



**WISCONSIN DNR  
FISHERIES INFORMATION SHEET**

**LAKE:** BLACK OAK

**COUNTY:** VILAS

**YEAR:** 2011

The Department of Natural Resources surveyed Black Oak Lake, Vilas County, from May 3 through June 6, 2011, to determine the health of its fishery. The survey was designed to take a comprehensive look at the lake's fishery. Black Oak Lake is a drainage lake with predominantly sand and gravel substrate and a low-density walleye population. It has a surface area of 584 acres, 7.4 miles of shoreline and a maximum depth of 85 feet.

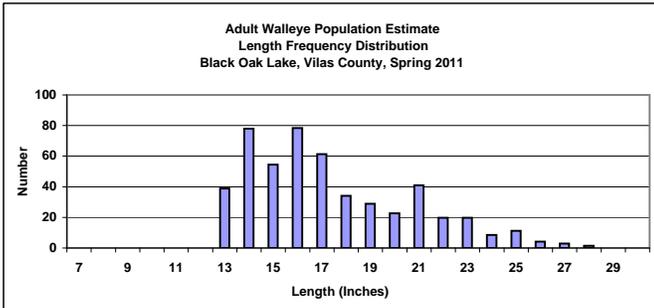


Figure 1. Length frequency distribution of 507 adult\* walleye estimated to be in Black Oak Lake, Vilas County, based on a spring 2011 survey.

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

**Walleye**

We conducted a mark-recapture survey of Black Oak Lake's adult\* walleye population from May 3-6, 2011. We captured and marked (fin clipped) 298 adult walleye in four days of fyke netting. A crew sampled Black Oak Lake with an electro-fishing boat on May 6th and captured 43 adult walleye. Approximately 53% (23 of 43) of those walleye had been marked during fyke netting.

Based on those results, we estimated that Black Oak Lake is inhabited by 507 adult walleye (0.9/acre). Nearly 77% (389 of 507) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 28.7-inch female.

**Smallmouth Bass**

We were unable to capture and mark a sufficient number of smallmouth bass from Black Oak Lake to estimate the population size. We captured 76 smallmouth bass, 8 inches or larger, in all sampling conducted through June 6th. Approximately 76% (58 of 76) of those smallmouth were 14 inches long or larger. The largest smallmouth we captured was 19.5 inches long.

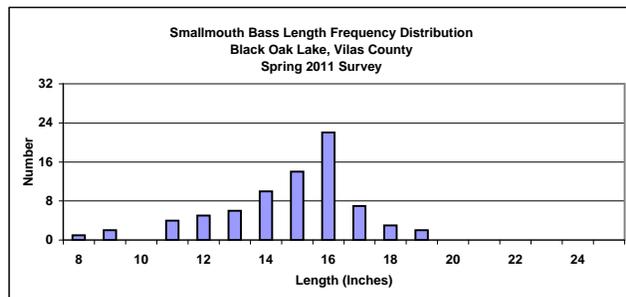


Figure 2. Length frequency distribution of 76 smallmouth bass  $\geq$  8" captured during a fisheries survey of Black Oak Lake, Vilas County, in spring 2011.

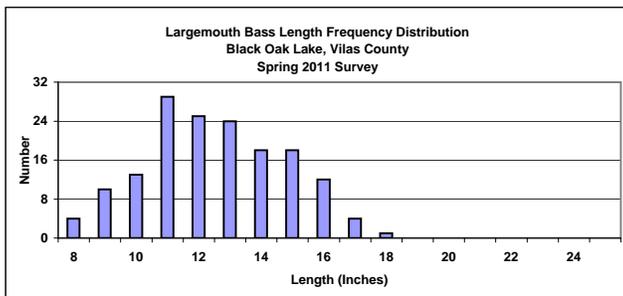


Figure 3. Length frequency distribution of 158 largemouth bass  $\geq$  8" captured during a fisheries survey of Black Oak Lake, Vilas County, in spring 2011.

**Largemouth Bass**

Largemouth bass density in Black Oak Lake was also too low for us to complete a population estimate. We captured 158 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Black Oak Lake. Nearly 34% (53 of 158) of those largemouth were 14 inches long or larger. The biggest largemouth bass we captured was 18.2 inches long.

## Northern Pike

We captured 15 adult\* northern pike during our fyke netting and electro-fishing sampling of Black Oak Lake through May 6th. Fourteen of the adult northern pike we captured were less than 26 inches long. The largest northern pike we captured was a 28.7-inch female.

\* Note: Adult northern pike are defined as all sexable northern pike and northern pike of unknown sex  $\geq$  12 inches long.

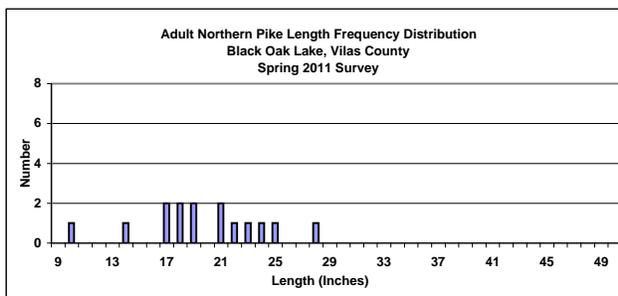


Figure 4. Length frequency distribution of 15 adult\* northern pike captured during a fisheries survey of Black Oak Lake, Vilas County, in spring 2011.

## Other Species

We captured eight species of fish in our fyke netting and electro-fishing sampling of Black Oak Lake in addition to the game fish mentioned above. Black crappie, bluegill, white sucker and yellow perch were common in our fyke net catches. We also caught bluntnose minnow, lake herring (cisco), mimic shiner and rock bass. In-water sampling will conclude with a survey of young-of-year walleye in fall 2011.

We are also conducting a creel (angler harvest) survey on Black Oak Lake this year. Creel clerk Lynn Robinson will count and interview anglers and examine their catch throughout the 2011 open-water fishing season.

Table 1. General Fishing Regulations for Black Oak Lake, Vilas County, 2011

FISH SPECIES	OPEN SEASON	DAILY LIMIT	MINIMUM LENGTH
Walleye	May 7 - March 4	3	15 inches
Largemouth and Smallmouth Bass	May 7 - June 17 (C&R) June 18 - March 4 (Harvest)	None 5 in total	14 inches
Muskellunge	May 28 - Nov. 30	1	34 inches
Northern Pike	May 7 - March 4	5	None

A brief summary of selected fishing regulations for Black Oak Lake is included above (Table 1). While the regulatory information provided was current at the time the surveys were conducted, it is not comprehensive and should not be used as a substitute for the current fishing regulation pamphlet. You may obtain a copy of current fishing regulations when you purchase your fishing license, or download a copy from our web site at:

<http://www.dnr.wi.gov/fish/regulations/>

This report is interim only; data and findings should not be considered final. Results of creel surveys should be available by June 2012.

Watch for survey summaries at:  
<http://dnr.wi.gov/fish/nor/northern.html>  
or contact:

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For answers to questions about fisheries management activities and plans for Black Oak Lake, Vilas County, contact:

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