

Spring, 2024 Volume 28, #1

Greetings Diamond Lakers,

This newsletter contains some very interesting reading: Water Quality Report summary, Healthy Lakes and Rivers and grant opportunities, new property owners, annual meeting, workshop information and everybody's favorite event—the Boat Parade.

One reminder regarding the annual meeting: as in the past, bring an hors d'oeuvre to share; beer, wine, soda and paper products will be provided.

If you have any comments or questions please reach out to any board member.

Safe boating,

Scott

As of today, Saturday, May 11, only 2 Diamond Lakers have signed up for the workshop. Please sign up by May 24 so the Board can arrange proper resources.



It's time to pay your dues!

See page 4.

SAVE THE DATES

DIAMOND LAKERS ANNUAL MEETING

Saturday, July 20

3:00 PM, Namekagan Town Hall

WORKSHOP

Saturday, July 27

10:00 AM-12:00 Noon, Grand View Town Hall

Annual Meeting, July 20: Steve Schieffer, of Ecological Integrity Services will present an overview of the two studies (Water Quality and Shoreland Assessment). He will discuss specific findings and solutions to problem areas. He will not discuss individual properties. Schieffer's expertise is in aquatic plant surveys, plant management plans, nutrient and water budget analysis, hydrology studies, and monitoring and pulling invasive species. The following Saturday, July 27, a workshop will be held where property owners can meet one-on-one with members of the water quality committee (WQC) and board to discuss their individual property and what can be done to enhance their shoreland.

CLICK HERE

to sign up for the
July 27 Workshop

(Reservations for 1/2 Hour Sessions)

WELCOME JON AND JACKIE PEDERSEN

Jon and Jackie recently purchased the cabin at 47650 N. Diamond Lake Dr., previously owned by the McNutt's. They are excited to support and be a part of the Diamond Lake association to protect that beautiful lake! They are recently retired and live in Stillwater, MN. They have been coming up to the Cable area for over 25 years so are delighted to now become part of the lake community! Jon and Jackie love "silent" sports, including kayaking, canoeing, x-c skiing, biking, etc. They have 3 adult children and 3 granddaughters. They absolutely love Diamond Lake and are so excited to spend more time there, and meet their new neighbors.



WELCOME TODD AND KRISTEN GILLINGHAM

Todd and Kristen Gillingham are the new owners at 47850 N. Diamond Lake Drive, previously owned by Bruce Wiedemann and Robin Arendt- Their permanent residence is in Hudson, Wisconsin. They have three adult sons - twins David (Lauren) and Ben (Caroline), 32, and Jacob (Anika), 26. Among other activities, the family particularly enjoys hiking, biking,



kayaking, reading, and travel. Kristen wrote, "We are looking forward to meeting our neighbors on Diamond Lake!!"

Kristen attached this photo and stated that she will contact Bob Jacobel about joining the Diamond Lakers. Their sons and Kristen all went to St. Olaf, and she is pretty sure that at least one of the boys has taken a class from Bob.

Annual Dues and the Diamond Lake Stewardship Fund

Annual dues for 2024 of \$50 may now be paid any time.

As in the past, one option is to send a check to Diamond Lakers, Box 543 Cable, WI 54821. Also, if your bank offers a "Bill Pay" service or an ACH external transfer option, you can have a check deposited directly to the Diamond Lakers account. The routing number for our account at the Chippewa Valley Bank is 091509468 and the account number is 227256.

The Diamond Lakers Board of Directors also encourages and solicits contributions to the *DL Stewardship Fund*, a new budget category that at Board discretion may be directed towards several important goals. These include, but are not necessarily limited to: (1) replacement of worn or outdated instruments for lake water-quality monitoring, (2) support for studies of lake ecosystem and water quality, (3) a 'rainy day' fund for remediation and treatment of aquatic invasive species should the need arise. The experience of nearby lakes has shown that the latter circumstance in particular can be an enormous drain on financial resources, and that having a reserve is essential.

Fully tax-deductible donations may be given together with annual dues, or at any time during the year. They will accumulate in the *Stewardship Fund* as a part of the Diamond Lakers unrestricted year-end balance which has been growing steadily at an average of about \$500/ yr for the past dozen years. By incentivizing a new category for donations specifically aimed at longer term needs, The Board hopes that we can substantially increase that rate of growth. Results will be reported annually as part of the Treasurer's Report.

SAVE the DATE:

Saturday, July 6, 4:00 p.m.

Diamond Lake Annual

BOAT PARADE

... in celebration of the 4th of July. Decorate your boat in the theme of your choice. Gather at 4:00 in the middle of the lake towards the SE side of the lake. As last year, we will have a gathering of boats on the lake after the parade at the location we began the parade. It will be a "potluck" of appetizers to share. Bring your own beverage of choice.



2023 BOAT PARADE WINNER

Charlie Nauen and PJ Pofahl & their "Wheels on the Bus" entry!

DL Water Quality Study Completed by Bob Jacobel

Results of our two-year study of the water budget and a water quality (WB/WQ) of Diamond Lake were received by the Board this spring and will be presented at the Annual Meeting in July. With support from a grant from the Wisconsin DNR, and help from our consultant Ecological Integrity Service, the Diamond Lakers Association commissioned the study begun in 2022 to quantify flows of water and nutrients entering and leaving the lake and how they vary over the season, along with measurements of water clarity.

The WB/WQ study has been part of efforts by the Board to better understand DL and its environs with the goal of preserving, and where possible improving, the environment. Beginning with a baseline aquatic plant survey in 2021 and ongoing efforts to prevent the introduction of invasive species, the WB/WQ study of 2022-23 was the second step in helping us understand the lake environment. This was followed by a recently-completed Shoreland Assessment Study this past season (see accompanying story), together with a new DNR grant received for 2024-25 to assist lake property owners in making improvements in the lakeshore environment.

Because of the drought in the summer of 2022, the WB/WQ study was extended for a second season to acquire more representative data. But while we experienced record snowfalls in the winter of 2022-23, the growing season of 2023 was another year of below-average precipitation. In order to depict the results under more average conditions, data were put into a water-

balance and water chemistry model which uses measured flow rates and water chemistry data over the two-year period, along with historic data, to give values more representative of average years.

For the past two seasons our consultant, together with a host of DL volunteers led by Ed Wallen, have continuously measured: stream flow at the inlet from Eighteenmile Creek (the culvert near the boat launch), (2) inflow from the east wetland, (3) lake outflow in the northwest bay, along with (4) the lake level and precipitation **Together** with amounts. monthly measurements of nutrients in the lake (Phosphorus and Chlorophyll) and water clarity, these data were fed into a waterbalance model that accounts for the dynamic changes in these measurements over the season and produces results that can be viewed as time-series over the growing season or averages for the year.

Water Balance

Model results (based on data from 2022 to 2023 and scaled to a year with more average rainfall) indicate that about one-third of water coming into DL is from precipitation and two-thirds from tributary inflow and runoff from directly within the DL watershed (chart below). Of that two-thirds non-rainfall input, about 35%come s from Eighteemile Creek (including a small amount from Crystal Lake), about a 38% from groundwater springs, 17% from the east wetland, and about 9% from runoff from the land within our basin. Perhaps the surprising result here is that on average, about a quarter of the water in DL enters from places unseen groundwater.

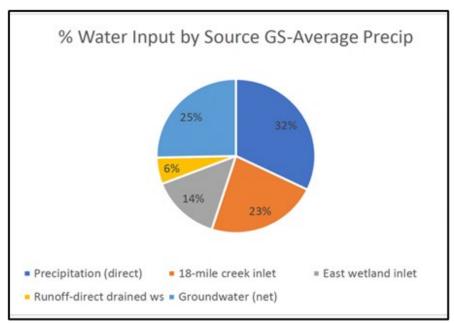


Figure 4: Graph showing the percent water budget by source during average precipitation growing season.

Water Quality

In terms of nutrient levels and water clarity, the report emphasizes the overall excellent water quality in DL but urges us to continue vigilance and adopt best practices, especially in the light of potentially more severe storms and runoff as we experience the results of climate change and greater weather variability. This ties in well with the results of our Shoreland Survey and opportunities now available for property owners to make improvements in the shoreland environment (see related story, Page 8).

As explained in the report, phosphorus is the limiting nutrient affecting algal growth in the water column and was therefore a primary focus of the report, although chlorophyll and water clarity (secchi depth) were also part of the results.

In terms of phosphorus inputs, just a bit less than one-fourth comes directly from rainwater, and the remaining three -fourths from inflow sources (inflow is more P-laden than rainwater, as expected). Of the inflow sources, just under 30% comes from the two streams. about the same is estimated to come from runoff in the watershed directly adjacent to DL, and another 10% each is estimated by the model to come from groundwater and septic system leakage (exact numbers total to 75% in the chart below). At present, none of the inputs contain high levels of phosphorus, though the report outlines ways we can be proactive with septic monitoring and limiting runoff.

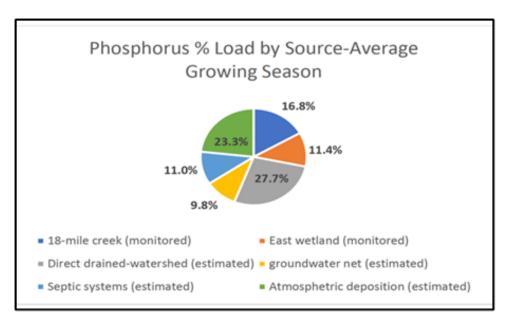
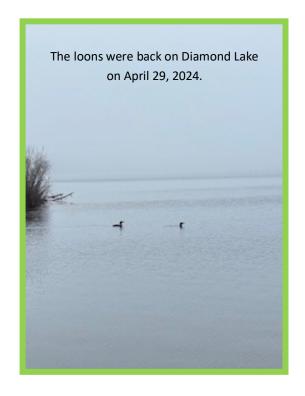


Figure 6: Phosphorus budget % by source in an average precipitation growing season.

For those interested, the full report runs to more than 50 pages and contains many more interesting charts, tables, and figures. It can be viewed on our website here, and will be discussed by our consultant Steve Schieffer at the Annual Meeting in July. Part of Steve's presentation will also cover the follow-up Shoreland Assessment Study done in 2023 and Board members will be discussing grant opportunities for DL members to take advantage of DNR funds to make improvements in the shoreland environment of their properties.

Diamond Lake "Good for the Soul"



Shoreland Assessment and DNR Funding for DL Shoreland/Habitat Improvements

Ed Wallen

The Diamond Lake Shoreland Zone Assessment was completed in late 2023. It involved two parts: part one involved a field survey of 200 feet sections of the Diamond Lake shoreland (not parcels) that was completed in August, 2023 by Bay Area Environmental Consulting, LLC. In part two these survey results were then analyzed/ mapped by Steve Schieffer of Ecological Integrity Service, LLC resulting in the report to us entitled: "Lake Shoreland & Shallows Habitat Survey-Diamond Lake" This report is available below and on the Diamond Lakers website. The assessment was made possible by a \$2000.00 gift to the DL Association through the efforts of long-time Diamond Laker, Todd Stivland. Todd is also a member of the DL Water Quality Committee.

The Assessment forms the basis, and is a guide for current and future efforts to maintain and improve the water quality/habitat of Diamond Lake. In order to assist landowners toward this end, the DL Board has secured funding to aid in the completion of several basic, pilot projects. This funding is in the form of a grant from the Wisconsin DNR and is discussed further below.

The current DNR funding falls under the "Healthy Lakes and Rivers" (HLR) program which is designed to "Improve habitat and water quality with simple and inexpensive projects for your

lakeshore property". Hence, the program will assist in the completion of several basic projects to improve the shoreland zone of DL. It dovetails with the Shoreland Assessment in which areas of concern have been identified for the Diamond Lake landowners.

The HLR funding derives from a statewide, competitive grant program. It required the submission of a proposal (and pre-proposal) to the DNR for evaluation, critique and scoring. In early 2024 we were informed that our proposal was funded. The current proposal is entitled: "DL Shoreland Improvements via the HLR program". It allows for the funding of "practices" e.g., Fish Sticks, Native Plantings, Diversion, Rain Gardens, etc. all designed to incrementally improve DL. The current grant will fund six landowners who will be reimbursed up to \$1,000./practice. Each grantee will be expected to contribute 25% in labor toward completion of a practice (In Kind contribution). There is also separate funding for technical assistance and educational components. Details of the current funding, 2024 participants, nature of the DL practices, progress, and future opportunities for DLers will take place at the membership's Annual meeting on July 20, 2024. In addition, the DL Board will offer a workshop for DLers on July 27, 2024 in order to discuss the Shoreland Assessment data for each landowner's parcel. The goal is to recruit another cohort of participants for HLR funding and discuss how stakeholders can use this information to improve Diamond Lake.

The seventy-six page <u>"Lake Shoreland and Shallows</u>
<u>Habitat Survey Assessment"</u> of Diamond Lake can be viewed here



Northern Lights 5-10-24 Seeley WI Beth & Scott Johnson's Niece, Malu Gavindan Dums

EAGLE SITING

"While kayaking we watched a bald eagle busy in the nest on the east side of the lake where the 2 eaglets were raised last year. Could we be lucky again this season and see both eagles and loons successful in raising their brood?! We live in an amazing place." Cathy & John Rosebush 5-7-24

FOX enjoying dinner with Ed and Monica Wallen, 4-11-24.



"Can you identify this? It is either a **MARTIN** or **FISHER**. He came thru our yard early morning the end of March. I've seen trails left by it in the snow previous winters. But this is my first sighting." Mary Palmer 4-22-24



SWANS







Ed Wallen spotted 2 swans in the water foraging, preening, and resting in loon cove as it is opening up. The sighting occurred in the morning on March 7, 2024- indeed a rare, early occurrence! But then on March 27 (right photo) they were back, along with the snow...eyeing the loon island.

LOON ISLAND

Due to the warm winter and early ice out, the Loon Platform was launched on March 22, and placed into the cove at the Browns. Ed Wallen assisted Trish and Mark Wilhelm in the endeavor. There was some ice forming and

leaving for a while afterwards but we hope that another Loon pair occupies the nest like they successfully have the previous two consecutive seasons. Let's hope for another pair of chicks! Mark Wilhelm







Volunteers needed for AIS monitoring

Coordinators: John & Cathy Rosebush, jrosebushjr@gmail.com

This summer of 2024 the Diamond Lakers will begin the work of a new committee for Aquatic Invasive Species monitoring. We will begin our efforts at 3 high risk areas on Diamond Lake where a minimum of 2 observations per year will need to be conducted and documented with data submitted to the Citizen Lake Monitoring Network of WI DNR. No experience is necessary: eyes on the water and learn as we go. Volunteers can check out an AIS Monitoring Kit that provides the Early AIS Detection Handbook, AIS ID laminates, water rake, magnifier, sample bags and documentation forms. For a clear picture of the process. see the CLMN informative https://youtu.be/Yz2AWgsgoAk.



Our biggest threats are Eurasian Watermilfoil and Curly-Leaf Pondweed. Both non-native species are present in numerous Sawyer County lakes and a growing number in Bayfield County. When introduced to a lake, these invasive plants rapidly spread crowding out native species permanently altering wildlife habitats and reducing the water quality we've come to enjoy for our recreational pursuits. Early detection can make rapid response possible leading to cost effective control and possible eradication. Unfortunately, the invasive Banded & Chinese Mystery Snail are present in Diamond Lake. They outcompete native species, consume fish embryos and can transmit parasites that may kill waterfowl. Other than manual removal to control populations, no other effective means are known at this time. Though not as common in northern Wisconsin, Zebra Mussels are a growing issue in our southern WI lakes. All Diamond Lakers can help monitor for these 1 inch D-shaped shells that attach to hard surfaces such as docks, rafts or boats that spend the season in the lake. They should be easy to spot in the fall when structures are removed from the water. As always, when moving boats and/or equipment between water bodies, inspect, drain, clean and dry to reduce risk of AIS spread.

To volunteer, or for any questions please contact John & Cathy at the above email.

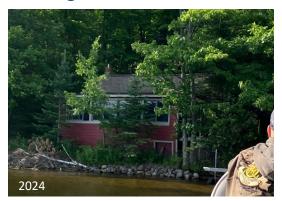
Click here for Video on

AIS MONITORING PROCEDURES



"Grandma's Cabin" Celebrating 100 Years





"Back in 1924 Grandpa acquired some land on Diamond Lake and we decided to build a cabin for Grandma. That was quite a task in those days, getting the material out here, because Bibon swamp was some hole, yes, it was. Especially in the rainy season and this particular year, they decided to work on it. So we used an old car, the old touring car which was a Saxon, a six cylinder. It had power and was strongly built because it was built out of heavy material in those days.

Read More of Chapter 7, *Diamond Lake,*from "A View From 7th Avenue" by James Goeltz
CLICK HERE

Even More About Grandma's Cabin... (48075 Chapinwood Road)

1924 cabin built for Grandma Lettie Goeltz
1926 Earl Goeltz (1) built a cabin on hill, which burned
Northland College
Herb Dutton
JoEllen Dutton and Dennis Stork
2007 Scott Byrd
2009 Scott and Beth Johnson (purchased the "non– dwelling")
2011 Scott and Beth Johnson (built cabin up on hill)

Recent-Fmails

3-14-24 Jean Hansen (<u>Cable/Namekagon Historical Museum</u>): When Herbert Dutton bought the Letty Goeltz cabin on Diamond Lake they discovered a Native American lacrosse stick given to Lettie by one of her friends. It has been on loan to us for years but has now been gifted to us by the Dutton family which we are so grateful for.

3-14-24 Audrey (Dutton) Sanderson: We had heard about the LaCrosse stick and visualized Native American kids playing, perhaps down the hill by the baseball flatland. Nor had we seen the stick. We still have much to ask Dad about!

MISSING DOCK WHEEL???

Ed Wallen reported that he recently found a dock wheel floating in the water near his dock. It's about 23" in diameter. Claimant can call Ed or Monica at (715) 798-3288.

AIS DECONTAMINATION STATION

We received a 2023 DNR grant award for the purchase and installation of an AIS decontamination station near the DL boat launch. A big thank you to Dave James for his successful efforts! This grant awards the Association ~\$2,300 to complete the project. The station will be completed later in 2024.



This year we will be offering hand-thrown mugs for sale with the Diamond Lake logo! They are available in either blue with a white logo and blue etching or in cream with a blue interior and blue logo and cream etching. Mugs are \$35 each- all orders received by June 15th will have an early August delivery date. These are being made by a relative of Trish Leaf- Trish will arrange delivery with you once they arrive. Pay by check payable to Trish Leaf, or if paying by Venmo: pay @Patti-Leaf. In the "What's This For line" indicate "Mugs for – your name".

Questions? Call or text Trish at 612.964.1176 or email at pbleaf@yahoo.com

NA-II Abia a	Trick Loof at 0073 Townson in the N. Marels Consul	AN 55244
	oupon to Trish Leaf at 8072 Terraceview Ln N, Maple Grove,	VIIV 22311
LAKE ADDRESS _		
HOME ADDRESS		
PHONE	EMAIL	
I want	_(number) of blue mugs @ \$35.00 each = \$	
I want	(number) of creammugs @ \$35.00 each = \$	
	TOTAL ENCLOSED: \$	Check or Venmo (circle)

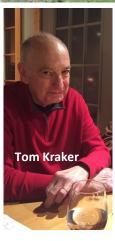


















Our Diamond Lakers Officers:

President: Scott Johnson Vice President: Ed Wallen

Secretary: Open

Treasurer: Bob Jacobel

Directors at large:

Pat Arndt
Dave James
Tom Kraker
Raye Lahti
John Rosebush
Mark Wilhelm



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Send future newsletter articles to <u>Beth Johnson</u>.