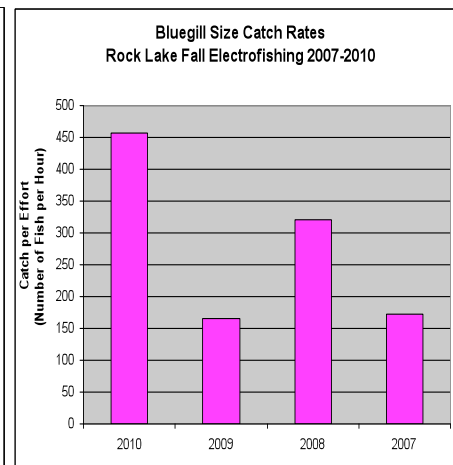
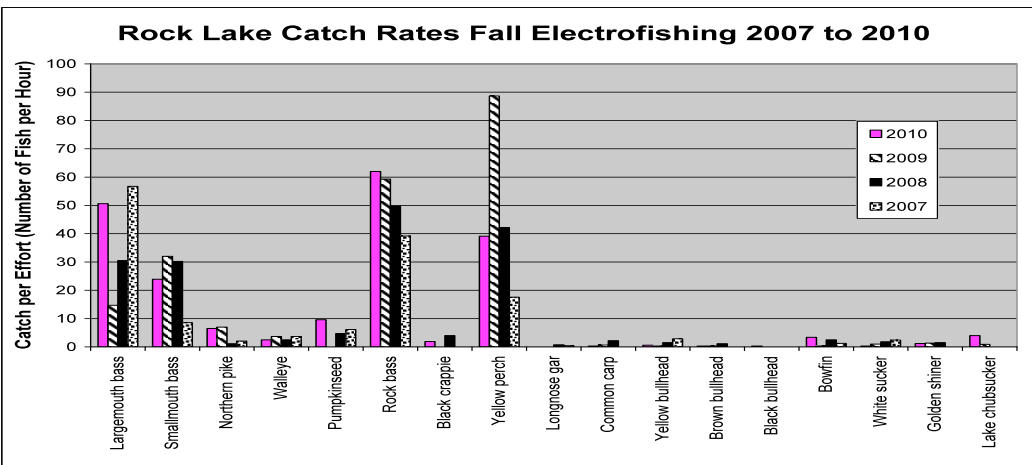


# Rock Lake Fall Electrofishing Summary Report – 2010

## Fall Electrofishing - Defined

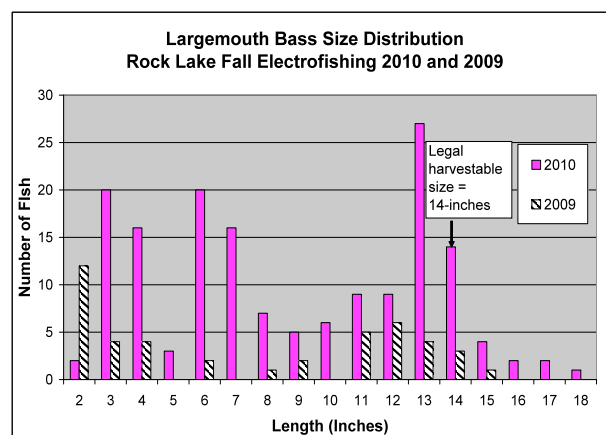
Fall electrofishing was conducted on Rock Lake in Jefferson County on October 13, 2010. Fall electrofishing is conducted using a large boomshocker boat allowing for the collection of young-of-the-year (YOY) walleye and adult bass that are often undersampled by other gear types. In order to standardize 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 sampling 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), an index of growth and gamefish recruitment (young-of-the-year catch per effort). For this survey, the total effort expended was 3.22 hours (covering 5.58 miles of shoreline) and the following stations were sampled: 1.) Rock Lake Park boat launch on Hwy B to boat canal north of Korth Bay (1 hour) 2.) Boat canal north of Korth Bay to the railroad trestle bridge (.82 hour) 3. Sandy Beach Park to Tyranena Park (1.4 hours). This summary report presents fall electrofishing data from 2010 with comparisons to 2009 and previous fall electrofishing surveys. This report was compiled by: Laura Stremick-Thompson, WDNR Fisheries Biologist-Horicon (920) 387-7876 or [Laura.StremickThompson@wisconsin.gov](mailto:Laura.StremickThompson@wisconsin.gov)



## Gamefish Summary

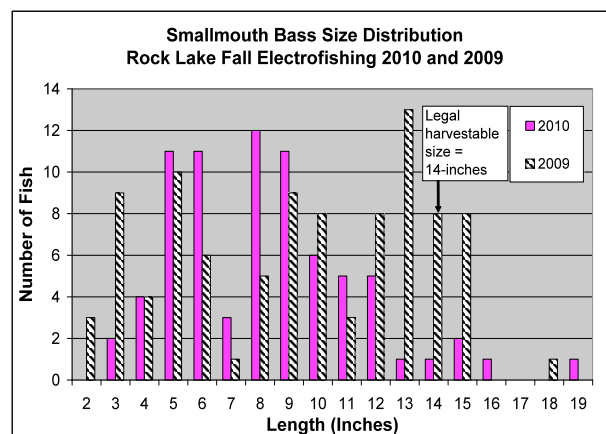
Largemouth bass	2010	2009	2008	2007
<b>Total Catch:</b>	163	44	84	139
<b>Catch Rate (fish per hour):</b>	51	15	31	57
<b>Length Range (inches):</b>	2.3-18.1	2.1-15.4	2.4-16.5	2.5-20.5
<b>Average Length (inches):</b>	9.2	7.9	9.6	9.5

2010 largemouth bass catch rates were 51/hour, compared to the 10-year average of 47/hour. The number of largemouth bass over 14-inches (current legal harvestable size) was 14% in 2010, compared to 9% in 2009, 7% in 2008 and 11% in 2007. The largemouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by the WDNR.



Smallmouth bass	2010	2009	2008	2007
<b>Total Catch:</b>	77	96	83	21
<b>Catch Rate (fish per hour):</b>	24	32	30	9
<b>Length Range (inches):</b>	3.7-19.2	2.5-18.1	2.8-18.0	3.0-18.0
<b>Average Length (inches):</b>	8.7	9.7	9.8	10

2010 smallmouth bass catch rates were 24/hour, compared the 10-year average of 28/hour. The number of smallmouth bass over 14-inches (current legal harvestable size) was 7% in 2010, compared to 18% in 2009, 17% in 2008 and 14% in 2007. The smallmouth bass population in Rock Lake is naturally reproducing and no stocking is currently conducted by the WDNR.



Walleye	2010	2009	2008	2007
<b>Total Catch:</b>	8	11	7	9
<b>Catch Rate (fish per hour):</b>	3	4	3	4
<b>Length Range (inches):</b>	12.3-23.5	16.1-25.5	13.0-24.0	7.1-23.8
<b>Average Length (inches):</b>	16.5	19.1	18.2	14.9

Overall walleye abundance was low with a total of 8 walleye (3/hour) sampled during 2010 fall electrofishing. No young-of-the-year (YOY) walleye (under 10-inches) were sampled (0/hour) during 2010 fall electrofishing. This trend is consistent with low YOY numbers in 2009 (0/hour), 2008 (0/hour) and 2007 (1/hour). No walleye stocking occurred on Rock Lake in 2010.

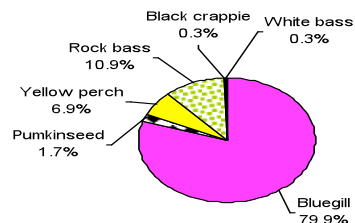
<b>Northern pike</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Total Catch:</b>	21	21	3	5
<b>Catch Rate (fish per hour):</b>	7	7	1	2
<b>Length Range (inches):</b>	9.7-27.5	9.1-33.1	10.6-34.2	20.5-36.5
<b>Average Length (inches):</b>	21.1	18	20.9	25.7

A total of 21 northern pike (7/hour) were collected during 2010 fall electrofishing. Electrofishing is not an effective method for sampling northern pike, as pike population data is best obtained using fyke nets set during spring spawning. No northern pike stocking occurred on Rock Lake in 2010.

## Panfish Summary

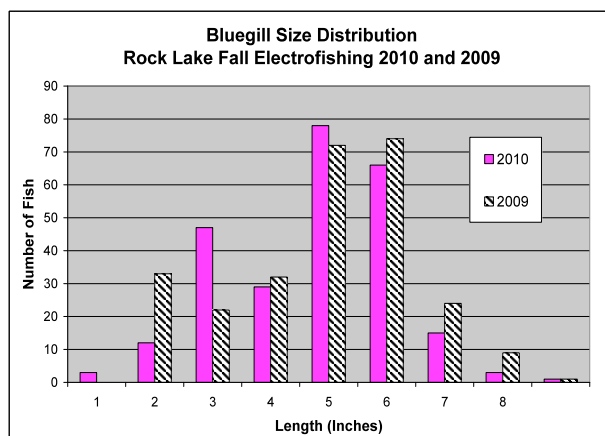
Rock Lake supports a diverse panfish community including; bluegill, yellow perch, rock bass, white bass, pumpkinseed, black crappie and green sunfish. Bluegill were the most abundant panfish species sampled in 2010 fall electrofishing, followed by rock bass and yellow perch. A small number of pumpkinseed (31 fish total, 10/hour), black crappie (6 fish total, 2/hour) and white bass (5 fish total, 2/hour) were also sampled.

**Panfish Relative Abundance  
Rock Lake Fall Electrofishing 2010  
(Number of fish sampled = 1839)**



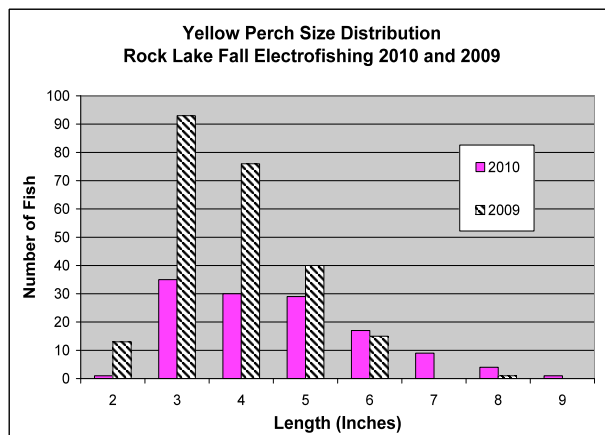
<b>Bluegill</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Total Catch:</b>	1470	496	881	421
<b>Catch Rate (fish per hour):</b>	457	165	320	172
<b>Length Range (inches):</b>	1.6-9.8	2.0-9.1	2.2-8.9	2.5-8.7
<b>Average Length (inches):</b>	5.2	5.4	5.3	5.4

Bluegill catch rates were 457/hour, above the 10-year average of 268/hour. In 2010, 33% of the bluegill measured were greater than 6-inches in length, compared to 40% in 2009, 31% in 2008 and 34% in 2007. The majority of bluegill measured were between 5 and 6.9 inches in length.



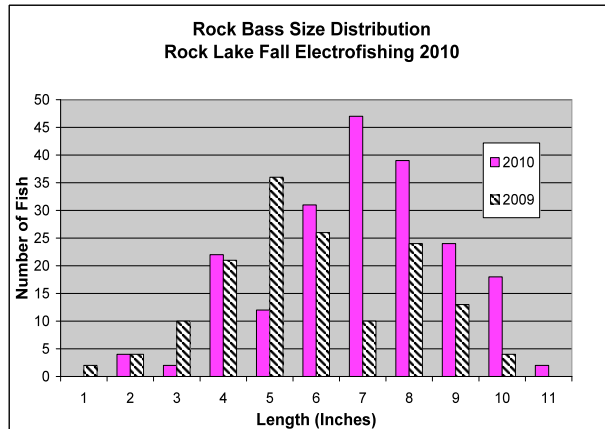
<b>Yellow Perch</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Total Catch:</b>	126	266	116	43
<b>Catch Rate (fish per hour):</b>	39	89	42	18
<b>Length Range (inches):</b>	2.7-9.9	2.1-8.4	2.3-8.6	2.4-8.9
<b>Average Length (inches):</b>	5.0	4.3	4.5	6.2

Yellow perch catch rates were 39/hour, comparable to the 10-year average of 31/hour. Young-of-the-year yellow perch (fish produced in 2010) were present representing 29% of the perch sampled.



<b>Rock bass</b>	<b>2010</b>	<b>2009</b>	<b>2008</b>	<b>2007</b>
<b>Total Catch:</b>	201	178	137	96
<b>Catch Rate (fish per hour):</b>	62	59	50	39
<b>Length Range (inches):</b>	2.6-11.1	1.7-10.7	2.9-10.8	2.6-10.5
<b>Average Length (inches):</b>	7.4	6.3	6.7	7.7

Rock bass catch rates were 62/hour, compared to the 10-year average of 39/hour. Rock Lake supports a sizable, robust population of rock bass with fish up to 11-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, banded killifish, Johnny darter, Iowa darter and common carp. In addition, two Special Concern (SC) species, the lake chubsucker and least darter and one Threatened (T) species, the pugnose shiner, inhabit Rock Lake. The pugnose shiner was found during fall electrofishing surveys conducted in 2003, 2004 and 2005 and summer shoreline seining in 2008. Thirteen lake chubsuckers (4/hour), ranging in size from 3.7-9.3 inches were collected in 2010 fall electrofishing.