# Lake Ripley Fall Electrofishing Summary Report – 2016

#### **Fall Electrofishing - Defined**

Fall electrofishing was conducted on Lake Ripley in Jefferson County on October 4, 2016. Fall electrofishing, conducted using a large boomshocker boat, allows for the collection of young-of-year (YOY) walleye and adult bass that are often under-sampled 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 and panfish recruitment (young-of-year catch per effort). Sampling on Lake Ripley was conducted at two gamefish stations, both 1.5 miles long (3 miles and 1.65 hours total effort) where only gamefish were collected and included stations 1B and 2B (see map). Two additional catch-all stations, each .5 miles long (1 mile and 0.63 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. The average water temperature was 65°F and water clarity was good. This summary report presents fall electrofishing data from 2016 with comparisons to previous fall surveys.

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## **Gamefish Summary**

Largemouth bass	2016	2015	2014	2013
<b>Total Catch:</b>	168	124	180	173
Catch Rate (fish per hour):	74	50	74	58
Length Range (inches):	3.8-15.8	2.7-16.2	2.2-18.4	2.1-18.6
Average Length (inches):	7.8	7.8	6.7	8.4

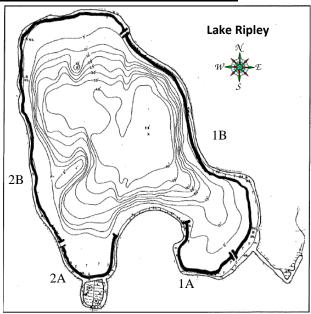
2016 largemouth bass catch rate was 74/hour, compared to 50/hour in 2015, 74/hour in 2014 and 58/hour in 2013. The number of largemouth bass over 14-inches (current legal harvestable size) was 1% in 2016, compared to 7% in 2015, 6% in 2014 and 5% in 2013. The majority of fish sampled in 2016 (57%) were 5.0 to 6.9-inches in length. The lake's largemouth bass population in is naturally reproducing and no stocking is currently conducted by WDNR.

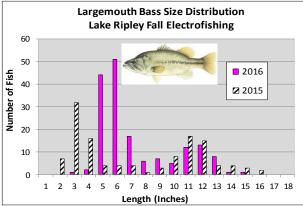
<b>Smallmouth bass</b>	2016	2015	2014	2013
<b>Total Catch:</b>	3	4	14	4
Catch Rate (fish per hour):	1	2	6	1
Length Range (inches):	9.7-12.6	7.6-14.7	3.1-15.6	7.5-10.9
Average Length (inches):	11.1	10.0	6.0	9.8

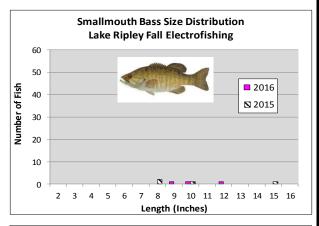
2016 smallmouth bass catch rate remained low at 1/hour, compared to 2/hour in 2015, 6/hour in 2014 and 1/hour in 2013. The lake's smallmouth bass population is naturally reproducing and no stocking is currently conducted by WDNR.

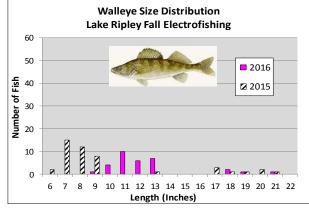
Walleye	2016	2015	2014	2013
<b>Total Catch:</b>	32	46	12	17
Catch Rate (fish per hour):	14	19	5	6
Length Range (inches):	9.9-21.4	6.7-21.7	7.7-20.5	8.2-22.3
Average Length (inches):	12.9	10.1	16.5	16.8

2016 walleye catch rate increased in both 2016 and 2015 primarily due to stocking. 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. Stocked in the fall, large fingerling are the largest-size walleye available through the state hatchery system. In 2015, Lake Ripley was stocked with 19,564 large fingerling (7-inch) walleye. The majority of walleye sampled in 2016 fall electrofishing were 10.0-11.9 inches, most likely representing the fish stocked in 2015.









Northern pike	2016	2015	2014	2013
<b>Total Catch:</b>	11	19	22	12
Catch Rate (fish per hour):	5	8	9	4
<b>Length Range (inches):</b>	16.0-33.1	11.2-24.8	8.8-29.7	10.1-38.3
<b>Average Length (inches):</b>	23.0	19.0	18.2	26.3



The largest northern pike sampled during 2016 fall electrofishing was 33.1 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 Lake Ripley is naturally reproducing and no stocking is currently conducted by WDNR.

## **Panfish Summary**

The panfish community of Lake Ripley is typically comprised of bluegill, yellow perch, rock bass, white bass, pumpkinseed, black crappie and green sunfish. Bluegill were the most abundant panfish species sampled in 2016 fall electrofishing, followed by pumpkinseed, rock bass and yellow perch. A small number of black crappie (8 fish, or 13/hour) were also sampled.

Bluegill	2016	2015	2014	2013
Total Catch:	115	175	240	254
Catch Rate (fish per hour):	183	244	358	348
Length Range (inches):	1.9-8.1	1.2-8.6	1.5-8.8	1.4-7.8
<b>Average Length (inches):</b>	4.6	5.0	5.6	4.3

2016 bluegill catch rate was 183/hour, compared to 244/hour in 2015, 358/hour in 2014 and 348/hour in 2013. In 2016, 23% of the bluegill sampled were greater than 6-inches in length, compared to 46% in 2015, 43% in 2014 and 10% in 2013. Young-of-the-year (YOY) bluegill were abundant indicating good reproduction in 2016.

Yellow Perch	2016	2015	2014	2013
Total Catch:	17	37	26	9
Catch Rate (fish per hour):	27	52	39	12
<b>Length Range (inches):</b>	3.4-8.2	2.3-5.2	2.3-6.1	2.5-5.0
Average Length (inches):	5.2	4.1	3.6	3.6

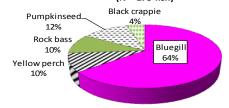
2016 yellow perch catch rate was 27/hour, compared to 52/hour in 2015, 39/hour in 2014 and 12/hour in 2013.

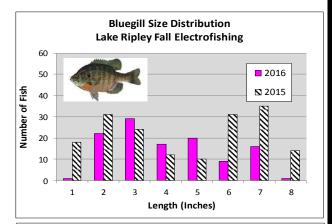
Rock bass	2016	2015	2014	2013
Total Catch:	18	11	20	15
Catch Rate (fish per hour):	29	15	21	21
Length Range (inches):	4.7-9.0	4.0-8.6	3.3-9.9	4.5-9.8
Average Length (inches):	6.5	7.1	5.8	7.0

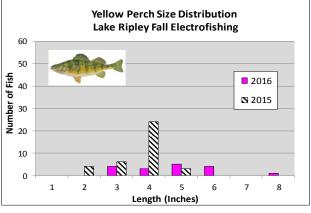
2016 rock bass catch rate was 29/hour, compared to 15/hour in 2015, 21/hour in 2014, and 21/hour in 2013.

Pumpkinseed	2016	2015	2014	2013
Total Catch:	21	11	7	26
Catch Rate (fish per hour):	33	15	10	36
Length Range (inches):	2.9-7.4	1.7-7.8	1.9-7.0	3.0-8.0
<b>Average Length (inches):</b>	5.1	6.2	5.4	5.7

#### Panfish Relative Abundance Lake Ripley Fall Electrofishing 2016 (N = 179 fish)







2016 pumpkinseed catch rate was 33/hour, compared to 15/hour in 2015, 10/hour in 2014 and 36/hour in 2013.

## **Non-game Species**

Lake Ripley supports a diverse non-game fish community including: bowfin, grass pickerel, white sucker, brook silverside, golden, emerald and mimic shiners, bluntnose minnow, fathead minnow, yellow, black and brown bullhead, longnose gar, central mudminnow, blackstripe topminnow, Johnny darter, Iowa darter, bigmouth buffalo and common carp. Historically, Lake Ripley also supported populations of several intolerant fish species, including blackchin shiner, blacknose shiner and banded killifish (also a State Special Concern (SC) species). It also supported two additional SC species, the lake chubsucker and least darter and one Threatened (T) species, the pugnose shiner. Due to their small body size, large boomshocking gear is not ideal for sampling most of these species during fall electrofishing. However, larger-bodied fish such as the lake chubsucker can be detected more readily using this gear. Lake chubsucker were sampled during 2016 fall electrofishing (1 fish, 2/hour), and in 2015, 2011, 2009 and 2006, but were absent in 2012, 2013 and 2014 fall electrofishing. Small numbers of common carp (2 fish, 3/hour), grass pickerel (6 fish, 10/hour), yellow bullhead (11 fish, 17/hour), white bass (1 fish, 2/hour), bowfin (1 fish, 2/hour), bluntnose minnow and golden shiner were also sampled during 2016 fall electrofishing.