

Raccoon Lake (Main Lake)

Beaver County

April 2019 Electrofishing and Trap Net Survey

Raccoon Lake (Main Lake) is a 101-acre lake contained within Raccoon Creek State Park. The park, in southern Beaver County, is stocked annually with Rainbow Trout in the spring and the fall. Additionally, fingerling Walleye are stocked every other year. The lake is managed with [statewide regulations](#). Boating at the lake is permitted only with use of electric-motor powered and non-powered boats.

Raccoon Lake was previously surveyed in 1995 and 2008 using trap nets and nighttime electrofishing. In spring of 2019, Area 8 staff surveyed the lake to assess the size and quality of the lake's gamefish and panfish populations. During the week of April 15th, eight trap nets were fished. Thirteen species were captured with White Crappie and Bluegill comprising the majority (Table 1).

Table 1. Length and frequency distribution of sampled fish.

| Species | Number caught | Size range (inches) | Notes |
|-----------------|----------------------|----------------------------|-------------------|
| Black Crappie | 9 | 5 – 9 inches | 11% over 9 inches |
| White Crappie | 597 | 3 – 12 inches | 1% over 9 inches |
| Bluegill | 266 | 2 – 7 inches | |
| Pumpkinseed | 1 | 6 – 7 inches | |
| Largemouth Bass | 5 | 4 - 20 inches | |
| Yellow Perch | 12 | 4 - 6 inches | |
| Brown Bullhead | 94 | 8 – 16 inches | |
| Yellow Bullhead | 9 | 7 – 12 inches | |
| Walleye | 5 | 16 - 29 inches | |
| Gizzard Shad | 68 | Not Measured | |
| White Sucker | 18 | Not Measured | |
| Rainbow Trout | 4 | Not Measured | |
| Common Carp | 12 | Not Measured | |

Although crappie were the most abundant fish, the size structure of their populations continued to be poor (Figure 1). The trap net catch rate of quality-sized crappie (over 9 inches) has declined from previous surveys. The lack of quality-sized fish is due to slow growth. Direct competition with Gizzard Shad for food resources is likely the main reason for the slow growth.

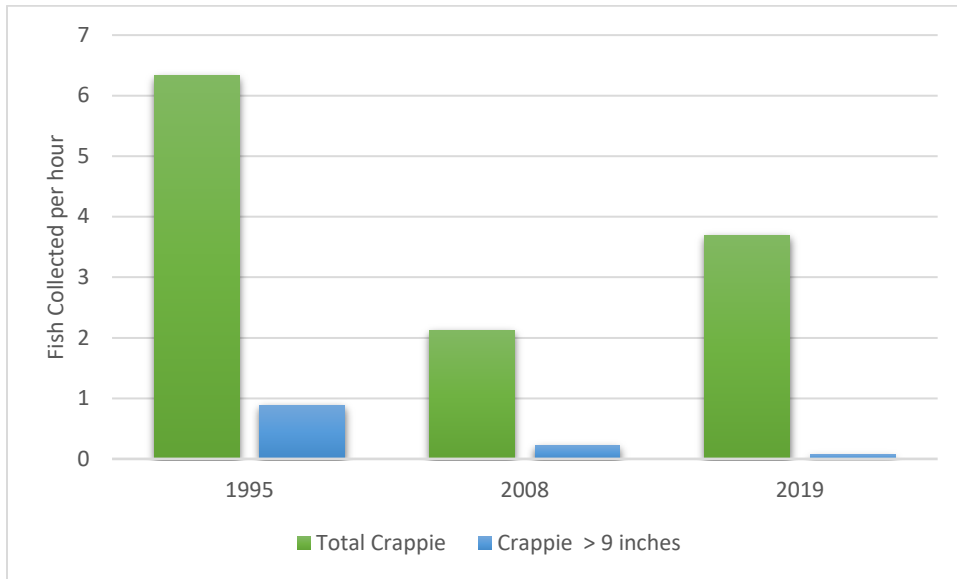


Figure 1. Trap net catch rates of Crappies at Raccoon Lake.



A pair of nice White Crappies from Raccoon Lake

Over the years Bluegill and Pumpkinseed populations, like crappie, have been abundant, but lacked quality size individuals. Over the past decade, the number of quality sized fish collected per hour dropped from 0.16 to 0.04 (Figure 2). Again, likely due to competition with Gizzard Shad for food in the lake.

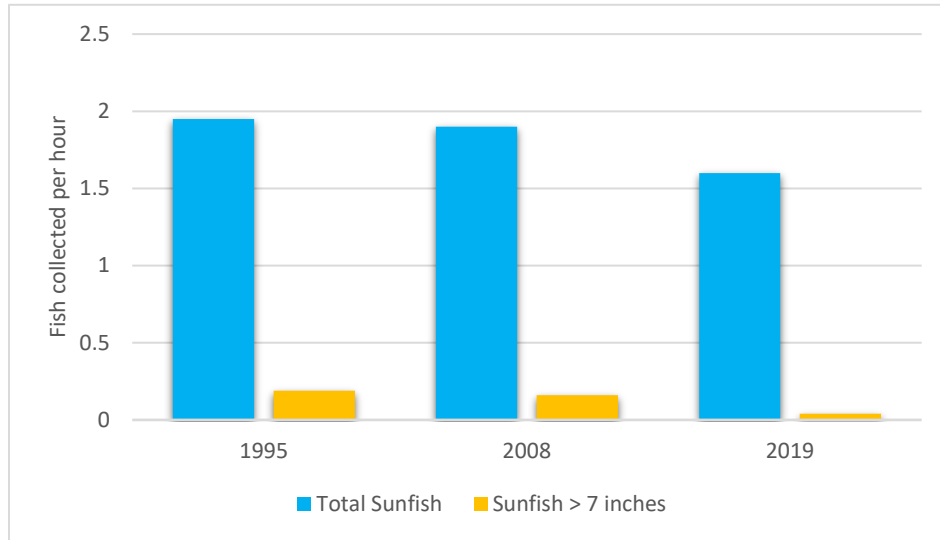


Figure 2. Trap net catch rates of Sunfish at Raccoon Lake.

Our night electrofishing survey in April 2019 was designed to assess the Largemouth Bass populations at Raccoon Lake. Area 8 staff collected a total of 98 bass in 2019 with a catch rate of 76 total bass/hr (Figure 3). The 2019 total bass catch rate was lower than previous years, but exceeded the statewide Big Bass Guideline of 35 bass/hr. In 2019, Raccoon Lake had 21 bass/hr over 12 inches and 12 bass/hr over 15 inches, which well exceeded the statewide Big Bass Guidelines of 7 bass/hr over 12 inches and 2 bass/hr over 15 inches used to define a quality bass population.

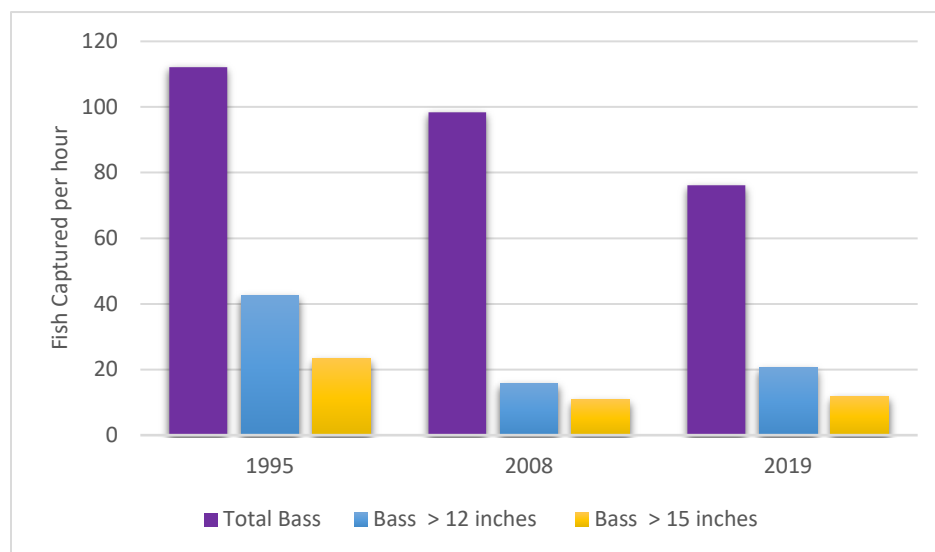


Figure 3. Night electrofishing catch rates of Largemouth Bass at Raccoon Lake



Largemouth Bass captured from night electrofishing on Raccoon Lake

A total of seven Walleyes were collected from trap nets and night electrofishing. The largest Walleye was 29 inches long and weighed 12 pounds.



Walleye captured in trap nets from Raccoon Lake

Our surveys at Raccoon Lake indicated that it will provide good fishing opportunities for a variety of fish species. Like in the past, the lake will continue to be a good fishing location for Largemouth Bass and stocked trout. Panfish will also provide fishing opportunities due to their abundance, even though the number of quality-sized fish is lacking.

Christina Edwards

Area 8 Fisheries Biologist Aide