

McKenzie Lakes Association Newsletter – Spring 2021

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Fish Sticks Grant Secured; Installation Delayed

The good news: McKenzie Lakes Association (MLA) is the recipient of a \$7,700 grant for installation of “fish sticks.” The project will involve six land owners and seven sites on Big and Middle McKenzie Lakes. However, due to Mother Nature’s gift of warm weather in early March, the installation of the fish sticks will not happen until January or February of 2022. The experienced contractor hired to install the fish sticks cannot safely use the heavy equipment on the ice at this time, hence the delay.

The Wisconsin DNR Healthy Lakes fish sticks grant, for which MLA will serve as the umbrella organization, was secured by Mike Pederson who will also administer the program. Many thanks to Mike and to those who are devoting a part of their shoreline to ensure healthy habitats for many lake species and provide a sheltering area for fish.

[Learn more about fish sticks](#) from the Wisconsin DNR. [Contact Mike Pederson](#) with any questions.

Research Update on Zapping Zebra Mussels

MLA is fortunate to have access to research updates regarding efforts to eradicate zebra mussels, thanks to board member and UW River Falls Professor of Biology Scott Ballantyne, PhD, who contributed details for this article. He and a team of University of Minnesota researchers are at the forefront of highly complex studies aimed at inactivating genes that zebra mussels need to thrive – and potentially save our lakes from this aggressive invasive species. This update showcases the teamwork, collaboration and institutional support that it takes to identify strategies to potentially obliterate the zebra mussels that are choking our lakes.

One of Scott’s collaborators is Michael McCartney, PhD, who also tracks zebra mussel populations using DNA. McCartney re-confirmed that “McKenzie, with regard to its zebra mussel populations, is part of a large genetic cluster of inland water bodies in Wisconsin, including prominent lakes (e.g. Winnebago, Mendota) that were infested in the earlier days of

the invasion in the state.” He stressed that in no way did the McKenzie Lakes get zebra mussels from a Twin Cities lake.

Scott described the specifics of the research project: “Recall that we are trying to identify candidate zebra mussel biocontrol genes using a process known as RNA interference (RNAi). Dr. Daryl Gohl, our project manager, gave a [brief presentation](#) in September introducing our project at the Minnesota Aquatic Invasive Species Research Center (MAISRC) fall open house. We are extremely grateful to MAISRC for supporting our work. The project officially began January 1, but I was able to begin work in fall thanks to my sabbatical supported by UW River Falls. While all did not go as initially planned due to COVID, I still made good progress and put us in a strong position to hit the ground running in January. Working with Drs. Daryl Gohl and Mike McCartney, we selected a core group of roughly 20 zebra mussel genes to target in our initial experiments. (Zebra mussels have approximately 20,000 genes – about the same number as humans. It took a fair amount of detective work to settle on our top 20.) We chose genes that are highly conserved, meaning they are present in many creatures including mice, worms and fruit flies. These are heavily studied model organisms for which we have vast amounts of genetic data. Also since January, highly-skilled laboratory scientist and collaborator Lindsey Gengelbach has worked with us to advance our research.”

“Our next step was to sift through the shared genes to find those that are essential in the model species. A key part of this analysis was the use of a software suite known as Geneious. I spent much of last fall learning to use this platform, which allowed me to devise a strategy for genetically engineering bacteria and algae such that they will trigger RNAi against our chosen zebra mussel gene targets. I’m grateful to MAISRC for providing this essential software.

“This summer we will feed the engineered microbes to captive zebra mussels using the MAISRC containment laboratory (MCL) facilities. The MCL is a state-of-the-art facility on the University of Minnesota’s St. Paul Campus designed specifically for aquatic invasive species research without risk of environmental release.”

Curious as to what will happen when the zebra mussels ingest the engineered microbes? Be sure to check out the [MLA website](#) in the coming months to learn more as new developments evolve.

Funding for this project was provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Minnesota Aquatic Invasive Species Research Center (MAISRC) and the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

Note from Scott: *I will be spending a significant amount of time in the MCL in St. Paul this summer and am looking for a place to stay. If you’re aware of any options, please contact me at scott.m.ballantyne@uwrf.com*

Sign Up for the Best Job on the Planet

Where can you enjoy a few hours in nature, meet your lake neighbors, work on your tan and do the important work of saving our lakes from pesky invasive species? At the public boat landings on all three McKenzie Lakes, of course!

You can be a watercraft monitor on your own schedule, arranged around your summer guests or special events. Sign up for just one or two 4.5 hour shifts per month on Saturdays and Sundays, May 29-September 12, or be an ongoing presence with a shift every weekend. Volunteers are needed on all three lakes, but **the need is greatest on Big McKenzie Lake**, our busiest lake. Use your people skills to ensure that lake enthusiasts decontaminate their boats, jet skis, etc. A brief training session will be provided.

Have a college student or high school senior who needs to make a few bucks over the summer? There are a limited number of paid positions available, too! If your student likes fun in the sun and the boating environment, this is the ideal position (funded for 35 weekends – Memorial Day weekend through September 12 – by a 2021 Clean Boats/Clean Waters state grant).

Why should you give your time to being a boat monitor?

According to the [2020 Burnett County Aquatic Invasive Species \(AIS\) Report](#), the county “is often referred to as ‘Wisconsin’s premier northwest,’ and to keep this slogan relevant, AIS must be slowed or prevented from invading the County’s natural resources. The many pristine waterbodies in Burnett County drive the economy during the summer months, and are what keep people returning each season. If these water resources were to be impaired not only would the natural ecosystems suffer, but the region’s pocketbook as well.”

McKenzie Lakes Association members know it’s crucial to control aquatic invasive species on our lakes. Any level of commitment you can make toward protecting our waters for future generations – *your children and grandchildren* – is much appreciated. For the health of our lakes, get on the schedule **TODAY** by contacting sandy@northescape.com or 715-520-0233.

A Great Opportunity to Hone Your Leadership Skills

MLA is seeking a volunteer **Membership Director** to form a membership committee and take charge of maintaining, building and engaging current and potential members. Have you had some thoughts on how this might be accomplished and think you may be a good fit for this very part-time endeavor? Have you had experience in a similar capacity in another organization? Even if you have *no experience* but are committed to helping MLA grow and thrive, we’d like to hear from you! This position would be a great resume-builder for a new college grad or suitable for a short or long-term member. Learn more by contacting [Sandy Swanson](#).

Horrors! Spring Melt Reveals Roadside Trash

Take action, and make it a family affair. All are invited to participate in the upcoming roadside clean-up on **Saturday, May 8**. If you typically clean a road in your neighborhood, call Roadside Clean-up Chair Fred Baltrusis so he is aware that road is covered: 715-416-3036. If you need a road assignment, meet him in the parking lot at the McKenzie Landing at 8 a.m.

A trailer (rather than a dumpster as in the past) will be available at McKenzie Landing from 8 a.m. – 11:30 a.m. to take all roadside trash to the dump.

Note: All trash must be deposited in the trailer by 11:30 a.m. as the facility closes at noon, and we need enough time to unload it so the attendants don't have to stay late.

Lunch will be available at McKenzie Landing following the event.

Calendar

May – September – All boat landings will be staffed on weekends and holidays to educate boaters on the need to comply with law regarding spraying all watercrafts to deter spread of aquatic invasive species.

May 8 – Roadside clean-up

May 29 – 1st MLA meeting

June 26 – 2nd MLA meeting (Annual Meeting)

July 4 – Boat parades

July 31 – 3rd MLA meeting

August 7 – 30th Annual Booya (TBD)

September 4 – 4th MLA meeting