

2026 Eurasian Watermilfoil Delineation

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

Surveyed June 22, 2026



Surveyed by:
Krista Espelien

Analysis & Reporting by:
James A. Johnson – *Aquatic Ecologist*
Freshwater Scientific Services



Certified Lake Manager
www.NALMS.org

Purpose of Survey

This 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

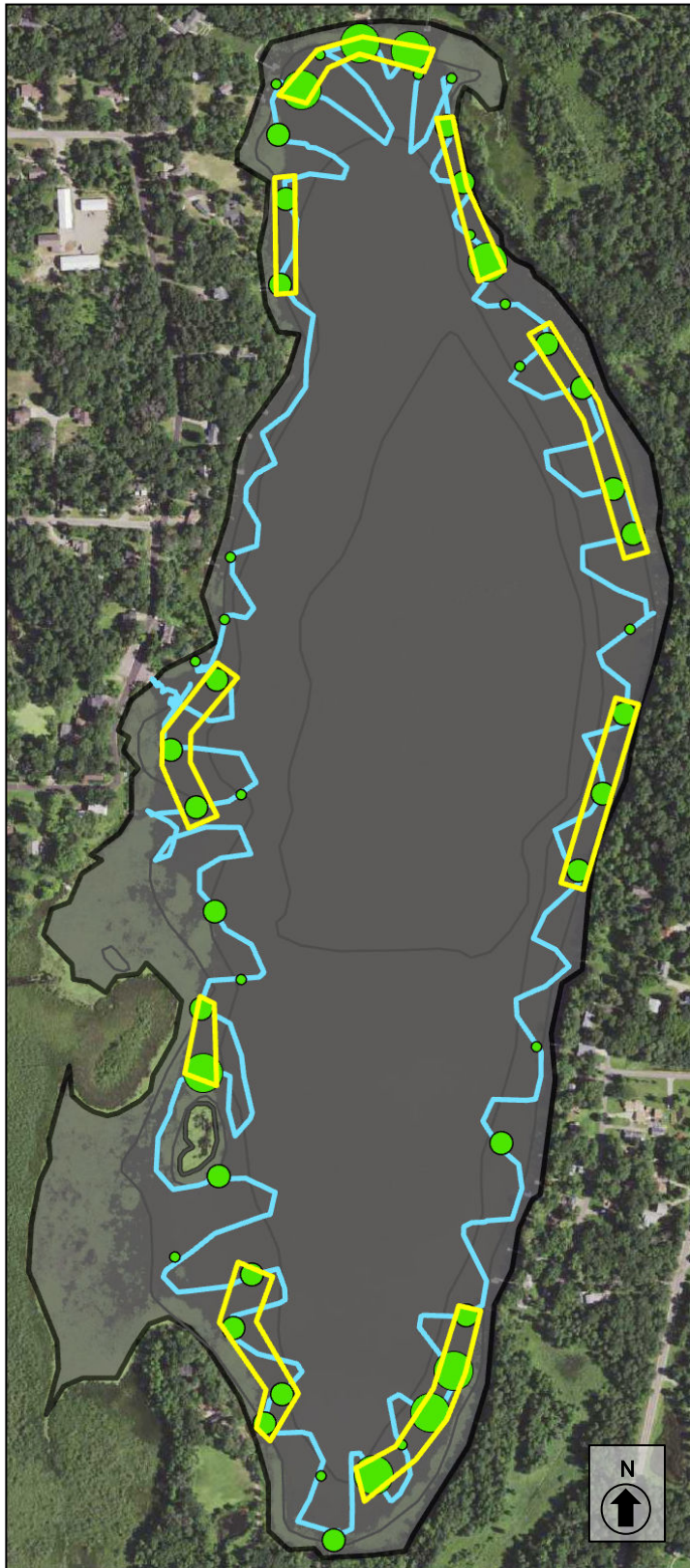
EWM Delineation Survey

We surveyed Birch Lake on June 22, 2026. During this survey, we navigated a meandering path over the vegetated portion of the lake (areas of dense lilies excluded). 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 EWM Plants	1-2 stems
2	Moderate / Scattered Dense Patches	3 to 9 stems
3	Dense / Uniform Matted EWM	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.

Birch Lake (#71-0057) 2026 Eurasian Watermilfoil Delineation



— Surveyed Path

▭ Proposed Plots

EWM Density

- 1
- 2
- 3

Surveyed: June 22, 2026

Methods: Visual, Sonar, Rake

Surveyor K Espelien

Analyst: JA Johnson



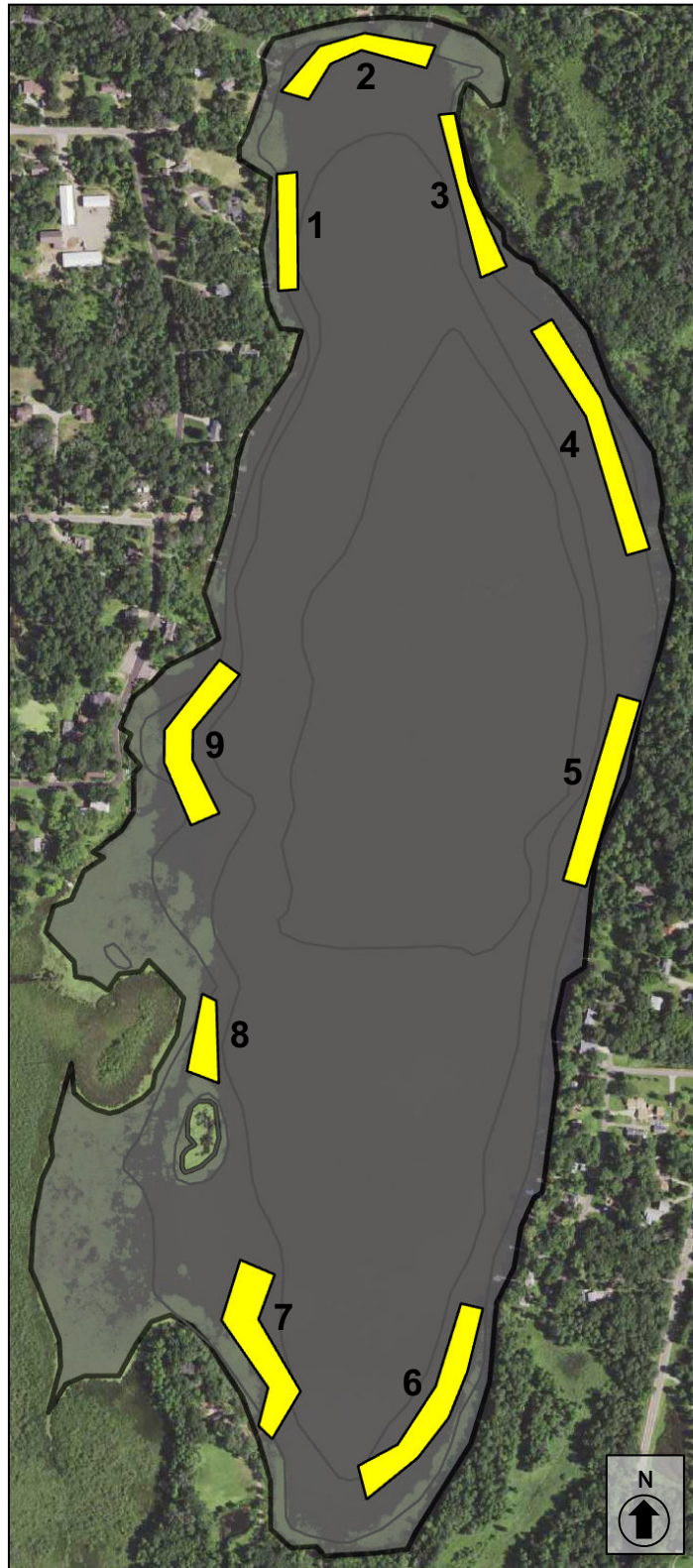
Certified Lake Manager
www.NALMS.org



15771 Creekside Lane
Osseo, MN 55369
fixmylake.com
(651) 336-8696

Birch Lake (#71-0057)

2026 Eurasian Watermilfoil Management Plots



Proposed Plots

Plot	Area (acres)	Avg Depth (ft)	Avg Milfoil Density (1-3)
1	0.6	5.2	2.0
2	0.9	6.7	2.5
3	0.8	4.5	2.0
4	1.5	4.4	2.0
5	1.2	4.0	2.0
6	1.5	6.0	2.4
7	1.5	5.5	2.0
8	0.5	5.1	2.5
9	1.2	5.8	2.0

Total 9.8 acres

Surveyed: June 22, 2026

Methods: Visual, Sonar, Rake

Surveyor: K Espelien

Analyst: JA Johnson



Certified Lake Manager
www.NALMS.org



15771 Creekside Lane
Osseo, MN 55369
fixmylake.com
(651) 336-8696

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>

Christine Jurek

Invasive Species Specialist

Minnesota DNR

christine.jurek@state.mn.us

(320) 437-7835

Mike Verhoeven

ALS Management Consultant

Minnesota DNR

michael.verhoeven@state.mn.us

(651) 259-5974