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## 2019 Powell River Fisheries Management Report

The headwaters of the Powell River are located in Wise County, Virginia, and the river flows approximately 80 miles through Wise and Lee counties before entering the state of Tennessee. The Powell River supports several sport fish species like smallmouth bass, largemouth bass, spotted bass, rock bass, sunfish, walleye, sauger, musky, channel catfish and freshwater drum. Historic fish stockings have included, channel catfish, walleye, and muskie. The Powell River has been sampled less frequently than other rivers in southwest Virginia primarily due to the lack of boat access. However, the river was sampled in 2018 to evaluate the current status of the fishery.

Smallmouth bass (48%) and rock bass (37%) dominated the fish sample collected in 2018 followed by longnose gar (7%) and redbreast sunfish (6%; Figure 1). Other species observed included bluegill, walleye, green sunfish, and flathead catfish.

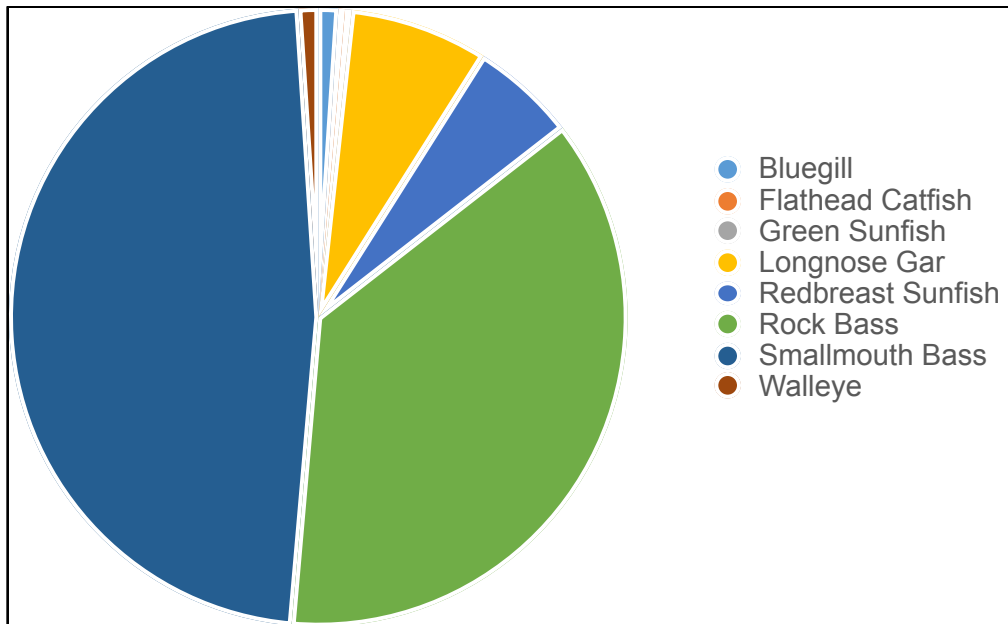


Figure 1. Species composition observed during electrofishing sample conducted on the Powell River in spring 2018.

**Smallmouth Bass** - Smallmouth bass relative abundance (number of fish collected per hour of sampling) in the Powell River varies from year to year, but has historically ranged

between 28 - 58 fish/hr. The 2018 smallmouth bass catch rate of 53 fish/hr was on the higher end of this range.

Smallmouth bass observed in the 2018 sample ranged in length from 4 –21 inches with an average length of 9 inches (Figure 2). Proportional size distribution (PSD) is an index that measures the percentage of adult fish that are  $\geq 11$  inches in length. The PSD for smallmouth bass in 2018 was 25%, which was the highest observed among previous samples. The percentage of adult fish  $\geq 14$  inches in the collection was 7% and the percentage of adult fish that were  $\geq 17$  inches was 1%.

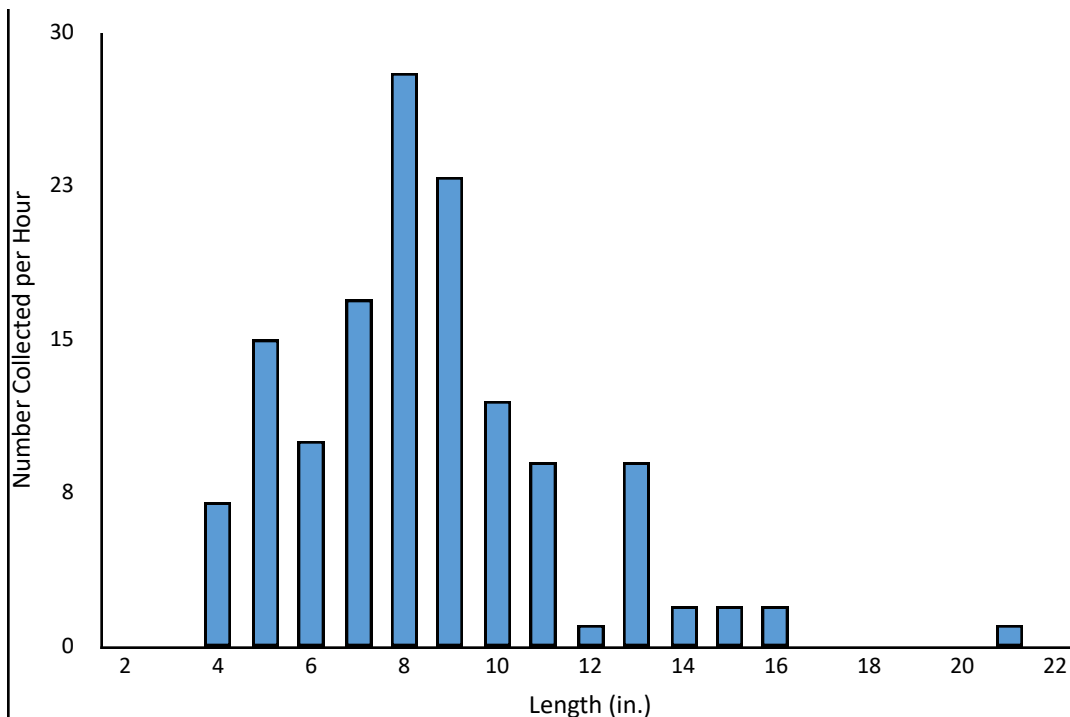


Figure 2. Length frequency distribution of smallmouth bass sampled from the Powell River during electrofishing samples in spring 2018.

**Rock Bass** - Rock bass were collected at a rate of 40 fish/hr in 2018, which was comparable to that observed in previous samples. Rock bass ranged in length from 2 – 9 inches with an average length of about 7 inches. Fifty-eight percent of the adult rock bass were of quality size ( $\geq 7$  inches) while 6% were  $\geq 9$  inches in length.

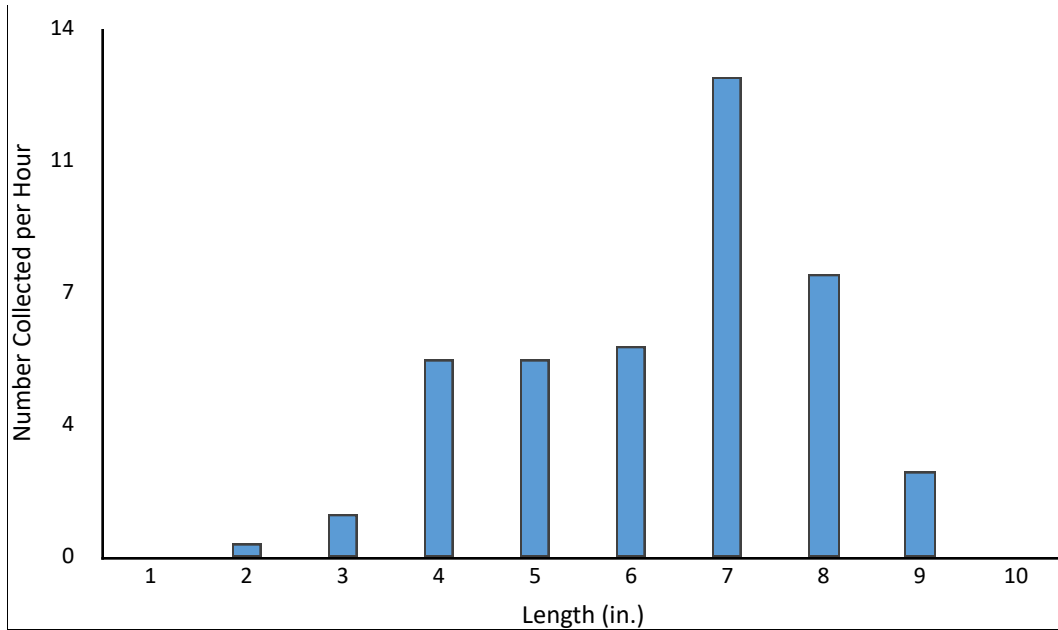


Figure 3. Length frequency distribution of rock bass sampled from the Powell River during electrofishing samples in spring 2018.

In summary, the Powell River offers some good fishing opportunities for a variety of species, especially smallmouth bass and rock bass. Although, the average smallmouth bass caught by anglers may be smaller than on other southwest Virginia rivers, the numbers should provide a great day of fishing. The size structure of the rock bass population is very good compared to other rivers in the region.

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