

Brandenburg Park pre-monitoring

In fall 2019, the MDNR conducted electrofishing at 14 sites in the nearshore zone of Lake St. Clair. One site, at Brandenburg park, was electrofished on October 25, 2019 at 9:15am. The site was sampled for 30 continuous minutes, starting on the northeast side of the pier and ending north of the park (Figure 1). During the first and last 10 minutes of the effort all species were targeted, while for the middle 10 minutes only muskellunge were targeted. The objective of the effort was to cover varying effective depths and habitat as much as possible during the 30 minutes. All fish collected were held in a tub on the boat for processing upon completion of the 30 minutes. All fish were identified and measured to the centimeter group (i.e. 1.0-1.9 cm = 1 cm) and the result can be found in Table 1. As with any fisheries gear, environmental factors can have an impact on the efficiency. The water temperature was 51.4°F and visibility was poor as evidenced by a Secchi reading of 1 ft. Conductivity was measured at 190 micro-Siemens per centimeter. Setting for the electrofishing output was 60 pulses per second, 290 volts, 17.5 amps (max) and a duty of 18%.

The poor visibility likely limited the catch, especially for smaller species that might not have been near the surface. There were multiple times when we had to back up for fish floating to the surface after we went through. The Brandenburg Park site had low species diversity (9 fish species) when compared to the other 13 sites, that averaged 13 fish species. For all 14 sites the 25th percentile mark was 10 fish species, slightly higher than what was found at Brandenburg Park.

Table 1. Catch summary of the electrofishing effort at Brandenburg Park, October 25, 2019

Species	Number caught	Length range (cm)	Average length (cm)
Brook silverside	62	3 – 7	5
Yellow perch	50	5 – 17	11
Gizzard shad	6	11 – 17	14.6
Largemouth bass	5	5 – 43	27.4
Emerald shiner	4	4 – 10	7.5
Bluntnose minnow	1	7	7
White crappie	1	28	28
Common carp	1	17	17
Freshwater drum	1	47	47
Total	131		



Figure 1. Electrofishing path for pre-monitoring effort at Brandenburg Park, October 25, 2019.