

Hasbrook Lake

Page 1: AIS Monitoring and Water
 Clarity Report of July 10, 2014



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

Hasbrook Lake AIS Monitoring and Water Clarity Report

WBIC: 1589100
Previous AIS Findings: Rusty Crayfish
New AIS Findings: None
Field Date: July 10, 2014
Field Crew: Stephanie Boismenu and Alyssa Nycz, AIS Project Assistants,
Oneida County Land and Water Conservation Department
Report by: Alyssa Nycz

Stephanie and I monitored Hasbrook Lake on Thursday, July 10th. We used our canoe to navigate to the lake's deep site and meander along portions of the lake's shoreline (Figure 1). Our purpose for monitoring Hasbrook Lake was to measure water clarity and dissolved oxygen levels in the lake's deepest site, as well as to check for the possible presence of AIS.

The deep hole site that we collected data from ranged from 47 to 49 feet in depth. Our Secchi disk reading for water clarity was 5 meters, or just under 16.5 feet. Additionally, we measured dissolved oxygen levels one foot below the water's surface, and at three foot intervals below that. The canoe shifted location after our reading at a depth of 22 feet, so we only collected one data point past this. Table 1 presents dissolved oxygen levels and temperature readings at various depths in Hasbrook Lake.

We visually analyzed the lake's shoreline at a number of locations to check for AIS. Hasbrook Lake is reported to contain rusty crayfish, and we did not observe any new AIS in the lake. The first area we meandered was on either side of the boat landing. We noted a fairly rocky lake bed here with little vegetation.

We also studied the shoreline to the north of our deep hole site. This portion of the lake has a very sandy bottom. We saw a number of large tadpoles, a beaver's dam, and native iris plants, but nothing that raised concern. The shoreline on the opposite end of the lake is also sandy and without vegetation. In fact, we only noted two small clumps of native pondweed in the lake, and this was after canoeing the majority of it.

The blue circle marked on Figure 1 surrounds an island in lake that we monitored around. The lake bed here is very sandy, and buoys label the area as a loon nesting location. Stephanie and I found it interesting that on this island and on portions of the lake's southern shoreline, houses were built within 10 feet of the water's edge. Overall, we noted that the majority of the lake is clear with a sandy bottom.

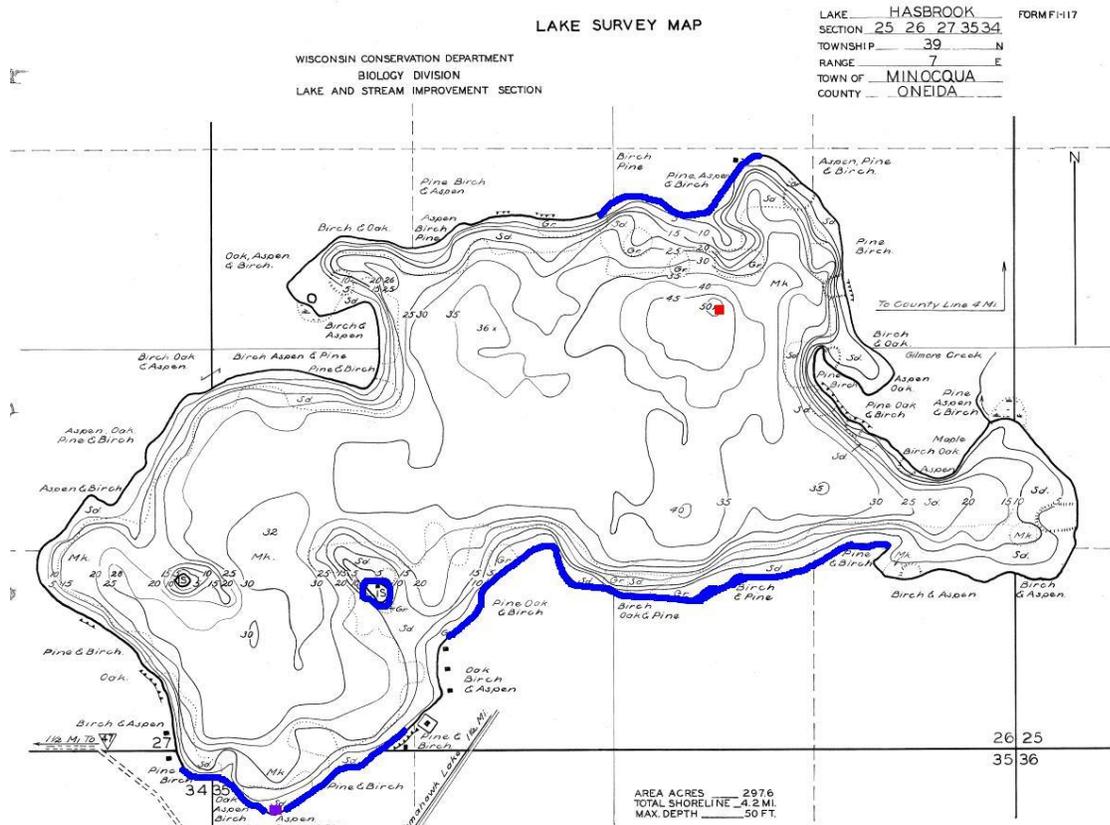


Figure 1. A map of Hasbrook Lake: the blue lines represent approximate areas where we scanned the shoreline for the presence/absence of AIS, the purple square marks the boat landing, and the red square marks our deep hole site.

Table 1. Dissolved oxygen levels and temperature readings at the deep hole site, which our depth finder marked as fluctuating from 47 to 49 feet deep. Our canoe drifted right after I took our 22' reading, so the reading at 25' may not be as accurate as the previous data we collected.

Depth	Dissolved Oxygen Level	Temperature Reading
1'	8.71 mg/L	71.8 °F
4'	8.78 mg/L	71.4 °F
7'	8.77 mg/L	71.2 °F
10'	8.76 mg/L	71.1 °F
13'	8.76 mg/L	71.0 °F
16'	8.72 mg/L	70.9 °F
19'	8.72 mg/L	70.8 °F
22'	12.58 mg/L	60.8 °F
25'	10.28 mg/L	53.4 °F