Cummings Reservoir (aka Blue Spruce Lake)

Indiana County

May 2019 Night Electrofishing Bass & Panfish Survey



Aerial photo of Cummings Reservoir, courtesy of google earth.

Cummings Reservoir is a small, 13-acre, infertile (19 ppm alkalinity) lake located approximately six miles north of Indiana, Pennsylvania. The impoundment is owned by Indiana County Parks and Trails. The lake is located within Blue Spruce Park, a 650 acre public park in Indiana County. Amenities include trail hiking, skiing, hunting and bird watching. The park also contains two playgrounds, volleyball court, horseshoe pits and has four pavilions and two lodges that are available for public rental. The Pennsylvania Fish and Boat Commission (PFBC) manages the lake for recreational fishing. Boating is not permitted. The lake's coldwater and warmwater/coolwater fish populations are managed under Statewide Regulations for Commonwealth Inland Waters. The lake receives annual plantings of adult Rainbow Trout in the spring and fall seasons.

During the night of May 7, 2019, staff from Fisheries Management Area 2 evaluated the panfish and Largemouth Bass populations. Prior to the 2019 assessment, the lake had never been surveyed. The entire lakes shoreline was sampled with a boat electrofisher in two total runs and captured fish were measured for total length, weighed to the nearest gram and then promptly released. Results of our electrofishing survey documented a catch of 539 total fish representing 10 different species. The relative abundance of black bass was determined using catch per hour of electrofishing effort. Scales were retained from bass and panfish from each 25 mm (1 inch) size group to measure exact ages across all sizes and assess growth. A summary of all fish collected during the survey is presented in the table below.

Table 1. Species, abundance and size range of all fish collected during a night time boat electrofishing survey at Cummings Reservoir on May 7, 2019.

Species	Number	Size Range (inches)
Largemouth Bass	195	4 – 14
Bluegill	164	1 – 8
Yellow Perch	75	2 - 10
Pumpkinseed	71	3 – 7
White Crappie	3	11 – 13
Black Crappie	1	10
Golden Shiner	2	9
Common Carp	4	Counted Only
Bluntnose Minnow	23	Counted Only
Total	539	

Cummings Reservoir is a popular trout water destination that provides anglers with outstanding fishing opportunities to catch and harvest stocked trout. However, what some anglers may not be aware of is this lake also contains a modest panfish population along with a quality bass population, for its small size.

Largemouth Bass Assessment:

With respect to the bass population, during our 2019 assessment we captured a total of 195 Largemouth Bass that ranged in size from 4 to 14 inches in length (Figure 1) for a total catch rate of 390.1 fish/hr. The overall catch rate for Largemouth Bass ≥ 12 inches

was 90 fish/hr (Figure 2). Of the 195 bass netted, 23% measured over 12 inches. Although no bass over 15 inches were collected during our assessment, the park manager occasionally receives angler reports of trophy sized bass being captured. Anglers seeking Largemouth Bass will find them present throughout much of the lake but they are particularly abundant in the cove areas where aquatic vegetation is prominent, located on the northern and southern near-shore areas.

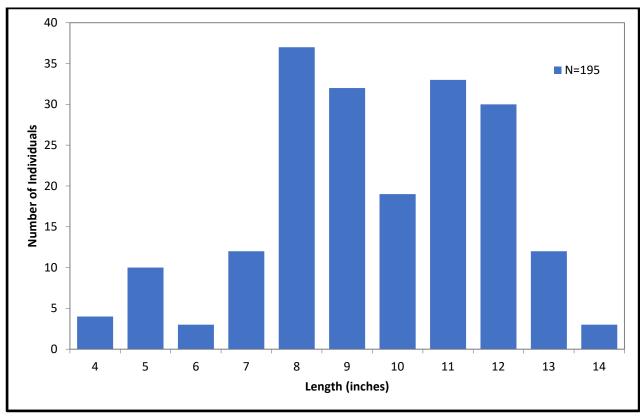


Figure 1: Length frequency distribution of Black Bass collected in Cummings Reservoir on the night of May 7, 2019.



Figure 2. Fisheries Management Area 2 Fisheries Biologist Aide Nicholas Nelson with a 14-inch Largemouth Bass captured during night electrofishing at Cummings Reservoir.

Panfish Assessment:

Cummings Reservoir also contains a modest panfish population composed primarily of Bluegill and Pumpkinseed. Both the Bluegill (164) and Pumpkinseed (71) populations are providing good numbers but unfortunately lack quality size structure as very few fish measured above 7 inches in length. Yellow Perch are present but occur in much lower

abundance compared to the other sport fishes; some individuals measured greater than 7 inches in length.



Figure 3. A Bluegill captured during a night electrofishing survey at Cummings Reservoir.



Figure 4. Several Yellow Perch captured during a night electrofishing survey at Cummings Reservoir.

Other games species captured during the survey, apart from those mentioned included White Crappie, Black Crappie, and several adult stocked trout. Forage species such as Golden Shiners and Bluntnose Minnows were also captured and provide important forage for the warm/cool water fish communities.

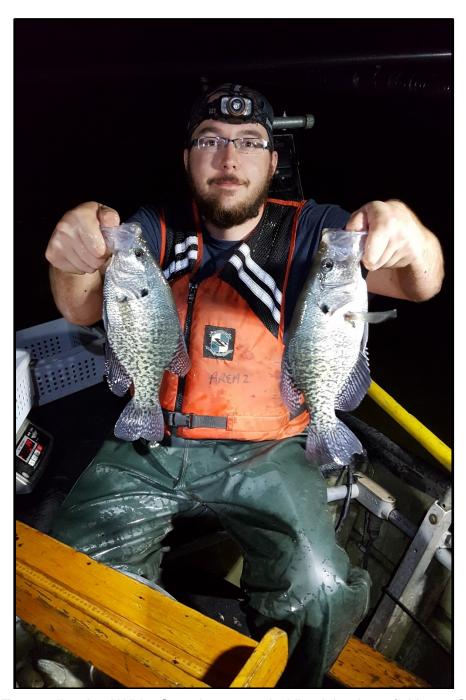


Figure 5. Two quality sized White Crappie captured while night electrofishing at Cummings Reservoir.

In summary, Cummings Reservoir is providing excellent fishing opportunities primarily for adult stocked Rainbow Trout. The Largemouth Bass population is sustained through natural reproduction and offers anglers opportunities to capture quality size Largemouth Bass along with an occasional trophy size bass. Panfish are present in decent numbers but few individuals lack any quality size at the present time. The PFBC would like to extend our thanks to Indiana County Parks Director Ed Patterson for his assistance with this survey.

Brian A. Ensign, Area 2 Fisheries Biologist