Frances Slocum Lake

Luzerne County

2021 Spring Trap Net and Black Bass Night Boat Electrofishing Survey's



Biologist Garret Kratina with a pair of White Crappie caught during spring trap netting on Frances Slocum Lake (May 2021).

The Area 4 Fisheries Management Office conducted trap netting at Frances Slocum Lake at Frances Slocum State Park during the week of May 10, 2021. This work was performed to assess its panfish populations (see previous surveys 2013, 2011, and 2006). We set 12 trap nets and caught 16 fish species (Table 1). Panfish catch rates were fair compared to previous years sampling events. Most frequently encountered were crappie's (Black Crappie and White Crappie), followed by sunfishes (Bluegill and Pumpkinseed) and bullhead catfishes (Brown Bullhead, Yellow Bullhead, and White Catfish). Black Crappie ranged from 3 to 14 inches and White Crappie ranged from 8 to 16 inches (Figure 1). Of both crappie species combined, 46 individuals (9%) exceeded 10 inches. Bluegill ranged from 3 to 8 inches and Pumpkinseed ranged from 4 to 7 inches (Figure 2). Of both sunfish species combined, 18 individuals (3%) exceeded 8 inches. Brown Bullhead ranged from 9 to 16 inches, Yellow Bullhead ranged from 7 to 16 inches, and White Catfish ranged from 10 to 19 inches (Figure 1). With all catfish species combined, 198 individuals (69%) exceeded 12 inches long.

Table 1. Relative abundances, and size ranges of species caught during trap-netting at Frances Slocum Lake (May 2021).

Species	Count	Size Range (in)
Alewife	1078	
Black Crappie	479	4-15
Bluegill	362	4-9
Brown Bullhead	190	10-17
Pumpkinseed	154	5-8
Yellow Bullhead	81	8-17
White Crappie	28	9-17
Yellow Perch	11	8-11
Golden Shiner	10	8-10
White Catfish	10	11-20
Rainbow Trout	10	
Walleye	6	24-29
Common Carp	4	26-31
White Sucker	2	17-19
Chain Pickerel	1	15
Largemouth Bass	1	8

The Largemouth Bass population is managed under the <u>Big Bass Program</u>. On June 7, 2021, night electrofishing was conducted at 4 different locations of the lake with sampling effort totaling 1.4 hours. A total of 138 Largemouth Bass were caught ranging from 4 to 19 inches for a catch rate of 101/hour (Figure 4). This rate is higher than that measured in previous surveys in <u>2011</u> and <u>2006</u>. Catch rates of fish \geq 12 inches was 31/hour and \geq 15 inches was 12/hour.



White Crappie (left) and Black Crappie (right) caught during spring trap netting on Frances Slocum Lake (May 2021).



Pumkinseed (left) and Bluegill (right) caught during spring trap netting on Frances Slocum Lake (May 2021).



Biologist Garret Kratina with a White Catfish caught during spring trap-netting on Frances Slocum Lake (May 2021).



Biologist Garret Kratina with a Walleye caught during spring trap-netting on Frances Slocum Lake (May 2021).



Biologist Garret Kratina with a Largemouth Bass caught during night electrofishing on Frances Slocum Lake (June 2021).

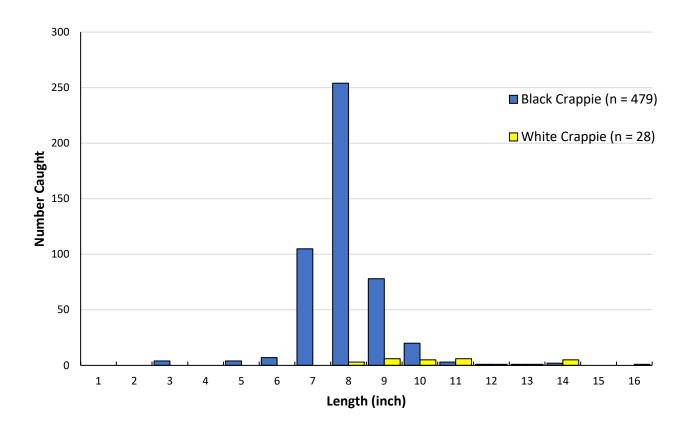


Figure 1. Frances Slocum Lake Black Crappie and White Crappie length frequency distributions from May 2021.

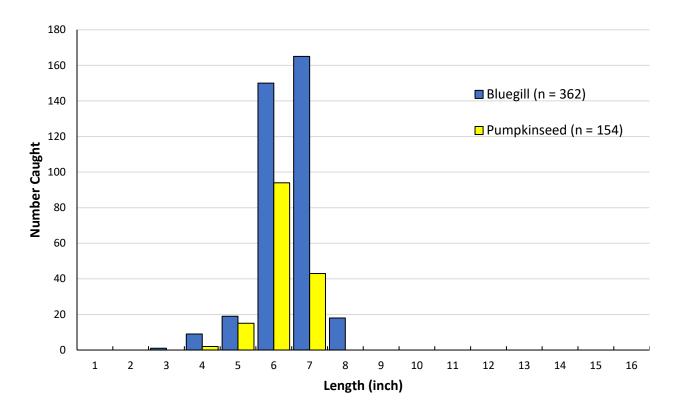


Figure 2. Frances Slocum Lake Bluegill and Pumpkinseed length frequency distributions (May 2021).

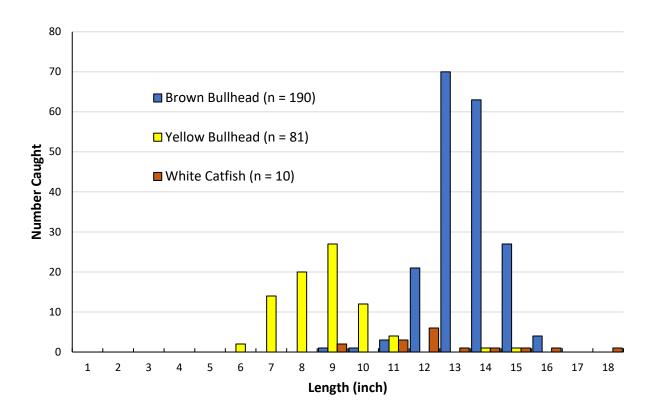


Figure 3. Frances Slocum Lake Brown Bullhead, Yellow Bullhead and White Catfish length frequency distributions (May 2021).

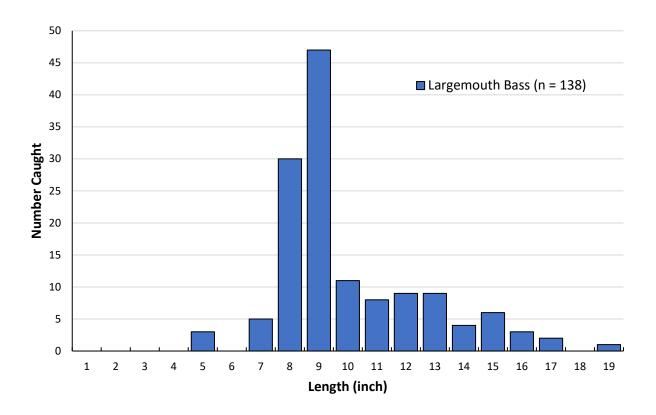


Figure 4. Frances Slocum Lake Largemouth Bass length frequency distribution collected during night boat electrofishing in 2021.

Garret Kratina Area 4 Fisheries Biologist