Researchers predict invasion risk of starry stonewort in upper Midwest

September 18 2018

Researchers from the Minnesota Aquatic Invasive Species Research Center recently published a new paper predicting the invasion risk of starry stonewort (*Nitellopsis obtusa*) in Minnesota and Wisconsin lakes. Starry stonewort is a macroagla invasive in North America that has been found in fourteen lakes in Minnesota to date.

At this state of invasion, there is significant potential for continued expansion. There is currently an opportunity for targeted surveillance and response efforts to limit further spread in the state and the upper Midwest.

Scientists used data on starry stonewort presence and lake-level environmental conditions in New York, where the invasive alga is more common, and trained a set of ecological niche models using various algorithms. The models then predicted habitat suitability and potential invasion risk for roughly 900 lakes based on lake-level water quality data.

The models found relatively high risk of invasion in central Minnesota and eastern Wisconsin waters; and relatively low risk in north-central Wisconsin. Having a better understanding of risk of invasion is critical for informing intervention and prevention strategies. Refining prioritization and resource allocation is helpful for resource managers around the state.

 More information: Ranjan Muthukrishnan et al, Prediction of starry

stonewort (Nitellopsis obtusa) invasion risk in upper Midwest (USA) lakes using ecological niche models, *Aquatic Botany* (2018). DOI: 10.1016/j.aquabot.2018.08.001

Provided by University of Minnesota