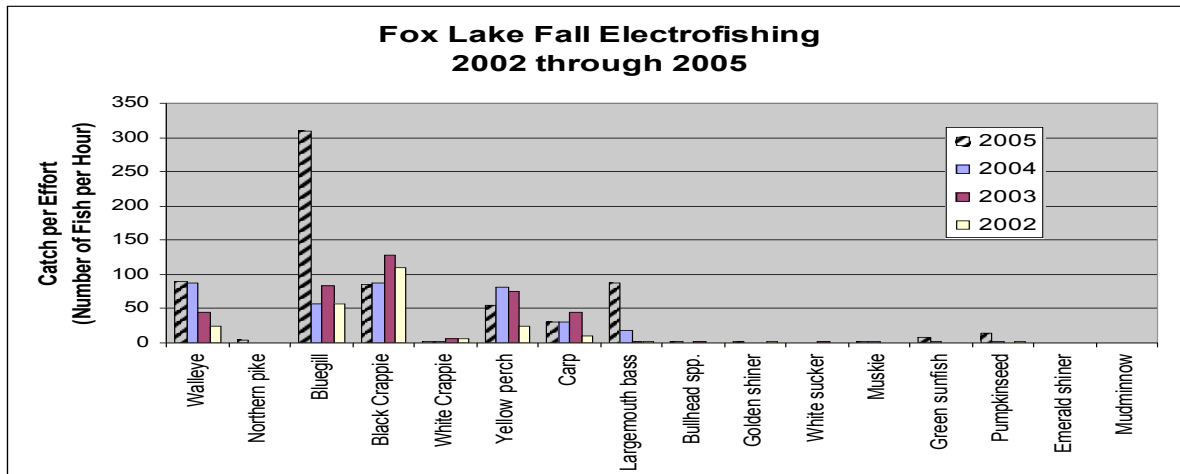


# Fox Lake Fall Electrofishing Summary Report – 2005

## Fall Electrofishing - Defined

Fall electrofishing was conducted on Fox Lake in Dodge County on October 10, 2005. Fall electrofishing is conducted using a large boomshocker boat during the fall allowing for the collection of young-of-the-year (YOY) and adult bass and walleye 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. For this survey, the total effort expended was 2.08 hours and the following stations were sampled: 1.) Inlet of Cambria Creek south (25 minutes), 2.) North side of Chief Kuno Trail (20 minutes). 3.) South side of Chief Kuno Trail (20 minutes), 4.) South shore of The Jug to outlet (20 minutes), 5.) Elmwood Island (20 minutes), 6.) Green Bell tavern to Maple Point (20 minutes). Length measurements were taken from a subset of fish and all fish were returned to the lake. This report highlights the findings of 2005 fall electrofishing with comparisons between 2004 fall electrofishing made where applicable. Compiled by: Laura Stremick-Thompson, DNR Fisheries Biologist, N7725 Hwy 28, Horicon WI 53032. Phone (920) 387-7876 or Laura.Stremick-Thompson@dnr.state.wi.us.

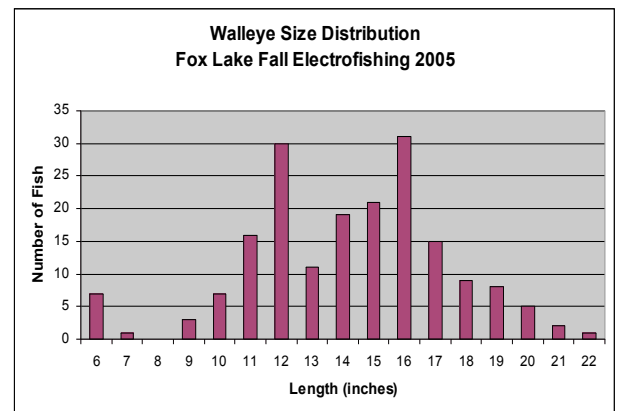


## Gamefish Summary

### Walleye

- Abundance:** 2005 Fall Electrofishing Catch = 186 total fish, or 89.2/hour.  
2004 Fall Electrofishing Catch = 180 total fish, or 86.5/hour.
- Size Structure:** 2005 Length range = 6.0-22.8 inches.  
2004 Length range = 6.5-22.8 inches.  
2005 Average Length = 14.6 inches.  
2004 Average Length = 14.1 inches.

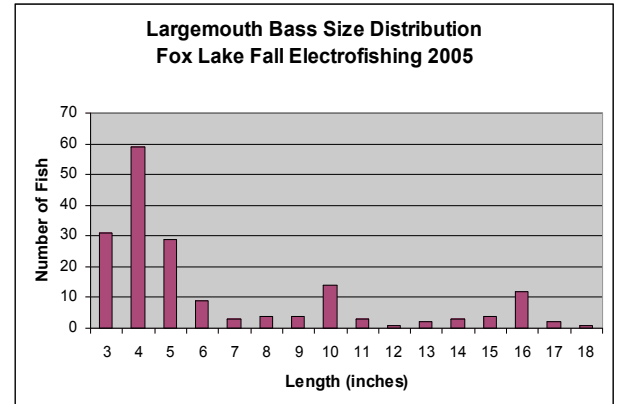
Walleye catch rates for 2005 fall electrofishing were 89.2/hr, compared to 86.5/hr in 2004. The number of young-of-the-year (YOY) walleye under 10 inches was 5.3/hr in 2005 and 11.5/hr in 2004 fall electrofishing. In 2005, DNR stocked Fox Lake with 129,850 small fingerling walleye (2-inch average length).



### Largemouth bass

- Abundance:** 2005 Fall Electrofishing Catch = 182 fish total, or 87.4/hour.  
2004 Fall Electrofishing Catch = 37 fish total, or 17.8/hour.
- Size Structure:** 2005 Length range = 3.0-18.0 inches.  
2004 Length range = 3.1-20.4 inches.  
2005 Average length = 6.9 inches.  
2004 Average length = 7.7 inches.

Largemouth bass catch rates for 2005 fall electrofishing were 87.4/hour, up from 17.8/hour in 2004. The majority of fish measured (33%) were between 4 and 5 inches. The abundance of small bass is most likely due to an increase in spawning and rearing habitat provided by the abundant submerged aquatic plants that the lake experienced due to clearer water during summer 2005.



### Northern pike

- Abundance:** 2005 Fall Electrofishing Catch = 8 fish total or 3.8 fish/hour.  
2004 Fall Electrofishing Catch = 0 fish total
- Size Structure:** 2005 Average Length = 20.8 inches.  
2004 Length Range = N/A.

The low number of northern pike sampled is a reflection of the electrofishing gear used, not low population levels. The best northern pike population data is obtained using fyke nets set during the spring spawning season. In 2005, DNR stocked Fox Lake with 12,500 small fingerling northern pike (2-3 inch average length).

## Muskie

**Abundance:** 2005 Fall Electrofishing Catch = 4 fish total or 1.9/hour.

2004 Fall Electrofishing Catch = 4 fish total or 1.9/hour.

**Size Structure:** 2005 Length Range = 28.0-35.3 inches.

2004 Length Range = 25.0-31.2 inches.

2005 Average Length = 32.2 inches.

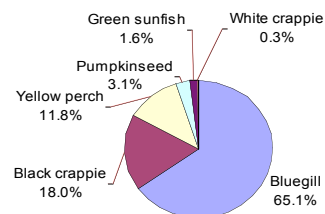
2004 Average Length = 28.1 inches.

DNR has not stocked muskies into Fox Lake since 2001.

## Panfish Summary

The panfish community in Fox Lake is dominated by a large black crappie population, as well as smaller populations of white crappie, bluegill, and yellow perch. Other panfish species present in the lake include pumpkinseed and green sunfish.

**Panfish Relative Abundance  
Fox Lake Fall Electrofishing 2005**



## Bluegill

**Abundance:** 2005 Fall Electrofishing Catch = 643 fish total, 309/hour.

2004 Fall Electrofishing Catch = 118 fish total, or 56.7/hr.

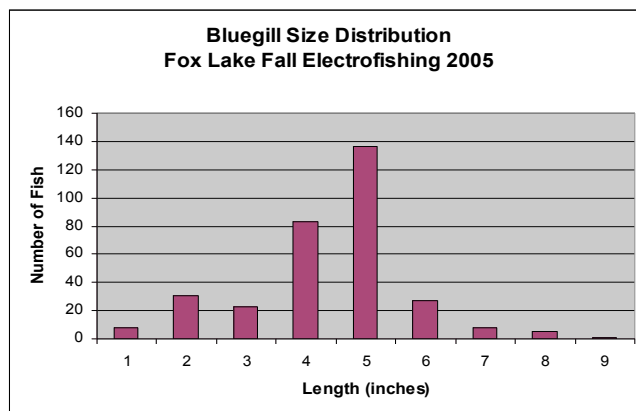
**Size Structure:** 2005 Length range = 1.2-9.5 inches.

2004 Length range = 1.2-8.9 inches.

2005 Average length = 4.9 inches.

2004 Average length = 4.0 inches.

Length measurements were taken on 314 of the total 643 bluegill sampled, of which 13% were greater than 6 inches in length. The majority of bluegill measured (43%) were between 5 and 6 inches in length.



## Yellow perch

**Abundance:** 2005 Fall Electrofishing Catch = 116 fish total, 55.7/hour.

2004 Fall Electrofishing Catch = 171 fish total, 82.2/hour.

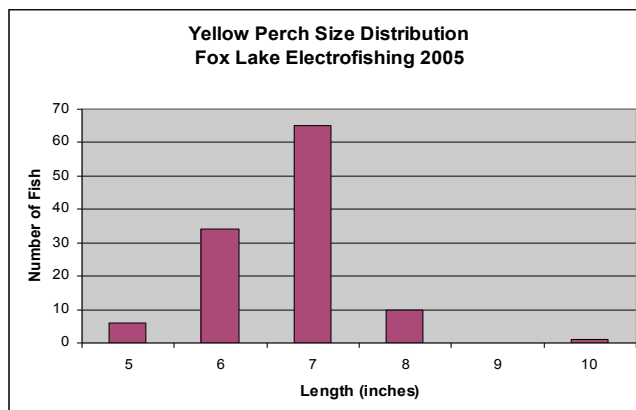
**Size Structure:** 2005 Length range = 5.5-10.5 inches.

2004 Length range = 2.0-10.9 inches.

2005 Average length = 7.1 inches

2004 Average length = 4.9 inches.

Length measurements were taken on all 116 yellow perch sampled. The majority (56%) of the fish measured were between 7 and 8 inches in length.



## Black crappie

**Abundance:** 2005 Fall Electrofishing Catch = 178 fish total, 85.4/hour.

2004 Fall Electrofishing Catch = 181 fish total, 87/hour.

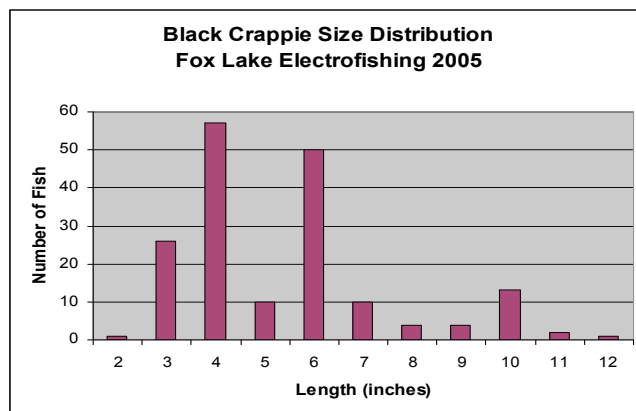
**Size Structure:** 2005 Length range = 2.5-12.0 inches.

2004 Length range = 2.0-11.5 inches.

2005 Average length = 5.8 inches.

2004 Average length = 7.3 inches.

Length measurements were taken on all 178 black crappie sampled. The majority of the fish sampled (32%) were between 4 and 5 inches in length.



## White crappie

**Abundance:** 2005 Fall Electrofishing Catch 3 fish total, 1.4/hour.

2004 Fall Electrofishing Catch 5 fish total, 2.4/hour.

**Size Structure:** 2005 Length range = 4.6-11.2 inches.

2004 Length range = 4.7-10.5 inches.

2005 Average Length = 6.8 inches.

2004 Average Length = 9.0 inches.

## Other Species

Other species sampled during 2005 fall electrofishing included golden shiner, common carp, and yellow and black bullhead. 2005 yellow bullhead catch rates were .96/hr with lengths between 6.0-8.2 inches. 2005 carp catch rates were 30.7/hr, compared to 29.8/hr in 2004.