 2). About 40% of the Largemouth Bass surveyed were 4–6 years old and weighed between 475-2000 g. Body conditions were optimal for larger fish (>380 mm) and slightly lower for the majority of Largemouth Bass within this survey. The larger proportion of smaller fish is likely causing body condition to be slightly lower for those size classes (Figure 3). Growth rate at Lake Reese is ideal where fish reach 400 mm by age 4 and have a maximum potential of 534 mm (Figure 4). CPUE (48 fish/hr) is typical of a small Piedmont reservoir with higher-than-average PSD-P values (Table 1). Lake Reese supports an extraordinary population of Largemouth Bass with ample amounts of the population within the memorable size class and larger.

MANAGEMENT RECOMMENDATIONS

1. Maintain current statewide harvest regulation for minimum size limit and five fish daily creel limit on Largemouth Bass at Lake Reese.
2. Promote harvest of the smaller bass within the smaller stock density (200–300 mm) to maximize body condition within that size range and reduce the level of competition for larger Largemouth Bass in the lake.

TABLES AND FIGURES

TABLE 1.—Catch per unit effort (CPUE), percent of fish that were 356 mm and longer, Proportional Size Distribution-Preferred (PSD-P), mean length (TL mm) at age two, and mean relative weight (*Wr*) of preferred sized Largemouth Bass collected from Lake Reese with electrofishing in April 2003, 2009, and 2022.

Year	CPUE (fish/h)	%≥356 mm	PSD-P	Mean length at age 2	Mean W_r
2003	38	55	60	241	96
2009	NA	53	50	NA	93
2022	48	52	59	269	90

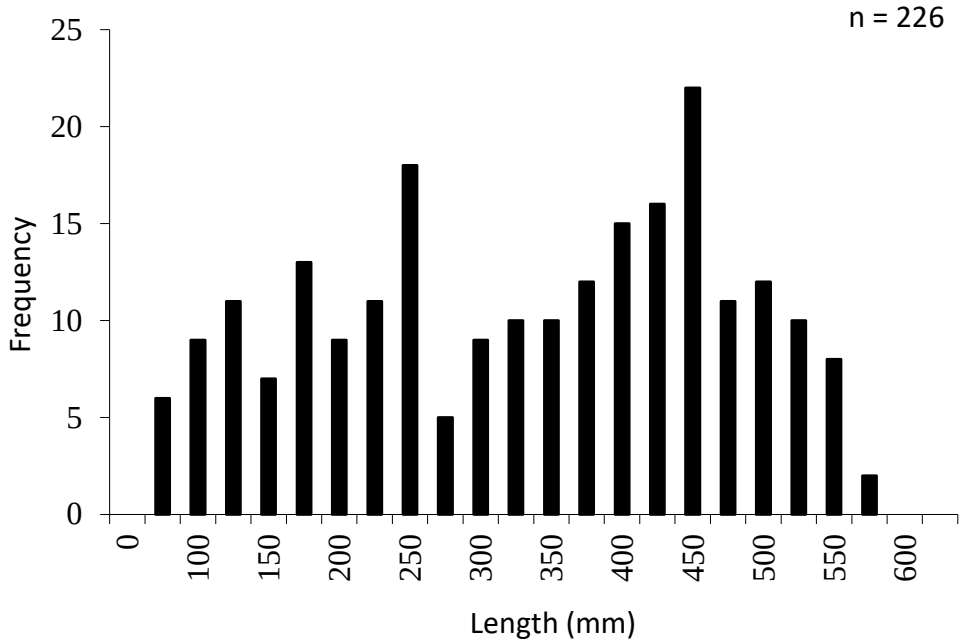

Figure 1.—Length frequency distribution of Largemouth Bass collected from Reese Lake with electrofishing during April of 2022.

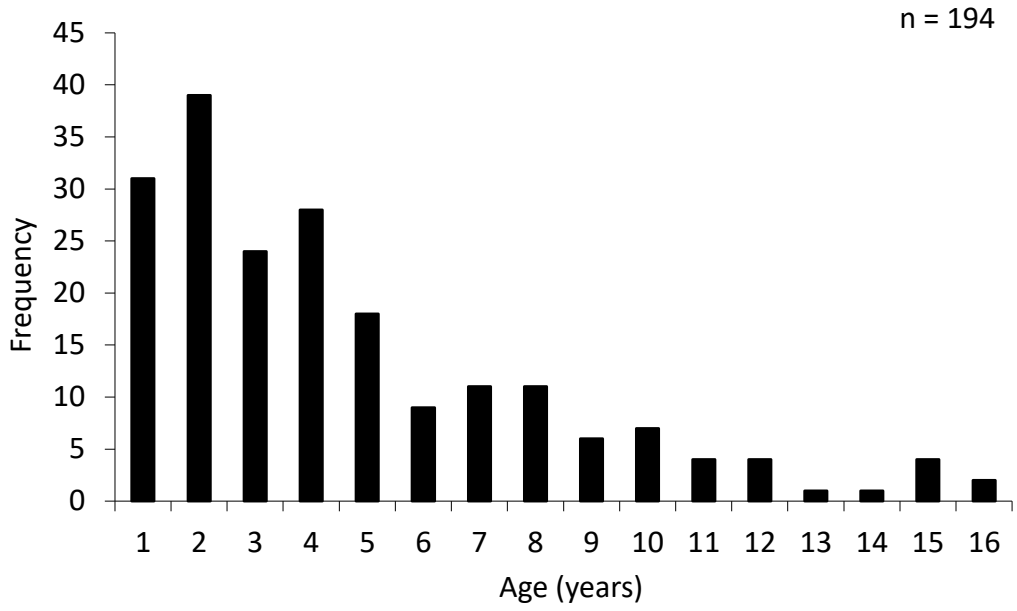

Figure 2.—Age frequency distribution of Largemouth Bass collected from Lake Reese with electrofishing during April of 2022.

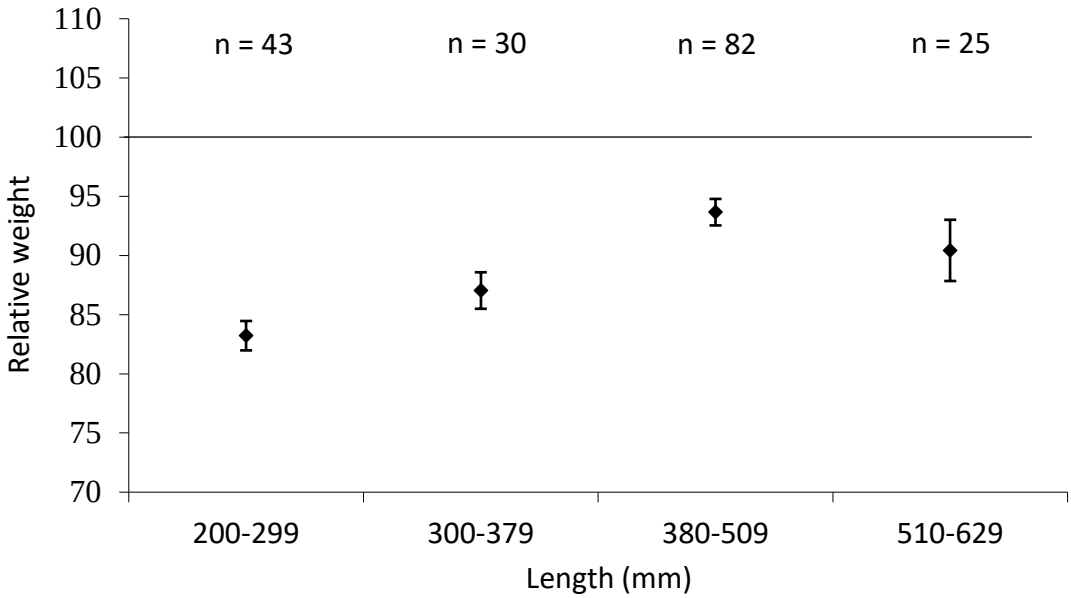

Figure 3.—Relationship between stock density and relative weight (*Wr*) of Largemouth Bass captured from Lake Reese with electrofishing during April of 2022.

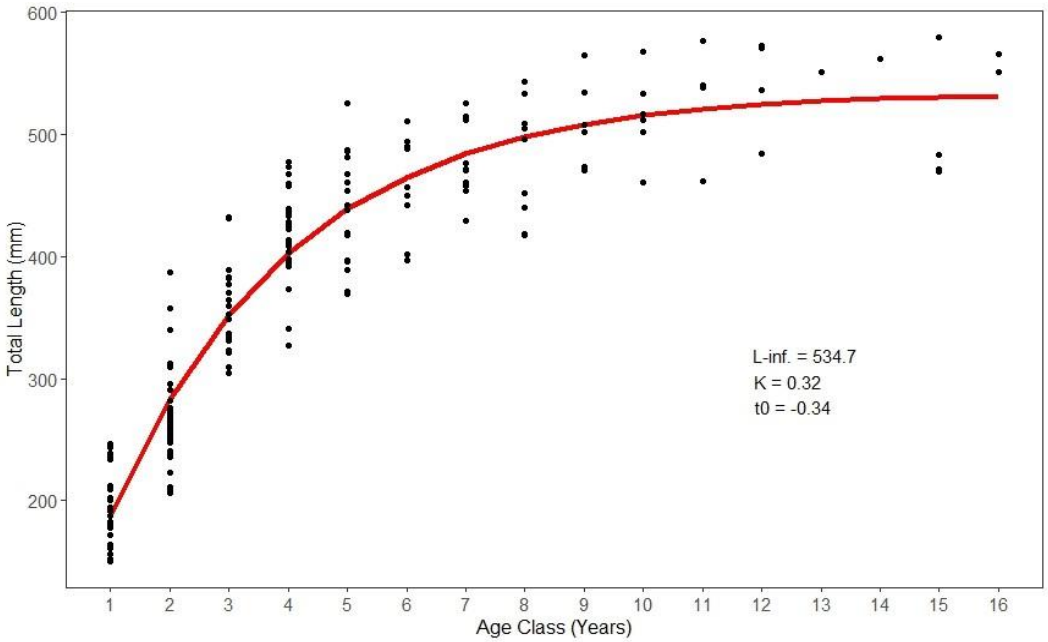

Figure 4.—von Bertalanffy growth curve for of Largemouth Bass collected from Lake Reese with electrofishing during April of 2022.