LAKE MINNIE BELLE
MESSENGER

A Newsletter from the Lake Minnie Belle Improvement Association Fall 2021

Chairman's Corner

by Kristin Jaquith, *Lake Association Board Chairman*

Goodbye Summer, welcome Fall/Winter!!

Goodbye Summer, Welcome Fall/Winter!! Summer seemed to fly by this year. We happily, have no new reported AIS as of yet. Our zebra Mussel traps are showing more spread as to be expected. We have been monitoring other lakes and sources for possible treatment or eradication options closely. This year, I was appointed to the Meeker County AIS Advisory Committee. I am hopeful that this resource will keep us on top of the best preservation and treatment opportunities for our beautiful lake. As summer came to an end, many of us experienced more than usual weed build up on our shores and difficulty removing our boats and pontoons, attributing this to our low lake levels. I have included reports from our Lake Survey in the newsletter as well as introductions to our newest board members. We are still looking for members to join us. If you have any interest at all, we welcome you to a meeting. We meet once per month – it is a small commitment that makes a huge impact. Take care and I will see many of you on the lake this winter and again in the Spring!

Kristin

Drought to Dredge

At our annual meeting there was a critical question asked to the DNR. What are we going to do about our access? It is getting difficult to use the landing with our boats. The answer was unanswered and at that point, as July got dryer, I started to do my research and calling. This trail led me to the Park and Trails division of the DNR. They are in charge of the accesses. I worked with Kristy Rice, Acquisition and Development specialist. She was wonderful to work with and has been involved in access work for quite some time.

The Process.
We received complaints that the access was difficult to impossible to use. Local DNR Parks and Trails staff inspected the site and determined the blow hole berm needs to be excavated to improve access. Local DNR worked with regional staff to hire a contractor. Contractor excavated the berm. Local DNR Parks and Trails staff followed up with a site inspection. The excavation was successful and access has been improved.

In going forward, we can all help and educate others with the following information to help keep our access usable. Contributing to the difficult access was the low water and power loading. Power loading damages boat ramps!

What is power loading?
Power loading is what it's called when you use the boat motor to load and unload a boat onto and off a trailer. Power loading can damage your boat, motor and trailer, as well as the launch ramp and lakebed.

Why is power loading a problem?
Trying to load or unload your boat using engine power can erode sediment and dig a large and hazardous hole at the base of the ramp. The eroded sediment creates a mound behind the propeller. Trailer tires can get stuck in these holes, and boats can run aground on the mound. It results in a barrier for both launching and loading.

Boats and equipment can incur costly damage when boaters unknowingly back trailer wheels off the ramp and into the hole. The trailer frame can get hung up on the concrete. If able to launch, the boat or lower unit can run aground on the mound, especially in low water conditions. In extreme cases, the end of the launch ramp can collapse, leaving it unusable and causing the access to be closed. Most of Minnesota's public launch ramps were not designed to sustain the forces of power loading generated by today's larger and more powerful boats. Repairs by DNR crews are costly and time consuming.

What you can do.
Always check the end of the ramp for power loading holes and mounds before launching, especially in low water level conditions. You may not be able to see holes from the surface of the water. Instead of power loading, use the trailer winch to load and unload your boat. Don't race your boat motor while on the ramp. If you need to use power from the engine, slightly more than idle speed should be all that is necessary to load or unload the boat. Know your equipment. Back the trailer to the right depth, just far enough that your boat starts to float when launching, then remember that depth for retrieval. Consider using smaller watercraft or going to a different launch ramp if the water is too shallow.

Karen Peterson

Zebra Mussels in Minnie Belle

Zebra mussels were discovered in Lake Minnie Belle in October of 2020. Since then they have been found all around the lake, of various sizes. This means they have been in the lake longer than we thought and are wide spread. Zebra mussel traps have been put out to detect how wide spread they are. Most traps have had numerous zebra mussels of all sizes on them. Note the zebra mussels on the trap in the picture below.

What problems can they cause?

Zebra mussels can:

- clog irrigation intakes and other pipes
- attach to boat motors and boat hulls, reducing performance and efficiency
- attach to rocks, swim rafts and ladders where swimmers can cut their feet on the mussel shells
- attach to and smother native mussels
- eat tiny food particles that they filter out of the water, which can reduce available food for larval fish and other animals, and cause more aquatic vegetation to grow as a result of increased water clarity.

What should you do to prevent their spread?

Before you leave any water access, clean weeds and debris from your boat, remove drain plugs and keep them out while traveling, and dispose of unused bait in the trash.

For additional recommendations see mndnr.gov/AIS.

Treatment of Eurasian Milfoil with ProcellaCOR instead of 2 - 4D

Treatment of Eurasian Milfoil with ProcellaCOR instead of 2 - 4D.

Lake Minnie Belle Improvement Association contracted with Clarke to perform aquatic herbicide applications to Eurasian watermilfoil (EWM) and potentially its hybrid (HWM).

38.0 total acres of EWM/HWM/HWM at treatable levels was identified. Knowing that the goal of the Association is to effectively control AIS within the lake, a new aquatic herbicide, ProcellaCOR EC was recommended for more efficacious control of EWM/HWM/HWM. Long term control of Milfoil allows the Association to split up

treatment areas in following years with a goal of establishing lakewide control of M/HWM/HWM.

Due to the 15% of the littoral zone maximum permitted herbicide treatment, the Lake Association had to make decisions on which sites to prioritize for 2021 with a maximum of 19 acres (due to treatments already performed in 2021 targeting Curly Leaf Pondweed and private shoreline properties). Meeker County is also offering to support certain lake groups willing to enhance their strategy and make a move from conventional 2 - 4D treatments showing mixed results, to trying ProcellaCOR EC. Lake Minnie Belle received $4000.00 from Meeker County to go towards the cost of the ProcellaCOR.

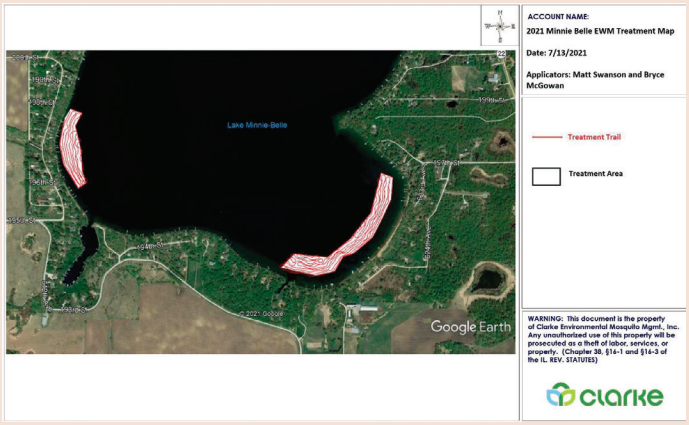
The approved strategy included two dense sites of EWM/HWM that were targeted for control with SePRO's ProcellaCOR EC (liquid florpyrauxifen-benzyl) at a rate of 4 PDU per acre foot. Treatment site and herbicide rate information/map is below.

Results

No actively growing EWM was identified within the treatment areas. High populations of the native aquatic plant, northern watermilfoil was identified within and surrounding the treatment areas. HWM is also suspected in Lake Minnie Belle. HWM can occur when EWM and the native northern watermilfoil are both present in a lake – they hybridize, and HWM is difficult if not impossible to confidently identify in the field and therefore should be sent in for genetic testing to determine species.

Milfoil plant samples were collected in summer 2021 by Ariana Richardson, Kristin Jaquith and Don Kotila, and were sent to Montana State University for genetics testing. This was done to determine what types of milfoil Lake Minnie Belle has.

In general, native vegetation was found in high densities on Lake Minnie Belle during the survey. Spring and summer, 2021, has provided an exceptionally long and favorable growing season for aquatic plants and algae, and dense vegetation in our waterways is something we have seen consistently throughout the Midwest this year. Native plants identified in abundance during the post-treatment survey include wild celery, clasping leaf pondweed, and northern watermilfoil.



Future Treatment Plans

In the spring of 2022, Clarke will survey the lake for Curly leaf pondweed and Eurasian milfoil. Since the ProcellaCOR treatment is guaranteed for 3 years, we can move onto other areas of the lake that have infestations of Eurasian Milfoil. We will keep the Lake Association informed as to the results of the survey and treatment plans in the 2022 spring newsletter.

Starry Stonewart Survey 2021

In 2021 the Lake Minnie Belle Lake Association Board hired LIMNOPRO to conduct a Starry Stonewart survey. This was completed in the fall of 2021, near the DNR public landing. The report from the survey is as follows:

Surveyor: LIMNOPRO

Dan McEwen, Survey Date/Times: 10/19/2021 (14:30 – 19:00 CDT)

Environmental Conditions

Air temperatures was 69 oF with sunny conditions and no precipitation. Winds were light from south at 6 mph. Underwater visibility was excellent (approximately 10 ft).

History

MN DNR Infested Waters List (9/20/2021) lists Minnie-Belle as having been infested with Eurasian watermilfoil in 2010 and zebra mussels in 2020. Curlyleaf pondweed (listed 1993) and banded mystery snails (listed 2015) were listed in EDDMaps. There are no other known infestations in the lake.

Diagnosis

Brittle naiad (BN): Not detected

Search Area

Curlyleaf pondweed (CP): Not detected

Eurasian watermilfoil (EW): Present

Flowering rush (FR): Not detected

Rusty crayfish (RC): Not detected

Starry stonewort (SS): Not detected

Zebra mussels (ZM): Present

Chinese mystery snail (CMS): Not Detected

Banded mystery snail (BMS): Present.

Outcome Summary

No previously undetected aquatic invasive species were found with the possible exception. Adult zebra mussels were sparse, observed only on a few hard surfaces. The ones seen were mature and large, indicating a population that has been in place for at least a couple years. Only a single Eurasian watermilfoil plant was found during the dive. There were many beds of native watermilfoils within the search area. Chinse mystery snails were the most abundant AIS detected. They were littered over large areas of the bottom around the launch area. A list of all species observed during the dive are as follows (AIS are underlined): water marigold (Bidens beckii), muskgrass

(Chara spp.), coontail (Ceratophyllum demersum), zebra mussel (Dreissena polymorpha), needle spikerush (Eleocharis acicularis), brown-fruited rush

(Juncus pelocarpus), northern watermilfoil (Myriophyllum sibiricum), Eurasian watermilfoil (Myriophyllum spicatum), grass-leaved pondweed

(Potamogeton gramineus), Illinois pondweed (Potamogeton illinoensis), whitestem pondweed (Potamogeton praelongus), claspingleaf pondweed

(Potamogeton richardsonii), sago (Stuckenia pectinata), wild celery

(Vallisneria americana), and banded-mystery snail (Viviparus georgianus).

While curlyleaf pondweed is known to infest the lake, we did not observe any during our dive.

Survey Description

Minnie-Belle Lake Public Boat Launch, SCUBA transect over 200 ft x 100 ft at boat launch (see photo)

Why is the lake level so low?

The water level in Lake MinnieBelle is low this year, as it is in many other lakes, due to the drought this past summer. Fortunately, the rains in August and September helped to stabilize the dropping levels. The winter and spring precipitation may also be helpful to restore the lake.

The water level of the lake is measured in elevation above sea level. For MinnieBelle that

"ordinary high-water level" is 1142 feet above sea level. This equates on the shoreline to the bottom of the rip-rap stones that most of us have along the shore. The lowest recorded level was in April of 1990 after several years of below normal rain and snow beginning in 1988. That record low was 1137.44 feet. It took until the spring of 1993 to get back up to the ordinary high-water level. So, one can see that it can take several years for the water levels to come back up.

Historically, there have been other low time periods for the lake. In the late 1930's, during the "Dust Bowl" era in the south, the lake levels were low but not measured. I have a picture of my grandfather and great-grandfather on MinnieBelle beach with at least 50 feet shore out from the tree line. Again, stories are that it took several years to get back to the ordinary level.

So, what about high water levels? The record high water level of 1143.36 feet occurred in 1972. This resulted in the flooding of several cabins at that time. Since then the outlet has been significantly improved so that ordinary high-water level should be the new maximum high water level. These improvements are thanks to the work of the LMBIA and continue to be a priority.

So, what the future holds for the lake water level is uncertain but historically it should come up again. It may take some time but be patient and keep the faith.

Rob Kruger, LMBIA board member

Welcome New Board Members

My name is **JOHN GILLARD**, I am new to the lake and even newer to the LMBIA board. My wife, Gail and I were blessed to have had the opportunity to purchase property on one of the premier area lakes in the spring of 2020. That first summer on the lake sure helped soften the blow of the Covid lockdowns. We enjoy lake activities with our extended family of four married children and eight grandchildren.

For the past 40 years, I have practiced dentistry in Hutchinson and am still working full time. As retirement nears, so does living full time on the lake. I look forward to serving on the board to help ensure Lake Minnie Belle maintains its pristine beauty for generations to come.

My name is **DEAN NISSEN** and I'm happy to be a new board member for the Lake Minnie-Belle Association. I am a retired family practice physician who lived and practiced in Hutchinson for 35 years. My wife Carol and I raised 5 boys and now have 7 grandchildren, going on 9 and counting. We used to trailer a boat out to Minnie-Belle to ski and swim with the boys and always wanted to get on the lake. In 2018, we bought a cabin on the south end and in 2020 built a home and moved here full time. We love the lake and thought living here would be a bribe to keep the kids/grandkids coming home (sometimes it works almost too good!). Anyway, I think we should do anything we can to preserve and improve this great asset and keep it for future generations.

My name is **CHRIS WILKE** my wife Sara and our four kids – Ellie, Isaac, Amelia, and Nora – felt so fortunate to be able to purchase our cabin on Lake Minnie Belle in late summer of 2020. It was always a dream of ours, one that we didn't know would become a reality when it did!

I work in cyber security for a large health care company along with being the owner of a consulting firm which provides cyber and technology services to small businesses. I enjoy spending time on the lake with family and friends, traveling, and watching the Minnesota Vikings (and all the ups and downs that go with being a fan!)

My family and I are excited to spend many years making memories on the lake, and I look forward to helping keep Lake Minnie Belle the premier lake in the area, by serving on the board.

LAKE MINNIE BELLE
IMPROVEMENT ASSOCIATION
PO Box 34, Litchfield, MN, 55355

Check Us Out!

LMBIA website:
www.lakeminniebelle.org (under construction)

LMBIA on facebook:
www.facebook.com/lmbia

LMBIA Email:
info@lakeminniebelle.org

DNR website:
www.dnr.state.mn.us

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LAKE MINNIE BELLE BOARD OF DIRECTORS

Board meetings are held the 4th Tuesday of the month, either via web or TBD space.
Announcements posted via Facebook.

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