

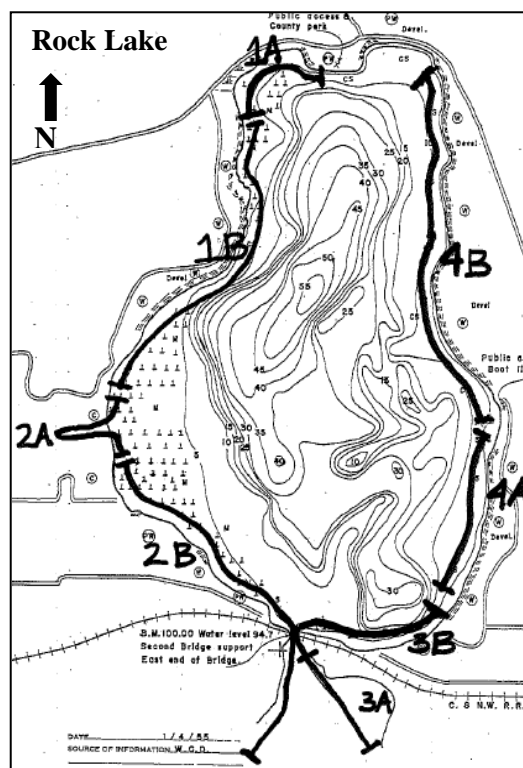
# Rock Lake Fall Electrofishing Summary Report – 2014

## Fall Electrofishing - Defined

Fall electrofishing was conducted on Rock Lake in Jefferson County on October 8 and 9, 2014. 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) as an index of growth and gamefish recruitment (young-of-year catch per effort). The 2014 fall electrofishing survey differed from previous fall surveys in that effort (distance and time spent sampling) increased to 8 miles and 4.24 hours. The more intensive fall survey was part of the 2014 comprehensive fish survey being conducted on Rock Lake and aimed to sample additional habitat types. Fall electrofishing was conducted at four gamefish stations, each 1.5 miles long (6 miles and 3.12 hours total effort) where only gamefish were collected and included stations 1B, 2B, 3B, and 4B (see map). Four additional stations, each .5 miles long (2 miles and 1.12 hours total effort) were sampled where all fish species were collected and included stations 1A, 2A, 3A and 4A. Length measurements were taken from a subset of fish and all fish were returned to the lake. Average water temperature for the 2014 survey was 68.5° F and water clarity/visibility was good. This summary report presents fall electrofishing data from 2014 with comparisons to previous fall electrofishing surveys.

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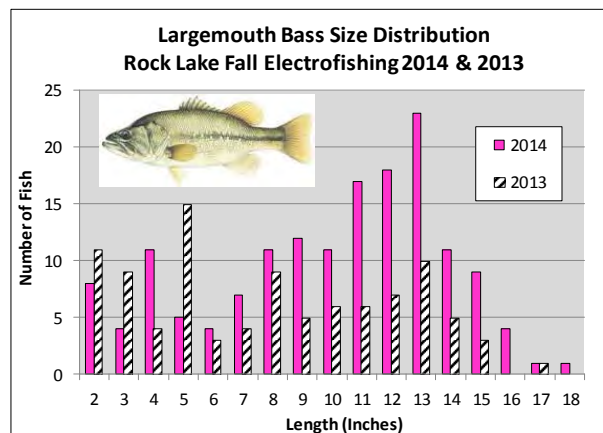
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## Gamefish Summary

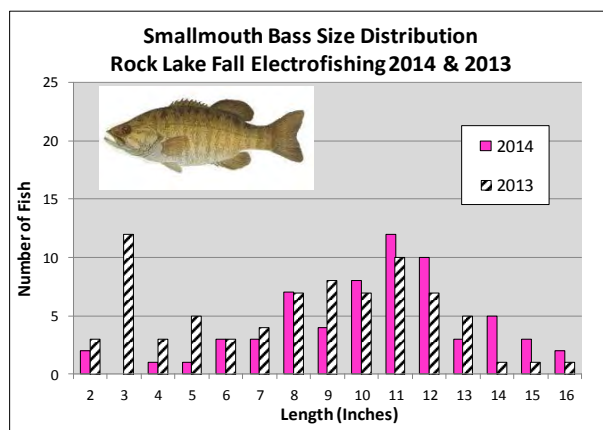
<b>Largemouth bass</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	157	98	79	113
<b>Catch Rate (fish per hour):</b>	37	41	31	50
<b>Length Range (inches):</b>	2.0-18.0	2.1-17.2	2.1-17.0	2.2-16.0
<b>Average Length (inches):</b>	10.4	8.3	6.3	7.0

2014 largemouth bass catch rate was 37/hour, compared to 41/hour in 2013, 31/hour in 2012, 50/hour in 2011 and comparable to the 10-year average of 41/hour. The number of largemouth bass over 14-inches (current legal harvestable size) was 17 % in 2014, compared to 9% in 2013, 11% in 2012 and 11% in 2011. Young-of-year (YOY) largemouth bass were present in 2014 indicating good natural reproduction. The largemouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.



<b>Smallmouth bass</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	64	77	53	124
<b>Catch Rate (fish per hour):</b>	15	32	21	55
<b>Length Range (inches):</b>	2.7-16.2	2.8-16.4	2.8-15.1	2.6-15.9
<b>Average Length (inches):</b>	10.8	8.6	9.6	5.8

2014 smallmouth bass catch rate was 15/hour, compared to 32/hour in 2013, 21/hour in 2012 a high of 55/hour in 2011 and the 10-year average of 32/hour. The number of smallmouth bass over 14-inches (current legal harvestable size) was 16 % in 2014, compared to 4% in 2013, 4% in 2012 and 3% in 2011. The smallmouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by WDNR.



<b>Walleye</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	22	2	14	9
<b>Catch Rate (fish per hour):</b>	5	1	6	4
<b>Length Range (inches):</b>	7.5-26.5	14.4-20.0	7.8-20.4	6.7-14.4
<b>Average Length (inches):</b>	15.9	17.2	15.1	8.2



2014 walleye catch rate (all sizes) continues to be low at 5/hour, compared to 1/hour in 2013, 6/hour in 2012 and 4/hour in 2011. Walleye recruitment (young fish coming into the population) remains low with 2014 YOY walleye (under 10-inches) catch rate of .9/hour, compared to 0/hour in 2013, .8/hour in 2012 and 4/hour in 2011. WDNR did not stock walleye into Rock Lake in 2014, as the lake is slated to be stocked with 68,550 large fingerling walleye in 2015.

<b>Northern pike</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	27	13	17	14
<b>Catch Rate (fish per hour):</b>	6	5	7	6
<b>Length Range (inches):</b>	8.2-30.7	7.4-35.2	13.8-26.1	18.3-31.3
<b>Average Length (inches):</b>	18.6	20.7	21.7	22.5

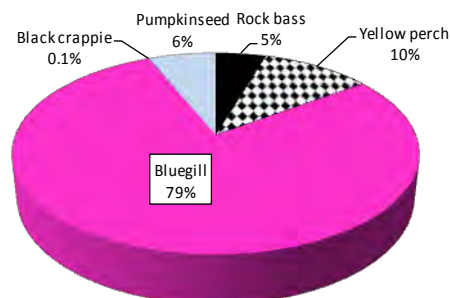


The largest northern pike sampled during 2014 fall electrofishing was 30.7 inches in length. Electrofishing is not an effective method for sampling northern pike, as pike population data is best obtained using fyke nets set during spring spawning. Rock Lake was not stocked with northern pike in 2014.

## Panfish Summary

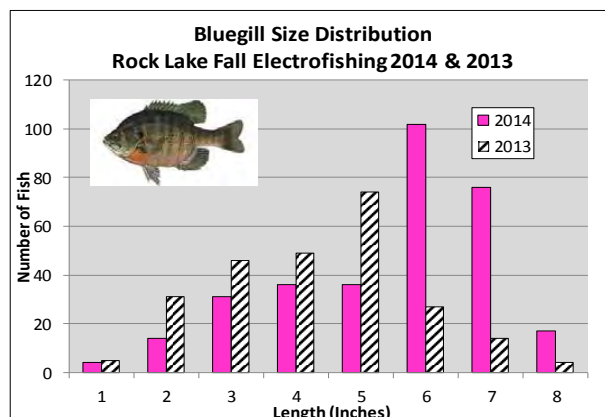
Rock Lake supports a diverse panfish community including: bluegill, yellow perch, rock bass, white bass, pumpkinseed, black crappie and green sunfish. Bluegill were the most abundant panfish species sampled in 2014 fall electrofishing, followed by yellow perch and rock bass. A small number of pumpkinseed (48 fish total, 43/hour) and black crappie (1 fish, 1/hour) were also sampled.

**Panfish Relative Abundance  
Rock Lake Fall Electrofishing 2014  
(number of fish sampled = 755)**



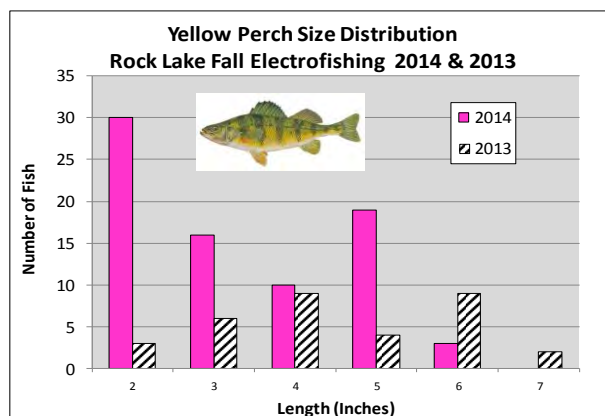
<b>Bluegill</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	592	376	295	365
<b>Catch Rate (fish per hour):</b>	529	597	468	664
<b>Length Range (inches):</b>	1.3-8.5	1.3-8.1	1.8-8.7	2.5-7.7
<b>Average Length (inches):</b>	5.9	4.7	4.5	4.3

2014 bluegill catch rate was 529/hour, compared to 597/hour in 2013, 468/hour in 2012, 664/hour in 2011 and above the 10-year average of 378/hour. In 2014, 62% of the bluegill sampled were greater than 6-inches in length, compared to 18% in 2013, 16% in 2012 and 6% in 2011. The majority (32%) of the bluegill sampled in 2014 were between 6- and 6.9 inches in length.



<b>Yellow Perch</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	78	33	8	25
<b>Catch Rate (fish per hour):</b>	70	52	13	46
<b>Length Range (inches):</b>	2.0-6.1	2.3-7.2	2.8-5.9	2.8-8.8
<b>Average Length (inches):</b>	3.7	4.9	4.1	5.0

2014 yellow perch catch rate was 70/hour, compared to 52/hour in 2013, 13/hour in 2012, 46/hour in 2011 and the 10-year average of 34/hour.



<b>Rock bass</b>	<b>2014</b>	<b>2013</b>	<b>2012</b>	<b>2011</b>
<b>Total Catch:</b>	36	32	33	46
<b>Catch Rate (fish per hour):</b>	32	51	52	84
<b>Length Range (inches):</b>	2.2-10.1	2.6-10.6	2.3-11.1	3.4-8.9
<b>Average Length (inches):</b>	6.4	6.2	6.7	6.0

2014 rock bass catch rate was 32/hour, compared to 51/hour in 2013, 52/hour in 2012, 84/hour in 2011 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, emerald, blacknose and mimic shiners, bluntnose and fathead minnows, yellow, black and brown bullhead, longnose gar, central mudminnow, blackstripe topminnow, Johnny darter, Iowa darter and common carp. In addition, two Special Concern (SC) species (lake chubsucker and least darter), one Threatened (T) species (pugnose shiner) and one special concern (SC) species (banded killifish) inhabit Rock Lake. While fall electrofishing gear is not ideal for sampling most of these species due to their small size, 11 lake chubsuckers (SC), 2 blackchin shiners and 1 pugnose shiner were sampled during 2014 fall electrofishing. Bowfin, golden shiner, yellow bullhead, white sucker, central mudminnow and brook silverside were also sampled during 2014 fall electrofishing.