

Maple Lake

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Clarity Report of August 4,
2015



Land & Water Conservation Department

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Maple Lake AIS Monitoring and Water Clarity Report

WBIC: 1609900
Previous AIS Findings: Banded Mystery Snail, Chinese Mystery Snail
New AIS Findings: None
Field Date: August 4, 2015
Field Crew: Stephanie Boismenu, Sara Mills, and Samantha Zommers, AIS Project Assistants, Oneida County Land and Water Conservation Department
Report By: Samantha Zommers

Stephanie, Sara, and I monitored Maple Lake on August 4, 2015. This lake is 131 acres and is located in the municipality of Three Lakes (Figure 1). There is a maximum depth of 15 feet and the bottom is composed of 70% sand, 15% gravel, 5% rock, and 10% muck. Maple Lake is a spring fed lake which means that its source of water is groundwater or it is spring-fed. This lake has many fish such as musky, panfish, largemouth bass, northern pike, and walleye. The water quality is excellent on this lake for being mesotrophic. Mesotrophic lakes are commonly clear waterbodies with a variety of submerged aquatic plants and support a wide variety of fish. They have an intermediate level of nutrients and productivity, more than oligotrophic lakes, but not nearly as much as eutrophic lakes.

We entered with the canoe from a private landing off of Timbershore Drive (Figure 3). Using bathymetric map (Figure 2), the three of us canoed to the deep hole using a depth finder. After canoeing around the area of the deep hole, we used a point with a depth of 13 feet out of a possible depth of 15 feet. At this point Stephanie anchored so that we could do our water quality measurements. I used the dissolved oxygen meter to find the dissolved oxygen readings and temperature readings (Table 1), while Sara recorded. Sara then used the Secchi disk to measure water clarity while I recorded. During this time Stephanie used the GPS to record the exact location of our deep hole water quality measurements.

The main reason we were brought to this lake was to search for purple loosestrife with June, whose private dock we entered the lake from. She had suspicions that there was purple loosestrife along the northwest shoreline, which is where we searched for a presence/absence check (Figure 3). While along this shoreline we also did a presence/absence check for other invasive species.

Findings:

Aquatic Invasive Species:

Fortunately, we did not discover any new invasive species.

Dissolved Oxygen:

These measurements can be seen on Table 1.

Secchi:

The Secchi reading on this lake was 13 feet at a depth of 14 feet.

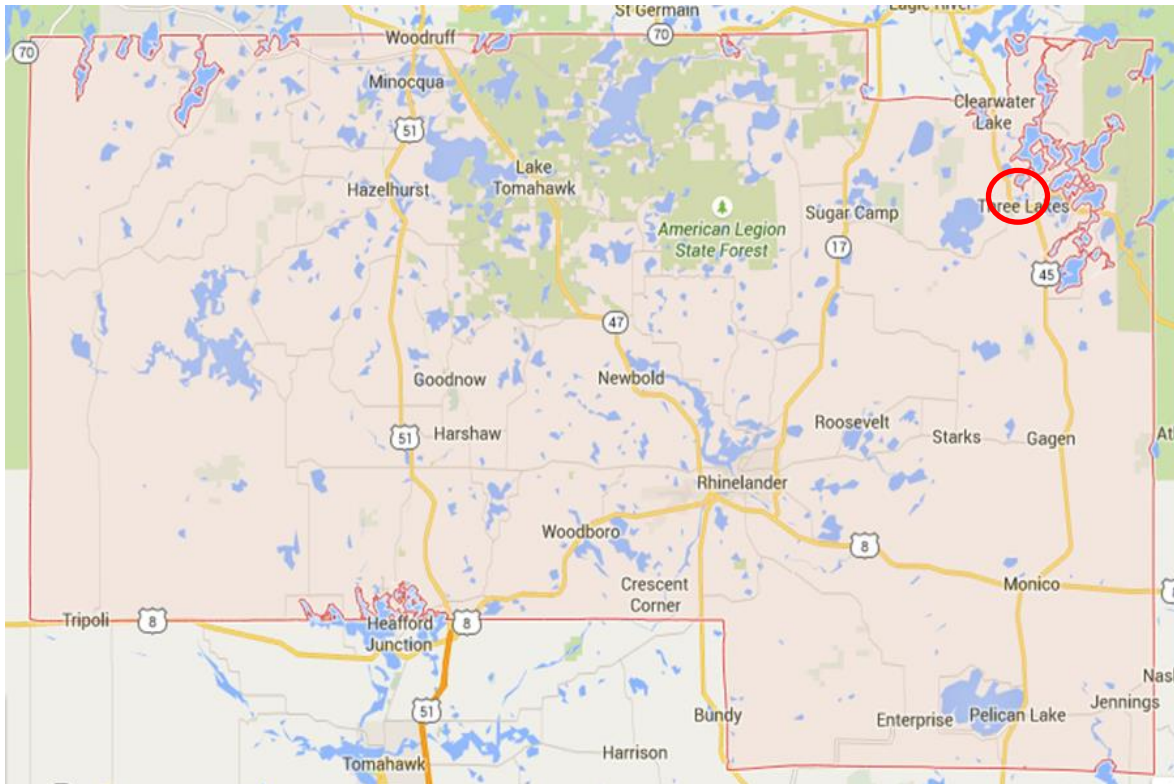


Figure 1. Map of Oneida County, WI with Maple Lake circled.

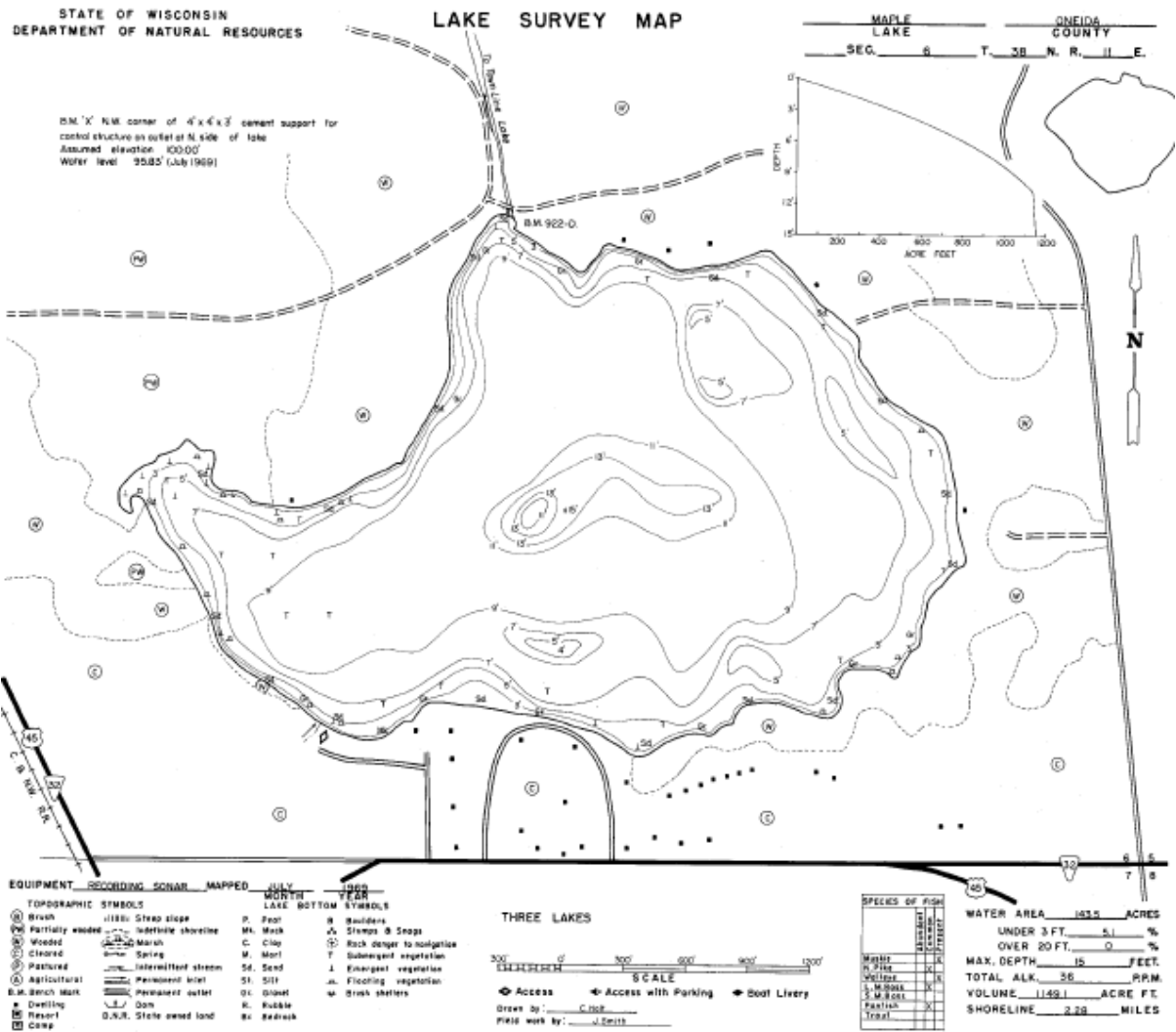


Figure 2. Bathymetric map of Maple Lake in Oneida County, WI.

Map Source: Wisconsin Department of Natural Resources 608-266-2621, Maple Lake – Oneida County, Wisconsin – DNR Lake Map, Date –July, 1969– Historical Lake Map



Figure 3. Map of Maple Lake with the site of the deep hole, where we accessed with our canoe from a private dock, and locations of a presence/absence check.

Deep Hole GPS Coordinates: 45.80285148, -89.16418484

Table 1. Dissolved oxygen levels and temperature.

Depth (Feet)	Dissolved Oxygen Levels (mg/L)	Temperature (°F)
2	7.98	72.7
4	7.96	72.7
6	8.54	72.5
8	8.62	72.4
10	8.73	72.2
12	8.72	72.1

Resources: <http://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=1609900&page=facts>