

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

2025 Eurasian Watermilfoil Delineation

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

Surveyed June 23, 2025



Surveyed by: Krista Espelien

Analysis and Reporting by:

James A. Johnson – Aquatic Ecologist – Freshwater Scientific Services



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

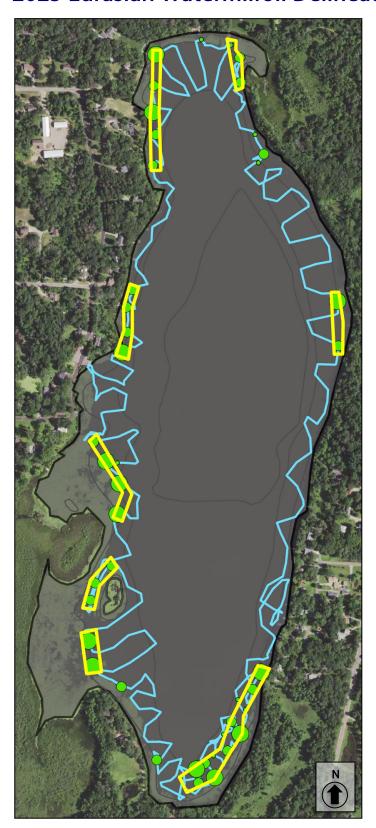
EWM Delineation Survey

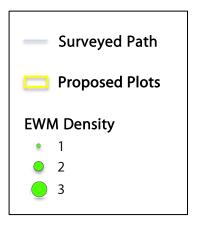
We surveyed Birch Lake on June 23, 2025. During this survey, we navigated a meandering path over the vegetated portion of the lake (areas of dense lilies excluded). While navigating this search path, we used a combination of surface observations, sonar readings, and rake tosses to locate and delineate 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 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.

Birch Lake (#71-0057) 2025 Eurasian Watermilfoil Delineation





Much of the EWM that we found was growing immediately adjacent to beds of waterlilies. The DNR generally does not allow treatment within 50 ft of lilies. Accordingly, we are recommending that you contact your applicator to discuss the option of a fall treatment after the lilies begin to senesce.

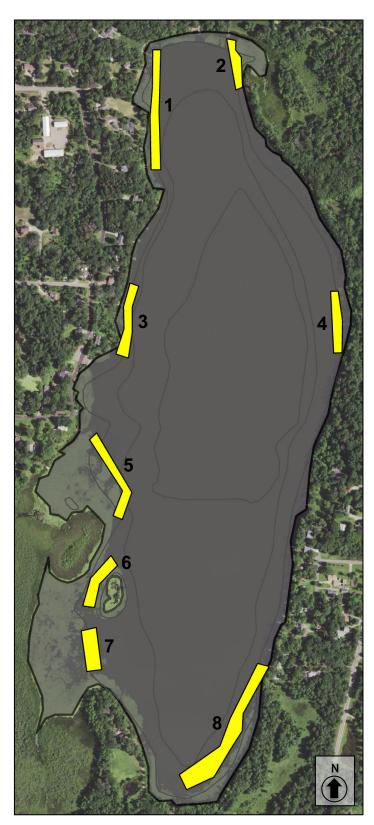
Surveyed: June 23, 2025 Methods: Visual, Sonar, Rake Surveyor K Espelien Analyst: JA Johnson





Birch Lake (#71-0057)

2025 Eurasian Watermilfoil Management Plots



Proposed Plots	
Proposed Plots	

Plot	Area (acres)	Avg Depth (ft)	Avg Milfoil Density (1-3)
1	1.1	4.5	2.4
2	0.5	4.8	1.7
3	0.7	4.9	2.0
4	0.6	4.4	2.5
5	0.9	4.3	2.8
6	0.6	4.3	2.0
7	0.7	4.4	3.0
8	2.2	5.2	2.2

Total 7.3 acres

Much of the EWM that we found was growing immediately adjacent to beds of waterlilies. The DNR generally does not allow treatment within 50 ft of lilies. Accordingly, we are recommending that you contact your applicator to discuss the option of a fall treatment after the lilies begin to senesce.

Surveyed: June 23, 2025 Methods: Visual, Sonar, Rake Surveyor K Espelien Analyst: JA Johnson





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 <u>christine.jurek@state.mn.us</u> (320) 437-7835

Mike Verhoeven

AIS Management Consultant Minnesota DNR <u>michael.verhoeven@state.mn.us</u> (651) 259-5974