

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

2025 Summer Eurasian Watermilfoil & AIS Survey

Crookneck Lake (# 49-0133) Morrison County, MN

Surveyed July 31, 2025





Survey, Analysis, & Reporting by: James A. Johnson – *Aquatic Ecologist*



Purpose of Survey

This summer AIS survey was conducted to search for invasive Eurasian watermilfoil (EWM), zebra mussels, flowering rush, starry stonewort, and other AIS in Crookneck Lake (#49-0133). In addition, we conducted diver AIS surveys at three locations to search for zebra mussels on plant, rocks, boat ramp sections, and dock structures. This information will help to assess the effectiveness of past EWM management activities, track whether zebra mussels have established in the lake (first reported in 2018), and to help guide future AIS prevention and management actions.

Survey Method

Search for AIS

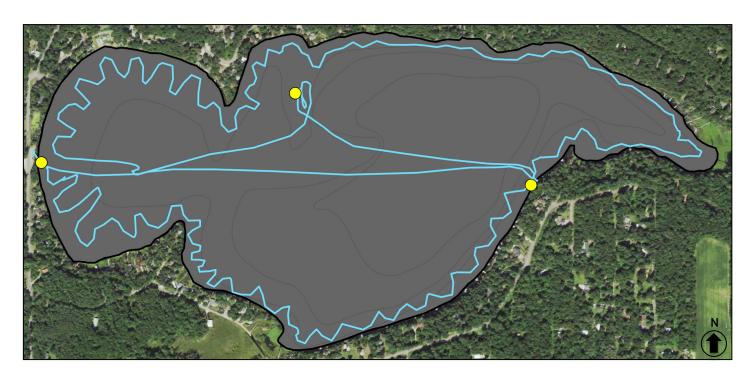
We surveyed Crookneck Lake on July 31, 2025 for AIS. This included (1) a lakewide meandering boat survey to look for Eurasian watermilfoil and other invasive aquatic plants, and (2) AIS diver surveys at 3 locations – including the public boat access – to look for zebra mussels and starry stonewort.

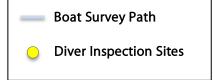
For the lakewide boat survey, we navigated a meandering search path over nearshore portions of the lake while using a combination of visual observations, sonar readings, and rake tosses to search for EWM and other AIS. We used a hand-held Garmin GPS unit (GPS-MAP78) to log the search path and record any locations with AIS. We then mapped these locations using desktop GIS software.

For the diver surveys, we conducted a 15-minute snorkel search at each of the 3 selected locations (see map on page 3). During these diver surveys, we conducted intensive inspections of the boat ramp, propeller-scoured area, submerged dock structures, rocks and other hard debris where zebra mussels are typically found, as well as a detailed assessment of the vegetation surrounding each site. For dock structures, we also slid our hand on surfaces to feel for small zebra mussels.



2025 Survey for Aquatic Invasive Species Crookneck Lake (#49-0133)





Surveyed: July 31, 2025

Methods: Visual, Sonar, Rake, Sonar, Diver

Surveyor: JA Johnson





Findings

We <u>did not</u> find any EWM, zebra mussels, flowering rush, or starry stonewort during our survey. However, we once again found invasive banded mystery snails (see upper left photo on page 2). These snails are very common in Minnesota lakes. Although they may increase the likelihood of swimmers itch in some lakes, they have not been shown to negatively affect lake ecology to any great degree. The University of Minnesota is currently planning to conduct several research projects on these snails over the next few years to further determine any negative impacts, but no management is required on Crookneck Lake for these snails.

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