



Fall 2017





Do you know what this is?

(Answer on page 6)

FALL NEWSLETTER, 2017

Lake Washington Improvement Assn.
PO Box 68 Dassel, MN 55325
www.lakewashingtonassn.com
Email: info@lakewashingtonassn.com



General Issues:

info@lakewashingtonassn.com

Membership Changes:

membership@lakewashingtonassn.com

Lost and Found:

lostfound@lakewashingtonassn.com

The Lake Washington Newsletter is published three times a year (Spring, Summer and Fall) by the Lake Washington Improvement Association. It is distributed free to lake property owners and friends around Lake Washington.

CONTENTS

The Power of Our Lake Associations	4
Aquatic Invasive Species	5
2017 Grant Program	6
Cormorants and Pelicans	7
Vegetation Management	7
Zebra Mussels	8
Watershed	10
I-LIDS	11
Water Quality and Clarity	12
Committee Reports	13

End Of The Dock

By Ron Bubany



I have always felt that our lake association, along with others in the state, plays an important role in preserving our waterways. Even so, I had no idea just what a major impact lake associations have.

Steve Ullom leads off this issue with a summary of an important study completed in September by Concordia College. The study was commissioned by Jeff Forester, Executive Director, Minnesota Lakes and Rivers Advocates. See Steve's recap on page 4 next. It includes a link to the actual study itself, should you wish to dig into the full details.

Of course we have updates for you on our ongoing activities, including information about the growing invasion of zebra mussels. So have a good read and bring yourself up to date.

The GPS we have been using in our vegetation and water quality surveys is old and out of date. So we have replaced it with a state of the art Humminbird Helix 9 unit. This unit is much easier to use, very accurate, and provides opportunities to see what goes on under the water - much better than just pulling weeds up with a rake.

As for myself, I am excited about the ability this unit has to create contour maps of the lake bottom. These maps can identify hard/soft bottoms, vegetation and other details. Even 3D drawings can be achieved. This winter I will be developing a plan to use this tool to create detailed maps of Lake Washington. It's about time we replace the ancient depth maps we have been using for the past many years.



The Power of Our Lake Associations

By Steve Ullom

On September 25 Concordia College, Moorehead released the findings of their in-depth study, "Minnesota's Lake Associations: Who they are and what they do." This study analyzed a survey sponsored by Minnesota Lakes and Rivers Advocates.

The following are the key points made in the analysis:

- Most Minnesota lake associations formed in the 1960's and 70's mainly for preservation and protection of their lake.
- The top goals of most are to control aquatic invasive species and improve water quality.
- Collectively 500+ Minnesota lake associations donate \$6.25 million annually to the care of lakes.
- The 500+ associations contribute about 1.2 million volunteer hours per year doing AIS
 inspections, attending meetings, testing water quality, and promoting community education
 outreach activities.
- The top 3 association concerns were AIS, water quality and runoff control, while the top 3
 association challenges are inadequate membership, not being heard or taken seriously by the
 DNR and aging population of property owners.
- Most respondents agree or strongly agree lake associations face hurdles in becoming more engaged in lake conservation activities.
- Most respondents DO NOT AGREE that lake associations are authentically included in lake planning processes, have real authority over the lake, and that the DNR has sufficient lake management policies in place.
- Of special interest lake association members are the largest angling group in Minnesota, responsible for nearly 550,000 fishing license sales and nearly \$400,000 spent towards fish stocking.

The survey analysis revealed that AIS, lack of communication with the DNR, managing water quality, and engaging members are major concerns of many lake associations. Association members assert that AIS infestations greatly impact their lives and are eager to engage in more collaborative conservation efforts with the DNR. Miscommunications about decisions affecting the lake and about allocation of funds may result in the projection of major concerns and hostilities directly toward the DNR.

The report concludes that Minnesota's lake associations play a crucial role in protecting and managing Minnesota's lakes and recommends more communication and collaboration between policy makers and lake associations.

You can read the full report at this link:

http://www.mnlakesandrivers.org/sites/mnlakesandrivers.org/files/files/mn-lake-association-survey-2017-report.pdf

Aquatic Invasive Species

By Mark Johnson

This year I attended training to become certified as an Aquatic Invasive Species (AIS) Detector through the University of Minnesota Extension, and the Minnesota Aquatic Invasive Species Research Center (MAISRC). This is the first year of the program where 120 detectors became certified throughout the state.

As the threat of AIS continues to grow across Minnesota, there is a need for an organized statewide surveil-lance program that targets high-risk areas with trained observers. In partnership with University of Minnesota Extension, this program trains detectors to identify and report potential aquatic invasive species such as Starry stonewort and zebra mussels. Early detection is one of the most effective ways to help stop the invasion and spread of AIS.

The role of an AIS Detector is to help identify new invasive species occurrences. Examples of activities include:

Respond to and report on new potential AIS which have been submitted to the DNR. By filtering out any false positives, the DNR can efficiently focus on their efforts.

Participate in new detection surveys by helping search lakes for new AIS.

Assist with other AIS-related projects in coordination with the DNR, University of Minnesota Extension, and the Minnesota Aquatic Invasive Species Research Center.

And lastly, assist in educating the public on how they can help stop the spread of AIS.

Lake Washington News:

This years rake sampling on the lake produced NO Eurasian Water Milfoil. Good news that this AIS remains in check for another year!



2017 Grant Program

By Sharon Daniels, Grant Coordinator

October brings fall colors, but it also brings opportunity for Lake Washington Improvement Association to apply for two grant programs for 2018.

The <u>Meeker County Association of Lakes grant application program for the 2018 year is now available and needs to be completed and mailed to MCAL president, George Kraemer, Dassel, MN prior to October 31.</u>

The <u>Aquatic Invasive Species</u> grant application program for year 2018 is also available and will need to be completed and mailed to AIS, Meeker County Planning and Zoning office, Litchfield, MN no later than November 15, 2017.

I will be completing both of these applications and requesting grant money to help prevent or control the spread of aquatic invasive species (AIS) as milfoil, curly-leaf pondweed, zebra mussels, spiny water fleas, starry stonewort, etc. Monthly water quality testing, I-LIDS maintenance, monitoring and tree clean up at the Ellsworth landing, along with zebra mussel inspections, milfoil monitoring and treatment as needed, tile inlet projects, buffer strips, holding pond maintenance, are all with volunteer help, but there are costs to complete these projects and that is why these grants are so important to LWIA.

Reminder... all volunteers that have helped to work on projects during 2017, please email me your amount of "in-kind" volunteer hours as well as any receipts for expenses <u>prior to October 20, 2017</u>. My email address: <u>sdaniels@grdaniels.com</u>. I will forward the receipts to MCAL and or AIS for reimbursement for year 2017 approved grant monies.

Thanks! To all those that volunteer their time and efforts to keep our lake at its best!



Answer to "What is it?". On front page.
The Original Lake Washington Dam

Cormorants And Pelicans

By Steve Grotbo

The good news is that the cormorant sightings on Lake Washington have gone down. In the past it was very common to see hundreds in a group, but this summer it has been more like a dozen in a group. Not sure of the reason for the decline. Is it the Newcastle's disease, lack of fish, or possibly some illegal poaching? At the end of the day, nobody seems to know enough about cormorants, but yet enough seem to have an "expert" opinion. A study at Lake Winnipegosis in Canada revealed that of 10,911 fish eaten by cormorants, only 30 were walleyes (0.20%). The studies in Minnesota show a range of 1.4% to 11.1% walleye consumption. With each bird eating between 1 to $1\frac{1}{2}$ pounds of fish per day, it only takes a small percent to affect the walleye population.

On the pelican front, things seem pretty status quo. We have received reports of brown pelicans now. My thought is they are the ones from Florida and Texas that came to Minnesota to escape the hurricanes. Others believe they are just younger versions of the American White Pelican that is most common to Lake Washington. In any case, keep an eye out for the brown pelican and hopefully someone can get a picture for the next newsletter.

On September 10th, the Dassel Rod and Gun Club hosted the Minnesota Junior BASS Nation High School State Championship. The weather did not really cooperate, but these teams definitely got some big bass. So that tells me that the cormorants and pelicans are not getting all of the fish.



Vegetation Management

By Steve Grotbo

At the pot luck one of the members asked about getting rid of the weeds on the west side of the lake. This brings up an interesting topic of what is exactly a weed. In my mind, any vegetation that is not where I want it is a weed. But my opinion does not count for much and from an association standpoint the focus is on weeds being non-native to the lake. In other words, native vegetation is not a weed. Currently the associations focus is on Curly Leaf Pond Weed and Eurasian Water Milfoil.

As a lake home owner you have many options for removing vegetation. The easiest from a paperwork standpoint is to cut / pull the submerged vegetation. You can do up 2500 square feet that extends up to 50 feet of lake shore or half the length of your shoreline, whichever is less. You can additionally make a 15 foot path as wide as long as necessary to get to open water. All the other options for clearing vegetation requires a permit from the DNR, which is usually around \$35. Many companies are more than happy to help you out as well, but of course at a price.

The <u>lake association directory</u> is a great resource and has many details on this topic in the "Aquatic plant regulations" section starting on page 92.

Zebra Mussels

(an Aquatic Invasive Species from Eastern Europe) By Dave Rathe

Zebra Mussels





The population of zebra mussels in Lake Washington is really starting to explode. Last year we found 3 mature zebra mussels on our 11 "hotels" (settlement plates). This year there were 96 mature zebra mussels on our 11 hotels, YIKES. There were also many immature (less than 1/16 inch) zebra mussels on the plates. I didn't count them all, as I don't have a microscope and they are hard to identify just using a large magnifying glass.



The hotels were in the same location as last year as shown on the map. Site 1 had 5 zebra mussels, site 2 had 20, site 3 had 3, site 7 had 1, site 9 had 61, site 10 had 6, all the other sites had no zebra mussels on the hotels.

Zebra Mussels (continued)

So how many zebra mussels are there? You make the call (your own estimate of zebra mussel population in our lake.). Here is my calculation:

Knowns – there were 4.6 zebra mussels found per square foot of hotel area, there are about 115,000,000 square feet of lake surface area.

Unknowns – what percent of Lake Washington is habitable by zebra mussels?

Calculation – 4.6 zebra mussels/ft² x habitable % = number of zebra mussels currently in the lake

- 10% habitable = 52.9 million zebra mussels
- 1% habitable = 5.29 million zebra mussels
- 0.1% habitable = 529,000 zebra mussels

Wow, these numbers are eye opening!

I saved and froze 35 zebra mussels to be taken to Dr. Mike McCartney at Minnesota Aquatic Invasive Species Research Center at the U of M for DNA sequencing. Dr. McCartney will use this information in his study of zebra mussels and future possible management techniques.

Remember: The MN DNR requires you take the following steps to prevent the spread of zebra mussels:

- Clean weeds and debris from your boats, and remove any attached zebra mussels,
- **Drain** your boat, live wells, and bait wells, and keep all drain plugs out while traveling,
- **Dispose** of unwanted bait in the trash, and
- Dry docks, lifts, swim rafts and other equipment for at least 21 days before placing equipment into another water body,
- **Do not transport** a special permit is required to transport zebra mussels for any reason.

More information on zebra mussels can be found on the MN DNR website. http://www.dnr.state.mn.us

If you find zebra mussels on our docks, boat lifts, etc. when putting them up for the winter, you can text or email me the approximate number found and I'll add it to my zebra mussel monitoring data. Text to 612-875-0410 or email to skrathe@aol.com.

Special thanks go to Mike Wosmek for setting out and picking up all of the zebra mussel hotels.



Watershed

By Skip Sustacek

Summer is slowly passing by. The summer was good to us. No big storms but short of moisture. That meant we had no watershed problems. After 3" to 4" of rain our watershed areas are working just fine.

Our plans for this fall are to revamp the ditch on the east side of Ellsworth Boat Landing. It's very full of small brush and very messy. We are working with the DNR and they are a pleasure to work with. The plan is to remove all weeds and bushes that have grown up over the years. Then we will plant flowers and grasses to improve the looks. The appearance of the landing is important to the community.

It will not be costly to the Association since we have volunteers; also, the DNR is not charging anything. The only cost will be the seed which we will split with the county. The more we do with lake people the more fun and interesting it can be.

Breaking News!

The project at Ellsworth Landing did begin on Sept. 30, 2017. The project is to clean up the ditch on the east side. Over the years it became overgrown and thick. Five men from the Lake Washington Improvement Assn volunteered their help for eight hours.

Thank you to our lunch people, Mary Jo Lyke and Sharon Sustacek who supplied coffee.

The crew had the brush piled on the parking lot. The DNR removed all the brush. There is seeding left to be done, probably not until spring due to rainy conditions.



BEFORE



AFTER



HARD WORKING AMERICANS

A big thank you to Kristy Rice, DNR Natural Resource Specialist, Trails and Waterways, Joe Norman, Meeker County Soil and Water, and Lake Washington volunteers - Mike Wosmek, Steve Ullom, Mark Johnson, Dave Rathe, Skip Sustacek and Tom & Mary Jo Lyke. A true team effort.

Other News

I have good news for the winter fishermen.

The entry to Lake Washington on the west side between Stella and Washington, off County Rd 14, has been repaired so you can drive on and off the lake with little problem.

Thanks to a local resident for this. "People are great!". Yes, we had a permit from the county to do this work.

I-LIDS

By Dave Rathe

Our I-LIDS system operated at Ellsworth landing starting April of this year. We recorded over 6,000 boat launches. It amazes me how much use our lake gets during the year.

Based on the video evidence, I believe I-LIDS is doing the job by making people more aware of AIS and the boaters role in controlling AIS.

An improvement added this year was the ability to monitor I-LIDS performance parameters from a cell phone app like voltage level, solar panel output, etc. without disassembling the unit to get at the controller.

I-LIDS maintenance and video review costs were slightly less than \$2,000 this year. Plan is to take down the system late October or November for the winter.

Thanks to Tom Hauer and Skip Sustacek for helping this year.





Water Quality And Clarity

By Dave Rathe

Lake Washington water is sampled and analyzed monthly at the deepest part of the lake for phosphorus (nutrients in the water) and chlorophyll-a (a measure of algae concentration). In the table below are the averages for this year, last year and averages since 2011. As you can see, water quality has been pretty consistent over the years. It will be interesting to see how the zebra mussel population affects water quality.

5. S.							
Year	TP ug/L	ChIA ug/L	Secchi Ft.	TSI Phos.	TSI CHIAL	TSI Secchi Ft.	TSI Avg.
2017	30.3	12.3	4.4	53.3	54.8	54.3	54.3
2016	34.6	13	4.7	54.8	50.8	55.2	53.6
2011 - 2017	30.8	13.1	3.7	53.1	54.6	59.2	55.4

Ug/L = micrograms/liter

TP Total phosphorus

ChlA Total chlorophyll-a

Secchi Ft Clarity in feet

TSI Phos, Tropic State Index for phosphorus

TSI ChlAL Tropic State Index for chlorophyll-a

TSI Secchi Ft. Tropic State Index for clarity

TSI Avg. Tropic State Index: A measure of overall lake nutrients (Afg of TSI Phos. + TSI

ChlAL + TSI Secchi Ft.

RMB Environmental Labs provides our water quality analysis.

Our lake water is also tested for clarity twice a month (via secchi disc readings) at 5 locations. Water clarity affects how far light can penetrate lake water. Many factors affect how far you can see down into the lake, the largest factors being algae and other particles like sediment. A decrease in Secchi disc depth means higher algae and particle concentration. Our lake varies in clarity throughout the year due to algae concentration, wind, rain, wave action, etc. therefore it is important to look at the average clarity as well as the year-over-year clarity. All water quality data is reported to the Minnesota Pollution Control Agency on an annual basis.

This year's average clarity test results at the 5 site locations are 6.2 feet on May 21st, 4.7 feet on June 5th, 5.2 feet on June 19th, 4.4 feet on July 3rd, 3.4 feet on July 17th, 3.9 feet on August 7th, 4.8 feet on August 27th and 4.8 feet on September 18th. Average for the year was 4.7 feet.

Thanks to Tom Hauer, Dean Shaner, and Skip Sustacek for helping collect data.

COMMITTEE REPORTS

Shoreline Captains/Membership Committee

By Cathy Klehr

Thanks to all who have renewed their membership. To recognize these members we have a listing on our web site (www.lakewashingtonassn.com) and update monthly throughout the year. Currently we have 212 paid members. Your continued support is appreciated and needed in our effort to keep our Lake Washington clean and healthy for ALL to enjoy throughout the year.

If you have not paid dues for this year, you can still do so by mailing a check for \$50 to LWIA, Box 68, Dassel, Mn. 55325. We all need to work together in supporting our lake needs.

Our Shoreline Captains have been busy visiting homes in their area throughout the summer getting names and lake addresses for the 2018 Lake Washington Directory. If you feel you have been missed, contact your shoreline captain or go to membership@lakewashingtonassn.com. We expect this directory to be completed by next spring so we can deliver the books to you then.

Special Thanks to these Shoreline Captains for all the time and effort they put into reaching out to lake residents.

Sheryl Faust Jenny Kjell John Sandstede Nancy Finkenaur

Jenna O'Brien Grace Brinkmann Jim Wendling Mary Jo Lyke

Bob Paulson Jim Barnes Cathy Klehr Sandy, Mike Wosmek

Phil Flores Sharon, Gary Daniels Christine, Steve Ullom John Bartz

Connie Paulson Ruth, John Fink Jo Lukes

For changes of address, phone, e-mail or any other information we should be aware of, please contact us at:

membership@lakewashingtonassn.com

Finance Committee

By Lyle Walker

As the 2017 season winds down, the Lake Association's financial position remains strong. A few highlights include:

- 1. Again this year, no costs were incurred for lake treatment.
- 2. The Board made the decision to donate \$5,000 to Dr. Michael McCartney at the University of Minnesota in support of his zebra mussel research. Dr. McCartney made a presentation about his research work at our spring membership meeting.
- 3. A new GPS system was purchased to facilitate and support our water quality monitoring and testing efforts. The cost for this was \$1,400.
- 4. On the revenue side, membership through October 9 is 212. This has generated \$10,600 for the Association.

Our financial position at September 30 is \$119,000 in available funds.

COMMITTEE REPORTS (continued)

Social Committee

By Sandy Wosmek

SUMMER 2017 -----

Another great lake summer!!!

Seasonals packing to leave --

Snowbirds thinking of winter --

The rest of us enjoying the fall and still some lake time.

Hope all had a good summer.

Dates to remember for 2018 ---

Annual meeting and membership - Saturday, May 5th.

Pot Luck - Saturday, August 4th.

Hope everyone has a safe and good winter.

