Bird Lake

Land & Water Conservation Department

Michele Sadauskas, County Conservationist
Stephanie Boismenue, AIS Coordinator
Jonna Stephens Jewell, Program Assistant

Oneida County Courthouse
P O Box 400, Rhinelander, Wisconsin 54501
Phone (715) 369-7835 Fax (715) 369-6268

Bird Lake AIS Monitoring and Water Clarity Report

Field Date:	July 6th, 2018
WBIC:	972000
Previous AIS Findings:	None
New AIS Findings:	None
Field Crew:	Aubrey Nycz, AIS Project Leader and Jody Partin, AIS Project Assistant, Oneida County Land and Water Conservation Department
Report By:	Jody Partin

On July 6th, 2018, Aubrey and I went to Bird Lake to implement AIS monitoring along with water clarity and quality assessments. Bird Lake is a 97 acre oligotrophic lake located in Oneida County and has one public boat launch. The shoreline along Bird Lake is composed of private owners and American Legion State Forest. The lake has a maximum depth of 40 feet, and the substrate is reported to be 70% sand, 7% gravel, 20% rock, and 3% muck. Along with reporting the depth and substrate, the Wisconsin Department of Natural Resources also reports that the lake has walleye, largemouth bass, smallmouth bass, and panfish present.

The weather while conducting research on Bird Lake was ideal. The outside temperature was in the upper 70s degrees Fahrenheit, the sky was sunny, the wind was fairly calm, and the water clarity was excellent. There was no adverse weather to impede our measurements in any way.

When conducting our AIS lake survey, the AIS team 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.

To observe the water clarity and quality of Bird Lake, the AIS team went to the deep hole and used a Secchi disk to measure water 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 Bird Lake. The Secchi disk reading was 16.5 feet, and the dissolved oxygen readings can be found in table 2.

The AIS team was glad to see that no new invasive species were present at this time. The lake seems to be healthy, and native plants were present and thriving. The three most common native plants we observed were Watershield, Spatterdock, and Bladderwort. These plants can be seen below in table 1.

Findings: Taken 10:30 a.m. – 12:30 p.m. on July 6th, 2018

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

Secchi: The Secchi reading on this lake was 16.5 feet out of a 40 foot maximum depth. The water color was a yellowish color, and appeared clear when glancing across the lake.

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

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

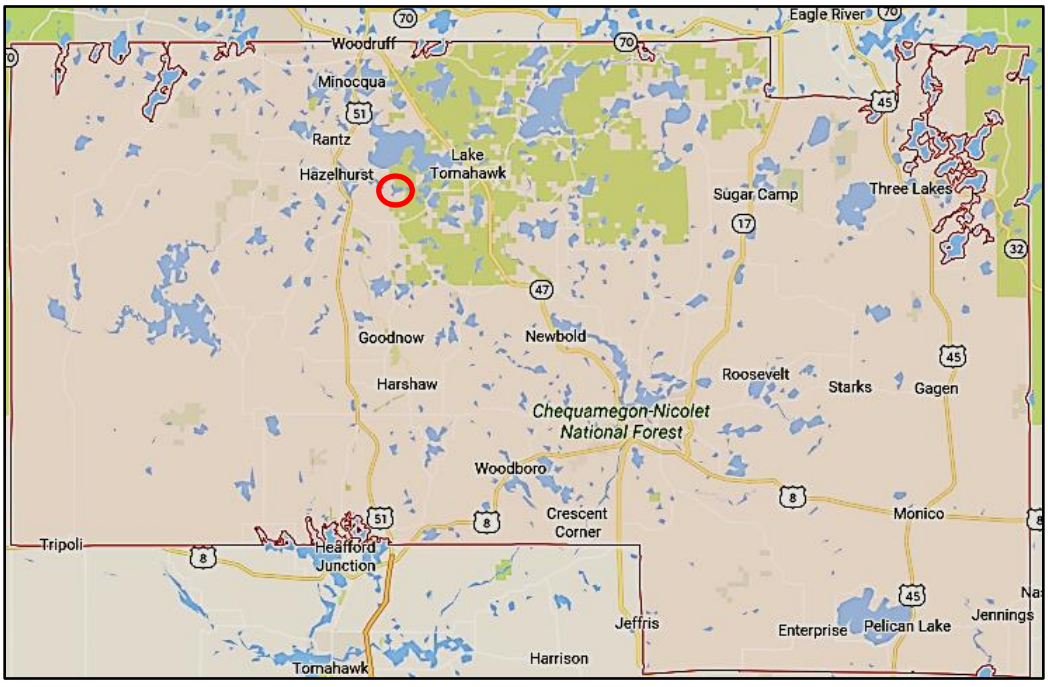

Figure 2. Map of Bird Lake with boat landing and location of Secchi disk reading labeled.

Public boat landing

Deep hole & location of Secchi disk reading

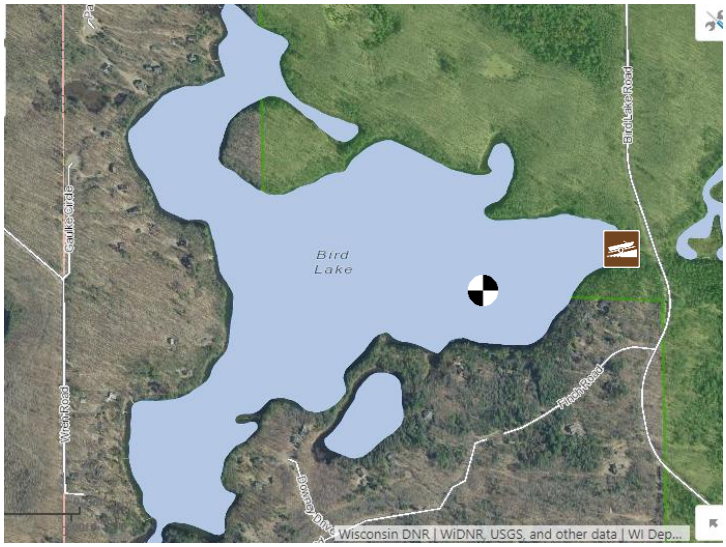

Table 1. Common plants found in Bird Lake when monitoring.

Common Plant Name Scientific Plant Name	Description	Image
Water Shield *Brasenia schreberi*	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.	 *Photo Credit: Shannon Sharp*

Bullhead Pond Lily (Spatterdock) *Nuphar variegata*	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.	 *Photo Credit: Jomegat's Weblog*
Bladderwort *Utricularia spp.*	An aquatic plant with leaves containing small sacks that trap small invertebrates. This plant usually has unrooted stems that easily tangle with other plants. In the water, this plant tends to look cloudy or slimy. This plant is native.	 *Photo Credit: frenchhill.org*

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

Depth (Feet)	Dissolved Oxygen Levels (mg/L)	Temperature (F)	Percent Dissolved Oxygen
2	7.79	78.8	99.9%
4	7.80	78.4	99.6%
6	7.78	78.1	99.1%
8	7.77	77.8	98.7%
10	7.76	77.5	98.2%
12	9.88	72.2	118.4%
14	11.35	63.2	122.9%
16	11.03	57.4	111.6%
18	9.33	51.9	88.2%
20	4.63	48.6	41.9%
22	0.31	46.5	2.7%