

Beaverdam Run Reservoir

Cambria County

April 2016 Trap Net Survey and May/June 2016 Night Electrofishing Survey

Beaverdam Run Reservoir is a 360-acre impoundment located east of Beaverdale, PA on State Route 869. The impoundment is owned by Highland Sewer and Water Authority and in 2000 was opened to the public for fishing and other lake recreational activities. The Pennsylvania Fish and Boat Commission recognizes the Authority for their cooperative effort of allowing public access to the Reservoir. The reservoir has low turbidity and low productivity. Alkalinity values have ranged from 2 to 3 mg/l in 2000 and 2001, to 8 mg/l in 2008, and to 6 mg/l in 2016. Lake liming by the Beaverdam Conservation Group (BCG) in 2006 and 2007 boosted the alkalinity but it appears the effects of the liming may be waning. Currently, Beaverdam Run Reservoir is managed with [Big Bass](#) and [Panfish Enhancement](#) regulations for black bass and Yellow Perch, respectively. The Fish and Boat Commission stocked fingerling Smallmouth Bass in 2003 and 2004 to develop a reproducing population and increase angling opportunities, while local groups have been stocking adult Rainbow and Brook Trout.

The lake was surveyed in April 2016 using 12 trap net sets and May and June 2016 using 6-night electrofishing runs. Trap netting was performed to assess the lakes naturally reproducing populations of warmwater/coolwater gamefish and panfish. Night electrofishing was performed to assess the lakes naturally reproducing populations of Largemouth Bass and Smallmouth Bass. Table 1 below shows the total catch of all species from trap nets in April 2016.

Table 1. Length and frequency distribution of fish from April trap netting.

Species	Number caught	Size range (inches)	Comments
Bluegill	277	4 – 9 inches	80% over 7 inches
Pumpkinseed	53	4 – 8 inches	60% over 7 inches
Rock Bass	120	4 – 9 inches	18% over 7 inches
Green Sunfish	5	5 – 6 inches	
Hybrid Sunfish	2	8 inches	
Yellow Perch	123	5 – 13 inches	29% over 9 inches
Black Crappie	11	8 – 12 inches	73% over 9 inches
Brown Bullhead	105	7 – 14 inches	
Yellow Bullhead	10	7 – 11 inches	
Smallmouth Bass	54	6 – 18 inches	24% over 15 inches
Largemouth Bass	4	10 – 15 inches	50% over 15 inches
Hatchery Rainbow Trout	4	8 – 16 inches	
White Sucker	28	Not measured	
Golden Shiner	13	Not measured	

Bluegill were the most abundant species captured in trap nets. Numerous Bluegill in the 7 and 8-inch size classes were captured trap netting. Bluegill numbers and sizes have improved greatly since the first survey in 2001 (Figure 1). Beaverdam Run Reservoir would be an excellent place for anglers to target large Bluegill.

Like Bluegill although less abundant, large Pumpkinseeds were also present at Beaverdam Run Reservoir. Overall, 60% of the Pumpkinseeds captured were over 7 inches in length. Total catch and average size of Pumpkinseed have also improved since the previous surveys (Figure 2.)

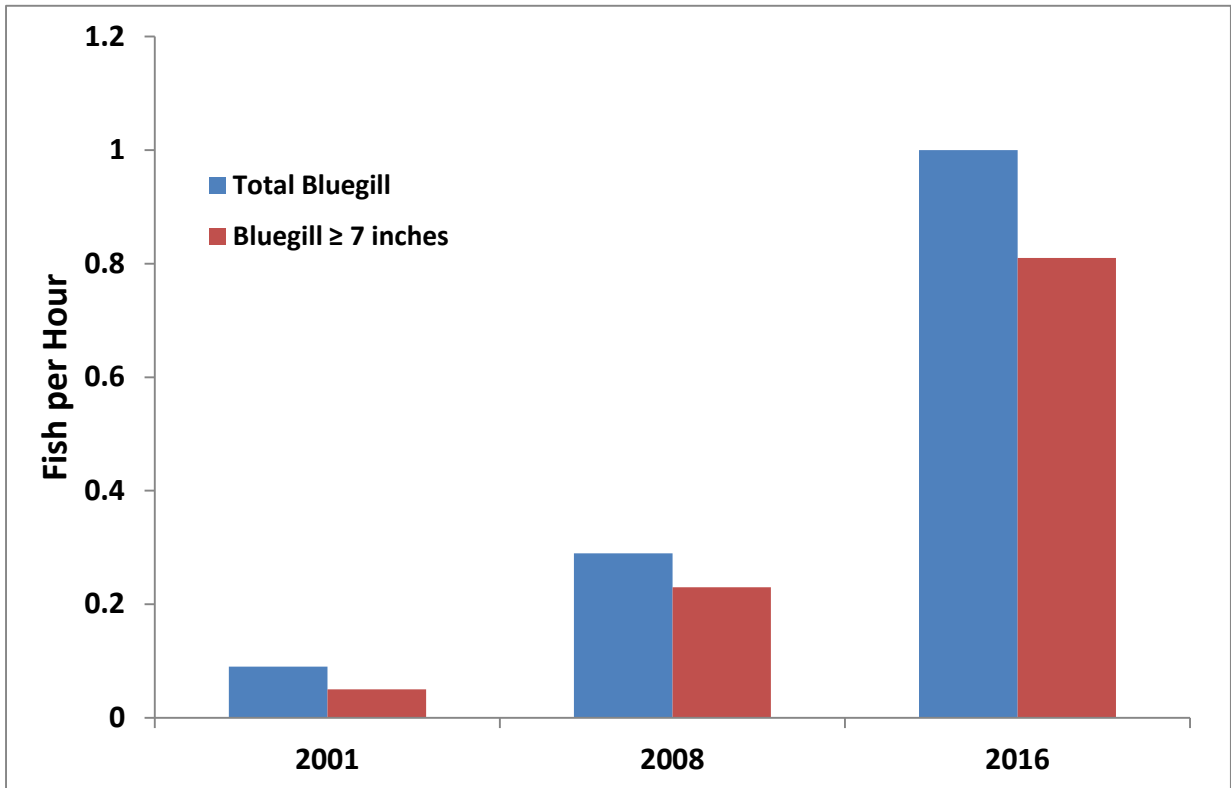


Figure 1. Bluegill collected from trap nets at Beaverdam Run Reservoir.

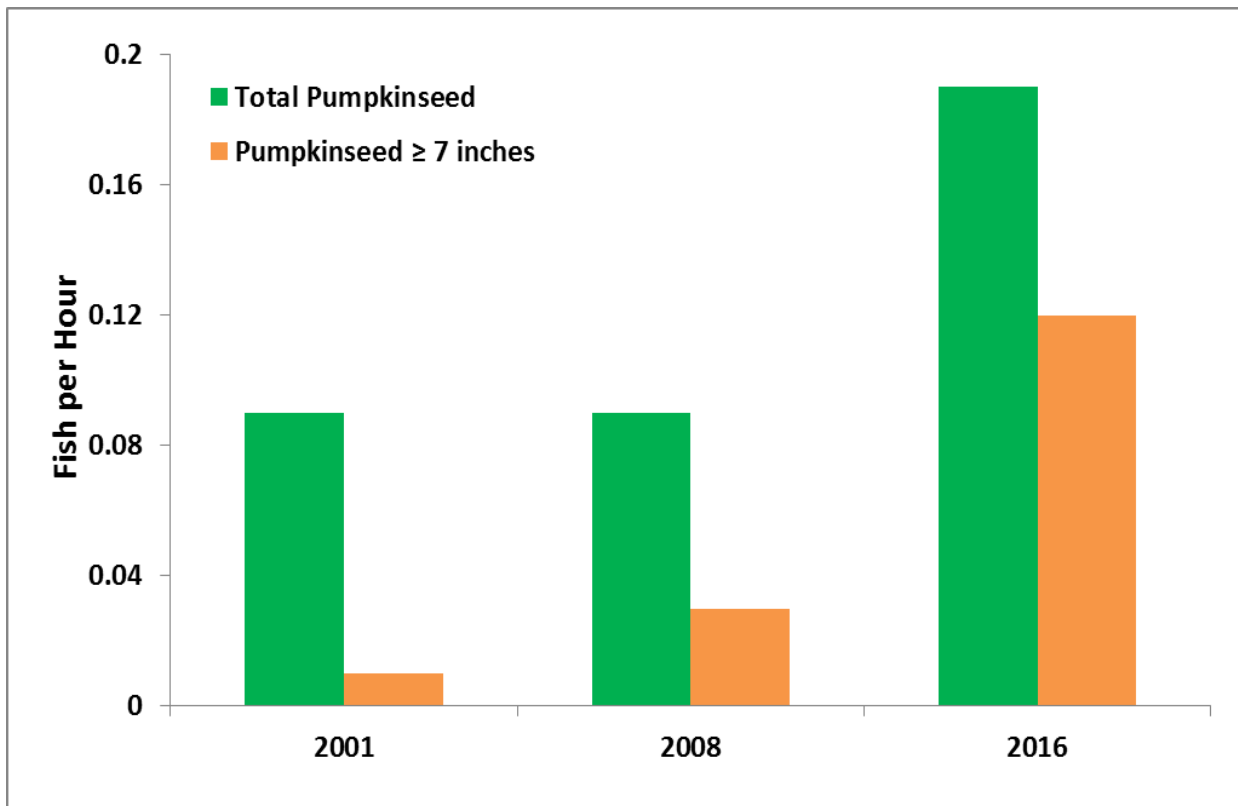


Figure 2. Pumpkinseed collected from trap nets at Beaverdam Run Reservoir.



Typical Bluegill (right hand) and Pumpkinseed captured from trap nets in Beaverdam Run Reservoir.

Good numbers of Rock Bass were also captured in 2016 at Beaverdam Run Reservoir. Although their size distribution wasn't as impressive as the Bluegill and Pumpkinseed, just under 20% of the Rock Bass were over 7 inches in length. Numbers of Rock Bass have increased steadily since the initial survey in 2001 (Figure 3).

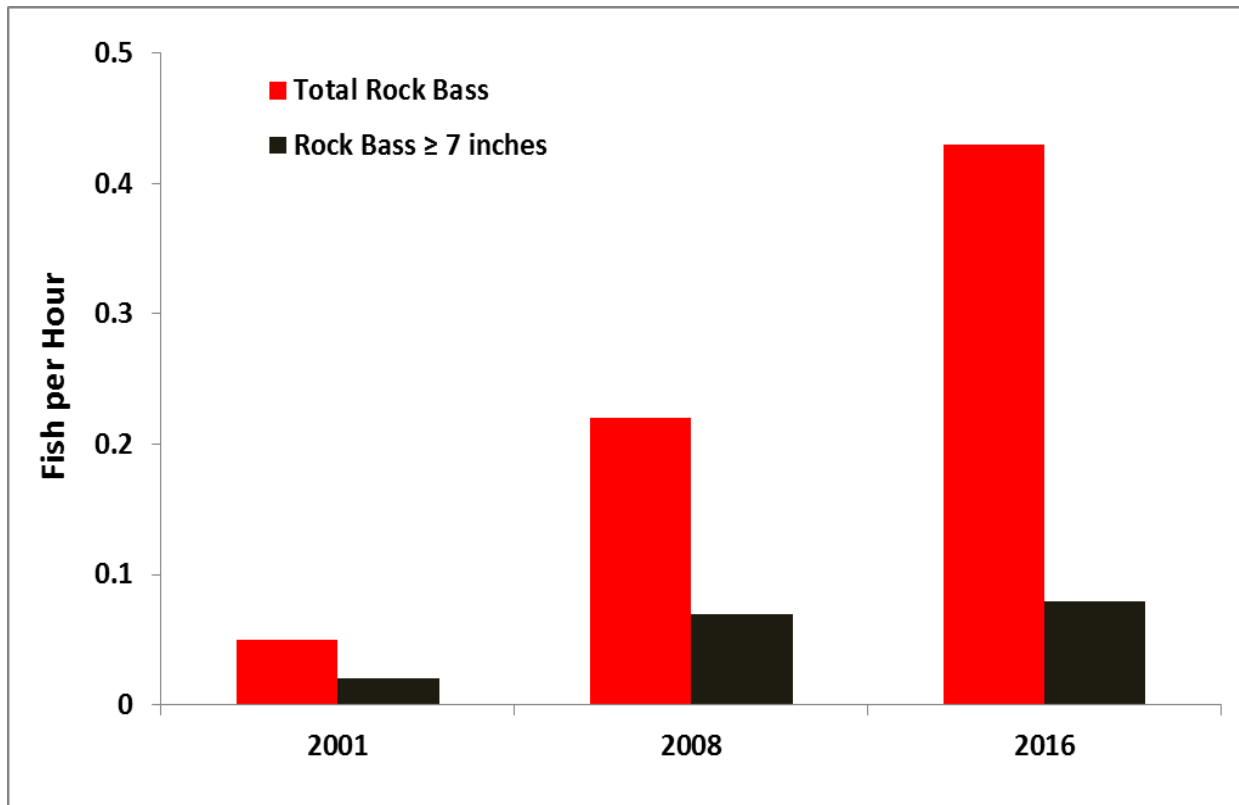


Figure 3. Rock Bass collected from trap nets at Beaverdam Run Reservoir.

Yellow perch numbers have declined since the initial survey in 2001. However, the quality component of the fishery has remained the same. Fish over 9 inches were captured at a rate of 0.16 fish/hr in 2001 compared to 0.13 fish/hr in 2016 (Figure 4). The introduction of Smallmouth Bass to the reservoir may be responsible for the overall decline in the Yellow Perch population.

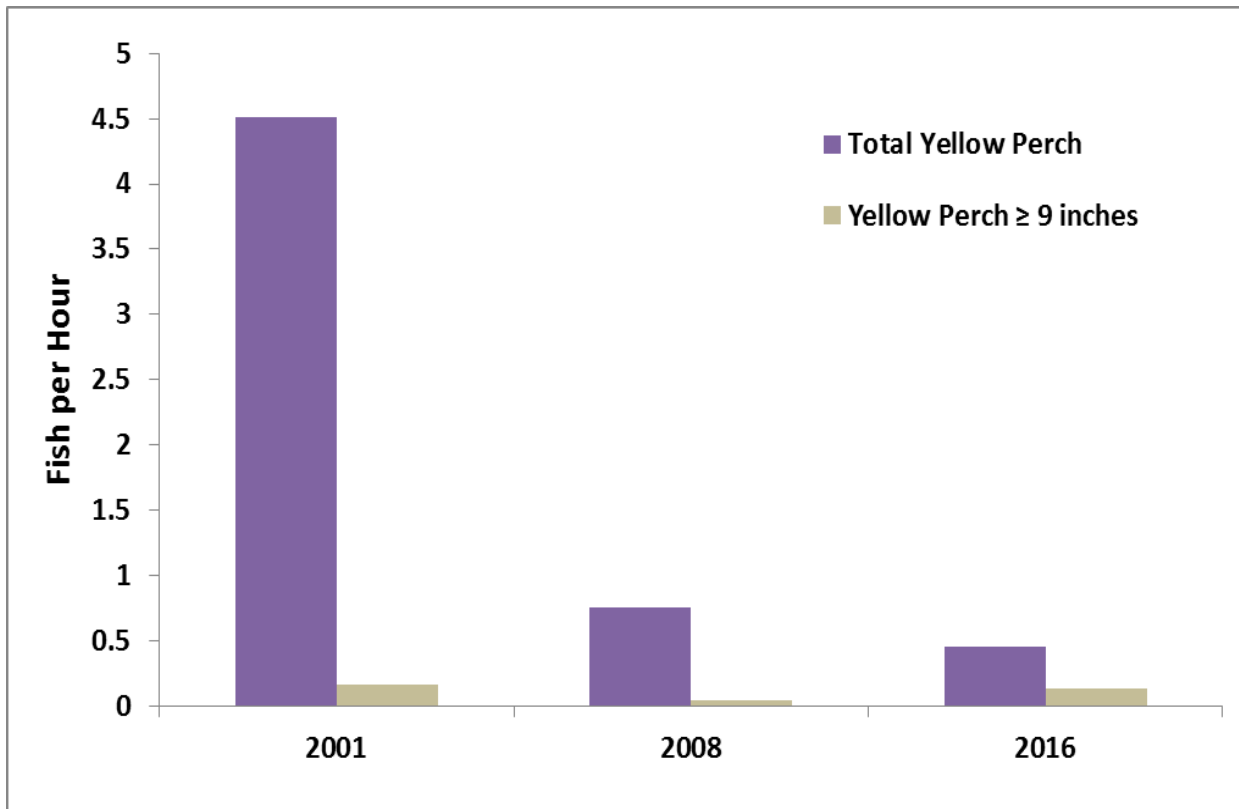


Figure 1. Yellow Perch collected from trap nets in Beaverdam Run Reservoir.

Brown Bullheads were captured in good numbers at Beaverdam Run Reservoir. Numbers have declined from 2001 but the average size of the fish is larger. Fishing opportunities for Brown Bullhead should be fair at Beaverdam Run Reservoir. Smallmouth Bass were also captured in good numbers in trap nets. Typically, black bass species avoid trap nets and are captured primarily by night electrofishing. However, we have captured good numbers of Smallmouth Bass in trap nets during both the 2008 and 2016 surveys on Beaverdam Run Reservoir.

Night electrofishing in May and June 2016 was conducted to evaluate the population of Largemouth Bass and Smallmouth Bass in Beaverdam Run Reservoir. Table 2 below shows the total electrofishing catch. Although numbers of bass were fair, the size distribution was poor, with very few fish over 12 inches in length (Figure 5 and 6). In contrast 31% and 24% of the Smallmouth Bass captured in trap nets were over 12 and 15 inches, respectively. Due to the unseasonably warm temperatures, it is likely that our night electrofishing survey was conducted too late in the spring to capture the larger bass near the shore. We will return in 2018 to conduct an earlier night electrofishing survey to reassess the black bass population at Beaverdam Run Reservoir.

Table 2. Night electrofishing catch of black bass at Beaverdam Run Reservoir in 2016.

Species	Number caught	Size range (inches)	Comments
Smallmouth Bass	79	3 – 16 inches	5% over 12 inches 3% over 15 inches
Largemouth Bass	8	3 – 13 inches	50% over 12 inches



Seventeen inch smallmouth bass from a trap net in Beaverdam Run Reservoir.

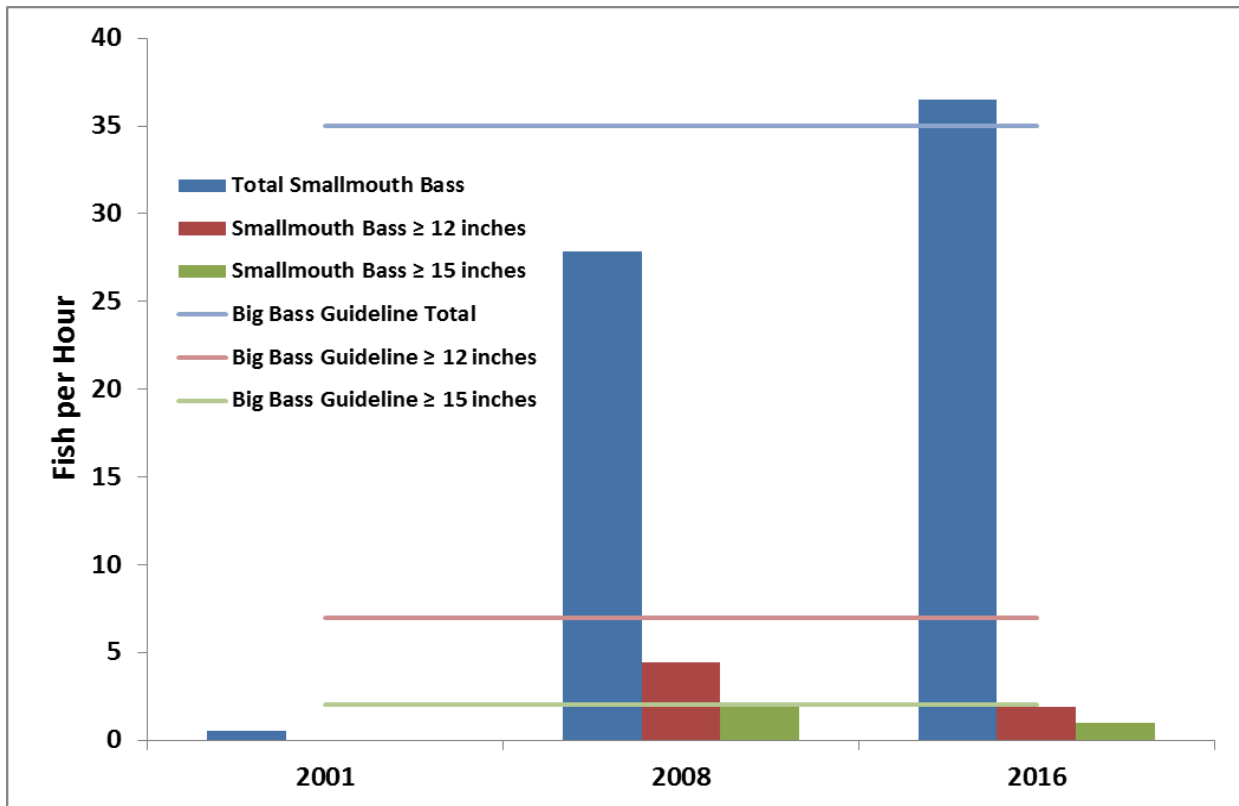


Figure 5. Smallmouth Bass collected from night electrofishing in Beaverdam Run Reservoir.

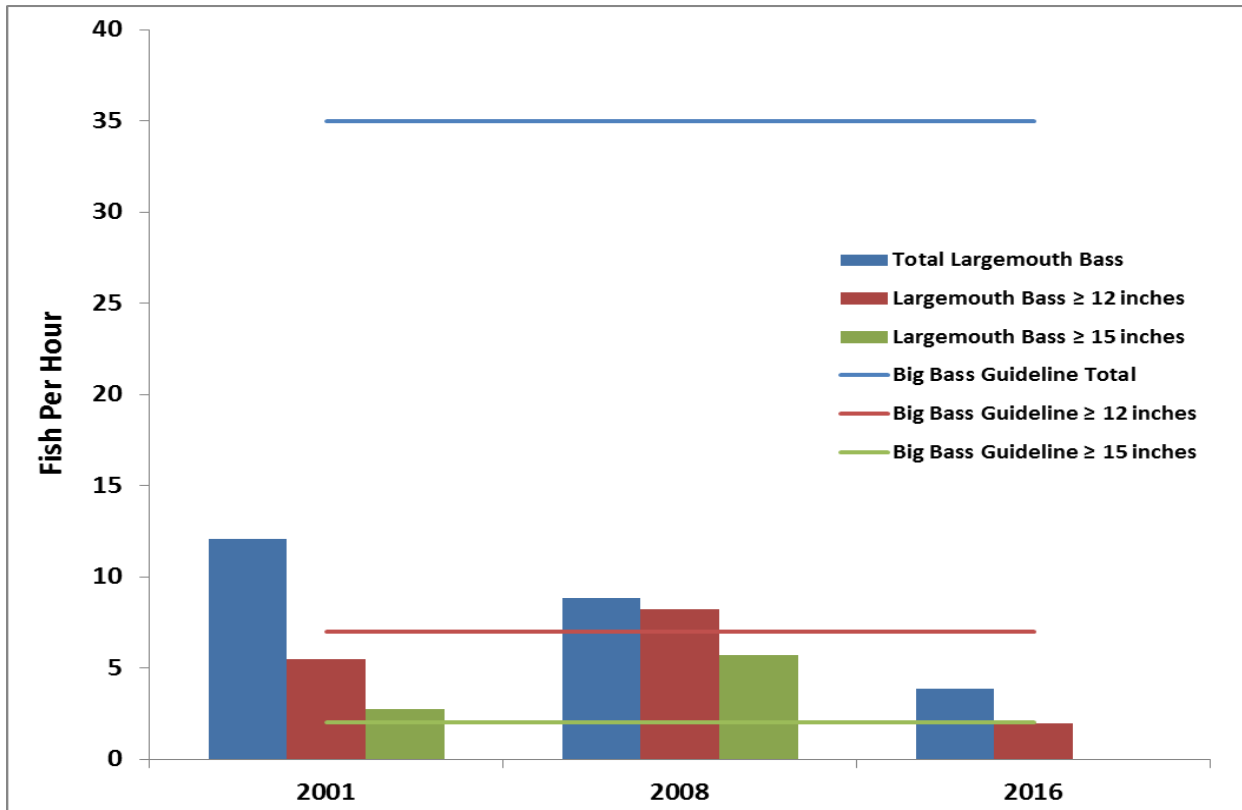


Figure 6. Largemouth Bass collected from night electrofishing in Beaverdam Run Reservoir.

Overall, Beaverdam Run Reservoir provides good fishing opportunities for a variety of species. Panfish are at the top of the list, with good numbers of quality sized Bluegill, Pumpkinseed, and Rock Bass. Although perch numbers have declined, larger fish over 9 inches are still available to anglers. Crappie numbers are low, but fish that anglers encounter should be sizable. Our trap net survey indicated good sized Smallmouth Bass are present in the lake and we will return in 2018 to resample the lake via night electrofishing to get a better sample of the black bass population.

*Mike Depew
Area 8 Fisheries Biologist*