

Douglas County Aims to Build a Comprehensive Aquatic Plant Database

As he's done for the past two years, Steve McComas and his small company, Blue Water Science, will be spending a lot of time this summer mapping native and non-native vegetation in Douglas County. The finished product, he says, will be one of the most extensive databases of aquatic plant life in the state.

With advanced degrees in fisheries biology, civil engineering and environmental chemistry, McComas has been running Blue Water Science since the early '80s. Beginning in 2019 the company has surveyed 15 of the county's more popular recreational lakes each year, mapping plant species and tracking the distribution of zebra mussels.



Blue Water Science has been collecting and identifying aquatic plant life on Douglas County lakes for three years. Here, owner Steve McComas and a staff member take a sample.

“We combine the information we get from three types of survey techniques to get a comprehensive inventory of plant life in the lake,” he explains.

The first is a grid search where samples are taken from within a

particular area. Second is a random, meandering search pattern, and the third is an intensive random search focused on areas surrounding public access ramps.

The coordinates of each spot where a sample was taken are recorded via GPS, making the survey a valuable tool going forward. “It’s a systematic survey that can be reproduced, so managers can make comparisons (to plant type and density) in the future” he said.

Coontail is the dominant plant found in the Douglas County lakes surveyed so far. “It’s good plant for water quality,” he said; “maybe not necessarily the best for fish habitat, at least not as good as some of the other pond weeds; but it’s still a nice native plant to have in a lake.”

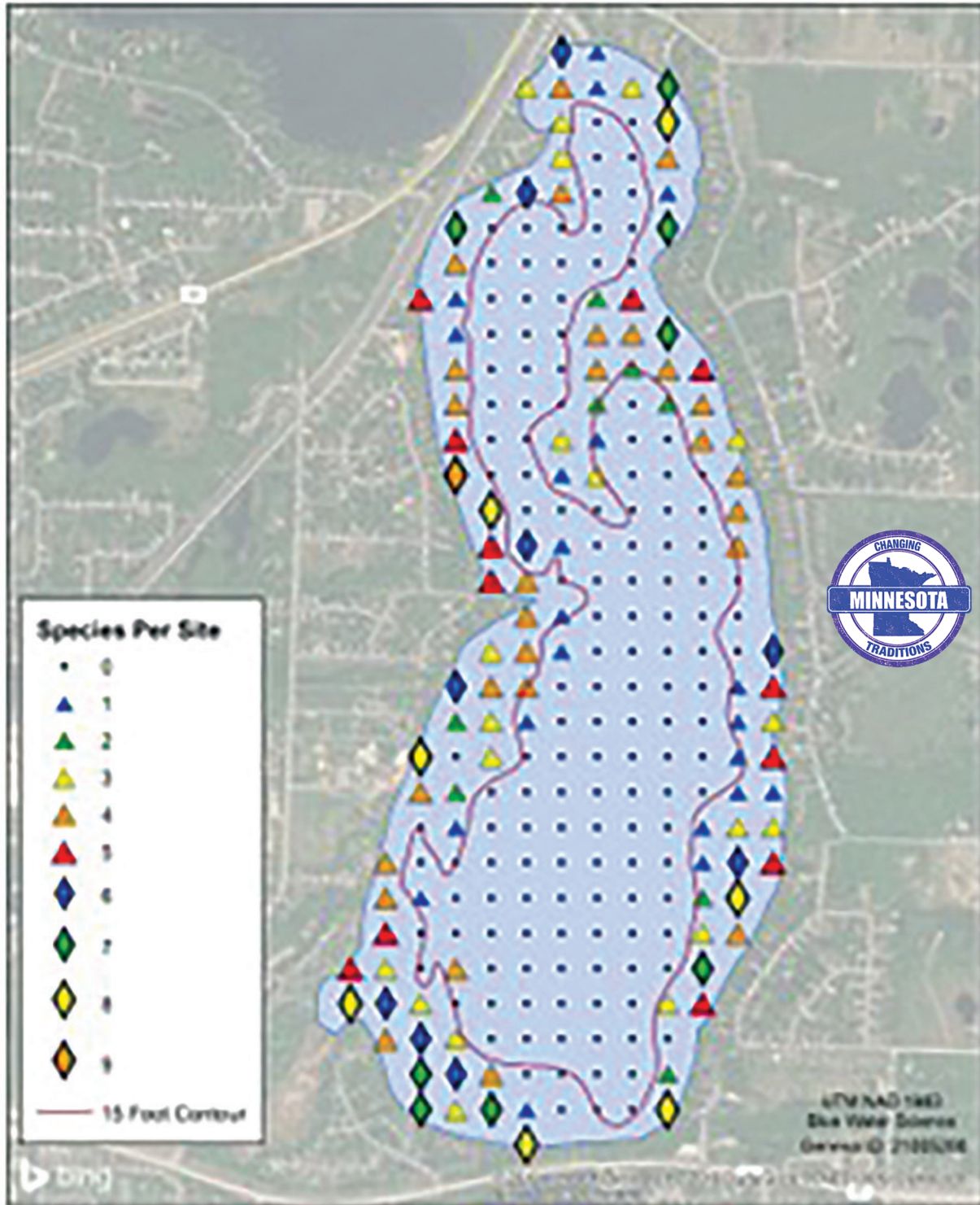
News regarding plant species of concern, Eurasian watermilfoil, starry stonewort and flowering rush, is positive as well. “So far, the need for management has been relatively light because the invasive species have not been too overwhelming,” said McComas. “In the few lakes with milfoil, they only need to treat maybe a few acres at this point. Douglas County in general is in pretty good shape for milfoil—and for stonewort.”

Douglas County AIS Coordinator Justin Swart shares McComas’ opinion. “It’s a case of, ‘so far, so good’ here,” said Swart. “In doing the surveys, we’re definitely trying to stay vigilant regarding starry stonewort, and fortunately we’ve not found it. Neither have we found any new infestations of milfoil.

“Where we’re really coming from with these surveys, however, is to try to set up a local aquatic plant database to determine what’s in our lakes, and whether it would be beneficial to survey more of the county’s waters. The information we had to work with before is somewhat outdated and sometimes incomplete. So this is an early detection effort for us.”

It will also paint a more detailed, and valuable, picture for Douglas County’s neighbors and the entire state.

Lake Geneva Species Richness July 10, 2019



Survey data for each lake will help managers track changes in plant species and determine whether intervention is needed.

“After we complete these last surveys, we’ll have covered pretty much every lake in the county with a public water access,” he said. “It will help us determine what we might need to do going forward, but on a larger scale, we’ll also feed all our information to the University of Minnesota, which is building a statewide database of aquatic plants.”

This information is produced and distributed by the Mississippi Headwaters Board in an effort to motivate everyone to protect our natural resources. A recreation based lifestyle is part of our MN Traditions and is only preserved when we protect our aquatic resources from invaders such as zebra mussels and Eurasian milfoil. To support Minnesota Traditions join us on social media here:

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