

2023 Eurasian Watermilfoil Delineation

Birch Lake (# 71-0057)
Sherburne County, MN

Surveyed June 13, 2023



Surveyed by:
Krista Espelien

Analysis and Reporting by:
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Certified Lake Manager
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Purpose of Survey

This late-spring survey was conducted to locate and delineate areas of Eurasian watermilfoil (EWM) in Birch Lake (#71-0057). This information will help to guide future management decisions and meet DNR permit requirements.

Survey Method

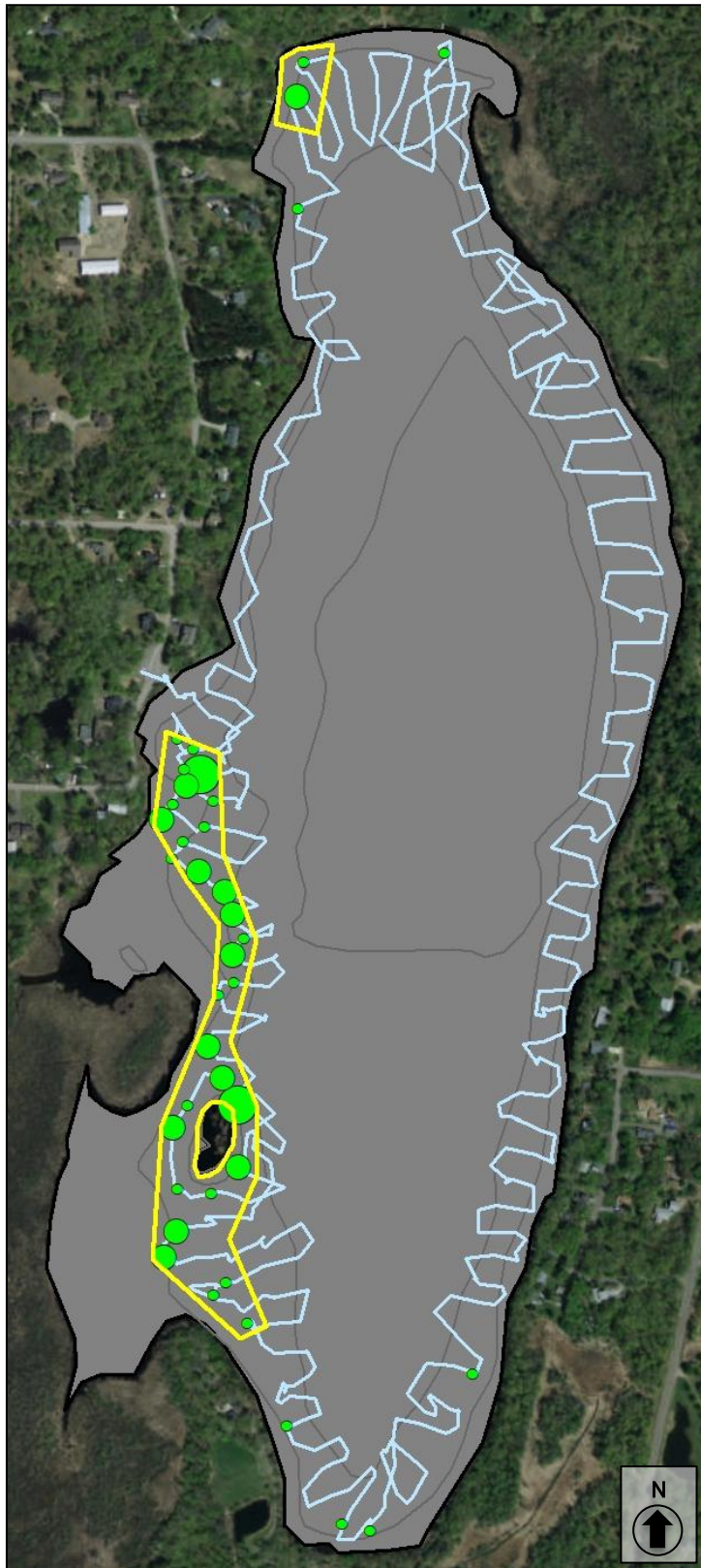
EWM Delineation Survey

We surveyed Birch Lake on June 13, 2023. During this survey, we navigated a meandering path over the vegetated portion of the lake. While navigating this search path, we used a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of EWM growth. When we encountered EWM plants, we marked the location, recorded the water depth, and rated the density of the growth using density scores as described in the table below.

Score	Visual	Rake
1	Light / Solitary plants	1-2 stems
2	Moderate / Scattered dense patches	3 to 9 stems
3	Dense / Uniform dense growth	10+ stems

For rake samples, we dragged a sampling rake over approximately 10 square feet of lake bottom and recorded the EWM density based upon the number of plants (stem count) retrieved on the rake. The recorded water depths and density scores were linked to the appropriate GPS locations and then mapped using desktop GIS software.

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— Surveyed Path

▭ Proposed Plots

EWM Density

- 1
- 2
- 3

Surveyed: June 13, 2023

Methods: Visual, Sonar, Rake

Surveyor: K Espelien

Analyst: JA Johnson



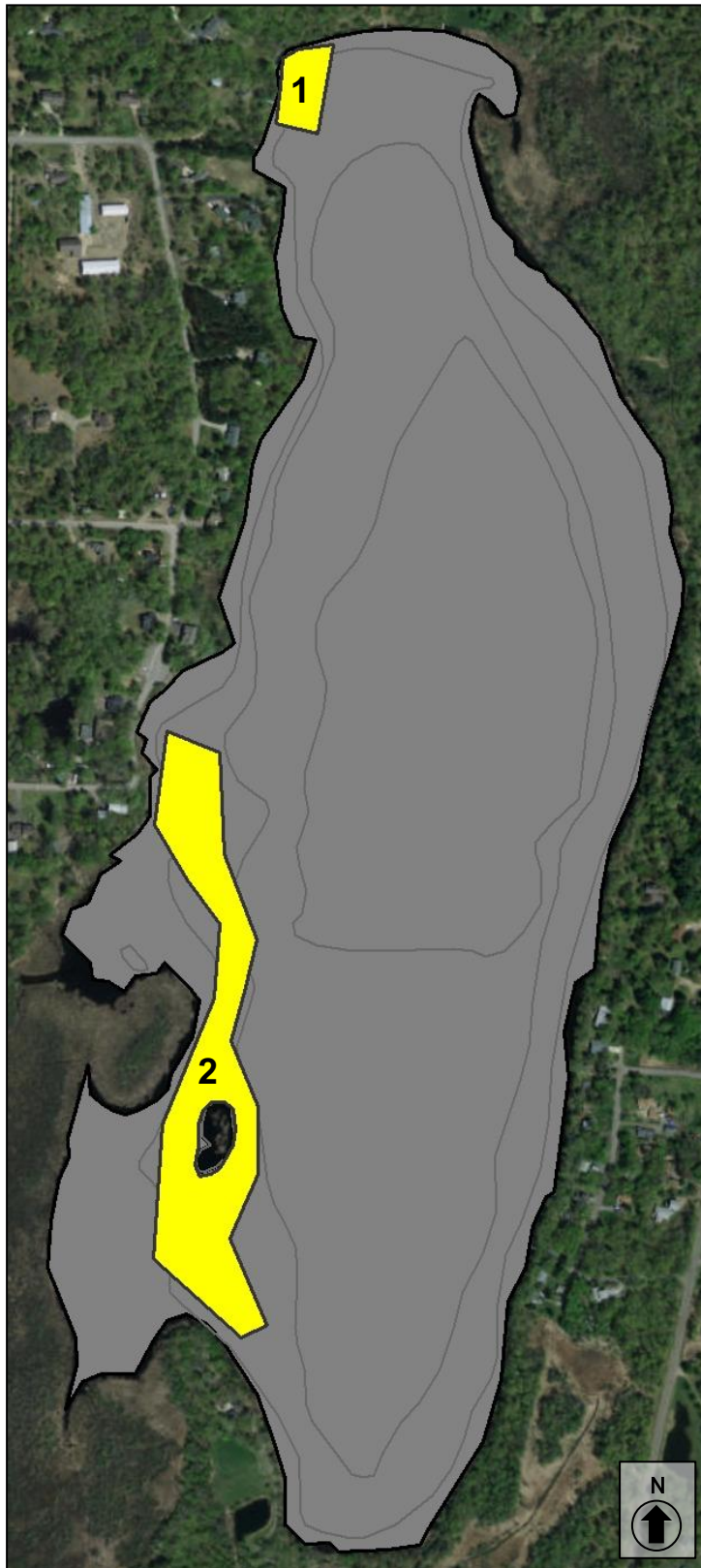
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Birch Lake (#71-0057)

2023 Eurasian Watermilfoil Management Plots



 Proposed Plots

Plot	Area (acres)	Avg Depth (ft)	Avg Milfoil Density (1-3)
1	1.0	4.0	1.5
2	9.2	4.2	1.5

Total 10.2 acres

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Online Resources & Contacts

Minnesota Administrative Rules for Aquatic Plant Management

<https://www.revisor.mn.gov/rules/?id=6280>

Minnesota DNR – Aquatic Plant Management Regulations & Permit Application Forms

<http://www.dnr.state.mn.us/apm/index.html>

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