



**WISCONSIN DNR
FISHERIES INFORMATION SHEET**

LAKE: PELICAN

COUNTY: ONEIDA

YEAR: 2011

The Department of Natural Resources surveyed Pelican Lake, Oneida County, from April 28 through June 10, 2011, to determine the health of its fishery. The survey was primarily focused on estimating the abundance of the lake's walleye and muskellunge populations. Pelican Lake is a drainage lake with predominantly sand and gravel substrate and a moderate density walleye population. It has a surface area of 3,585 acres, 16.7 miles of shoreline and a maximum depth of 39 feet.

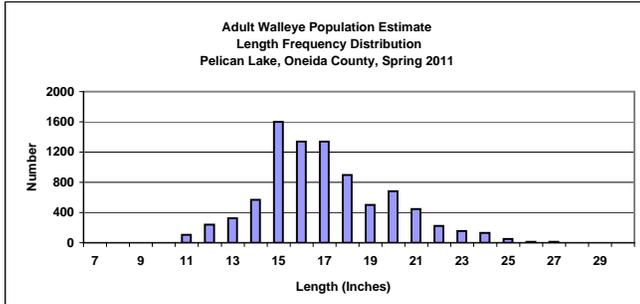


Figure 1. Length frequency distribution of 8632 adult* walleye estimated to be in Pelican Lake, Oneida County, based on a spring 2011 survey.

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

Walleye

WDNR and a Sokaogon Chippewa Environmental Department crew conducted a mark-recapture survey of Pelican Lake's adult* walleye population from April 28 through May 4, 2011. We captured and marked (fin clipped) 1,344 adult walleye in six days of fyke netting. Three crews sampled Pelican Lake with electro-fishing boats on May 4th and captured 176 adult walleye. Approximately 17% (30 of 176) of those walleye bore the fin clip given during fyke netting.

Based on those results, we estimated that Pelican Lake is home to 8,632 adult walleye (2.4/acre). Nearly 86% (7,393 of 8,632) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 27.7-inch female.

Smallmouth Bass

We were unable to capture and mark a sufficient number of smallmouth bass from Pelican Lake to estimate the population size. We captured 66 smallmouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Pelican Lake. Forty-nine of those smallmouth (74%) were 14 inches long or larger. Nearly 23% (15 of 66) smallmouth captured were 18 inches long or larger. The largest smallmouth bass we captured was 20.2 inches long.

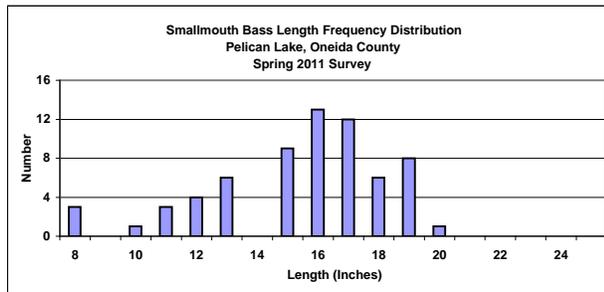


Figure 2. Length frequency distribution of 66 smallmouth bass \geq 8" captured during a fisheries survey of Pelican Lake, Oneida County, in spring 2011.

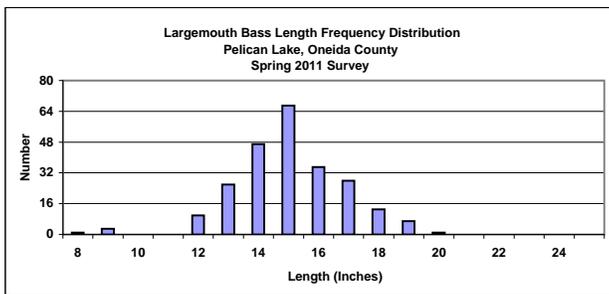


Figure 3. Length frequency distribution of 238 largemouth bass \geq 8" captured during a fisheries survey of Pelican Lake, Oneida County, in spring 2011.

Largemouth Bass

We also caught too few largemouth bass from Pelican Lake to make a valid estimate of their abundance. We captured 238 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling of Pelican Lake. Approximately 83% (198 of 238) of those largemouth were 14 inches long or larger. Nearly 9% (21 of 238) largemouth captured were 18 inches long or larger. The biggest largemouth bass we captured was 20.2 inches long.

Northern Pike

We captured 581 adult* northern pike in fyke nets fished in Pelican Lake from April 28 through May 3, 2011. Nearly 3% (15 of 581) of adult northern pike we captured were 26 inches long or larger. The largest northern pike we captured was a 38.3-inch female.

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

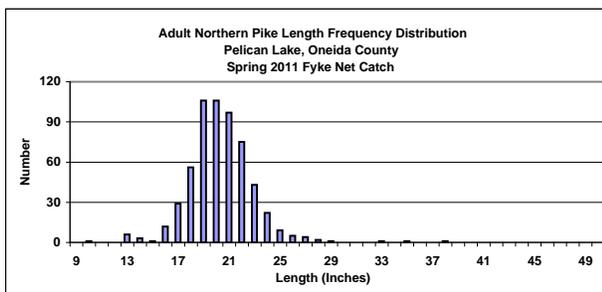


Figure 4. Length frequency distribution of 581 adult* northern pike captured in fyke nets during a fisheries survey of Pelican Lake, Oneida County, in spring 2011.

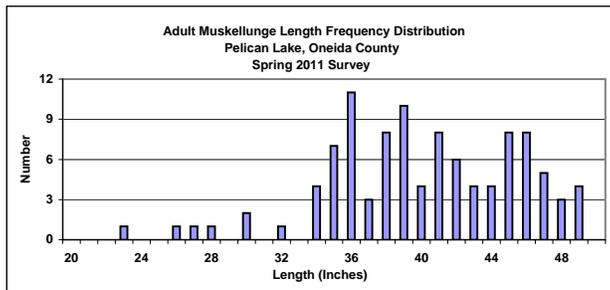


Figure 5. Length frequency distribution of 104 adult* muskellunge captured during a fisheries survey of Pelican Lake, Oneida County, in spring 2011.

Muskellunge

We captured 104 adult* muskellunge during our fyke netting and electro-fishing sampling of Pelican Lake. Ninety-three percent of the adult muskellunge (97 of 104) we captured were 34 inches long or larger. Nearly 52% of muskellunge captured (54 of 104) were 40 inches long or larger. The largest muskellunge we captured were two 49.5-inch females.

* Note: Adult muskellunge are defined using PSD stock size as all sexable muskellunge and muskellunge of unknown sex ≥ 20 inches.

Other Species

We captured 13 species of fish in our fyke netting and electro-fishing sampling of Pelican Lake in addition to the game fish mentioned above. Bluegill, pumpkinseed, white sucker and yellow perch were the most abundant species in our fyke net catches. We also caught black bullhead, black crappie, burbot, golden shiner, Iowa darter, rock bass, trout perch, white bass and yellow bullhead.

We are also conducting a creel (angler harvest) survey on Pelican Lake this year. Creel clerk Jason Halverson with substantial support from John Davis will count and interview anglers and examine their catch throughout the 2011-12 fishing season.

Table 1. General Fishing Regulations for Pelican Lake, Oneida County, 2011

FISH SPECIES	OPEN SEASON	DAILY LIMIT	MINIMUM LENGTH
Walleye	May 7 - March 4	2	15 inches
Largemouth and Smallmouth Bass	May 7 - June 17 (C&R) June 18 - March 4 (Harvest)	None 1 in total	18 inches
Muskellunge	May 28 - Nov. 30	1	50 inches
Northern Pike	May 7 - March 4	5	None

A brief summary of selected fishing regulations for Pelican 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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