FRIENDS OF LAKE WINGRA

WINGRA WATERSHED NEWS

Promoting a healthy Lake Wingra through an active watershed community.

SUMMER 2020 • VOLUME 17 • ISSUE 2

Exciting Times

by Ben Yahr

What an interesting and exciting time 2020 has turned out to be! Friends of Lake Wingra hopes that whatever other changes you've experienced, you've had a chance to get outside and enjoy the lake. We've had lots of fun adventures and learning opportunities, hiking, fishing, paddling, finding the "Wingra ABC's", participating in the Vilas Park masterplanning process, learning about Dane County's Climate Action Plan, and flooding in the Wingra Watershed.

It has also been a year of great change for Friends of Lake Wingra. We are thrilled to announce that Casey Hanson is now the Executive Director of the organization! We believe that this change will allow for greater flexibility and impact. Casey has served as Program Manager since 2017, and brings an incredible amount of vision and passion for working with the community to improve the Lake. In addition to being a talented manager and communicator, Casey brings a strong technical background including degrees in Civil Engineering and Community & Regional Planning. Please join me in congratulating Casey and Friends of Lake Wingra on this important step forward!

We have also had some big changes in the Board of Directors. We welcome Ian Krauss and Hannah Buscemi as the new Co-Chairs of the organization! I have served as Chairman since 2014, and I'm excited to pass the torch to these two talented individuals. We also welcome Gail Epping-Overholt to the Board (see page 3).

As we reflect on the changes of the last year, it has also been exciting to look back on the last eight years that I have served on the Board of Directors for Friends of Lake Wingra. Some issues still remain- one reason that I was motived to join the Board was concern about a very bright street light at Edgewood High School that is quite disruptive to evening paddling and fishing; an issue that is still pertinent.

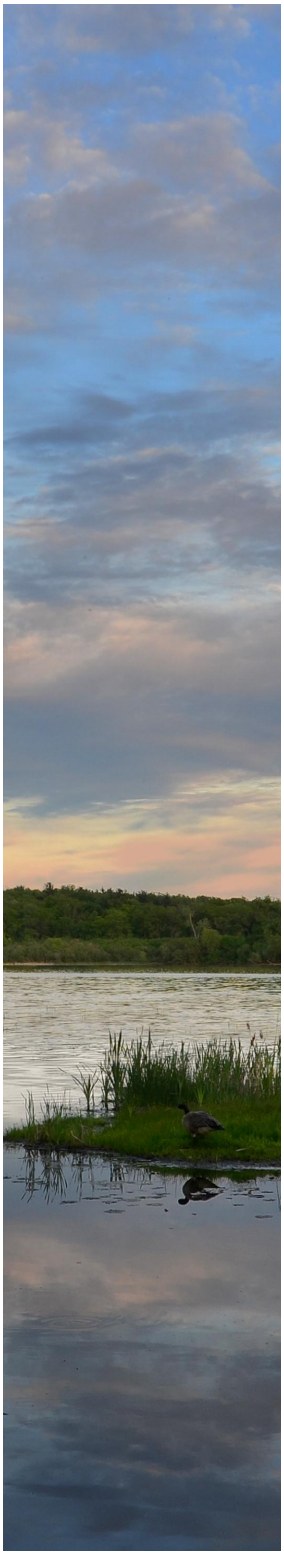
However, we have made amazing progress on numerous other important areas. The Lake Wingra Watershed Management Plan (WMP) remains a guiding focus for the organization, and significant progress has been made in its implementation. More importantly than the individual projects identified in the plan that have already been accomplished are the programs and conversations that the plan has sparked at both the city and county level. Programs like Leaf Free Streets, Saltwise, salt applicator certifications, and raingarden building programs were suggested in the Lake Wingra WMP- and these programs are now implemented and making a difference for all of the Madison lakes.

Lake Wingra is truly a unique lake. There are very other few lakes in our country that are located in cities and have the quality of nature, and the quality of experience of Lake Wingra. Whether you like walking past the lake, biking around it, sitting and observing it, fishing in it, or paddling on it; it is a treasure. This treasure is even more special because it is not developed or surrounded by buildings. For many who can't make the journey to State or National Parks, Lake Wingra is the closest thing to wilderness that they will experience. And it can be easily reached every day of the year!

Lake Wingra still needs your help and support to remain the special place that it is. As we continue conversations about how to manage plants growing in the lake, development around it, fish in the lake and birds above it, rain falling in the watershed, or views to and from the lake; we need passionate individuals to join us. Please consider a financial gift, or even better, a gift of your time to help manage our Board or the projects that we are undertaking.

See you on the lake!

ANNUAL ACCOMPLISHMENTS



A huge thank you to everyone who made this past fiscal year's accomplishments possible. This includes our board members, volunteers, donors, supporters, and partners!

102 YOUTH EDUCATION

Classrooms participated in Wingra ABC's, which consisted of an e-book, bingo, and Wingra watershed talking points

2 OUTREACH EVENTS

- Crawford-Marlborough-Nakoma NA Leaf Mulching Workshop
- I'm Unsalted (about road salt)

RAIN GARDENS 600

Front yards assessed by Badger Volunteers for rain garden suitability

61.5%

Homeowners in the Toepfer reconstruction area that elected for a terrace rain garden after we reached out to them (8 of 13 homes)

CITIZEN MONITORING 4

Number of years we've completed our amphibian monitoring program!

6 COMMUNITY CONTRIBUTIONS

- Serving on resident resource group for **Vilas Park Master Planning** process
- Collaborating with City of Madison Engineering on Green Infrastructure Study
- Went door-to-door in Vilas and Greenbush for **City of Madison Streets leaf-collection pilot**
- Commented on **City of Madison's stormwater ordinance** revisions
- Advocated for green infrastructure in **Westgate Mall redevelopment**
- Expressed environmental concerns regarding **Edgewood Stadium**

Welcome Our New Board Member, Gail!

We are thrilled to welcome Gail into our Friends of Lake Wingra Board of Directors family. Gail Epping Overholt is a senior lecturer at the University of Wisconsin and the Education Coordinator of the UW-Madison Arboretum. She holds a BS in Elementary Science Education (1987) and an MS in Water Resource Management (1993) with an emphasis on wetlands and public education, both degrees from the University of Wisconsin-Madison. Gail has worked in natural resources education for over 25 years, with a good majority of that time focusing on watershed, stormwater and Great Lakes issues. She has held board positions for the Wisconsin Association of Environmental Education, the Wisconsin Wetlands Association, the Friends of Cedarburg Bog, and a short time for Milwaukee Riverkeeper before moving north to the shores of Lake Superior. Her personal goal is to help people of all ages see the "land" as a community of soil, water, and living organisms—not excluding people. Having a special affinity for looking at issues with her eyes on the water, she has enjoyed her time exploring the shores of Lake Wingra and the flora and fauna that call it home.

Volunteer with Friends of Lake Wingra

We could really use volunteers to:

- Grow our board of directors
- Plan fundraising events
- Maintain/install rain gardens or native prairies
- Help with web design and redesign old and new posters
- Assist in marketing and social media strategies

Let's chat! We can also discuss other opportunities.
info@lakewingra.org

Friends of Lake Wingra Board Meetings

When we see a new face at a board meeting, it makes our day! Anyone is welcome to attend at any time. Have something you want to talk about? Email us at least a week in advance so it can get on the agenda.

When: First Thursday of the month from 6:30 – 8:00 (double check website for any changes)

Where: Virtual indefinitely, e-mail info@lakewingra.org if you would like to attend.

Become a Friends of Lake Wingra Board Member

We're on the lookout for experience in:

- Nonprofit law
- Accounting & budgeting
- Fundraising
- Youth education
- Marketing/Communications
- Business-nonprofit partnerships
- Information technology
- Grant writing

What We Are Working on This Year and Why!

As we present this year's work plan to you, we also want to take a moment to explain how we decide what we focus on. To take care of Lake Wingra any one of us could come up with a long list! For example, biodiversity, aquatic invasive species, terrestrial invasive species, ambiance, water quality, recreation, etc. If we took on everything at once, we would spread ourselves too thin and make it hard to complete anything meaningful. Therefore, we do what we can with persistence and the belief that we can take on more as our volunteer base grows. With that said, thank you for your support in our group and for your belief that Lake Wingra has value and serves as a natural treasure that all of us can escape to.

To guide our work at a very high level, we have pulse points. They gauge the vitality of our organization's effectiveness in achieving our mission which is to promote a healthy Lake Wingra through an active watershed community. You can see our pulse points in the image to your top right and we'll explain how we choose them and arrived where we are today.

- The 2009 Lake Wingra: A Vision for the Future guided what the future of Lake Wingra could look like during the formation of the Wingra Watershed Management. It also captured our understanding of why people love our lake. Therefore, it served as the seed for our pulse points.
- The goals the infiltration, phosphorus, and chloride categories refer to, come directly from the Wingra Watershed Management Plan. Although this is a City of Madison plan, we feel some responsibility for facilitating action to move toward achieving those goals as a stakeholder and because it fits our mission.
- The actions listed under the character category originate from your feelings and testimonials (this includes our partners and those who live, work and play near Lake Wingra).

Using those pulse points as a guide, we then determine what we can accomplish this year and create our work plan. We try to build off previous work and to amplify our efforts by partnering with other local groups and government when possible. You can check out this year's tentative work plan to the lower left (everything is COVID-19 contingent these days), and we would love to hear what excites you and if you want to help volunteer with anything!

FRIENDS OF LAKE WINGRA

PULSE POINTS

Short-Term Goal: Recover 10 percent of the lost infiltration resulting from development

- 35% participation in downspout disconnection
- 25% participation in rain barrel
- 1000 terrace rain gardens
- 1000 terrace rain gardens
- 1000 private rain gardens
- 60 commercial rain gardens

Short-Term Goal: 50 percent reduction in TP compared to no pollutant reduction controls.

- Promote leaf-free streets
- Advocate for effective waterfowl management

Short-term goal: 40 percent salt reduction by commercial applicators and a 20 percent reduction by municipal applicators

- Encourage Salt-certification and Salt Wise Practices

- Preserve recreational culture
- Encourage experiences with Lake Wingra
- Observe and advocate for biota health and minimizing invasive species threats (both aquatic and terrestrial)

FY 21 WORK PLAN

PROJECTS & EVENTS

CORE EXTERNAL PROJECTS

- Green Infrastructure Study: July 2020 - June 2021
- Vilas Park Master Plan: July 2020 - Winter 2020
- Spring monitoring partnership: Ongoing
- Salt Wise Outreach: Winter 2020
- Amphibian Monitoring: Summer 2020 and Spring 2021

TBD: COVID - 19 CONTINGENT

- Leaf-free streets - Fall 2020
- Stakeholder meeting - TBD
- Party for the Planet: September 2020
- NRF Field Trips: Summer 2021

CORE INTERNAL PROJECTS

- Refine donor stewardship
- Focus on organizational development
- Strategic planning

STRETCH CAPACITY

- Heritage plan
- Edgewood Stadium
- Invasive species
- Westgate
- Geese
- Dane County Climate Action Plan

Imagine a Neighborhood Full of Green Infrastructure

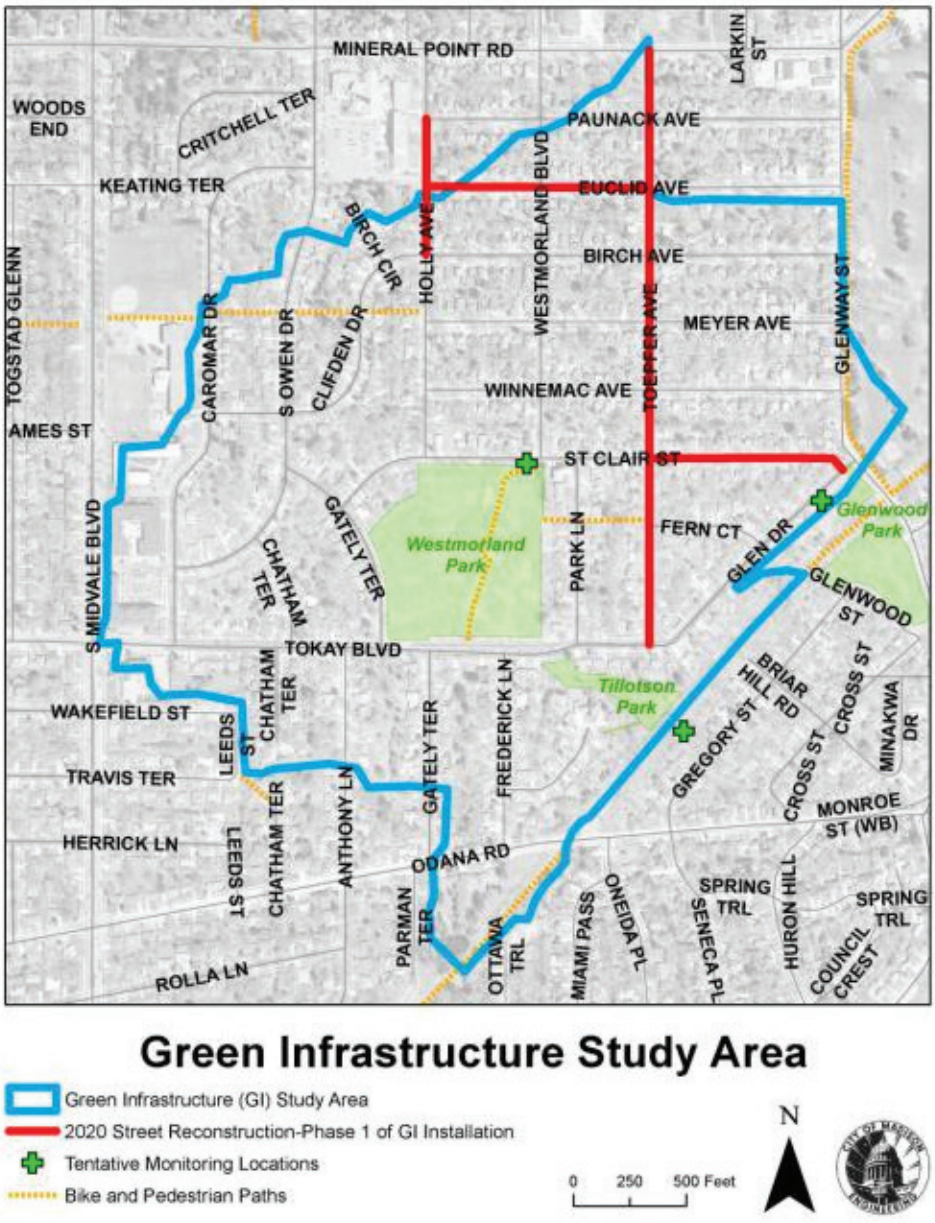
by Casey Hanson

We all likely have some internal dialogue about how impactful our individual choices are when it comes to keeping rain water on our property. This does not refer to a conversation about what helps or benefits our lakes the most, but more that feeling like you face this mammoth problem all on your own and can you really change anything. We know it's a tough thing to ask someone to do something when you can't provide a clear, immediate visual return. Yet, most of us take a leap of faith and do it, trusting we'll reap the rewards in the end.

Green infrastructure captures rainwater at a site and uses natural elements to mimic natural functions of the water cycle. It can provide many benefits like flood reduction, stormwater runoff, heat mitigation, groundwater recharge, and more.

For those of you who have had this conversation, hang on to your hat! Excitingly, the City of Madison partnered with the United States Geological Survey (USGS) to conduct a study in part of the Westmorland neighborhood to improve our collective understanding about how a watershed responds to a collection of green infrastructure practices. The study will answer questions, as presented in the Green Infrastructure Study Webage, like:

- How much effective impervious cover (sidewalk, pavement,



Map courtesy of City of Madison.

driveways, roofs etc.) needs to be converted to pervious cover (allows stormwater to soak into the ground) before a reduction in volume can be measured in downstream pipes?

- Can a waterbody impaired by urban land use (current neighborhoods) ever be able to revert to pre-settlement conditions (oak-savannah) through implementation of GI alone?
- What temporal scale should municipal officials expect when developing plans for watershed and ecosystem restoration?
- Are flood models that include large amounts of GI accurate or misleading towards long-term watershed health?

A study like this requires years before it can provide us with some answers and in the meantime we want to help homeowners participate. Over the five-year project period (2020-2025), Friends of Lake Wingra plans to collaborate with the City of Madison on the project by helping with outreach and providing some small programs for homeowners. Our intent is to walk participants through the process of installing some green infrastructure in their yard. While specific programs are still in the works, we'll likely focus on some combination of rain barrels, rain gardens, downspout disconnection, or soil amendments.

In one of the road construction projects in the study area this summer, the City of Madison will install pervious pavement or portions of city streets and rock cribs, rain basins, and rain gardens in the terrace. Upon completion, we think it will serve as a great demonstration corridor to showcase these green infrastructure practices!

If you follow us closely, you will notice that we refer to the City of Madison's Wingra Watershed Management Plan a lot for how individuals can take action to improve their impact on the lake. That plan lays out recommendations and targets for green infrastructure, determined through analysis and modeling. With the results from this green infrastructure study, we will better understand how the actual performance of implementing green infrastructure practices might help us achieve the goals set out in the watershed management plan. We're excited to participate in this project and can't wait to share what we find with you!

To learn more about the project, check out the project website: https://www.cityofmadison.com/engineering/projects/green-infrastructure-study

Mission

We promote a healthy Lake Wingra through an active watershed community.

Friends of Lake Wingra Board

Ian Krauss, Co-chair

Hannah Buscemi, Co-chair

David Thomposon, Vice Chair

Gail Epping Overholt, Secretary

Roger Bannerman

Timothy Kuhman

Advisors to the Board

Anne Forbes
Tyler Leeper
Jim Lorman
John Magnuson
John Nicol
Rebecca Power
Ben Yahr, (acting Treasurer)

Become a Friend

To become a Friend of Lake Wingra, send your tax-deductible contribution using our address below.

Please make checks to:
"Friends of Lake Wingra"

Or visit our website at:
www.lakewingra.org/donate

Friends of Lake Wingra, Inc.

PO Box 45071
Madison, WI 53744
info@lakewingra.org
www.lakewingra.org

Wingra Watershed News

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How Dane County's Climate Action Plan Addresses Watershed Issues

by Casey Hanson

Earlier this year, Friends of Lake Wingra signed on as a supporter of the Dane County Climate Action Plan (CAP). We acknowledge that climate change and watershed issues intertwine. Advocating for actions and policies that might not seem directly related to watershed issues remains important if we, as a community, want to continue to enjoy nature and our lakes.

Sediment removal project. Photo courtesy of Dane County.

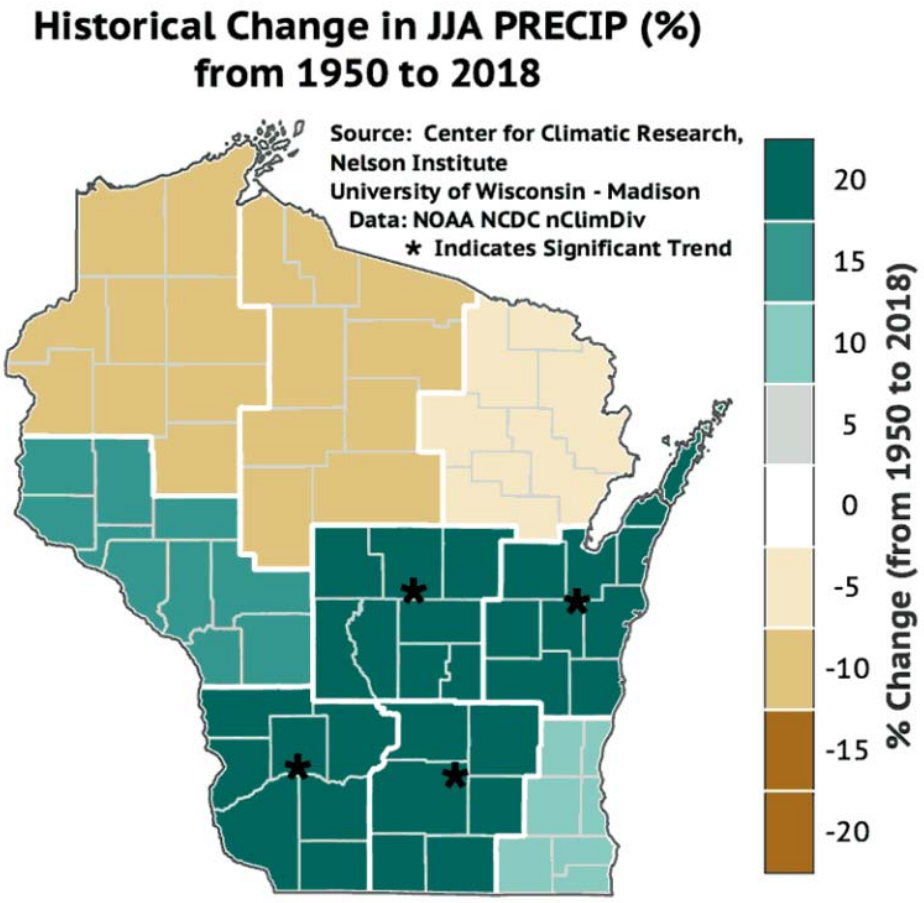
On July 14 we co-hosted a webinar with Dane County Executive Joe Parisi and Office of Energy & Climate Change staffer Kathy Kuntz to learn about the CAP and want to share a bit of what we learned. CAP's overarching goal, from an emissions standpoint, aims for at least a 45% reduction in greenhouse gas (GHG) emissions by 2030 and aims for net zero emissions by 2050. They collectively refer to that goal using the term, "deep decarbonization" and the goal stays consistent with what the Intergovernmental Panel on Climate Change (IPCC) recommends.

Now that we understand where the X on the map is, how do we get there? Dane County created a baseline of greenhouse gas emissions at the County level. By setting a goal with these baselines in mind, Dane County can identify the most effective opportunities to attain these goals and update them as we all learn from taking steps to get to our "X on the map."

While it's important to identify effective opportunities, it's equally important to understand the priority of the different actions. The CAP approaches deep decarbonization in four steps:

1. Include everyone in the process. This requires team effort and that includes participation from everyone, including you!
2. Increase efficiency first. A baseline model estimated that a little over half of Dane County's GHG emissions related to buildings (36% of emissions are electricity and then another 16% for the natural gas and other fuels that heat buildings -- 9% residential, 7% commercial). Optimizing how efficient our buildings operate can help reduce the amount of effort and resources required later. It's like pumping up a half deflated tire and greasing our chain before a bicycle ride.
3. Electrify everything. Transitioning buildings and vehicles away from using fossil fuels, to electricity, is a way to reduce emissions because we can make electricity cleaner whereas we don't have that option with gasoline.
4. Offer clean electricity. Coal accounts for 55% of Wisconsin's electric generation. Wisconsin also spends $10 billion a year importing fossil fuels into our state and could instead invest that money in a local renewable energy economy.

If we zoom out, nature reminds us everything connects. We know trying to reduce our emissions and expect change in the climate is like trying to turn a cruise ship at full speed. It'll take some time. While we're waiting, the prudent thing to do is make our communities as



climate-resilient as possible.

The Wisconsin Initiative on Climate Change Impacts (WICCI) is a DNR-UW partnership of climate experts that have researched climate impacts in Wisconsin. They tell us to expect southern Wisconsin to continue to get hotter and wetter. This highlights the importance of having a climate-resilient infrastructure system. Utilizing green infrastructure will help us get there. In an urban watershed like Lake Wingra, infiltration (which green infrastructure achieves) will remain a high priority. The Wingra Watershed Management Plan lists infiltration as one of three main areas of concern. Over the last few years, Dane County has also focused on different land purchases like the Pheasant Branch Conservancy expansion, to not only promote conservation but help address watershed issues, like stormwater runoff.

Now that we've zoomed out and reviewed the big interconnected picture as it relates to our watershed issues, let's dive back down into the world of electricity and energy efficiency and how it relates to water. Moving water out of our aquifers and into our homes and buildings requires a lot of energy. The CAP will address the water-energy nexus through several actions. Some include: a short term goal to decrease per capita water demand by 20% by helping with residential water efficiency and rainwater capture; the Madison Metropolitan Sewerage District will identify ways to reduce its energy demand and dependency; and the CAP also calls for an assessment of what a net blue model ordinance would look like for a water-neutral community growth.

Dane County has mentioned that for our community to achieve deep decarbonization, everyone must be involved. If you found this interesting here are a few high-impact ways you can take action:

- Read the Dane County Climate Action Plan, reach out to the Office of Energy & Climate Change if you want to be involved or learn more about a particular part that excites you.
- Talk to your favorite business, neighborhood associations, and other groups to let them you support this plan and encourage them to sign on as a supporter.
- Let us, Friends of Lake Wingra, know what excites you about the plan and how you see us supporting it as we move forward.

Pondweeds: Diversity in Lake Wingra

by Rex Merrill

As you dip a paddle into Lake Wingra during mid-summer and maneuver through the great mats of invasive Eurasian watermilfoil (*Myriophylum spicatum*), you may not notice the wide diversity of native aquatic plants that are also present in our lake. You'll find them closer to shore, where the water is easier to navigate. Many of these submerged species are commonly called pondweeds. Let's look at some of the most common pondweeds in Lake Wingra. Good descriptions and illustrations of these plants can be found at https://minnesotawildflowers.info/.

The name "pondweed" is used for a variety of submerged aquatic plants but is associated most often with the genus (*Potamogeton*). Don't be put off by this five- syllable name; it rolls off the tongue easily once you learn it. Potamocomes from the Greek root for "river" and is found in the words hippopotamus (river horse) and Mesopotamia (between two rivers). *Geton* means "neighbor" referring to the still water near a river where most *Potamogetons* grow.

Of the 24 species of *Potamogeton* found in Wisconsin, there are at least ten species found in Lake Wingra. All *Potamogetons* have small, inconspicuous flowers on spikes that poke a few inches above the water like those of *Myriophyllum*, but unlike *Myriophyllum* with its feather-like leaves found in whorls along its stems, *Potamogeton* leaves are borne singly along its stems and can take a variety of forms. In fact, the easiest way (though not the most conclusive way) of identifying species of *Potamogeton* is by their leaves.

The most common species of *Potamogeton* in Lake Wingra is *P. illinoensis* (Illinois pondweed).

"*Potamogeton illinoensis* Morong" by Andrew Hipp

As with a few other less common species in our lake (*P. natans, P. nodosus*, and *P. gramineus*), it may have two different leaf forms: submersed and floating. Both kinds of *P. illinoiensis* leaves have elliptical blades that are about 2" to 8" (5 cm to 20 cm) long and ¾" to 2½" (2 cm to 6 cm) wide. Submersed leaves are translucent with wavy edges, while floating leaves are dark green and firm.

Other common species of *Potamogeton* in our lake have only submersed leaves. The bright green, oval leaves of *P. richardsonii* (Richardson's pondweed) can be as large as 1½" wide by 5" long (2 cm x 12 cm) with bases that clasp the stems. *P. praelongus*

"*Potamogeton richardsonii* (A.Benn.) Rydb." by Matthew Wagner CC BY-SA

(white-stemmed pondweed) has leaves that appear like the previous species, but it is distinguished by having white, zig-zag stems. *P. compressus* (= *P. zosteriformis*) lives up to its common name (flat-stemmed pondweed) and has rigid, narrow (¼" by 8" or 0.5 cm x 20 cm) leaves. The invasive *P. crispus*

"*Potamogeton crispus* L." by Matthew Wagner

(curly-leaved pondweed) leaves, with their wavy margins, look like small green lasagna noodles (1/2" by 5" or 1 cm x 10 cm). Finally, there is a pondweed that botanists once classified as *Potamageton pectinatus*, now named *Stuckenia pectinata*.

"*Stuckenia pectinata* (L.) Börner" by Robert Freckman CC BY-SA

Among its many common names, I prefer fennel-leaved pondweed because of its clusters of very narrow (l mm wide) leaves that look like the many fine leaflets of fennel.

The next time you venture into Lake Wingra in your canoe or kayak, be sure to paddle past the watermilfoil to the shoreline. See how many of these native species you can spot.

THANK YOU!

Thank you to all of our volunteers who have provided some capacity of support and resilience in helping further our mission this past fiscal year. We would not exist or be able to complete a majority of our work without your help!

Amphibian Monitors: David Liebl, Perri Liebl, Leah Owens, Ann Rivlin, John Shillinglaw

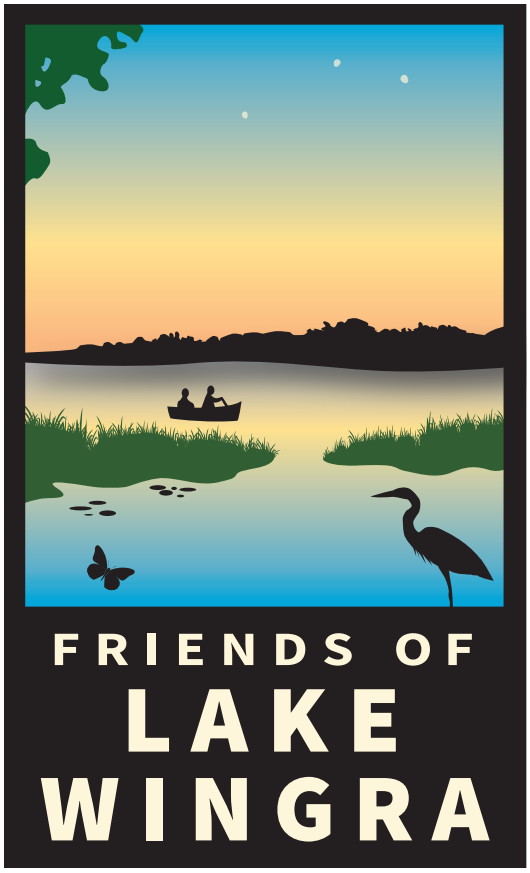
Badger Volunteers: Matthew Bosshardt, Hannah Cochlin, May Jagodzinski, Philomena Lindquist, Nicholas Loew, Hana Romero, Anna Schmidt, Emily Snelson

Board of Directors: Roger Bannerman, Hannah Buscemi, Timothy Kuhman, Ian Krauss, David Thompson, Ben Yahr

Green Infrastructure Study: Sarah Young

Stay vibrant in a carribean blue Friends of Lake Wingra t-shirt! These shirts are so comfy; you'll never want to take it off. Proceeds go to fund our projects and outreach efforts.

Cost $20
Buy one at https://www.lakewingra.org/shop-to-support



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