

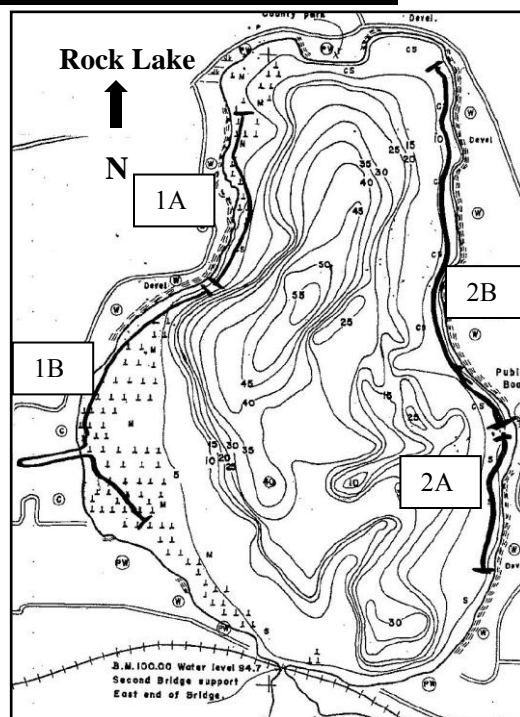
# Rock Lake Fall Electrofishing Summary Report – 2016

## Fall Electrofishing - Defined

Fall electrofishing was conducted on Rock Lake in Jefferson County on October 6, 2016. Fall electrofishing is conducted using a large boomshocker boat allowing for the collection of young-of-the-year (YOY) walleye and adult bass that are often undersampled by other gear types. In order to standardize fisheries data, total effort in the form of time spent shocking and/or miles of shoreline shocked is recorded and presented as catch rates or catch-per-unit effort (CPUE). Fall electrofishing provides an indication of the health of the fishery through estimates of gamefish and panfish relative abundance (catch rate or catch per effort), gamefish population size-structure (size distributions) and gamefish recruitment (young-of-year catch per effort). Sampling on Rock Lake was conducted at two gamefish stations, each 1.5 miles long (3 miles and 1.45 hours total effort) where only gamefish were collected and included stations 1B and 2B (see map). Two additional stations, each 0.5 miles long (1 mile and 0.55 hours total effort) were sampled where all fish species were collected and included stations 1A and 2A. Length measurements were taken from a subset of fish and all fish were returned to the lake. Average water temperature for the 2016 survey was 66° F, water clarity and visibility was good and boat speed was slightly high at 2 miles per hour. This summary report presents fall electrofishing data from 2016 with comparisons to a similar fall electrofishing survey conducted in 2015.

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## Gamefish Summary

<u>Largemouth bass</u>	<u>2016</u>	<u>2015</u>
<b>Total Catch:</b>	45	48
<b>Catch Rate (fish per hour):</b>	23	25
<b>Length Range (inches):</b>	3.8-14.5	2.2-15.1
<b>Average Length (inches):</b>	10.7	9.9

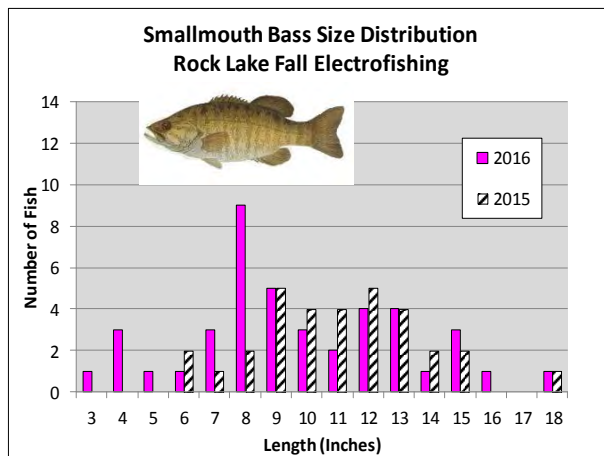
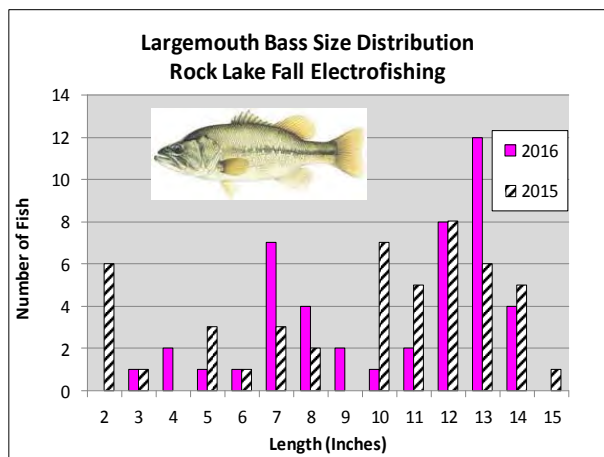
2016 largemouth bass catch rate was 23/hour, compared to 25/hour in 2015, and the 10-year average of 37/hour. The number of largemouth bass over 14-inches (current legal harvestable size) was 9% in 2016, compared to 13% in 2015. The majority (40%) of the largemouth bass sampled in 2016 were between 12- and 13.9-inches in length. The largemouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.

<u>Smallmouth bass</u>	<u>2016</u>	<u>2015</u>
<b>Total Catch:</b>	42	33
<b>Catch Rate (fish per hour):</b>	21	17
<b>Length Range (inches):</b>	3.8-18.3	6.1-18.1
<b>Average Length (inches):</b>	10.2	11.4

2016 smallmouth bass catch rate was 21/hour, compared to 17/hour in 2015 and the 10-year average of 28/hour. The number of smallmouth bass over 14-inches (current legal harvestable size) was 14% in 2016, compared to 16% in 2015. The smallmouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.

<u>Walleye</u>	<u>2016</u>	<u>2015</u>
<b>Total Catch:</b>	23	16
<b>Catch Rate (fish per hour):</b>	12	8
<b>Length Range (inches):</b>	9.8-20.1	7.4-23.9
<b>Average Length (inches):</b>	12.3	14.6

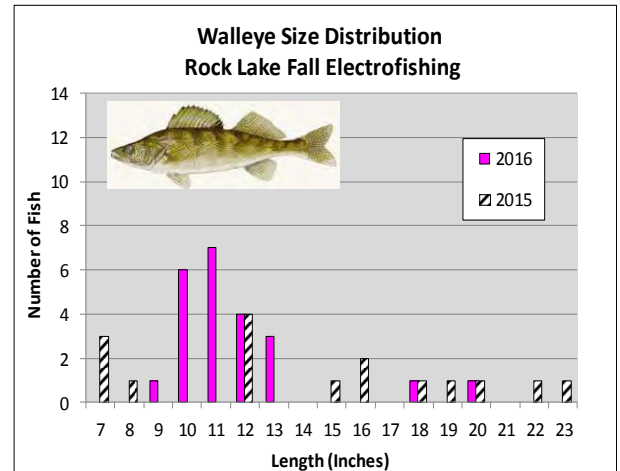
2016 walleye catch rate (all sizes) was 12/hour, compared to 8/hour in 2015. Walleye recruitment (young fish coming into the population) remains low with young-of-the-year (under 10-inches) catch rate of 0.5/hour (0.25/mile) in 2016 and 2/hour (0.5/mile) in 2015. As part of the Wisconsin Walleye Initiative, the lake is currently stocked in alternate (odd) years at an assigned stocking rate of 15 large fingerling walleye per acre. Large fingerling is the largest-size walleye available to stock through the state hatchery system. In 2015, Rock Lake was



stocked with 19,564 large fingerling (7-inch) walleye. The fish stocked in 2015 represent the majority of fish sampled in 2016 fall electrofishing, as fish in the 10-11-inch range.

<b>Northern pike</b>	<b>2016</b>	<b>2015</b>
<b>Total Catch:</b>	16	12
<b>Catch Rate (fish per hour):</b>	8	6
<b>Length Range (inches):</b>	15.6-24.7	7.0-38.5
<b>Average Length (inches):</b>	20.8	20.7

The largest northern pike sampled during 2016 fall electrofishing was 24.7 inches in length. Electrofishing is not an effective method for sampling northern pike, as pike population data is best obtained using fyke nets set during spring spawning. The northern pike population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.

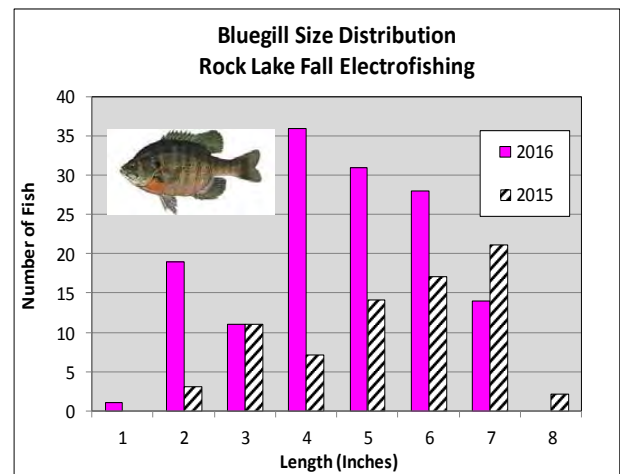


## Panfish Summary

Rock Lake supports a diverse panfish community including: bluegill, yellow perch, rock bass, white bass, pumpkinseed, black crappie and green sunfish. Bluegill was the most abundant panfish species sampled in 2016 fall electrofishing, followed by rock bass and yellow perch. A small number of pumpkinseed (3 fish total, 5/hour) were also sampled.

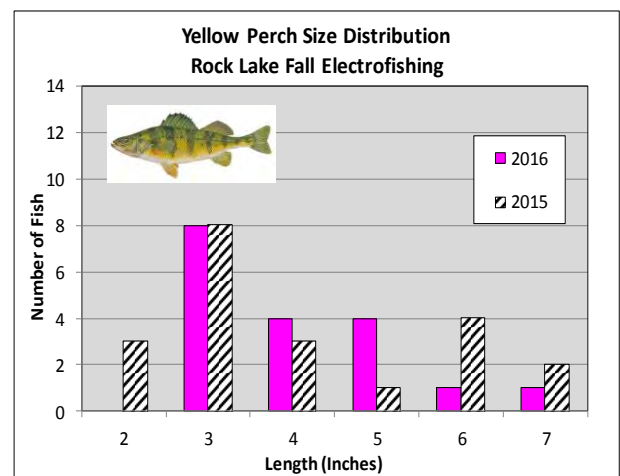
<b>Bluegill</b>	<b>2016</b>	<b>2015</b>
<b>Total Catch:</b>	140	75
<b>Catch Rate (fish per hour):</b>	255	167
<b>Length Range (inches):</b>	1.9-7.9	2.1-8.1
<b>Average Length (inches):</b>	5.0	5.8

2016 bluegill catch rate was 255/hour, compared to 167/hour in 2015, and the 10-year average of 377/hour. In 2016, 30% of the bluegill sampled were greater than 6-inches in length, compared to 53% in 2015. The majority (48%) of the bluegill sampled in 2016 were between 4- and 5- inches in length.



<b>Yellow Perch</b>	<b>2016</b>	<b>2015</b>
<b>Total Catch:</b>	18	21
<b>Catch Rate (fish per hour):</b>	33	47
<b>Length Range (inches):</b>	3.0-7.5	2.1-7.7
<b>Average Length (inches):</b>	4.4	4.4

2016 yellow perch catch rate was 33/hour, compared to 47/hour in 2015 and the 10-year average of 42/hour. The yellow perch population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.



<b>Rock bass</b>	<b>2016</b>	<b>2015</b>
<b>Total Catch:</b>	22	23
<b>Catch Rate (fish per hour):</b>	40	51
<b>Length Range (inches):</b>	2.8-10.5	2.6-10.2
<b>Average Length (inches):</b>	7.3	7.0

2016 rock bass catch rate was 40/hour, compared to 51/hour in 2015 and the 10-year average of 51/hour. Rock Lake supports a sizable, robust population of rock bass with fish up to 10+ inches present.

## Non-game Species

Rock Lake supports a diverse non-game fish community including: bowfin, grass pickerel, white sucker, brook silverside, golden shiner, emerald shiner, blacknose shiner, mimic shiners, bluntnose minnow, fathead minnow, yellow bullhead, black bullhead and brown bullhead, longnose gar, central mudminnow, blackstripe topminnow, Johnny darter, Iowa darter and common carp. In addition, three Special Concern (SC) fish species (lake chubsucker, banded killifish and least darter), and one Threatened (T) species (pugnose shiner) inhabit Rock Lake. While fall electrofishing gear is not ideal for sampling most of these species due to their small body size, one (1) lake chubsucker (SC) was sampled during 2016 fall electrofishing. Bluntnose minnow, longnose gar, common carp (1 fish, 2/hour), yellow bullhead and brook silversides were also sampled during 2016 fall electrofishing.