



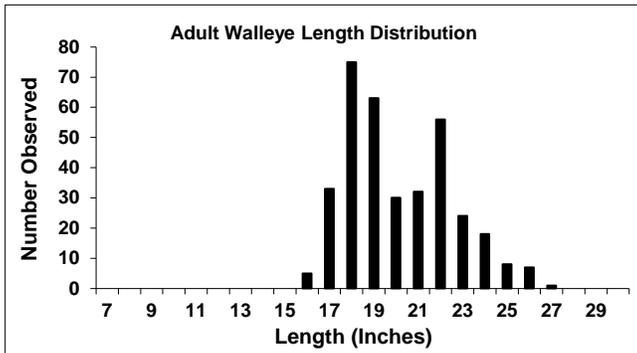
**WISCONSIN DNR  
FISHERIES INFORMATION SHEET**

**LAKE:** HALSEY

**COUNTY:** FLORENCE

**YEAR:** 2013

The Department of Natural Resources is currently surveying Halsey Lake, Florence County, to determine the health of its fishery. This survey was designed to take a comprehensive look at the lake's fishery. Halsey Lake is a drainage lake with a predominantly muck/sand/cobble substrate. Halsey Lake is the largest lake in Florence County covering 512 acres and achieving a maximum depth of 10 feet.



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

**Walleye**



A mark-recapture survey of Halsey Lake's adult walleye population was conducted from May 3-6, 2013. During 4 days of fyke netting, 276 different adult walleye were captured and marked with an identifiable fin clip. On the evening of 5/6 our crew sampled Halsey Lake with an electro-fishing boat and captured 123 adult walleye. During electrofishing approximately 38% (47 of 123) of the captured walleye bore the fin clip given during fyke netting. The largest walleye captured was a 27.2-inch female.

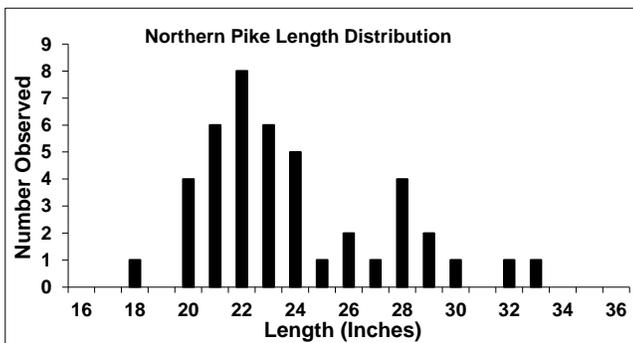
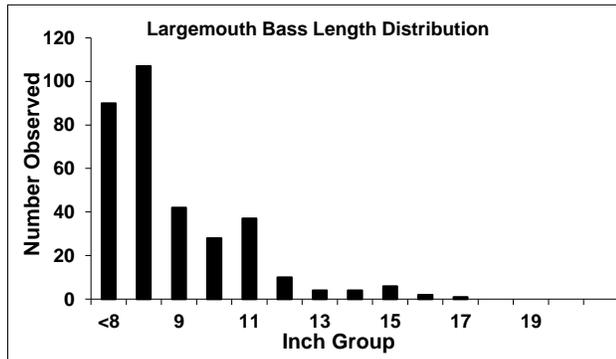
Based on those results, Halsey Lake is estimated to contain 679 adult walleye (1.3/acre). All of the adult walleye were larger than 15 inches.

**Largemouth Bass**



Largemouth bass were captured during our spring fyke net survey, walleye electrofishing survey and 4 nights of bass electro-fishing to estimate the adult population. During these surveys we captured and measured 354 different largemouth bass. After analyzing the data I estimate there to be approximately 911 largemouth bass  $\geq 8.0$  inches (1.8/acre) in Halsey Lake.

The size structure of largemouth bass in Halsey Lake is very poor. The majority of the largemouth bass captured (55.6%) were 8.0-9.9 inches in length and only 17 fish (4.8%) were larger than 14 inches.



**Northern Pike**



A total of 43 different northern pike were captured during 4 days of spring netting in early May. We did not capture enough northern pike to estimate their adult population. Northern pike are the third most abundant game fish in Halsey Lake with a catch rate of approximately 2.7 fish per net-lift.

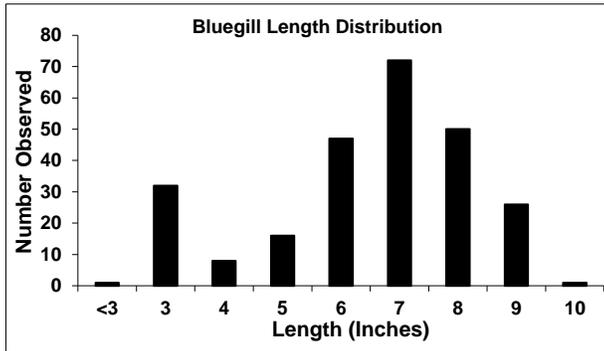
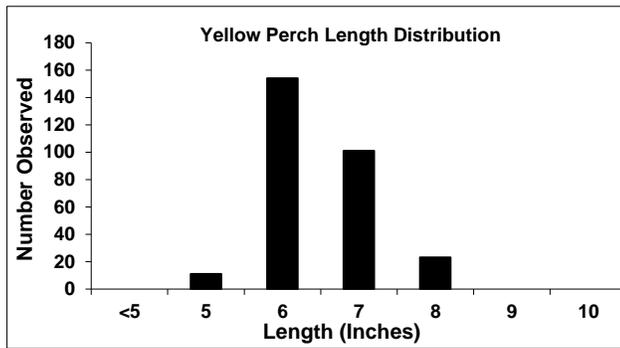
Size structure of northern pike was quite good in Halsey Lake with 88.4% and 20.9% of the pike sampled being  $\geq 21.0$  and 28.0 inches respectively.

## Yellow Perch



Yellow perch are the most abundant panfish species in Halsey Lake. During our spring netting survey we captured a total of 3,765 yellow perch, this is a catch rate of approximately 235 fish per net-lift. Of these fish captured a random sample of 289 yellow perch were measured during the first day of spring fyke netting.

The yellow perch population in Halsey Lake has a moderate size structure with approximately 42.9% and 8.0% of the yellow perch being  $\geq 7.0$  and  $8.0$  inches respectively. There were no large yellow perch sampled during the 2013 spring survey.



## Bluegill



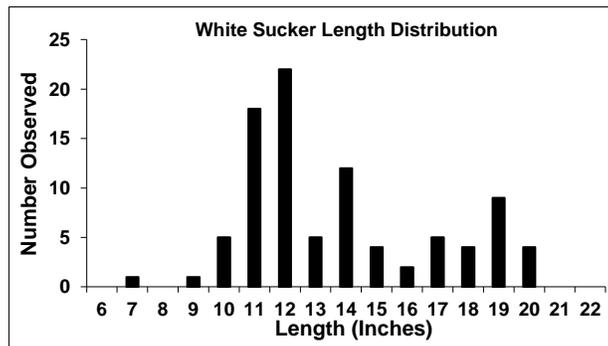
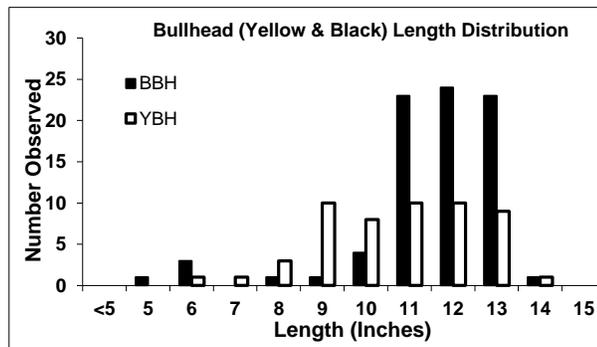
A total of 253 bluegill were captured during a 4-day panfish survey conducted 6/25-28/2013. Relative abundance of bluegills was approximately 12.7 fish per net-lift, making them the 2nd most abundant panfish species in Halsey Lake.

Size structure of bluegill in Halsey Lake is quite good with 77.8% and 30.6% of bluegill being  $\geq 6.0$  and  $8.0$  inches respectively.

## Other Species

Halsey Lake has a relatively low abundance of bullheads. Over the 4-day panfish survey we captured a total of 134 bullhead or approximately 6.7 fish per net-lift. We captured two different species of bullhead in Halsey Lake during 2013. Black bullhead, accounting for 60.4% of the bullhead catch, appear to be slightly more abundant than yellow bullhead.

The low density bullhead population has allowed for a very respectable size structure. Approximately 60.0% of the black bullhead sampled were  $\geq 12.0$  inches. Yellow bullhead, which are typically smaller than black bullhead, have an even more impressive size structure with 56.6%  $\geq 11.0$  inches and some individuals present  $\geq 14.0$  inches (which is considered to be the trophy length for yellow bullhead).



A total of 1,186 white suckers were captured during our spring fyke net survey. This average catch rate of 74.1 fish per net-lift suggests that white sucker are very abundant in Halsey Lake.

A random sample of 92 white sucker was measured during the first day of netting to assess size structure. White sucker size structure is quite high with 97.8% and 26.1% of the white suckers measured being  $\geq 10.0$  and  $16.0$  inches respectively.

White sucker is an excellent prey item for almost all fish in Halsey Lake. Young game fish and panfish prey on sucker fry and the early life stages of white sucker. While large gamefish will take advantage of all size classes of white sucker.

This report is interim only; data and findings should not be considered final.

For answers to questions about fisheries management activities and plans for Halsey Lake contact:

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