

Muskellunge Lake Report

VILAS COUNTY, WISCONSIN

Summary of the Lake Management Study

Field Work: 2004

Report: Summer 2005

Muskellunge Lake Management Program Formulated

Natural Conditions Rated as Good

AQUATIC PLANT PROJECTS COULD BE CONSIDERED

Muskellunge Lake, located in Vilas County, Wisconsin, is 272 acres in size, and has an average depth of 9 feet with a maximum depth of 19 feet.

A lake study was conducted in 2004 with two primary objectives.

- * to characterize existing lake conditions.
- * to develop a lake management plan that protects, maintains, and enhances Muskellunge Lake's water quality.

Results found that lake summer water clarity conditions of about 5 feet were slightly less than expected compared to reference lakes in the area (see page 3 for more information on reference or ecoregion lakes). A goal for Muskellunge Lake is clarity averaging about 7 feet over the summer.

Phosphorus is the typical nutrient that has the biggest influence in algae



Volunteers helped with aquatic plant surveys on Muskellunge Lake, Vilas County, Wisconsin in 2004.

growth. Phosphorus levels in Muskellunge Lake were on the moderately high side at 34 parts per billion (ppb). This accounts for the algae growth that results in water clarity of around 5 feet.

Aquatic plants were also studied in 2004. Muskellunge Lake was found to have a good diversity of plants with at least 13 plant species. No exotic plant species were found.

Based on these findings and from

previous work by others, a lake management plan was formulated.

Aquatic plant management is one management area and fish manipulation is a potential future project.

Muskellunge Lake Statistics

Muskellunge Lake

Lake size (acre):	272
Mean depth (feet):	9.3
Maximum depth (feet):	19
Volume (acre-feet):	2,530
Watershed area(surface) (acre):	2,602 (not including the lake)
Watershed : Lake surface ratio	10:1
Clarity in 2004 (feet):	4.7
Lake phosphorus in 2004 (parts per billion)	34

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