

Little Carr Lake

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Clarity Report of July 13th, 2017



Land & Water Conservation Department

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Little Carr Lake AIS Monitoring and Water Clarity Report

Field Date: July 13th, 2017
WBIC: 998800
Previous AIS Findings: Purple Loosestrife
New AIS Findings: None
Field Crew: Aubrey Nycz, AIS Project Leader, and Derek Thorn, AIS Project Assistant,
Oneida County Land and Water Conservation Department
Report By: Aubrey Nycz and Derek Thorn

On July 13th, 2017, Aubrey and I went to Little Carr Lake to implement AIS monitoring along with water clarity and quality assessments. Little Carr Lake is a 51 acre oligotrophic lake located in Oneida County, with one public, small craft launch. The lake has a maximum depth of 22 feet, and the substrate is reported to be 25% sand, 10% gravel, 0% rock, and 65% muck. Along with reporting the depth and substrate, the Wisconsin Department of Natural Resources reports that the lake has panfish, largemouth bass, walleye, and musky.

The weather while conducting research on Little Carr Lake was fair. The outside temperature was 73 degrees Fahrenheit, the sky was partly cloudy, and there was little wind. There was no adverse weather to impede our measurements in any way.

When conducting our AIS lake survey, Derek and I did a complete shoreline scan while meandering in and out between different depths. We looked on the shoreline itself and also in the water, noting the plants and animals we had observed in the process. When possible, we got in the water and used the aquascopes to have a closer look at the bottom composition.

To observe the water clarity and quality of Little Carr Lake, Derek and I went to the deep hole to obtain data information. After locating the deep hole with our sonar unit, we used a Secchi disk to measure clarity and a dissolved oxygen meter to measure water health. Oxygen is needed for a healthy fish population, and also for plants to respire at night as well. The measurements from the dissolved oxygen

meter can tell us if the organisms in the lake would be under stress. Thankfully, both of these measurements were relatively average in nature, and there should be no concern for the health of Little Carr Lake. The Secchi disk reading was 9 feet, and the dissolved oxygen readings can be found in table 2.

Derek and I did not observe any new invasive species while on Little Carr Lake. We did, however, observe purple loosestrife, along the south end of the lake. The purple loosestrife on the lake is being monitored by our AIS team, and it has been treated with beetles the past two years. We plan to continue monitoring Little Carr Lake in the coming years. Other than the purple loosestrife, this waterbody seems to be healthy, and many native plants were present and thriving. The four most common plants that we observed were Bullhead Pond Lily, Purple Loosestrife, Watershield, and White Water Lily. These plants can be seen below in table 1.

Findings: Taken between 1 p.m. – 3:30 p.m. on July 13th, 2017

Aquatic Invasive Species: We did not find any new invasive species along the perimeter of Little Carr Lake.

Secchi: The Secchi reading on this lake was 9 feet out of a 22 foot maximum depth. The water color was a murky, dark blue color.

Dissolved Oxygen: These measurements can be seen in Table 2.

Figure 1. Map of Oneida County, WI with Little Carr Lake circled in red (approximate location)

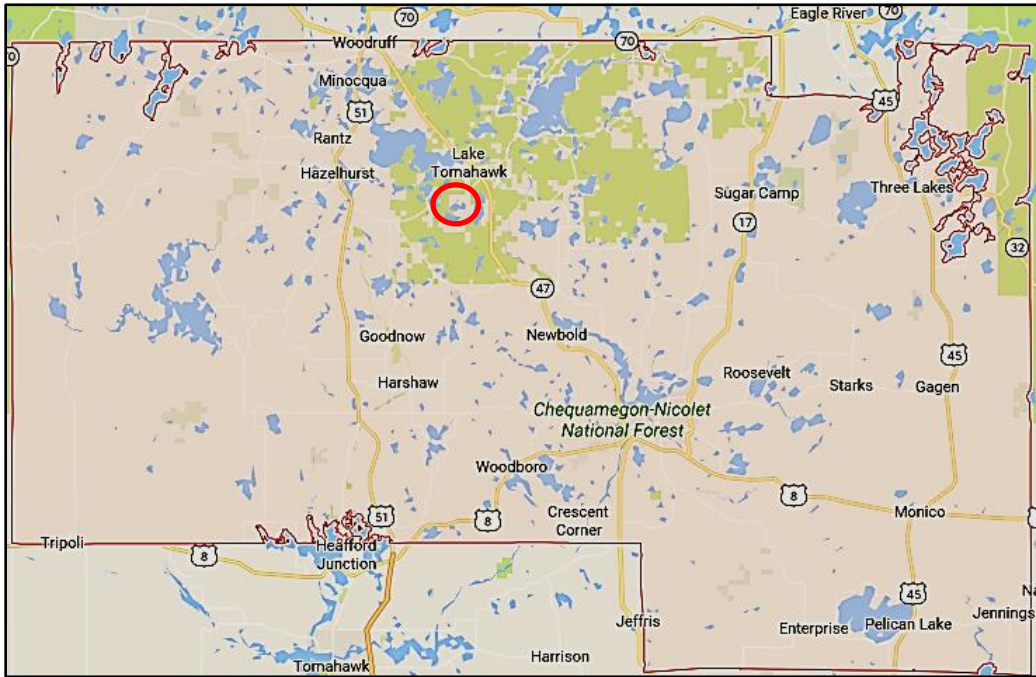


Figure 2. Map of Little Carr Lake with the location of the Secchi disk reading labeled.



Public boat landing



Deep hole & location of Secchi disk reading

Secchi Disk Readings:
Little Carr- Deep Hole
Coordinates - Not Available

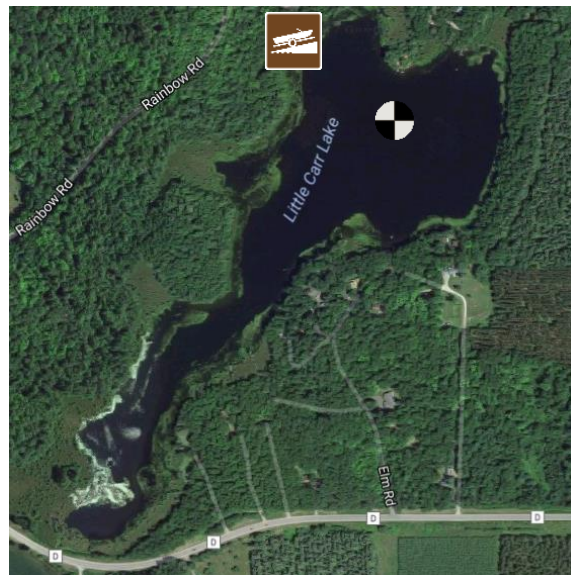


Table 1. Plants found in Little Carr Lake when monitoring.





Common Name	Scientific Plant Name	Description	Image
Bullhead Pond Lily (Spatterdock)	<i>Nuphar variegata</i>	An aquatic plant with heart-shaped leaves that can grow to be 15 inches long. This plant also has a yellow, cup-shaped flower. This plant is native.	 <p data-bbox="1149 556 1409 619">Photo Credit: Jomegat's Weblog</p>
Purple Loosestrife	<i>Lythrum salicaria</i>	A flowering plant with a square or 6-sided stem and smooth leaves. Flowers tend to be a pinkish purple with 6 petals. This plant is invasive!	 <p data-bbox="1141 903 1417 934">Photo Credit: Dave Britton</p>
Water Shield	<i>Brasenia schreberi</i>	An aquatic plant with stems up to 2 meters long. This plant has small floating leaves and reddish purple flowers that have 6-8 petals. This plant is native.	 <p data-bbox="1122 1278 1433 1310">Photo Credit: Shannon Sharp</p>
White Water Lily	<i>Nymphaea odorata</i>	An aquatic plant that has large, round leaves that can grow to be 12 inches in diameter. White water lilies also have large, white flowers with many petals. This plant is native.	 <p data-bbox="1154 1608 1401 1671">Photo Credit: Joseph A. Marcus</p>

Table 2. Dissolved oxygen levels and temperatures taken at the deep hole.

Depth (Feet)	Dissolved Oxygen Levels (mg/L)	Temperature (F)	Percent Dissolved Oxygen
2	8.16	73.7	100.5
4	8.06	74.3	100.0
6	7.99	74.5	99.4
8	6.9	73.8	85.2
10	7.10	72.4	86.3
12	5.95	70.2	70.7
14	2.8	67.1	32.1