

Buck Lake

Page 1: AIS Monitoring and Water
 Clarity Report of July 8, 2015



Land & Water Conservation Department

*Jean Hansen, County Conservationist
Michele Sadauskas, 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

Buck Lake AIS Monitoring and Water Clarity Report

WBIC: 443360
Previous AIS Findings: None
New AIS Findings: None
Field Date: July 8, 2015
Field Crew: Stephanie Boismenu and Sara Mills, AIS Project Assistants,
Oneida County Land and Water Conservation Department
Report by: Stephanie Boismenu

On July 8, 2015, Sara and I visited Buck Lake to complete an aquatic invasive species (AIS) survey and obtain baseline water quality data. The main focus of the survey is to visually observe the entire lake shoreline and littoral zone for any potential occurrences of invasive plants, animals, or microorganisms. At this time of year, plants are easy to recognize because they are near or at peak growth. No occurrences of any invasive species were located during this survey.

Buck Lake, Oneida County, is a 59-acre seepage lake with a maximum depth of 49 feet (Figure 1). Seepage lakes are natural lakes, with no inlet or outlet and are fed by precipitation, limited runoff and groundwater. Buck Lake’s trophic state Index is oligotrophic, with a bottom substrate of 65% sand, 10% gravel, and 25% rock. This is a very clear, deep lake, lacking in plant nutrients and aquatic vegetation, which is consistent with oligotrophic lakes. Fish include panfish, largemouth bass and smallmouth bass. This lake does not have a public boat launch.

Unique Character: Roughly half of Buck Lake’s shoreline is developed. The rest of the shoreline is undeveloped and protected by Almon Park. Almon Park is the largest and most popular day use recreational area in the county and is managed by the Oneida County Forestry and Parks Department. This 80-acre county park offers a large sand beach, swimming, woodland trails through old age mixed hardwoods, a northern bog with a boardwalk, and a lakeshore trail.

Since there is not a public boat access, Sara and I parked at the Almon Park swimming/picnic parking lot, carried our equipment down a non-motorized trail, and launched the canoe at the swimming beach. We had a beautiful morning to canoe this pretty lake and it was a delight to see a pair of adult loons and their two loon chicks, enjoying life on this quiet little lake.

Findings:

Aquatic Invasive Species:

We completed a visual meander survey of the entire shoreline for the presence of AIS. In addition, we performed a comprehensive survey in areas of special concern. These areas are noted as AIS Presence/Absence Meander on Figure 2. We did not identify any AIS.

Secchi:

Today's Secchi disk reading was 16 feet with a depth finder reading of 42 feet. The reading was sampled from Buck Lake's Deep Hole (Figure 2). The weather conditions were perfect - blue sky, few clouds, and very little breeze.

Dissolved Oxygen:

Dissolved oxygen levels were measured in mg/L on the dissolved oxygen meter and three feet increments. These measurements can be seen on Table 1.

Table 1. Dissolved Oxygen Levels

Depth (feet)	Temperature (degrees F)	Dissolved Oxygen (mg/L)
1	74.2	8.40
3	73.5	8.43
6	73.1	8.45
9	72.6	8.41
12	72.1	8.35
15	69.2	9.82
18	61.4	12.12
21	57.4	12.18
24	54.8	11.99
27	51.5	8.95
30	49.0	4.95
33	47.7	1.81
36	46.8	0.36

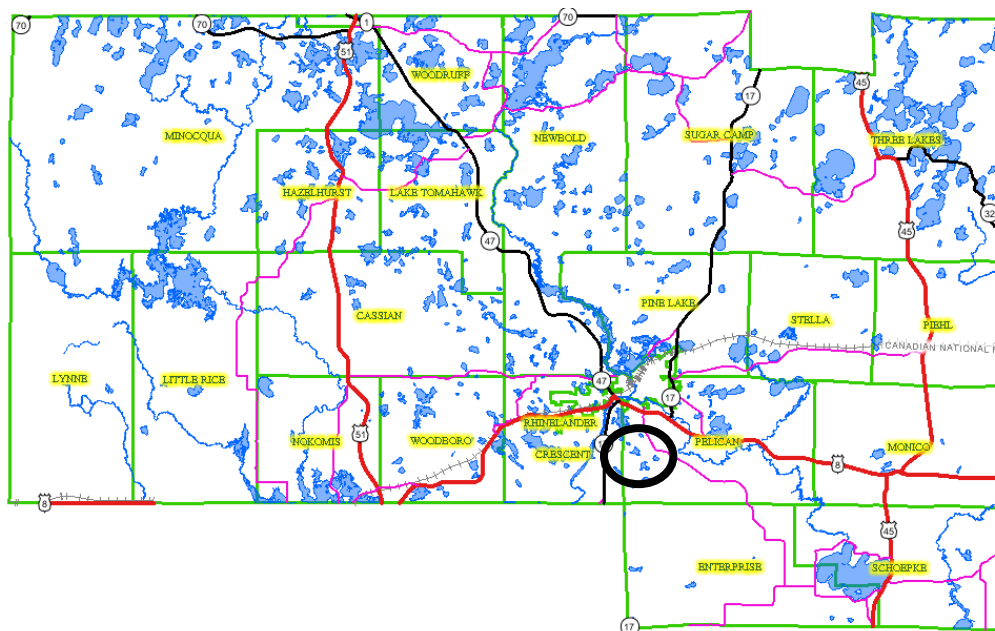


Figure 1. Map of Oneida County Wisconsin, with Buck Lake circled.

Figure 2.



Map sources: Oneida County <http://www.arcgis.com/home/webmap/viewer.htm>