



**WISCONSIN DNR
FISHERIES INFORMATION SHEET**

LAKE: WILLOW FLOWAGE

COUNTY: ONEIDA

YEAR: 2008

The Department of Natural Resources surveyed Willow Flowage, Oneida County, from April 22 through May 5, 2008, to determine the health of its fishery. The primary objective of the survey was to estimate the abundance of the flowage's walleye population. Willow Flowage is a soft water drainage lake with predominantly sand substrate and a moderate density walleye population. It has a surface area of 6,306 acres, 98.4 miles of shoreline and a maximum depth of 30 feet.

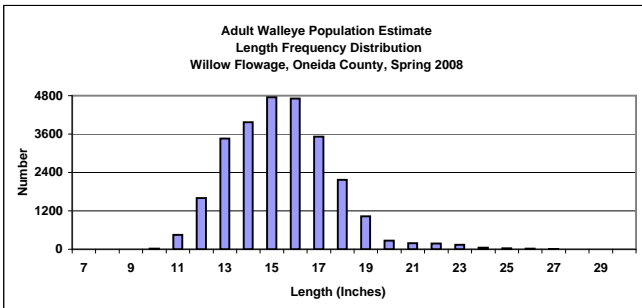


Figure 1. Length frequency distribution of 26,566 adult* walleye estimated to be in Willow Flowage, Oneida County, based on a spring 2008 survey.

* 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 Willow Flowage's adult* walleye population from April 22 through May 5, 2008. We captured and marked (fin clipped) 3,962 adult walleye in 12 days of fyke netting. Seven crews sampled Willow Flowage with electro-fishing boats on May 5th and captured 947 adult walleye. Nearly 15% (137 of 947) of those walleye bore the fin clip given during fyke netting.

Based on those results, we estimated that Willow Flowage is home to 26,566 adult walleye (4.2/acre). Approximately 64% (17,072 of 26,566) of adult walleye were 15 inches long or larger. The largest walleye we captured was a 28.7-inch female.

Smallmouth Bass

Smallmouth bass were not a primary target of our survey of Willow Flowage. Sampling occurred prior to peak smallmouth spawning. However, we did capture 183 smallmouth bass, 8-inches or larger, during our fyke netting and electro-fishing sampling. Approximately 51% (94 of 183) of those smallmouth were 14 inches long or larger. The largest smallmouth we captured was 21.3 inches long.

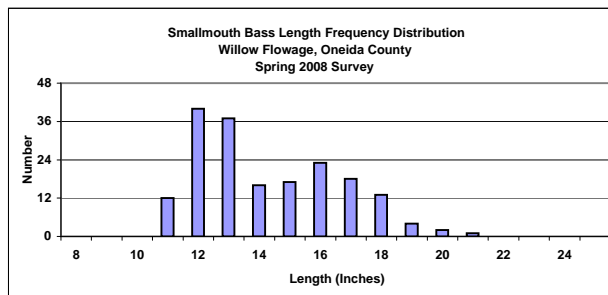


Figure 2. Length frequency distribution of 183 smallmouth bass \geq 8" captured during a fisheries survey of Willow Flowage, Oneida County, based on a spring 2008 survey.

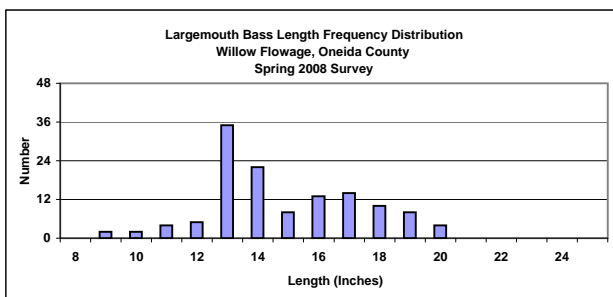


Figure 3. Length frequency distribution of 127 largemouth bass \geq 8" captured during a fisheries survey of Willow Flowage, Oneida County, in spring 2008.

Largemouth Bass

Largemouth bass were also an incidental catch in our survey of Willow Flowage. We captured 127 largemouth bass, 8 inches or larger, during our fyke netting and electro-fishing sampling. Approximately 62% (79 of 127) of those largemouth were over 14 inches long. The biggest largemouth bass we captured was 20.6 inches long.

Northern Pike

We captured 4,812 adult* northern pike in fyke nets fished in Willow Flowage from April 22 through May 3, 2008. Approximately 98% (4,729 of 4,812) of adult northern pike we captured were less than 26 inches long. The largest northern pike we captured was a 39.7-inch female.

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

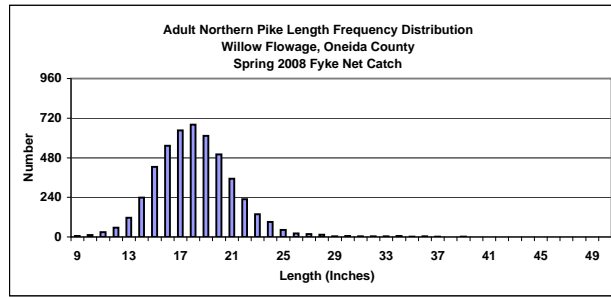


Figure 4. Length frequency distribution of 4,812 adult* northern pike captured in fyke nets during a fisheries survey of Willow Flowage, Oneida County, in spring 2008.

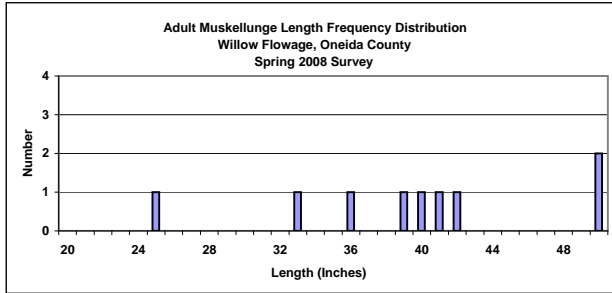


Figure 5. Length frequency distribution of nine adult* muskellunge captured during a fisheries survey of Willow Flowage, Oneida County, in spring 2008.

Muskellunge

We captured nine adult* muskellunge during our fyke netting and electro-fishing sampling of Willow Flowage. Seven of the adult muskellunge we captured were 34 inches long or larger. The largest muskellunge we captured was a 52.8-inch female.

* Note: Adult muskellunge are defined as all sexable muskellunge and muskellunge of unknown sex \geq 20 inches long.

Other Species

We captured 15 species of fish in our fyke netting and electro-fishing sampling of Willow Flowage in addition to the game fish mentioned above. Yellow perch, white sucker and yellow bullhead were the most abundant species in our fyke net catches. We also caught black crappie, black bullhead, bluegill, bowfin, burbot, emerald shiner, golden shiner, pumpkinseed, rock bass and three species of redbreast. In-water sampling will conclude with a survey of young-of-year walleye in fall 2008.

We are also conducting a creel (angler harvest) survey on Willow Flowage this year. Creel clerk Jason Halverson will count and interview anglers and examine their catch throughout the 2008-09 fishing season.

Table 1. General Fishing Regulations for Willow Flowage, Oneida County, 2008

FISH SPECIES	OPEN SEASON	DAILY LIMIT	MINIMUM LENGTH
Walleye	May 3 - March 1	3	15 inches
Largemouth and Smallmouth Bass	May 3 - June 20 (C&R) June 21 - March 1 (Harvest)	None 5 in total	14 inches
Muskellunge	May 24 - Nov. 30	1	34 inches
Northern Pike	May 3 - March 1	5	None

A brief summary of selected fishing regulations for Willow Flowage 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 2009. If you are interested in a summary of the creel survey or want an update on this year's fyke netting and electro-fishing survey results, contact:

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