



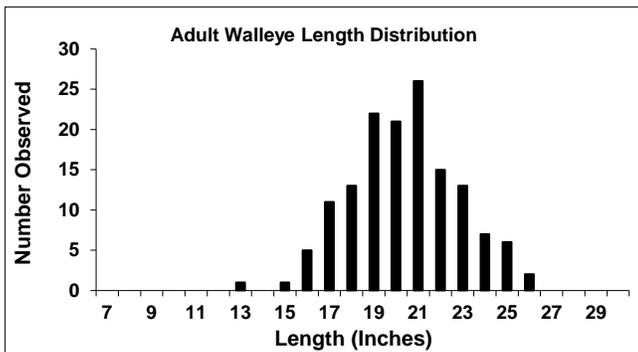
**WISCONSIN DNR
FISHERIES INFORMATION SHEET**

LAKE: FAY

COUNTY: FLORENCE

YEAR: 2013

The Department of Natural Resources, with the help of the USFS, is currently surveying Fay 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. Fay Lake is a drainage lake with a predominantly sand/gravel/muck substrate. Fay Lake is 282 acres and achieves a maximum depth of 15 feet.



* Note: Adult walleye are defined as all sexable walleye and walleye of unknown sex ≥ 15 inches long.

Walleye



A mark-recapture survey of Fay Lake's adult walleye population was conducted from May 3-6, 2013. During 4 days of fyke netting, 124 different adult walleye were captured and marked with an identifiable fin clip. On the evening of 5/6 our crew sampled Fay Lake with an electro-fishing boat and captured 43 adult walleye. During electrofishing approximately 58% (25 of 43) of the captured walleye bore the fin clip given during fyke netting. Based on those results, Fay Lake is estimated to contain 212 adult walleye (0.75/acre). All of the adult walleye were larger than 15 inches.

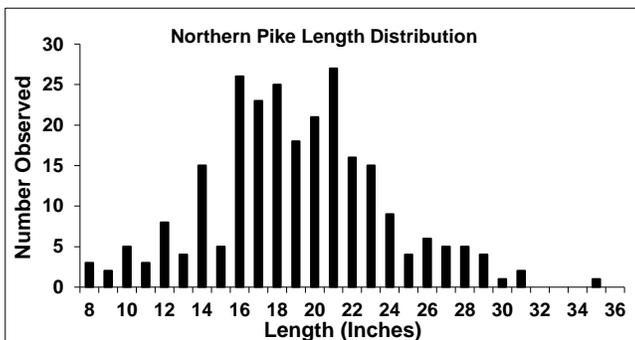
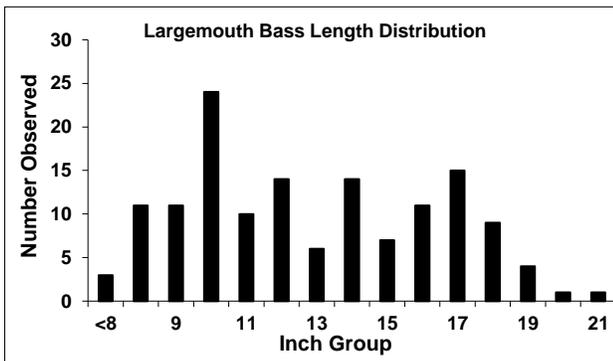
Size Structure of walleye in Fay Lake was very good with approximately 62.9% and 5.6% of walleye being ≥ 20.0 and 25.0 inches respectively. The largest walleye captured was a 26.5-inch female.

Largemouth Bass



Largemouth bass were captured during our spring fyke net survey, walleye electrofishing survey and 6 nights of bass electro-fishing to estimate the adult population. During these surveys we captured and measured 141 different largemouth bass. After analyzing the data I estimate there to be approximately 562 largemouth bass ≥ 8.0 inches (2.0/acre) in Fay Lake.

The size structure of largemouth bass in Fay Lake is very impressive. Of the adult bass captured a total of 62 fish (44.9%) were ≥ 14 inches in length and 15 fish (10.9%) were larger than 18 inches. The largest bass captured during the 2013 survey was 21.1 inches and 5.94 pounds.



Northern Pike



A mark-recapture survey was conducted to estimate the adult northern pike population in Fay Lake. During this survey we captured and measured 253 different northern pike. The 2013 population estimate shows that northern pike are the most abundant game fish in Fay Lake with a population of approximately 1,671 northern pike ≥ 12.0 inches (5.9/acre).

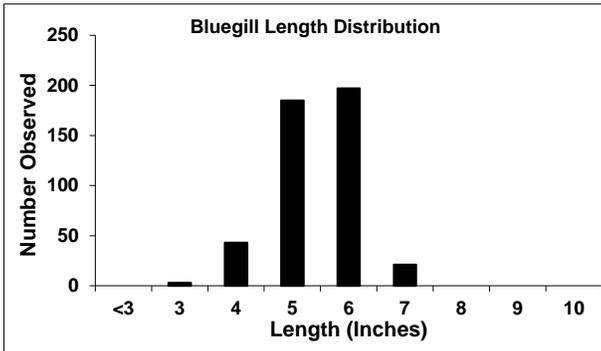
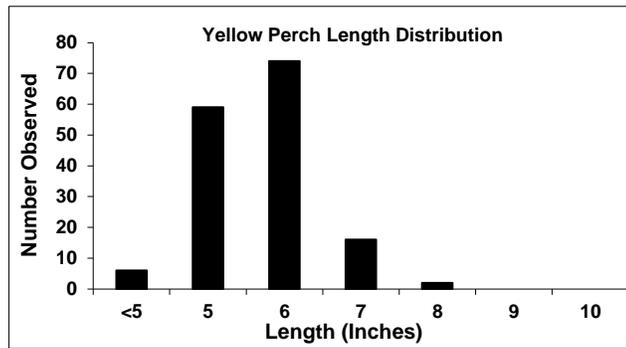
Size structure of northern pike is considered fair in Fay Lake with 41.7% and 5.7% of the pike sampled being ≥ 21.0 and 28.0 inches respectively. The largest pike captured during our survey was a 35.4-inch female.

Yellow Perch



During our spring netting survey we captured a total of 163 yellow perch, this is a catch rate of approximately 8.6 fish per net-lift. All yellow perch captured during spring netting were measured to assess size structure.

The yellow perch population in Fay Lake has quite poor size structure with approximately 11.9% and 1.3% of the yellow perch being ≥ 7.0 and 8.0 inches respectively. There were no large yellow perch sampled during the 2013 spring survey.



Bluegill



A total of 1,424 bluegill were captured during a 3-day panfish survey conducted 6/25-27/2013. Relative abundance of bluegill was approximately 94.9 fish per net-lift, making them the most abundant summer spawning panfish species in Fay Lake. In fact, this is the 2nd 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 449 fish, were measured to assess size structure.

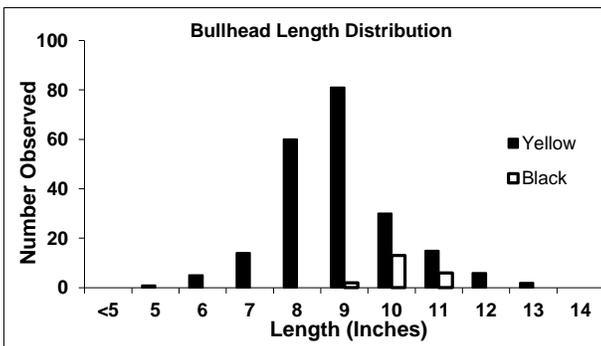
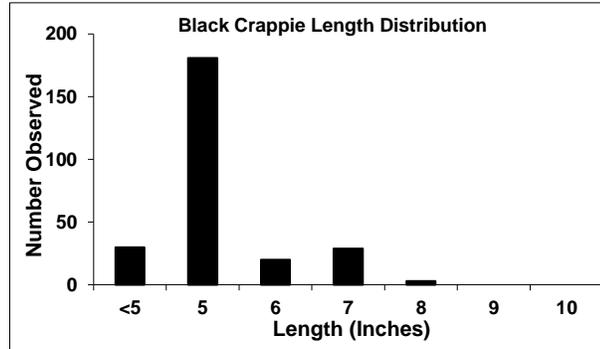
Size structure of bluegill in Fay Lake is very poor with 44.6% of bluegill being ≥ 6.0 and no fish measured ≥ 8.0 inches.

Black Crappie



Fay Lake has a very high abundance of black crappie. Over the 4-day spring netting survey we captured a total of 6,547 black crappie or approximately 339.8 fish per net-lift. This suggests that black crappie are the most abundant panfish in Fay Lake. That catch rate ranks the Fay Lake crappie population as the most abundant in Florence County (of those surveyed in the last 3 years).

However, like all other panfish species in Fay Lake the size structure of black crappie is less than desirable. A random sample of 263 black crappie was measured on the first day of our 2013 survey. This sample suggests that approximately 1.3% of the crappie population is ≥ 8.0 inches.



Other Species



Fay Lake has a high abundance of bullhead. Over the 3-day panfish survey we captured a total of 555 bullhead or approximately 37.0 fish per net-lift. A total of three different species of bullhead were identified in Fay Lake during 2013. Yellow bullhead, accounting for approximately 88.4% of the bullhead catch, are the most abundant species, followed by black bullhead (8.7 %) and brown bullhead (2.9%).

After noticing the high abundance of bullheads in Fay Lake we removed the bullheads captured on 6/26 & 6/27, a total of 377 fish. All of the bullheads captured on 6/26 were measured for size structure analysis.

In general bullhead in Fay Lake have a good size structure. Approximately 32.2% and 5.8% of the bullhead measured were ≥ 10.0 and 12.0 inches respectively. The largest bullhead captured was a 13.4-inch yellow

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

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