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Late-Spring Eurasian Watermilfoil Delineation

Crooked Lake (# 02-0084) Anoka County, MN

Surveyed June 9, 2020



Survey, Analysis, and Reporting by:

James A. Johnson – Aquatic Ecologist, Freshwater Scientific Services, LLC



Purpose of Survey

This late-spring survey was designed to locate and delineate areas of Eurasian watermilfoil (EWM) throughout Crooked Lake (#02-0084) to identify areas of EWM that may be considered for treatment in 2020. This information will help to guide EWM management in Crooked Lake, and is required as a part of the DNR permitting process.

Survey Method

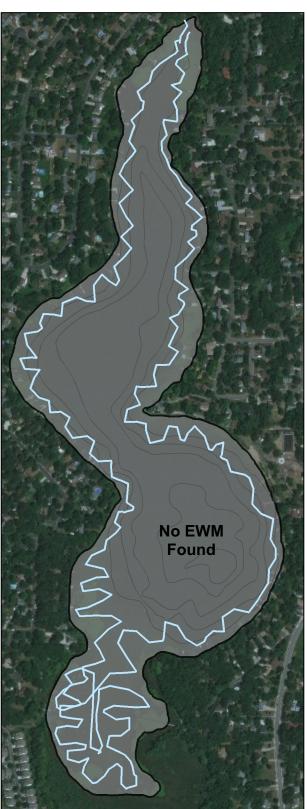
Delineation Survey

Freshwater Scientific Services surveyed the vegetated portion of Crooked Lake on June 9, 2020. During this survey, we navigated a meandering search path through the search area while using a combination of surface observations, sonar readings, and rake tosses to locate and delineate areas of EWM growth. When we encountered EWM, we marked the location, recorded the water depth, and rated the density of the growth using visual and rake 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 retrieved on the rake (stem count). The recorded water depths and density scores were linked to the appropriate GPS locations and then mapped using desktop GIS software.

2020 Late-Spring Delineation of Eurasian Watermilfoil Crooked Lake (# 02-0084)



Surveyed Path

We did not find any EWM growing in the lake during this survey.

Surveyed: Jun 9, 2020 **Methods:** Visual, Sonar, Rake **Surveyor:** JA Johnson



Map produced for the Crooked Lake Area Association by:



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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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