

Two Lake North

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 Clarity Report of June 23, 2016



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Two Lake North AIS Monitoring and Water Clarity Report

WBIC: 1007500
 Previous AIS Findings: None
 New AIS Findings: Purple Loosestrife
 Field Date: June 23, 2016
 Field Crew: Stephanie Boismenu and Aubrey Nycz, AIS Coordinator and AIS Project Assistant, Oneida County Land and Water Conservation Department
 Report By: Aubrey Nycz

Stephanie and I monitored Two Lake North on June 23, 2016. Two Lake North is located in the town of Lake Tomahawk, WI in Oneida County (Figure 1). It is a seepage lake of 150 acres with a maximum depth of 47 feet. The substrate on the lake is 80% sand, 15% gravel, 2% rock, and 3% muck. The lake has musky, panfish, largemouth bass, smallmouth bass, northern pike, and walleye. Two Lake North’s trophic state is listed as oligotrophic. According to dictionary.com, oligotrophic lakes are characterized by a low accumulation of dissolved nutrient salts, supporting but a sparse growth of algae and other organisms, and having high oxygen content owing to the low organic content. North Two Lakes has many homes placed around its perimeter and is located off of County Road D.

Stephanie and I were able to find a spot to launch at the end of Two Lakes Road. The road we parked on was state owned, so we were able to drive right up to the shoreline and launch from this point. We canoed the part of the perimeter of the lake, in order to check for any invasive species such as snails or weeds. The weather was sunny and warm, with little wind, so we had an enjoyable day canoeing on the lake.

We used a contour map of Two Lake North to help us locate the deep spot on the lake. We found the deepest point of the lake was 42 feet. When we found the deep spot, Stephanie anchored the canoe and I took the GPS coordinates of the location. Stephanie and I then measured the water clarity levels using a Secchi disk, dissolved oxygen using the dissolved oxygen meter, and temperature (Table 1).

Once Stephanie and I completed our data collection, we continued to paddle around Two Lake North. We did visual inspections from the canoe, and walked the shoreline for a more in depth inspection. Stephanie snorkeled around some private boat launches as well. Unfortunately, we did find some suspected Purple Loosestrife plants on some shorelines. Stephanie pulled the plants out by their roots and I took GPS coordinates of the plants' location.

Findings: All taken starting at 3:07 p.m.

Aquatic Invasive Species:

Purple Loosestrife

Secchi:

The Secchi reading on this lake was 16 feet out of a 47 foot max depth. The water color was a light blue-green, so it was not surprising that we were able to see the Secchi disk that far below the surface.

Dissolved Oxygen:

These measurements can be seen in Table 1 at three foot increments.

Figure 1. Map of Oneida County, WI with North Two Lakes circled in red.

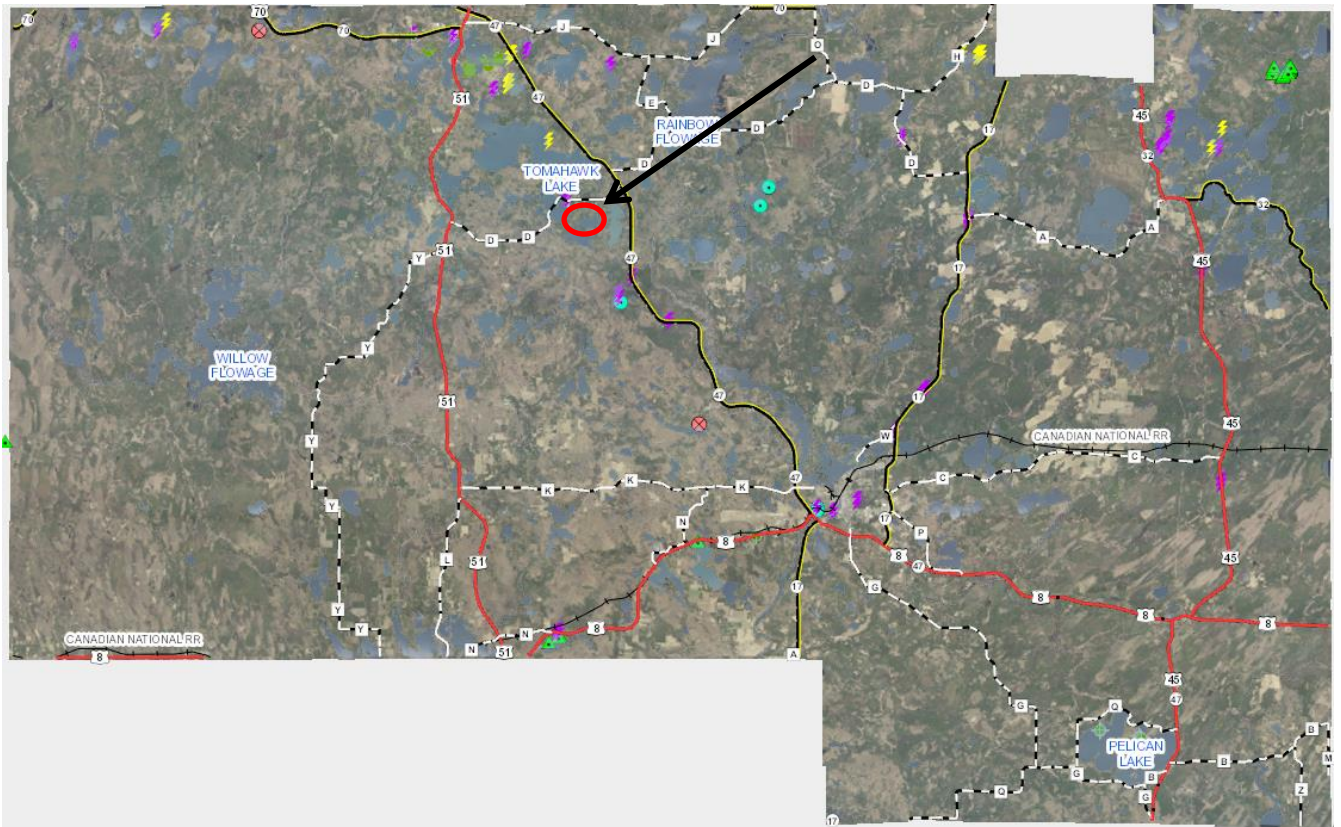


Figure 2. Map of North Two Lakes; the red circle shows where we entered the lake, the yellow square shows where the deep hole can be found, the green triangle shows where we obtained our Secchi Disk coordinates, and the purple circle shows where we found Purple Loosestrife..



WDNR Secchi Disk Readings: Two Lakes North - Deep Hole LATITUDE 45.79 LONGITUDE - 89.61

Table 1. Dissolved oxygen levels and temperatures at the deep hole.

Depth (Feet)	Dissolved Oxygen Levels (mg/L)	Temperature (F)
3	8.13	76.2
6	8.29	74.0
9	8.44	73.3

12	8.04	72.6
15	9.39	67.1
18	10.25	60.5
21	10.15	55.9
24	8.05	52.7
27	7.01	50.4
30	3.51	47.9
33	1.32	46.7
36	0.39	46.7
39	0.10	45.6

Resources:

<https://oneida-county.maps.arcgis.com/apps/webappviewer/index.html?id=c0144697a23243d6beb981727c3e6e2b>

<http://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=1007500&page=map>