

## **Bradford City Reservoir No. 3**

### **McKean County**

**May 2018 Night Electrofishing Bass & Panfish Survey**



*Aerial photo of Bradford City Reservoir No. 3, courtesy of google earth.*

Bradford City Reservoir No. 3 is a small, 40-acre, infertile (10 ppm alkalinity) lake located approximately six miles west of Bradford in McKean County. The impoundment is owned by Bradford City Water Authority and recreational fishing and boating opportunities are managed by the Pennsylvania Fish and Boat Commission (PFBC). Boating is restricted to un-powered boats and those using electric motors only. The lake's coldwater and warm/coolwater fish populations are managed under [Statewide Regulations for Commonwealth Inland Waters](#). The lake receives annual spring stockings of adult Brook Trout, Brown Trout, and Rainbow Trout. Additionally, the lake receives winter trout stocking, providing for ice angling opportunities.

During the night of May 23, 2018, staff from Fisheries Management Area 2 evaluated the panfish and black bass populations. Prior to the 2018 assessment, the lake had never been surveyed. The entire lakes shoreline was electrofishing in two total runs encompassing 1.25 hours of effort. Captured fish were measured for total length and

released. Results of our electrofishing survey documented the catch of 449 fish representing 12 different species (Table 1). The relative abundance of black bass was determined using catch per hour of electrofishing effort. Scales were retained from bass within each 25 mm (1 inch) size group to measure age across all sizes and assess growth.

**Table 1. Species, abundance and size range of all fish collected during night time boat electrofishing survey at Bradford City Reservoir No. 3 on May 23<sup>rd</sup>, 2018.**

Species	Number	Size Range (inches)
Largemouth Bass	84	4 - 16
Smallmouth Bass	5	8 - 21
Bluegill	165	1 – 8
Pumpkinseed	80	2 - 7
Green Sunfish	2	3
Yellow Perch	48	4 - 8
White Sucker	11	8 - 18
Golden Shiner	3	4 – 10
White Perch	3	6 - 8
Hatchery Brook Trout	35	Counted Only
Hatchery Brown Trout	10	Counted Only
<b>Total</b>	<b>449</b>	

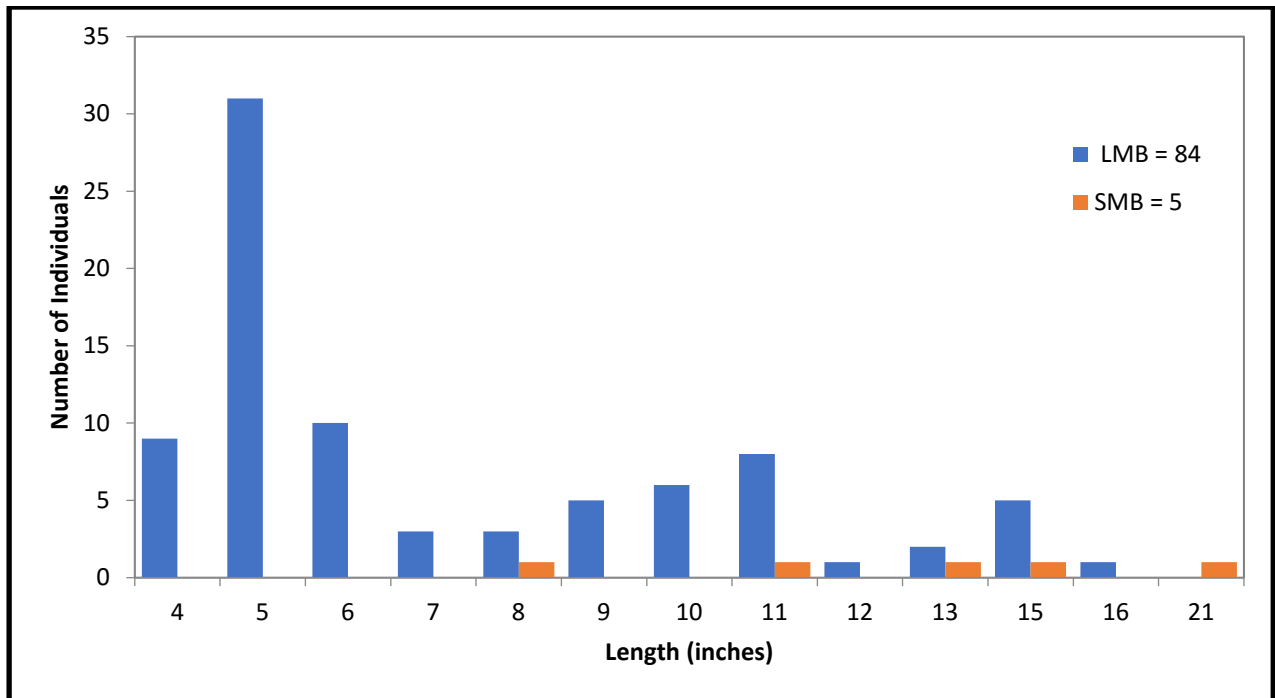
Bradford City Reservoir No. 3 is a popular trout water destination that provides anglers outstanding fishing opportunities to catch and harvest a variety of stocked trout species. However, what some anglers may not be aware of is this lake also contains a modest panfish population along with a quality bass population, for its size.

**Black Bass Assessment:**

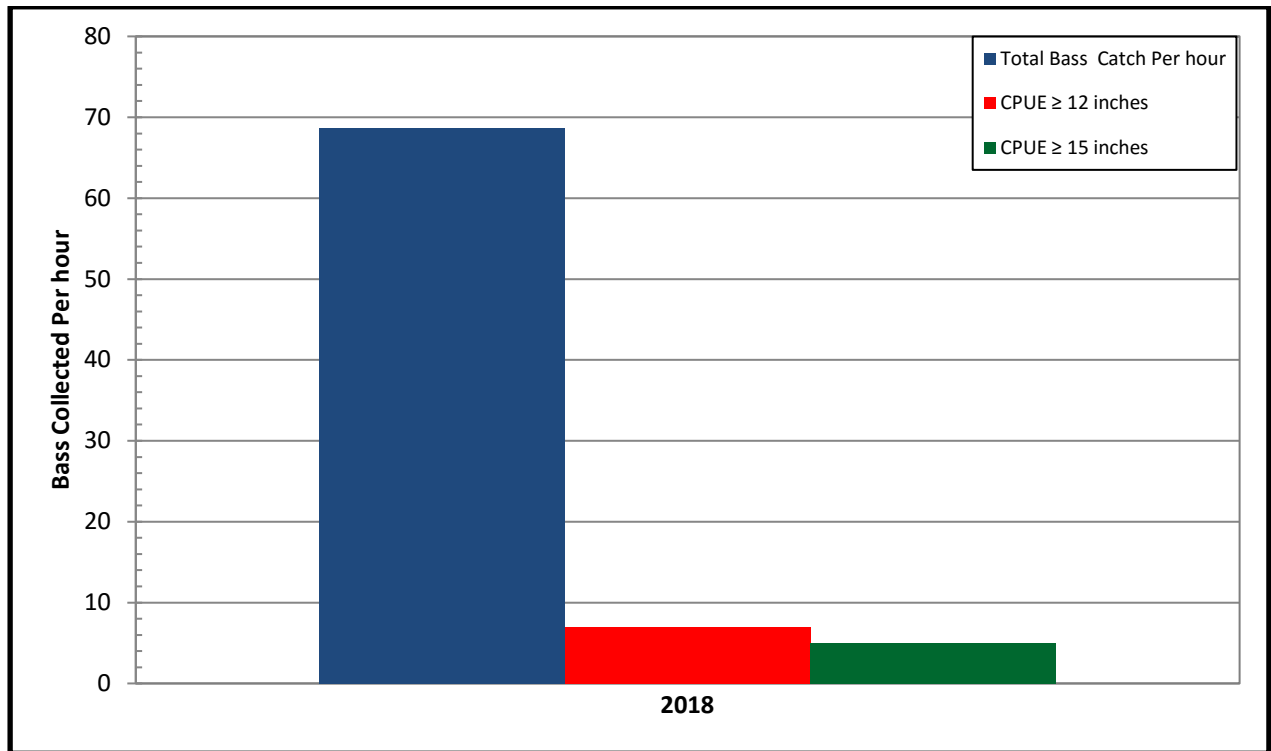
Largemouth Bass and Smallmouth Bass populations are both present in Bradford City Reservoir No. 3. However, Largemouth Bass were the most frequently caught black bass species and greatly outnumbered Smallmouth Bass. During our assessment we captured a total of 84 Largemouth and only five Smallmouth Bass. Largemouth Bass ranged in size from 4 to 16 inches in total length. The catch of Smallmouth Bass, although less compared to Largemouth, were larger in size with one specimen measuring 21 inches (Figure 1). The overall catch rate for Largemouth Bass  $\geq$  12 inches was 67.2 fish/hr and for

Smallmouth was 5.0 fish/hr (Figure 2). Additionally, the catch rate of Largemouth Bass  $\geq 15$  inches was 7.0 fish/hr and for Smallmouth was 2.6 fish/hr. Furthermore, abundance and catch rates of bass were comparable to other Area 2 high elevation impoundments containing limited alkalinity levels that are similar in size and depth. Anglers seeking Largemouth Bass will find them present throughout much of the lake but they are particularly abundant in coves containing aquatic vegetation on the northern and southern shores. Smallmouth Bass tend to be found in deeper water along the steeper, rockier “rip rap” areas on the north shore and along the dam breast.

**Figure 1: Length frequency distribution of Black Bass collected in Bradford City Reservoir No. 3 on the night of May 23, 2018.**



**Figure 2. Catch rate of Largemouth Bass collected in Bradford City Reservoir No. 3 on the night of May 23, 2018.**





*Photo 1. Area 2 Fisheries Biologist Aide Nicholas Nelson with a 16-inch Largemouth Bass captured during night electrofishing at Bradford City Reservoir No. 3.*

**Panfish Assessment:**

The lake also contains abundant panfish populations composed primarily of Bluegill and Pumpkinseed. Both the Bluegill (138) and Pumpkinseed (82) 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 in lower abundance, however some individuals measure greater than 7 inches in length.

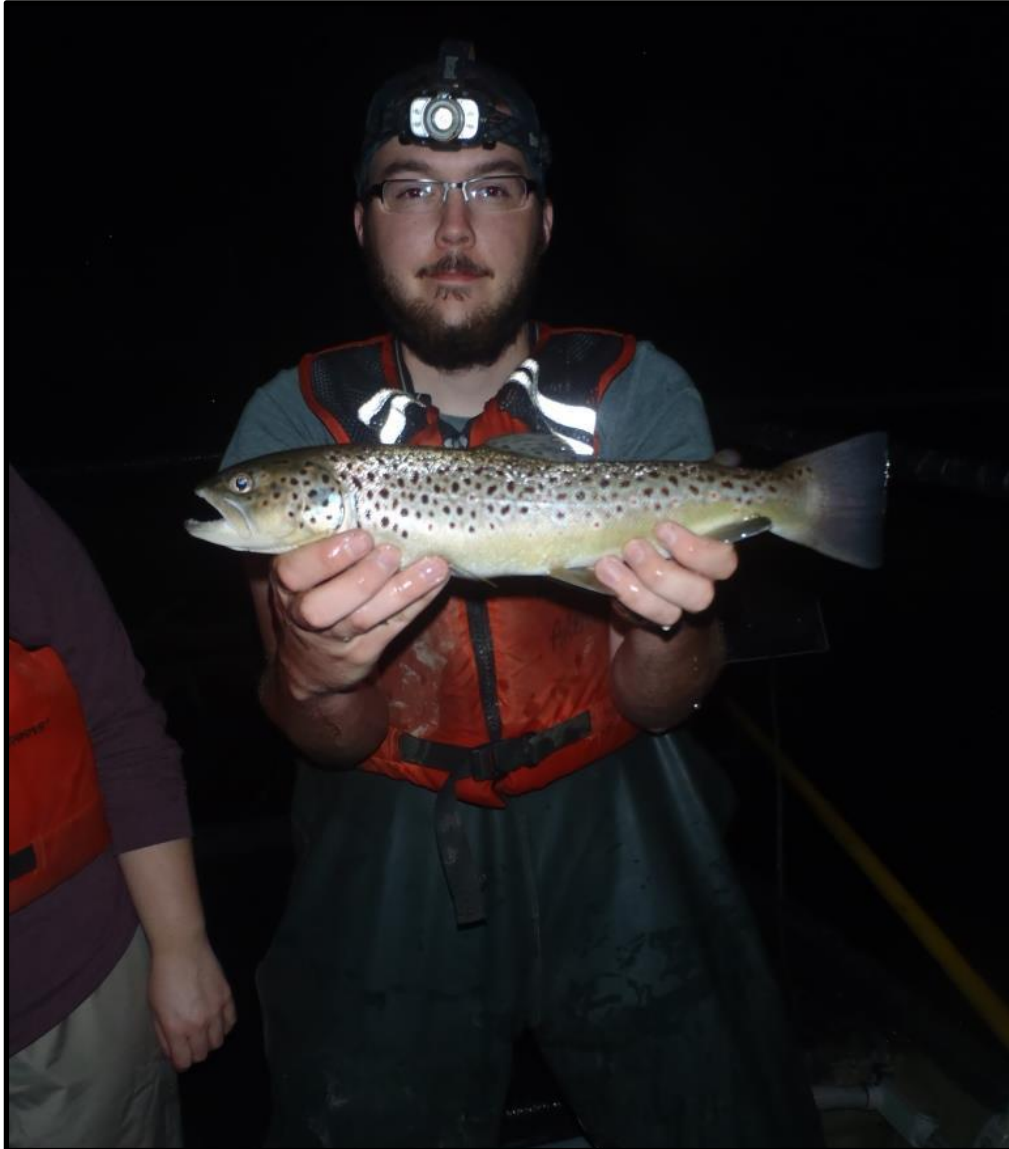


*Photo 2. A quality sized Bluegill captured during our night electrofishing survey at Bradford City Reservoir No. 3.*



*Photo 3. Several Yellow Perch captured during our night electrofishing survey at Bradford City Reservoir No. 3.*

Other species captured during our survey, excluding Largemouth Bass and panfish, included adult stocked trout consisting of Brook Trout, Brown Trout, and Rainbow Trout. Forage species such as Golden Shiners and White Suckers were also captured and provide important components to the warm/cool water fish community.



*Photo 4. One of several stocked adult trout captured during our night electrofishing survey at Bradford City Reservoir No. 3.*

One species we didn't expect to find during our survey was [White Perch](#), an invasive species that has also colonized Lake Erie. For those unfamiliar with White perch, they are not native to Lake Erie or Northwestern Pennsylvania waters, they are a semi-anadromous species native to freshwater and brackish waters in Pennsylvania's Atlantic slope drainage (principally the Delaware River drainage). The PFBC does not propagate nor stock White

Perch in any waterways in Northwest PA. Although the origin of this species is not certain, most likely it was introduced intentionally or unintentionally from another water source of known populations. Once introduced, White Perch often have the propensity to quickly overwhelm and outcompete existing fish communities to eventually become the only predominant panfish. It is for this reason the PFBC strongly encourages anglers not to transport this species or any species from one water to another; since the consequences of introduction may irreparably alter existing fish communities.



*Photo 5. Picture of a White Perch captured during our night electrofishing survey at Bradford City Reservoir No. 3.*

In summary, Bradford City Reservoir No. 3 is providing excellent fishing opportunities for adult stocked trout. The Largemouth Bass population is sustained through natural reproduction and offers anglers opportunities to capture an occasional trophy size fish. Panfish are present in decent numbers but few individuals lack any quality size at the present time.

**Brian A. Ensign**  
**Area 2 Fisheries Biologist**