

# FROM THE WATERSHED streamings

Oconomowoc Watershed Protection Program Newsletter



## 2024 UPCOMING EVENTS

TUES / DECEMBER 19 / 2023

**Farming for Soil Health  
Winter Workshop**

UW-Whitewater

[farmersforlakecountry.org](http://farmersforlakecountry.org)

SAT / FEBRUARY 3

**Luminary Walk**

Camp Quad

[tallpinesconservancy.org](http://tallpinesconservancy.org)

SAT / 8A-12P / MAY-OCTOBER

**Oconomowoc Farmers Market**

Bank Five Nine Campus Lot

155 W. Wisconsin Avenue

[oconomowoc.org](http://oconomowoc.org)

SAT / JUNE 22

**Lake Country Clean Water Festival**

Pewaukee Lake

[cleanwaterfestival.com](http://cleanwaterfestival.com)

SAT / JUNE 29

**10th Annual OWPP Paddle**

[oconomowocwatershed.com](http://oconomowocwatershed.com)

SAT / AUGUST 10

**16th Annual Ride to the Barns**

[tallpinesconservancy.org](http://tallpinesconservancy.org)

## A SHARED VISION OF SUCCESS

### CELEBRATING THE MASON CREEK PROJECT

by Erik Joost, OWPP Program Director



Group portrait at the ribbon cutting celebration at Mason Creek. Photo by Eddee Daniel.

Looking at Mason Creek today, it is difficult to remember its prior condition as a historically-channelized ditch. Celebrated with a ribbon cutting ceremony in September, the successful Mason Creek Remeandering Project involved returning a portion of the creek to a natural, meandering course to handle periods of high water flow and reduce the movement of phosphorus-laden sediment to downstream properties and North Lake. This project began with a vision of what the

*[continued on page 5]*

## THE LOFY FARM – A MULTI-FACETED APPROACH TO LAND STEWARDSHIP

by Tom Steinbach, OWPP Program Advisor

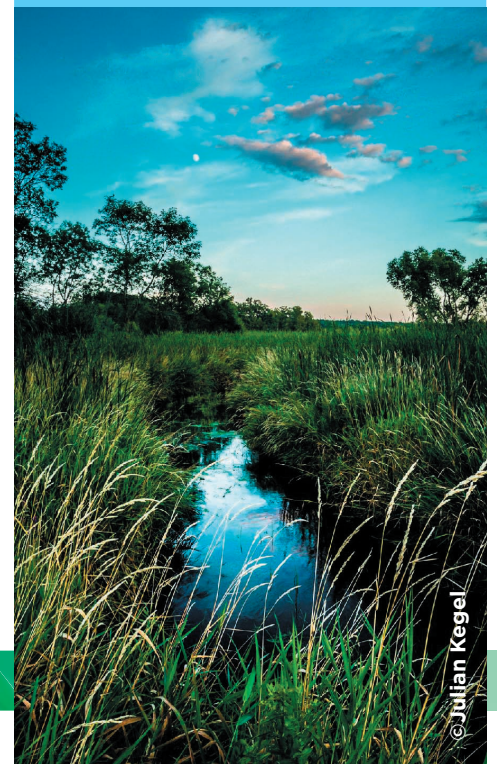
Driving on Hwy 164 north of Pleasant Hill Rd in Richfield, you will notice farm fields lush with cover crops. This is the Herb Lofy farm and is just one example of the practices Herb uses throughout the 154-acre farm that has been in his family's care since 1855.

Herb and his wife Sharon have been farming here since 1981 when they took over the farm operations after Herb's father started to retire. Before that, Herb's grandfather and great-grandfather farmed the land after receiving some of the land through the Homestead Act of 1862. A dairy farm for decades until stray voltage took its toll on production, Herb now cash crops corn grain, beans, alfalfa, and wheat in strategic rotations throughout the acreage. Utilizing cover crops for more than ten years without financial subsidies is



Herb Lofy standing amongst his cover crop of oats and radish.

*[continued on page 5]*



©Julian Kegel



# CUTTING-EDGE DRONES INCREASE PRODUCTIVITY FOR FARMERS

by Erik Joost, OWPP Program Director

Farmers for Lake Country recently completed its 2023 Aerial Seeding of Cover Crops Program. Nearly 1000 acres of aerially-applied cover crop seed was spread in early September. The ability to get the cover crop seed on the ground before the primary crop is harvested allows for an earlier start for the seeds to germinate and produce deeper root structures compared to a drilled cover crop planted weeks later. By the time colder temperatures arrive, aerial-applied seed has produced more green biomass and absorbed more nutrients compared to seeds planted weeks later. These benefits are accelerated in the spring since those plants are already further along in their life cycle. They are ready to continue growth, establish deeper root structures, accumulate more nutrients, and provide cover to help limit erosion.

Following the trend established during the last couple of years, all 2023 FFLC aerial seeding was completed by battery powered drones. We transitioned from using helicopters to drones in the application of seed due to significant increases in drone technology. Just in the past two years, the drones used in the program have increased payload from 50 pounds to more than 115 pounds, as well as increasing the flight time.

In 2020, our spreading rate averaged 12ac/hr. Now it is 40ac/hr., a 330% increase in productivity!

## WHY PLANT COVER CROPS?

Cover crops often reduce the need for herbicides and other pesticides. And, they typically lead to improved crop yields by enhancing soil health. Cover crops also hold



soil in place, which in turn prevents soil erosion while reducing non-point source pollution caused by sediments, nutrients, and agricultural chemicals. 🌍



*Save the Date!*

**OWPP PADDLE**  
**SAT / JUNE 29 / 2024**

**YOU'RE NOT GOING TO WANT TO MISS THE NEXT OWPP PADDLE!**

THE LOCATION OF THE EVENT IS YET TO BE DETERMINED, SO STAY TUNED FOR FURTHER DETAILS.

[economowocwatershed.com](http://economowocwatershed.com)

## THIS SUMMER'S OWPP PADDLE WAS A CAN'T-MISS EVENT!

by Erik Joost, OWPP Program Director

The Paddle event for 2023 was held on North Lake, where we were able to directly demonstrate how the lake's tributaries have had an impact on its ecology over the past several years. We were fortunate to have the event hosted at the North Lake Yacht Club, which provided an exceptional access point to the water and the ability to explore a portion of the Oconomowoc River that can sometimes be difficult to access.



As our attendees have become accustomed to, the optional trash removal activity was in full effect. Some of the more eye-catching items removed included: part of a rubber tire, piece of a kayak paddle, pile of firework remains, and half of a bowling ball (now we know what the inside looks like)! Who would have guessed that would be waiting around to be found! The event was wildly successful, with nearly 100 people gathering from throughout the Lake Country area and beyond. Attendees paddled off in groups with local professionals leading the way to sites around the lake where they were able to interact with Naturalists from Schiltz Audubon who described the surrounding environment and lake ecology. 🌍



# SCIENCE CORNER

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 Phosphorus  
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## PHOSPHORUS - WHAT ARE THE SOURCES?

When we started our watershed protection program in 2014, we were quite confident we knew what we were facing, including the sources of phosphorus.

Phosphorus is present, and needed, in all living organisms. Therefore, all waste from life forms, including humans, contains phosphorus. Stormwater also contains phosphorus as soil particles with phosphorus attached are collected from streets, parking lots and lawns. The large stormwater pond recently constructed on Worthington Street is designed to capture this source. Around lakes, phosphorus can be found in runoff from lawns, eroding ditches and swales, and septic systems that are not operating properly. Another source is falling leaves, which are very high in phosphorus. For this reason it is important not to rake leaves into the street or directly into our lakes and rivers. And, a healthy amount of phosphorus can be found entering the surface waters of our watershed from runoff from farm fields and eroded shorelines and stream banks.

Recently we learned of a potential source which we hadn't thought about. Did you know that the fireworks we blast into the air each year contain about 10% phosphorus? In 2021, we exploded more than 410 million pounds of fireworks into the air in the United States! This means that 41 million pounds of phosphorus was cast into the air. As it fell to the earth, some fell directly into our waterways and lakes. Something to think about the next time we hold our fireworks shows out over our lakes or blast those bottle rockets off our piers.



In summary, there are many sources of phosphorus that affect our water quality negatively by feeding algae and aquatic plant life. Remember, only one pound of phosphorus fuels the growth of 500 pounds of algae. Some of these sources will be easier to address than others. You can help by controlling runoff from your property, using fertilizers wisely, keeping leaves out of the water, and using fireworks wisely. 🌍

## DREDGING — WHAT DID THE NUMBERS SAY?

by Erik Joost, OWPP Program Director

Dredging North Lake was not done only for the visual and recreational benefits of the lake. Removing the dark mucky organic sediment was important for the reduction of phosphorus. Phosphorus has properties that enable the element to bind and hold tightly to soil particles, so the mucky soils that were removed are just the right type to hold a large concentration of phosphorus. That reason alone is why phosphorus had a large influence on the project.



North Lake is impaired for phosphorus, and phosphorus is released from lake bottom sediment into the water when it is disturbed and/or through diffusion. The sediment that was deposited on the north side of North Lake was there because of prior issues upstream, which caused the silt to flow down and settle to the bottom. Having that sediment in the lake is equivalent to leaving a large

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# RECOGNIZING CONSERVATION FARMING PRACTICES

by Paul Meuer, TPC Land Protection Manager

Many local farmers are committed to implementing Best Management Practices that promote soil health and protect our local waterways and should be recognized for those efforts. A new program, launched this year by FFLC, encourages these producers to take pride in the conservation practices in place on their farm while providing an opportunity to inspire other area farmers to explore integrating these practices on their own land.

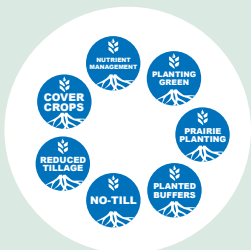


Known as the Field Signs Program, program participants are able to showcase up to four environmentally friendly strategies, including:

- COVER CROPS
- REDUCED TILLAGE
- NO-TILL
- NUTRIENT MANAGEMENT
- PRAIRIE PLANTING
- PLANTING GREEN
- PLANTED BUFFERS

If you are a farmer, would like more information about the program and are located within the Oconomowoc River Watershed, please contact Erik Joost at [ejoost@oconomowoc-wi.gov](mailto:ejoost@oconomowoc-wi.gov) or call 262-490-2222. For those outside of the Watershed, reach out to Paul Meuer at [paul@tallpinesconservancy.org](mailto:paul@tallpinesconservancy.org) or call 262-369-0500.

Each order package comes with a 36 x 14 FFLC sign and up to four individual practice signs, metal posts, and stainless-steel mounting hardware. Please note that there is limited availability and signs will be provided on a first-come, first-served basis. 🌱



## DREDGING...

[from page 3]

phosphorus bank for algae and weeds to withdraw their favorite nutrient.

Pre-dredging and post-dredging samples were taken from the lake bottom. As a result, we learned that 19,913 lbs. of phosphorus was in the 124,745 cubic yards of sediment that was removed. Wow, that is a lot of phosphorus in the muck! Now, not all phosphorus in the muck is available for algae and weeds as some of it is buried too deep for those organisms to reach. The portion of the lake bottom that is available for plants and organisms we will call the “active layer.” In the active layer, pounds of phosphorus were reduced from 2,611 to 1,257, and



decreased the annual release from 94 lb./yr. to 45 lb./yr. The annual release comparison will let us know what kind of an impact we could expect the dredging project to have on the lake’s water quality. Released phosphorus from the dredged area is now 49 lbs. per year less than before. Considering that 1 lb. of phosphorus in the water can support up to 500 lb. of algae, North Lake should see reduced intensity on algae blooms in the near future. Early 2023 water clarity tests proved that to be the case, showing increased visibility later into the season than recent history. Let’s hope this becomes a trend and continues as long as possible.

For North Lake to retain this level of improvement, it is crucial to reduce soil erosion inputs from the tributaries that fill the lake. 🌱



## A SHARED VISION OF SUCCESS... [from page 1]

1,600 foot stretch of stream “could be,” an idea that at times seemed almost out of reach. Our team faced and ultimately conquered a number of challenges along the way, including heavy rains that flooded the project site.

Fortunately, the erosion protection that was installed prevented a wash out. Digging equipment also unearthed an artesian aquifer, caused by the heavy precipitation adding downward pressure on the water table. This resulted in groundwater surfacing in a small geyser!


## THE SILVER LINING?

The temporary back-flow offered an idea of what the stream would ultimately look like once it was connected to the main stem of the creek. From land acquisition, grant writing and engineering to site preparation, construction and final execution, the project’s success was due to a number of



Photo by Eddee Daniel.

partners coming together to meet the end goal of water quality improvement. Through great partnerships like this, obstacles were overcome and our vision was realized.

The major partners for the Mason Creek Project included Tall Pines Conservancy, the Oconomowoc Watershed Protection Program and City of Oconomowoc, North Lake Management District, Wisconsin Dept. of Natural Resources, Stantec Engineering and Wondra Construction. Additional partners included Trout Unlimited, Waukesha County, the Town of Oconomowoc, Town of Merton, Field & Stream and the Corp of Engineers. Many thanks to the donors who provided financial support. 



**Luminary Walk  
at Camp Quad  
Saturday, February 3rd**

**candlelit stroll  
gourmet chili**  
created by Chef Earl Gesling  
of The Natural Way

**hot apple cider & s'mores  
outdoor bonfire**

**Adults: \$10  
Kids 12 & under: \$5  
(2 yrs & under: free)**

Register at:  
**[tallpinesconservancy.org](http://tallpinesconservancy.org)**  
or call 262-369-0500

  
Hosted by: 

## THE LOFY FARM...

[from page 1]

testimony to Herb’s belief in the benefits of this practice. “I want to have something covering the ground all year to hold the soil in place, preserve nutrients, and maintain and improve soil health every year. It’s really just common-sense farming,” he explained.


Included in their farming practices are no-till, vertical till, and maintaining buffer strips along the Coney Creek, which flows through the farm. They also have installed raised-bed vegetable gardens where they plant potatoes, tomatoes, beets, lettuce, carrots, and peppers. The raised beds are a no-till system, provide a relatively weed free garden, are easy to maintain, and are highly productive as long as the deer are kept at bay. Another example of Herb’s diligence and concern for the land is his attention to detail. While recently visiting with Herb, he pointed out a small area where he will be addressing soil compaction.

Coney Creek is a cold, spring fed stream that flows south through the farm and eventually through Richfield Historical Park where it connects with the Oconomowoc River. It supports trout and water cress when conditions are right.



The Coney Creek with watercress.

In 2021, Herb, Sharon, and the Richfield Historical Society placed 26 acres of the farm into a conservation easement to preserve this area from development. The easement was granted to Tall Pines Conservancy and will protect the land from development in perpetuity.

In summary, there is a wide variety of conservation practices in place on the Lofy farm, largely due to the Lofy’s persistence in properly caring for soil health and longevity, and out of respect for the ancestral heritage of their farm. A great example of success in agriculture while protecting the land and water resources of the Oconomowoc River Watershed. 

**FARMING FOR SOIL HEALTH**

# WINTER WORKSHOP

REGISTER AT: [farmersforlakecountry.org](http://farmersforlakecountry.org)

**DECEMBER 19, 2023**

UW WHITEWATER COMMUNITY ENGAGEMENT CENTER  
1260 WEST MAIN STREET, WHITEWATER, WI 53190

SMALL GROUP BREAKOUTS  
FARMER PANEL DISCUSSION  
NETWORKING OPPORTUNITIES

LUNCH FEATURING  
LOCALLY PRODUCED FOODS




## QUARTERLY MEETING WEBINAR:

### LAKE RESPONSES TO WISCONSIN'S CHANGING WINTERS

**DATE** December 7, 2023      **TIME** 6:00 PM - 7:30 PM

REGISTER AND LEARN MORE AT:  
[lakecountrycleanwaters.org](http://lakecountrycleanwaters.org)



**ZACH FEINER**  
Research Scientist,  
University of Wisconsin-Madison

## WHO'S WHO

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[oconomowocwatershed.com](http://oconomowocwatershed.com)   [tallpinesconservancy.org](http://tallpinesconservancy.org)   [farmersforlakecountry.org](http://farmersforlakecountry.org)   [lakecountrycleanwaters.org](http://lakecountrycleanwaters.org)



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