



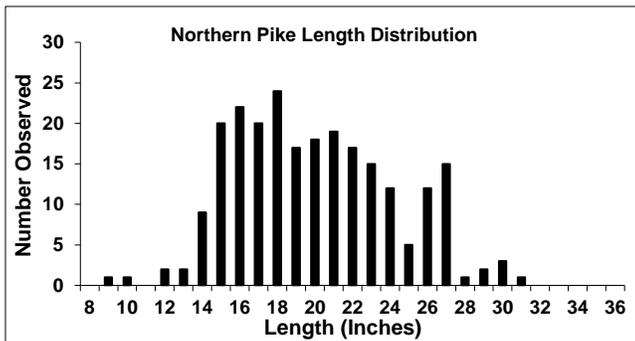
WISCONSIN DNR
FISHERIES INFORMATION SHEET

LAKE: LONG

COUNTY: FLORENCE

YEAR: 2013

The Department of Natural Resources, with the help of the USFS, is currently surveying Long Lake, Florence County, to determine the health of its fishery. This survey was designed to take a comprehensive look at the lake's fish community. Long Lake is a drainage lake with a predominantly sand/muck substrate. Long Lake is 340 acres and achieves a maximum depth of 23 feet.



\* Note: Adult northern pike are defined as all sexable northern pike and those fish of unknown sex >= 12 inches long.

Northern Pike



A mark-recapture survey was conducted between 5/3 and 5/20/2013 to estimate the adult northern pike population in Long Lake. During this survey we captured and measured 238 different northern pike. The 2013 population estimate shows that northern pike are the most abundant game fish in Long Lake with a population of approximately 1,145 northern pike >= 12.0 inches (3.4/acre).

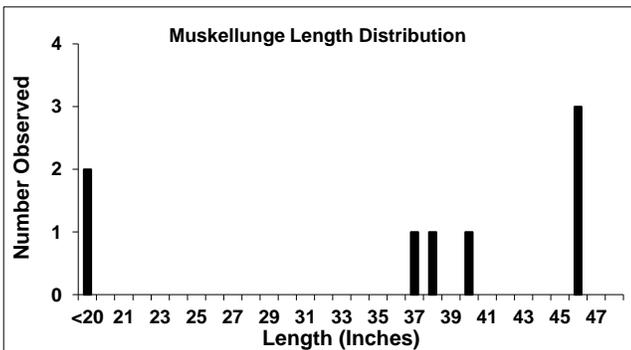
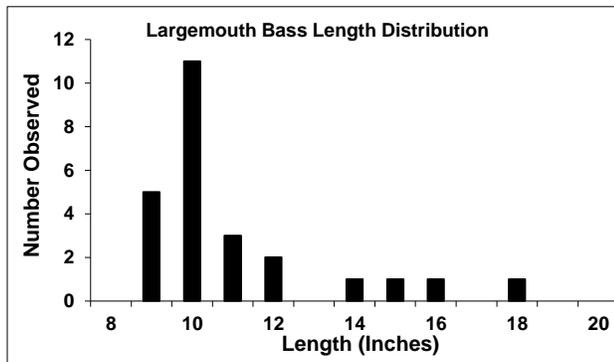
Size structure of northern pike is considered fair in Long Lake with 44.0% and 3.0% of the pike sampled being >= 21.0 and 28.0 inches respectively. The largest pike captured during our survey was a 31.4-inch fish.

Largemouth Bass



Largemouth bass were captured during our spring fyke net survey and 2 nights of spring electrofishing. During these surveys we captured a total of 34 largemouth bass, this was not enough fish to estimate the abundance of largemouth bass in Long Lake. However, the catch rate of largemouth bass during the 2013 survey indicates that they are the 2nd most abundant game fish in Long Lake. A random sample of 26 largemouth bass was measured for size structure analysis.

Based on the small sample of largemouth bass measured during 2013, their size structure appears to be relatively poor. Only four (16.0%) of the adult bass measured were >= 14.0 inches in length and only one fish (4%) was larger than 18.0 inches. The largest bass captured during this years survey was 18.8 inches and weighed 4.06 pounds.



Muskellunge



Muskellunge were not specifically targeted during this survey of Long Lake. We did capture and measure 8 different muskellunge during spring surveys targeting northern pike. Six of the eight fish were adults, ranging from 37.7 to 46.5 inches in length. These adult muskies are likely 15 and 16 year old fish that were stocked by the Long Lake Association in 1997 and 1999. Muskies have never reproduced naturally in Long Lake, so it was not a surprise that no younger/smaller adults were seen during our survey.

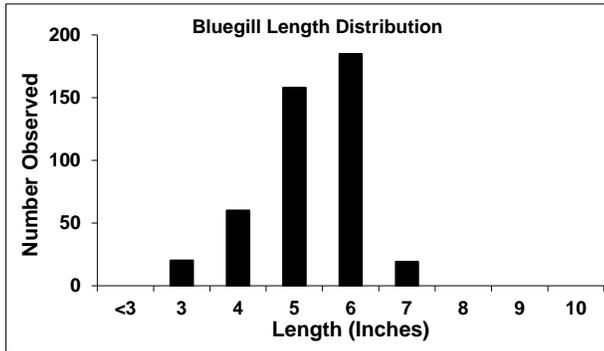
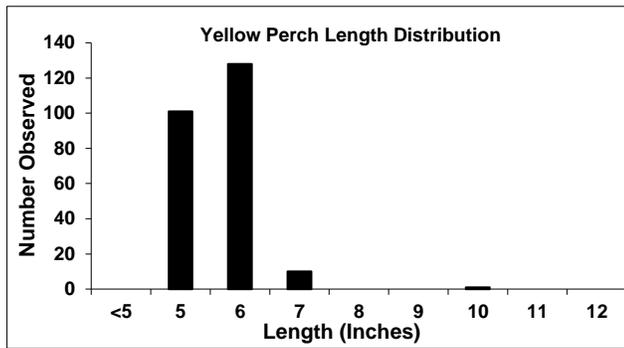
Long Lake is now being actively managed for muskellunge. Large fingerling muskies (normally 10-12") have been stocked each of the last two years. Individuals from both of these stocking events were also seen during

## Yellow Perch



During our spring netting survey we captured a total of 566 yellow perch, this is a catch rate of approximately 23.6 fish per net-lift. A random sample of 240 yellow perch was measured on 5/4 and 5/5 to assess size structure.

The yellow perch population in Long Lake has very poor size structure with approximately 4.6% and 0.4% of the yellow perch being  $\geq 7.0$  and 8.0 inches respectively. Only a single yellow perch was measured over 8 inches long, this fish was 10.3 inches in length.



## Bluegill



A total of 1,043 bluegill were captured during a 2-day panfish survey conducted 6/25-26/2013. Relative abundance of bluegill was approximately 104.3 fish per net-lift, making them the most abundant pan fish species in Long Lake. In fact, this is the highest catch rate of bluegill of any water surveyed in Florence County over the last 3 years. Every bluegill captured on the first day of panfish netting, a total of 442 fish, was measured to assess size structure.

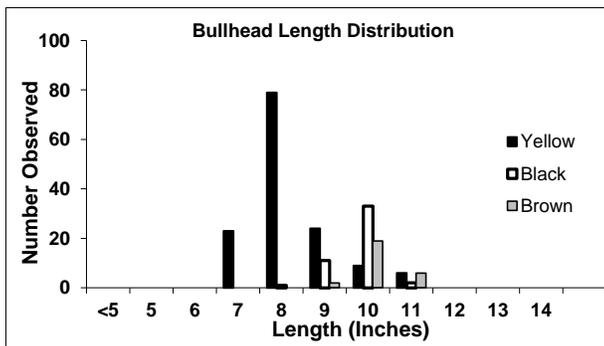
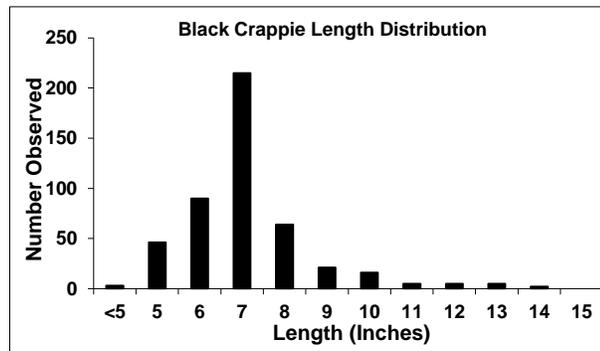
Size structure of bluegill in Long Lake is quite poor with 46.2% of bluegill being  $\geq 6.0$  inches and no fish measured  $\geq 8.0$  inches.

## Black Crappie



Long Lake has a very good abundance of black crappie. Over the 6-day spring netting survey we captured a total of 1,122 black crappie or approximately 46.8 fish per net-lift. This suggests that black crappie are the 2<sup>nd</sup> most abundant pan fish in Long Lake.

A random sample of 472 black crappie was measured during two days of spring fyke netting. This sample suggests that approximately 25.2% and 7.0% of the crappie population is  $\geq 8.0$  and 10.0 inches respectively. This is a below average size structure for black crappie. Although low in numbers a few large black crappie were captured during the spring survey, the largest of which was 14.9 inches in length.



## Other Species



Long Lake has an extremely high abundance of bullhead. Over the 6-day spring fyke net survey we captured a total of 4,130 bullhead or approximately 172.1 fish per net-lift. A total of three different species of bullhead were identified in Long Lake during 2013. A 101 bullhead sample was examined to determine the species composition of the bullhead population. Yellow bullhead were the most abundant species accounting for approximately 67.3% of the bullhead catch, followed by black bullhead (19.8%) and brown bullhead (12.9%).

All of the bullheads captured during two days of summer pan fish netting were measured for size structure analysis (a total of 215 fish). In general, bullhead in Long Lake have a below average size structure. Approximately 52.1% and 6.5% of the bullhead measured were  $\geq 9.0$  and 11.0 inches respectively. None of the bullhead measured were over 12 inches long.

This report is interim only; data and findings should not be considered final.  
For answers to questions about fisheries management activities and plans for Long Lake contact:

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