This is Wisconsin Water News, a production of the University of Wisconsin Sea Grant Program. I'm your host, Marie Zhuikov. Today's episode is:

When it comes to aquatic plant management, words matter

People searching online for control options related to unwanted plants that grow in lakes and rivers use many different terms. Some call them "lake weeds," other call them "freshwater seaweed," still others "cabbage." Rarely do people search with the same terms that natural resource managers and scientists use, such as the plants' Latin names or the more formal, "submerged aquatic vegetation."

These are findings of a study on internet keyword search terms conducted by University of Wisconsin-Madison researchers that was recently published in the "Journal of Aquatic Plant Management."

The Wisconsin Department of Natural Resources estimates that 9.5 million dollars is spent annually on <u>aquatic plant management</u> in the state. About \$2 million of this is state funds, the rest is private dollars. Despite this, little funding or effort is dedicated to education specific to aquatic plant management. This study aimed at filling this information gap.

How people search for information about aquatic plants is critical for guiding professionals on best practices for educational programming and outreach. Such education could also steer people away from the ineffective and potentially harmful use of herbicides in lakes and toward more ecologically sound solutions.

The research team was composed of Wisconsin Sea Grant's Tim Campbell and Gavin Dehnert, UW-Madison Department of Life Sciences Communication and Division of Extension's Bret Shaw, and Luke Huffman, a Ph.D. student in UW-Madison's Nelson Institute for Environmental Studies. They examined 113 search keywords related to aquatic plant management and recorded the top 10 websites that contained those words.

Campbell, an aquatic invasive species outreach specialist, explained.

"We had 1,130 different websites that popped up. What we found across all the keywords was that commercial websites tended to rank higher than institutional and government websites or the mixed and other websites. So, essentially, if you type in a keyword related to aquatic plant management, you're more likely to get a commercial website than you are like a purely informational source.

"A lot of people appear to be searching for things related to aquatic plant management in a more vernacular colloquial way. As they do that, they're getting more commercial websites about management, a lot of times, regarding herbicides. And so, the information that we're putting together, which covers many different management options really isn't reaching our target audience."

The research team urged scientists and invasive species program managers to include more generic terms like "lake plants" in their online content and other terms like "lake weeds, freshwater seaweed" and "cabbage" so that search engines are more likely to display their content.

Campbell offered suggestions for noncommercial managers.

"Just think a little bit more about how we're writing the content and how that might actually map out to people looking for it. We probably all want our stuff to be seen by our target audience. In this information environment, we need to be using the language of the people we're trying to reach."

The study was supported by the Wisconsin Department of Natural Resources and the Great Lakes Restoration Initiative.

The team has a follow-up study planned where they will produce two versions of aquatic plant management fact sheets — one more scientific and the other with more colloquial terms — and then assess search engine results to see which one captures more internet traffic.

That's it for this episode of Wisconsin Water News, just one of the ways that Wisconsin Sea Grant promotes the sustainable use of Great Lakes resources through research, education and outreach. Thank you to Tim Campbell for the interview and thank you for listening.