

Lake Thompson

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Clarity Report of September 22,
2015



Land & Water Conservation Department

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Lake Thompson AIS Monitoring and Water Clarity Report

WBIC: 1569900
Previous AIS Findings: Chinese Mystery Snail, Purple Loosestrife, Rusty Crayfish
New AIS Findings: None
Field Date: September 22, 2015
Field Crew: Stephanie Boismenu and Sara Mills, AIS Project Assistants,
Oneida County Land and Water Conservation Department
Report by: Sara Mills

Stephanie and I monitored Lake Thompson on September 22, 2015. It is a 401 acre lake located in the town of Pelican (Figure 1). It is a drainage lake that is connected with Little George Creek. It has a maximum depth of 30 feet. There is one public boat landing and two private boat landings. The WDNR lists Lake Thompson's trophic state as eutrophic and substrates as 55% sand, 15% gravel, 5% rock, and 25% muck. Eutrophic lakes are characterized by an excessive amount of nutrients, allowing the lake to support an abundance of plants and algae. The lake had a lot of native pondweeds and clams.

The Lake Thompson Association President, Frosty Smith, and his dog, Roscoe, assisted us in our lake monitoring. We entered the lake through Frosty Smith's residence and utilized his pontoon boat for the day. The weather conditions for lake monitoring were overcast with a slight breeze and a temperature of approximately 60 degrees Fahrenheit. Using the bathymetric map (Figure 2), we navigated to the approximate deep hole of the lake. Due to the unavailability of our DO meter, we were not able to take dissolved oxygen and temperature readings. At the deep hole site we obtained a Secchi disk reading and performed spiny water flea and zebra mussel veliger tows (Figure 3). We then went to another site to perform a second zebra mussel veliger tow (Figure 3).

After data collection, we went to three locations on the lake shore to perform an AIS presence/absence check. The protocol for this process is to complete a visual inspection of the littoral zone along 100 feet of the shoreline in each area. We chose three areas that were either public or private boat landings (Figure 3) because they can be high risk areas for AIS to enter the waterbody. For the three locations of AIS presence/absence checks, we meandered the shoreline via walking, using an aquascope to eliminate the glare on the water surface. We looked through vegetation and checked under and around solid surfaces.

Findings:

Aquatic Invasive Species:

We did not find any new invasive species during our lake monitoring. We found a few dead shells of Chinese mystery snails and a couple purple loosestrife plants at the public boat landing that have already been reported on this lake.

Secchi Disk:

Lake Thompson was brown colored with low algae levels which resulted in a Secchi disk reading of 5 feet at a depth of 23 feet, recorded at the approximate deep hole location.

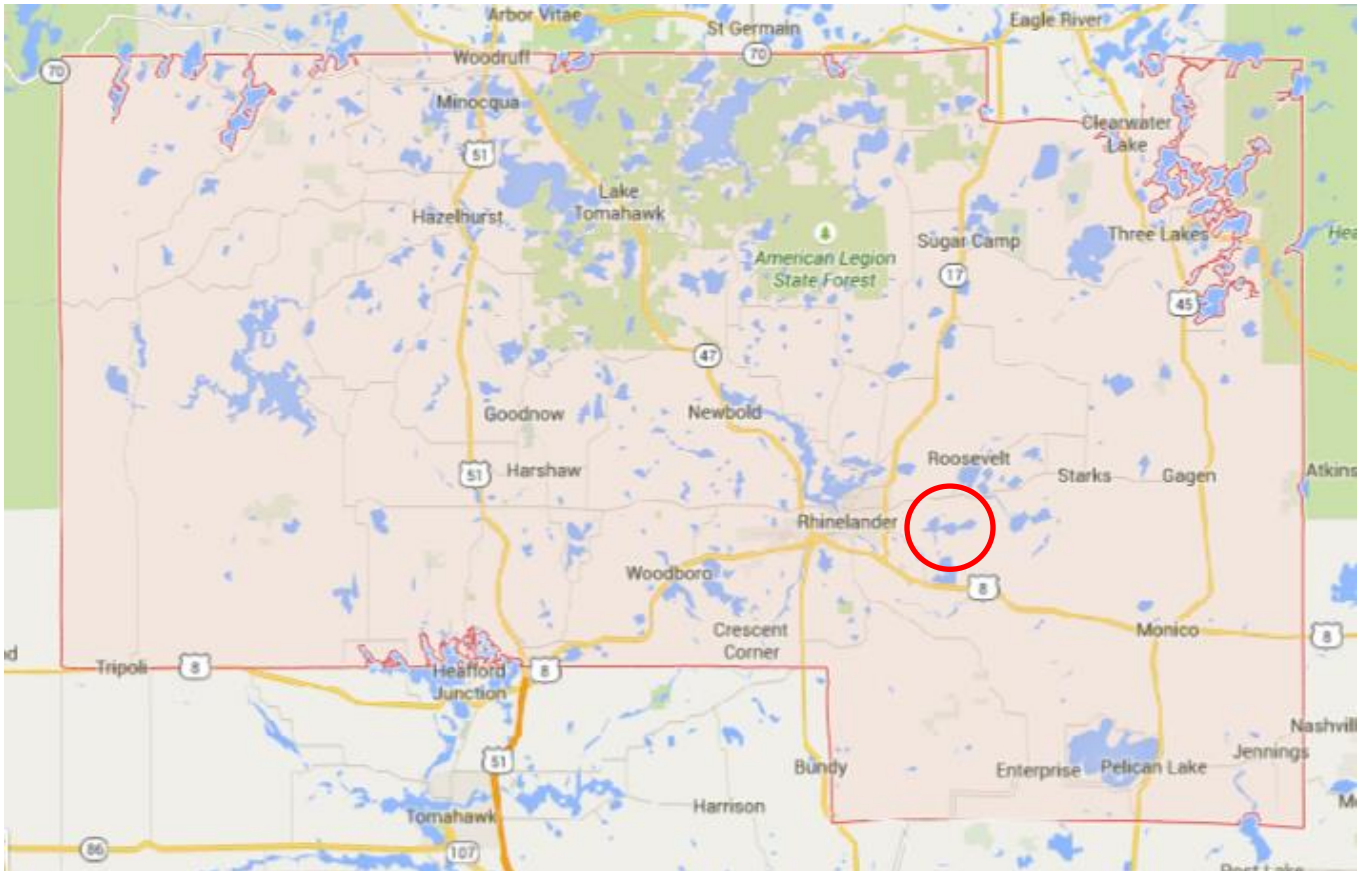


Figure 1. Map of Oneida County, WI with Lake Thompson circled.

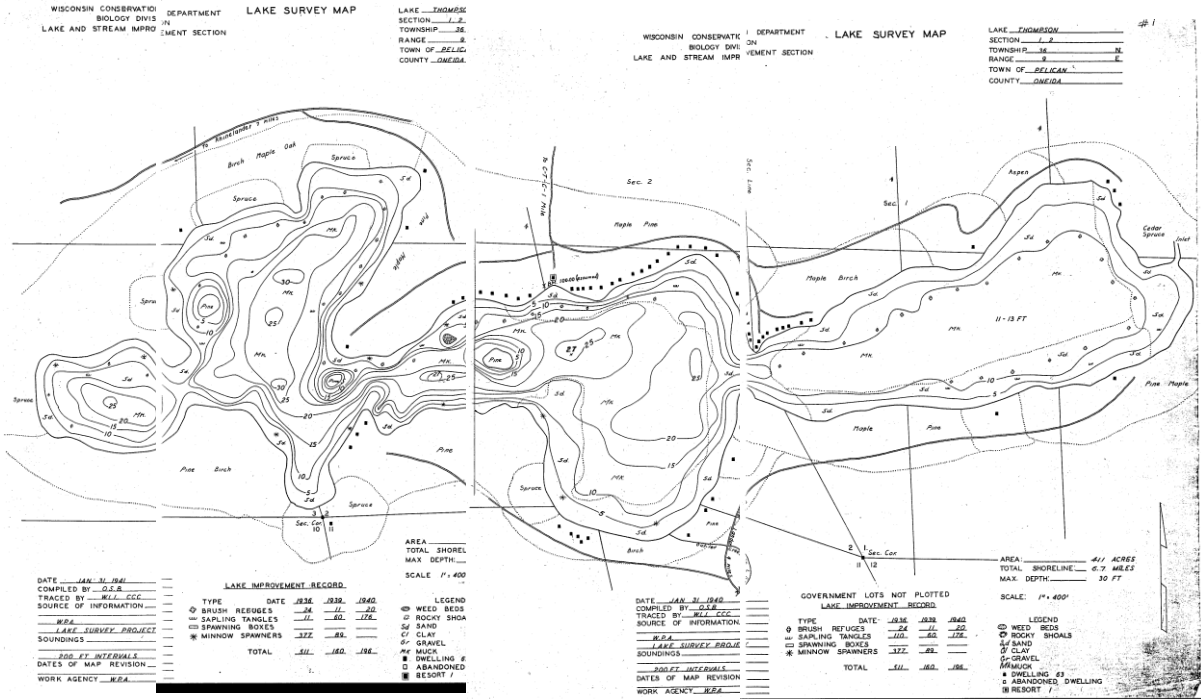


Figure 2. Bathymetric map of Lake Thompson. Due to the large size of the lake, four maps had to be pieced together to show the contour of the entire lake.

Map Source: Wisconsin Department of Natural Resources (608) 266-2621, Lake Thompson – Oneida County, Wisconsin – DNR Lake Map, Date – January 31, 1940 – Historical Lake Map.

<http://dnr.wi.gov/lakes/maps/DNR/1569900a.pdf>

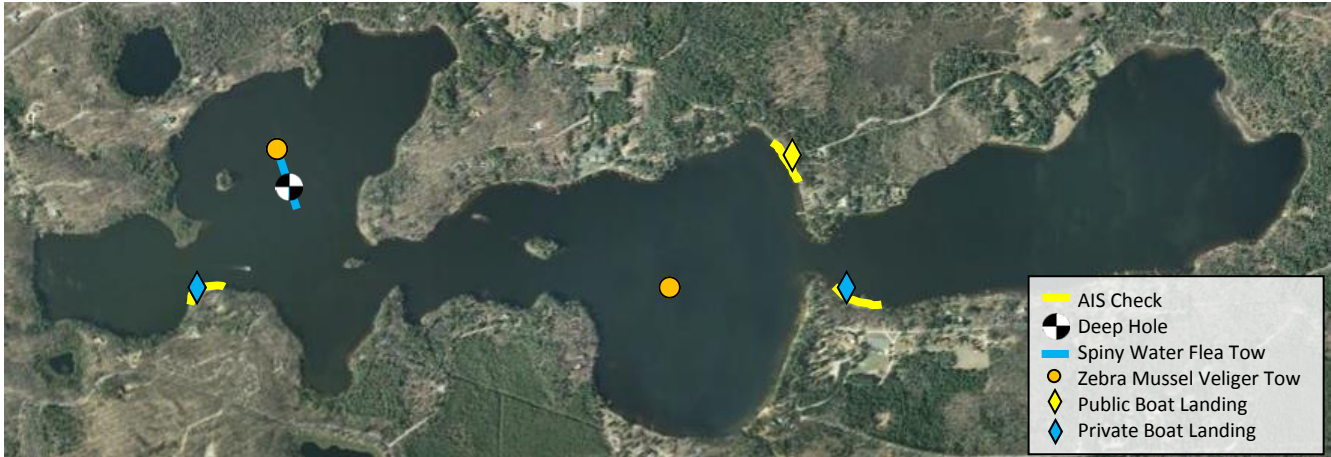


Figure 3. Map of Lake Thompson with deep hole site, locations monitored for AIS presence/absence checks, public and private boat landings, and spiny water flea and zebra mussel veliger tows labeled.

Resources: <http://dnr.wi.gov/lakes/lakepages/LakeDetail.aspx?wbic=1569900&page=facts>