

February 2024

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**Time to make
your 2024 AIS
contribution!**



THE Aerie

A NEWSLETTER FOR MEMBERS OF THE BIG MANTRAP LAKE ASSOCIATION

2024 Membership fees are due

Fill out and mail the registration form on page 4 of this Aerie or use PayPal. If you use PayPal, please complete the form so we can apply your donation as you direct. Tell me what year the dues are for. Dues can be paid at any time during the year, but are due by summer.

Please make checks payable to Big Mantrap Lake Association. Send to: Linda Zawacki, 5104 Sundial Lane, Woodbury, MN 55129

Loon Report for 2023

STEVE MAANUM

The 2023 loon season jumped into action the day the ice went out on May 3. Of course, it actually began back in December of 2022 as the rushes and nesting material were cut and delivered to the Pine Bay Marina where they would be stored until they were placed on the rafts before deploying them to their locations around the lake.

Each year we report that by providing the rafts as an alternative to the natural nests along the shoreline that are prone to predation, the Mantrap loon conservation project continues to be successful, while being a positive example for others to follow.

Although our hours of observation are continually providing us with increased knowledge of loons, they remain a mystery in many ways. In our efforts to be more thorough with our documentation, we began using remote

cameras in 2008. That year cameras were attached to two rafts. The following year we placed a camera by a natural nest and captured photos of a raccoon family raiding the nest. Since then, the technology component of our research has expanded to about half of the active nests. We can now monitor nest activity twenty-four hours a day. Where regular trail cameras with SD cards were the only models used from 2009 -2019, we began replacing them with newer cellular models in 2020. With the new cameras, photos and video clips are sent directly to our phones, eliminating our need to visit the nest sites to remove the SD cards before downloading photos onto our computers. Generous donations from lake residents have helped us purchase additional cameras and this past

CONTINUED ON PAGE 2

summer, many of the photos were shared on the Mantrap web site.

One of our goals is to keep you informed about the loons on the lake and another part of our education and outreach is to share the Mantrap project with other lake associations and conservation groups in hopes that they might chose to use it as an example for developing their own loon management plans.

This past year it was shared through presentations in several Minnesota towns and with audiences at the Detroit Lakes Annual Bird Festival and the National FNS (Family Nature Summit) held at Breezy Point in July. We also gave loon tours to an employee of the National Loon Center, Kevin Kenow (USGS loon researcher) and James Boyce (professor at Amherst College in Massachusetts). He is writing a research paper on loons.

The numbers for 2023 are:

- » 21 nests, 5 natural nests and 16 rafts
- » 45 eggs were laid, 34 on rafts and 11 on natural nests
- » The week of June 11 – 17 was a busy week. On the 11th we counted five new chicks and by the end of the week that number rose to 17. Over the following days, nine more chicks were hatched, bringing the total to 26.
- » Of the 26 chicks that were hatched 22 were on rafts and 4 were on natural nests.
- » Once they leave the nest, it is up to the parents to take care of them. When the August loon count took place, 44 adults and 20 juveniles were tallied, meaning the survival rate (20/26) equaled 76.9%.

By anyone's standards, that is an impressive survival rate.

A big thanks to all the loon volunteers and those who donate to the Mantrap Loon Fund. Your support is appreciated very much.

Forever a Mantrapper

We lost long time Mantrappers this year. The ones I know about are listed below. If there are others I should include, please let me know: Barb, barbf49@aol.com.

Our President, Rich Halvorsen, lost his mother, Sharon Halvorsen, October 22.

<http://tinyurl.com/p6b8rxxn>

Millie Evans died August 17

<https://www.schradercares.com/obituaries/mildred-evans>

New AIS Risk Assessment Tool

The University of Minnesota AIS Research Center has developed a new tool for AIS risk assessment. The tool is available at <https://www.aisexplorer.umn.edu/#!/map>. The tool can be used to assess risk introduction for Zebra Mussels or Starry Stonewort. The three strategies to assess are Introduction Risk Surveillance, Intervention Impact and Prioritization for Watercraft Inspectors.

AIS explorer user enters the Species of concern (Zebra Mussels or Starry Stonewort), Score desired (Overall Risk, Boater Movement or Water Connectivity) and the County(s). Then the user can ask for layers of data to be displayed in the map that is produced. For the Big Mantrap Lake map displayed below I entered the following information – Zebra Mussels, Overall Risk, Hubbard County. The map shows the location (🚩) of all local Zebra Mussel infested lakes as of August 2023, and color codes the risk level (1-10; 1=low (green) to 5=medium (yellow) to 10 high (red)) for Hubbard County lakes.

I found the tool quite easy to use and informative regarding the species and situations it covers. Big Mantrap Lake has a medium risk level. That is to be expected given the high volume of boat launches and nearness to infested lakes.

AIS Lake Management Strategies

I recently watched a University of Minnesota AIS seminar titled "Aquatic Invasive Species Prevention: Getting the Best Bang for the Buck!" It was well done and presented good overview of AIS prevention strategies and a cost benefit analysis to provide guidance to landowners and government officials. An interesting overview from the presentation was the concept of three categories of strategies being used to address AIS. The theme of Prevention was broken down into three subcategories

1. **Boater education, AIS inspectors and decontamination units.** These prevention measures are employed across Hubbard County.
2. **AIS monitoring.** This is an increasing strategy across Hubbard County with landowners taking the lead to construct organized approaches to train selected lake shore owners to periodically monitor stretches of shoreline, with particular emphasis on sites where watercraft are launched. The BMLA is developing this approach for 2024. More on this will be coming this Spring.
3. **Using experts in AIS identification and treatment (MN DNR and private contractors) to search for specific AIS outbreaks at boat launches, etc., and then employ techniques to treat these 'hot spots'.** Eradication is not the expected outcome of such treatments. Follow-up monitoring and treatments will be needed.

Water clarity and water quality sampling results for Big Mantrap Lake

Big Mantrap Lake has a long history of water clarity and quality sampling by volunteers dating back to at least the 1980s according to the MN Department of Pollution Control although long term residents suggest that sampling started much earlier. Sampling is done using a Secchi disc and determining the depth below the surface that the white disc can be seen. I recently searched the Minnesota Pollution Control website and found the following summaries for water clarity and summer water clarity for Big Mantrap:

For years 1980 to 2022 there is no identifiable water clarity trend at this lake. For the most recent year of the analysis, median water clarity was 2.00 feet lower than the watershed median.

Secchi reading average: 14.57 feet
Transparency Category: Excellent

Big Mantrap's lake water quality has been assessed five times per summer for more than 25 years. The lake water quality is trending toward improvement from an already quite acceptable measure

This past summer my Secchi readings were deeper than normal. You surely noticed the clarity of the lake as you spent time on the water. This unusually deeper clarity resulted from little rainfall which meant fewer sediments washing into the water column and lower than normal July temperatures which resulted in less than normal algae growth.

Big Mantrap Lake is an Environmental Common with an Associated Knowledge Base

You may have heard of the Tragedy of Commons. Here is a brief description modified for lakes.

The tragedy of the commons is a **metaphoric** label for a concept that is widely discussed in economics, ecology and other sciences. According to the concept, should a number of people enjoy unfettered access to a finite, valuable resource such as a lake, they will tend to over-use it, and may end up destroying its value altogether. To exercise voluntary restraint is not a rational choice for individuals – if they did, the other users would merely supplant them – yet the predictable result is a tragedy for all. Scholars argue about whether over-exploitation of the common resource is inevitable since the individuals concerned may be able to achieve mutual restraint by consensus. Lake associations are one way individuals gather to manage their lake for the common good.

Associated with environmental commons and their governance is the data and knowledge about the common (i.e., the lake) that accumulates over time. If this knowledge is known and widely distributed to the various stakeholders (i.e., residents, lake users, government officials, ...) it can be utilized to develop management strategies and systems to protect the commons for the long term. Examples of general knowledge about lakes and their environmental quality in Hubbard County are the following:

From Hubbard County Environmental Services – the County's septic system lake survey program began in 1992 and was completed around 2004-05. Most larger lakes were surveyed. The program was successful in that we rarely see a septic system in a shore land area these days deemed failing in a submitted compliance inspection report for reasons that were common early in the program such as tanks without bottoms, 55-gallon steel drums, straight pipes, etc.

From Hubbard County Soil and Water Conservation District (SWCD) – much of the agricultural development had already happened in the prairie land in the early 1900s with some conversion of the Pineland Sands happening later in the 1900s. Most of the fields were unirrigated until the late 1970s to early 1980s when irrigation pivots were being put up in the Straight River area and east of Long Lake. Most of the switch to irrigation happened from the mid 1980s to about 2000 with some fields being converted at a slower rate since.

Specific BML knowledge is known and shared regarding water clarity/quality, fisheries, etc., at <https://www.pca.state.mn.us/air-water-land-climate/lake-water-quality> and <https://www.dnr.state.mn.us/lakefind/index.html>. In addition, we have the following examples:

- » **A history of volunteer water clarity and quality measurements** described in the earlier article demonstrates that Big Mantrap's water clarity/quality has not degraded over the past 40 years.
- » **The BML fishery continues to be outstanding** because of diligence and transparency by DNR fisheries, both through their management and regulations (specific size and bag limits for northern pike and crappies).
- » **The Big Mantrap Lake Association has created a website** <https://mantraplake.org/the-lake> which shares knowledge about the lake association and about the lake. A significant improvement in knowledge sharing.

A closing thought – the above was written to both inform BML residents as well as to start a discussion on knowledge that is either missing, not clearly available or that needs to be developed in the future. This will allow the BML common to be better managed in the future for us all.

Big Mantrap Lake Association Membership Registration, AIS Watercraft Inspection Donation and Loon Fund Donation.

Big Mantrap Lake Association's purpose is to preserve and protect Big Mantrap Lake and its surroundings. BMLA will work to enhance the enjoyment of wildlife, fishery, boating, safety, economic and aesthetic value of Big Mantrap Lake for our members and the public.

Today's date _____ / _____ / _____

____ **Renewing member** ____ **New member: please complete all information.**

Contact member: _____

Mailing address: _____

Lake address: _____

Email: _____ Phone: _____

Other members: _____

Email: _____ Phone: _____

I have enclosed the following payment:

Membership dues \$25 per property. Please pay between January 1 and June 1.

AIS suggested donation \$300. Loon donation, any value is appreciated.

_____ Check, (preferred) made out to Big Mantrap Lake Association, for \$25 along with completed form.

_____ PayPal accepted, bmlamn@gmail.com please complete form and send to address below

_____ A donation of \$ _____ payable to BMLA AIS Fund.

_____ A donation of \$ _____ payable to BMLA Loon Fund.

Send completed form and/or check to Treasurer, Linda Zawacki, 5104 Sundial Lane, Woodbury, MN 55129

Or email form to: bmlamn@gmail.com

Anyone interested in volunteering or being on the board of directors contact any current board member.

Visit our web page for info about our meetings and current events:

www.mantraplake.org and/or Facebook page: [Big Mantrap Lake Neighbors](https://www.facebook.com/BigMantrapLakeNeighbors)

Board of Directors

President	Rich Halvorsen	612-245-9391	rich.halvorsen@gmail.com
Vice President	could be you!		
Treasurer	Linda Zawacki	651-246-3844	LZboutique@comcast.net
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Aerie coordinator	Barb Fischer	765-414-4197	barbf49@aol.com
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web site
www.mantraplake.org

Find us on 

www.facebook.com/BigMantrapLake
public site

[www.facebook.com/
groups/1076808002386929/](https://www.facebook.com/groups/1076808002386929/)
private site, contact Rich Halvorsen for access

2023 Big Mantrap Lake Association Financial Report

LINDA ZAWACKI

Revenue:	2023	2024 Projection
Membership Fees (59)	\$1,474.01	\$1,475.00
Loon Fund	\$1,565.00	\$1,500.00
Loon Memorials	\$270.00	\$250.00
Miscellaneous	\$100.27	\$120.00
Total Revenue:	<u>\$3,409.28</u>	<u>\$3,345.00</u>
Expenses:		
Loon Fund	\$1,840.00	\$2,000.00
Lake Maintenance	\$449.00	\$450.00
Meeting Expense	\$483.60	\$500.00
COLA Membership	\$220.00	\$225.00
Miscellaneous	\$374.62	\$375.00
Total Expenses:	<u>\$3,367.22</u>	<u>\$3,550.00</u>
Total Surplus:	<u>\$42.06</u>	<u>\$205.00</u>

AIS Fund

Revenue:		
Members donations	\$14,160.58	\$15,000.00
AIS Miscellaneous	\$0	\$100.00
Total AIS Revenue:	<u>\$14,160.58</u>	<u>\$15,100.00</u>
Expenses:		
AIS Inspector fees	\$11,450.00	\$12,000.00
AIS Survey/Misc.	\$620.00	\$1,000.00
Total AIS Expenses:	<u>\$12,070.00</u>	<u>\$13,000.00</u>
Total Surplus:	<u>\$2,090.58</u>	<u>\$2,100.00</u>

Bank Balances:

G. Fund \$21,009.97 -(\$6,749.90 Loon Fund) = \$14,260.07

AIS \$40,490.60

Who lives where

We lost an important resource when Rick Johnson died. The maps and list of residents you used to receive were created and maintained by Rick. Rick was an early adopter of computers and kept the map on hardware and used software that was lost with his passing. I sometimes wonder who lives where on our lake; and I expect that many of you are also curious. The Hubbard County website for access to this information is <https://maps-hubbardcounty.opendata.arcgis.com/> You don't need to sign-in to this tool to view the Public Property Viewer Application <https://hubbardcounty.maps.arcgis.com/apps/webappviewer/index.html?id=405588666bba4397982b98b3fd382f62>

Once on the site, you can zoom in/out to look at the maps and pick out properties to look at more closely. Once you get to a large enough scale, you can click on a property and find the owner and other information. You can search by name, address, pointing to a location on the map and lots of other ways.

Barb Fischer
618 W Soutar Drive
Bloomington, IN 47403

AIS in the Park Rapids Enterprise

LEE TESDELL

Recent articles in the *Park Rapids Enterprise* highlight the efforts to keep Hubbard County lakes – including Big Mantrap – AIS-free (aquatic invasive species).

In the first, (<https://www.parkrapidsenterprise.com/sports/northland-outdoors/multiple-close-calls-for-hubbard-county-ais-inspectors>) we learned that there were multiple “close calls” in Hubbard County lakes during the 2023 season. Five boats were denied entry into Hubbard County lakes in summer 2023 because of “aquatic invasive species violations.”

In Hubbard County, employees completed 144 decontaminations in 2023, compared to 83 in 2022. A total of 19,779 inspections were made by

late in the season.

Funding for the county AIS program comes mostly from the State of Minnesota to the tune of \$263,911 in 2024 compared to \$262,672 in 2023. Lake associations and other entities also provide dollars.

In the other article, (<https://www.parkrapidsenterprise.com/news/local/starry-stonewort-confirmed-in-long-lake>) the author tells us that Starry Stonewort (*Nitellopsis obtusa*) was found on August 13, 2023 in Long Lake, in Hubbard County. If you think you have found Starry Stonewort you should report it to the Minnesota DNR. You can also find information about identifying Starry Stonewort on the Minnesota DNR website at <https://www.dnr>.

state.mn.us/invasives/aquaticplants/starrystonewort/index.html.

When it comes to lake regulations, Minnesota law requires that you (1) clean watercraft, trailers and equipment to remove aquatic plants and prohibited invasive species, (2) drain all water and leave drain plugs out during transport, (3) dispose of unwanted bait in the trash, (4) never release bait, plants or aquarium pets into Minnesota waters, and (5) be sure to dry docks, lifts and rafts for 21 days before moving them from one water body to another.

For more information about aquatic invasive species visit: <https://www.dnr.state.mn.us/invasives/ais/index.html>.