FRIENDS OF THE MUKWONAGO RIVER



A Letter from the President

While Friends of the Mukwonago River and many other people and entities have continued to work to protect and keep the Mukwonago River watershed in a healthy condition, we must remain vigilant and dynamic in our roles as stewards in a changing world. Landowners, local land trusts, lake districts, yacht clubs, camps and schools, individuals and groups work at their own pace and in their own ways to further the mission of the Friends, by way of education, advocacy and promotion of sound land use.

We look to those folks who become citizen monitors in the lakes and rivers, the scientists with our universities and schools, their students who learn about the watershed, and volunteers who help do the work, to disburse the knowledge and awareness of the watershed. Some of their knowledge will be shared in this newsletter.

We need all of you to watch and monitor changes in the landscape, water and air. We need each other to be the eyes and ears of the watershed to ensure its health before changes become irreversible.

There are several lands that have been protected in the watershed, with the Nature Conservancy focused on the Pickerel Lake and Crooked Creek areas. The Waukesha County Land Conservancy is going to prioritize Jericho Creek and its headwaters, and the Kettle Moraine Land Trust, the Lake Beulah area of Walworth County. Protection for some pristine land, highly threatened species and areas of special concern will help us to keep the watershed in good condition. Waukesha County is revising its Park and Open Space Plan, which will benefit the Mukwonago River watershed by identifying areas that are especially important to the quality of the waters.

Friends thanks you for your work on your property removing invasive species and restoring native habitat. We appreciate your charitable giving which allows us to continue our work. Together we can sustain the value of the watershed, partnering and preserving, working and playing, monitoring and questioning. We are the ones best suited for this work, and we will continue with your assistance.

Please remember Friends of the Mukwonago River in your year-end planning and giving.

Thank you,

Ezra Meyer, President

2017
NEWSLETTER

INSIDE

Celebrating local conservationists

Crooked Creek Preserve

Mukwonago River
Wetland
Restoration

Mussel Survey & Observations

& More

OUR MISSION

To protect the Mukwonago River and its associated watershed ecosystems by way of education, advocacy, and promotion of sound land use throughout the watershed.

Profiles in Courage

Celebrating the work of local conservationists

By Laurie Lawlor, Pickerel Lake, Mukwonago River watershed

Thanks to recent grants from Friends of the Mukwonago River through the Weed Management Area Forest Grant Program of the Wisconsin Department of Natural Resources, Jack and Marcia Boeing, Jim Marrari and Barb Carstens, and Tom VanDenBogart, a member of Camp Charles Allis, have been able to continue brave and hopeful work clearing invasive plants and nurturing native species.

The three different properties range in size from five to 160 acres. Each has its own distinctive ecosystem within the Mukwonago River watershed. The grants, distributed over three years beginning in 2015, have helped pay for clearing, herbicide treatments and preis a recently purchased TNC property, 107 acres of wetland, oak savanna and upland forest, formerly known as the Chapman Hills Girl Scout Camp in Walworth County. About 245 feet of the Mukwonago River flows along the northeast corner of the tract.

Looking back on their early experiences, the Marraris and the other grant recipients agree that restoration was a much bigger job than what they originally had imagined. "When we started removing invasives, I thought well, that's not so bad; three or four years and I'll be done," says Jack Boeing, laughing. "Little did I know that this was going to be a way of life."

"It's not a do it, get it done and walk away kind of

"Although conservation requires a long-term commitment and a large-scale vision, the work itself is local and intimate, rooting us in our own place, awakening us to our own time, moment by moment. It is joyful work, however hard it may be. In the face of loss, it is brave and hopeful work."

—Scott Russell Sanders, "A Conservationist's Manifesto" Coming to Land in a Troubled World

scribed burns to remove everything from garlic mustard to buckthorn.

Restoration is a neverending job, season by season, year to year. "Mother Earth needs places to regenerate herself," says Jack Boeing, who's been an energetic steward of 160 acres of pristine wetland, prairie and upland oak savannah since purchasing their property in 1984.

"This is really a labor of love," says Jim Marrari. He and his wife, Barb, bought five acres 11 years ago and live there full time. They have been removing invasives to restore an oak savannah on a steep slope. Their land is almost completely surrounded by property owned and managed by The Nature Conservancy (TNC). To the south is 120 acres of wetland and springs that serve as one of the Mukwonago River headwaters. To the north

job," says VanDenBogart, a 20-year member of Camp Charles Allis. "You have to be willing to evaluate what you need to do and keep at it." VanDenBogart and other volunteers have been helping restore 26 acres.

The private camp, founded in 1908, includes upland oak savannah and a tamarack bog on the northern shore of Lake Beulah. When the camp began, it attracted city dwellers who came from Milwaukee by trolley, disembarked in Mukwonago, walked to Lake Beulah and then took rowboats to Camp and camped in the woods in tents. Today, much of the restoration work is done by camp volunteers.

Determination, energy, patience, curiosity and wonder are key qualities for long-term conservation efforts.



What has kept these grant recipients going? What has inspired them to not give up?

Inspiration for conservation

New vistas are Jack Boeing's inspiration. Years of working steadily to remove invasive, choking brush and plants and doing regular burns has dramatically opened up the landscape. "You can see clear across the wetland now. It's amazing," he says. "Once you get started doing restoration, the work is infectious. You see the results and how nice it can be."

Jack says that when he started, he hoped he'd have the 160 acres cleared of invasives by the time he was 75. "Now I'm 76 and it's basically pretty much cleared except for two small sections by the lake," he says, smiling. Ongoing work focuses on maintaining the native prairie, wetland and upland with regular prescribed burns and vigilant removal of any rogue invasives. One of his favorite jobs is acting as a kind of modern-day Johnny Appleseed, gathering native seeds from his prairies in a bucket and planting them where they're needed.

Once native plants and seeds are liberated from invasive ground cover and can begin to germinate and grow in full sunlight, wonderful surprises emerge. The Boeings have discovered gems such as cinque flower, fringed gentians, lady tresses

"Once you get started doing restoration, the work is infectious.
You see the results and how nice it can be."

orchids, rough blazing star, turtle head, nodding onion and rare wild quinine. They have nearly four different kinds of milkweed and in summer, native prairie grass grows tall enough on either side of one of their gravel roads to create a magical kind of tunnel.

The return of native plants and pollinators welcomes animals and insects that may have been long gone from the landscape. Prodigal populations of Luna moths, a very rare white admiral, and other bees and wasps, monarchs, and a variety of giant swallowtails have been spotted on their land by the Marraris, who have seen blue-spotted salamanders, fox squirrels, and rare Blanding's turtles. Spring peepers, chorus frogs and leopard frogs have such ear-piercing songs in spring and summer that the Marraris joke that visitors ask how they

can possibly sleep here.

Jim and Barb are avid bird watchers. Jim is coordinator for the Walworth County for the Wisconsin Breeding Bird Atlas, a five-year, statewide project to document all the birds breeding in Wisconsin; to date, he's documented 153 bird species on their property alone. Among their personal favorites are trumpeter swans, Arcadian flycatchers, wood thrushes, scarlet tanagers, cerulean warblers, red-headed woodpeckers and great horned owls, which have been seen nesting in their woods.

Encounters with so many different native plants, animals and insects are a big part of the reward for their conservation efforts. "We just have to look out the window and we'll see something amazing. I hope to never lose that wonder," says Barb, who was originally attracted to their land because of the upland woods and white pine trees that reminded her of the Black Hills in South Dakota where she grew up. "There's always something happening here no matter what the season. Getting outside always lifts your spirits."

Marcia Boeing echoes this enthusiasm. "Living on this farm is like a blessed, stress-free, contented life. You have this quiet view of nature all the time." Marcia bred and raised Tennessee Walkers on their property for many years after they built a stable and a house in 1985. At one time, she took care of more than 30 horses. Her last horse, Huey, who was born here sixteen years ago, now has a pasture to himself.

Marcia has become a devoted nature photographer and assists with the raising of baby prairie plants, a



skill that reflects her instincts nurturing foals and horses. With permission, Marcia and Jack recently rescued 52 prairie plants from a bulldozer razing on a school construction site in town. They carefully transplanted each one in their prairie that was once pasture. This herculean effort required even more attention during the

COURAGE continued on 5

Forest Weed Grant Recipient Motivations

Jacki Lewis & Dick Adduci are actively restoring 35 acres of oak savanna, prairie and wetlands on Jericho Creek, a tributary to the Mukwonago River where they reside.

When they purchased the property, they were unaware that the property and the Mukwonago River watershed were treasures. The land's appeal was space, privacy and dark skies. Dick had a lifelong passion for astronomy and the white dome of his observatory became a landmark in the area. Jacki loved the woods and planted a prairie. Both were engineers with little idea of the specifics of conservation, but Jacki developed into a serious amateur naturalist.

Jacki became aware of prairies because her grand-

As their knowledge and interest progressed, Jacki Lewis & Dick Adduci discovered that prolific invasives can be controlled, allowing native plants to return and thrive.

mother was born in the sod house of homesteaders on the Nebraska prairie. For a science paper in third grade, Jacki's mother suggested the benefits of fire in wildlands; Jacki found research fascinating, but was quite angry when her teacher graded it a C-, probably because it ran contrary to the Smokey Bear campaign to prevent forest fires. Living in the country and Girl Scouts cemented her childhood love of the outdoors.

Over time, they learned how well preserved the Mukwonago River was with its diversity, the potential of the watershed, and discovered fabulous things on their own property. They fostered conservation activity, but still had a lot to learn.

Jacki had seen an opportunity to restore native prairie, continued on page 10







COURAGE continued from page 3

September 2017 drought, when the new plants had to be regularly watered by hand. "We've been able to live and take care of this land for 33 years," she says. "It's been a privilege for sure.

Urgency and a sense of purpose provide important motivation. The Boeings, Marraris and VanDenBogart see their work as an important environmental legacy that they hope to complete in their lifetimes. "When you seed an area, it may take five or six years for the native plant to grow to any height. It may be eight years before the plants bloom. And we don't have that kind of time," says Jack Boeing.

Jim Marrari echoes this sentiment. "Restoration work gives us time to learn and observe and educate others. That's the beauty of it. That's what keeps me going. Getting young people here and showing the land to them. Encouraging them to see what's possible," he says. "Obviously, we're not spring chickens. We can't be doing this in 50 years."

Making a difference for the planet, even in small ways, helps these individuals overcome despair in a time of dire news about global warming and pollution, social unrest and violence. "I feel like I'm doing my part," says VanDen-Bogart, who retired as a scientist with Kimberly-Clark and now has his own small business. At Camp Charles Allis, he works extensively with the younger generation, from pre-school through high school, and encourages them to explore the outdoors during informal education. "We are all stewards of the land. We each have a certain amount of time here on earth. Hopefully, I'll leave it a little better than when I got here," he says. "I want to instill in others, especially young people, the importance of taking care of the environment. If I can do this, I feel I've accomplished my mission."

2017 FOMR NEWSLETTER

Tips for sustained restoration work on your land

Get information "There are tons of resources out there," says Barb Marrari. Expertise is available for restoration beginners and people who have been working to remove invasives for years. Friends of the Mukwonago River, The Nature Conservancy (TNC), Kettle Moraine Land Trust, and your local chapter of Wild Ones can provide a network of helpful, experienced people willing to share expertise and support.

Wild Ones offers helpful property tours. Friends of the Mukwonago River and other organizations can help you find public money available and fill out grant forms. Stop by and ask a neighbor you see doing restoration work. Many people are happy to share what they know.

Teamwork makes a difference "As the saying goes, `Many hands make it easy,'" says VanDenBogart. Being part of a trained volunteer team during prescribed burns or working together informally with friends and neighbors pulling garlic mustard are important ways to stay motivated. Sharing the excitement of a new discovery of a plant or bird can help encourage you and your fellow workers.

"Find others with whom you share common goals. Having a community really helps us keep going," says Hannah Spaul, TNC Director of Land Management, Madison office, who has worked extensively with the Boeings on their restoration since the mid-1990s.

Come up with a manageable plan "Don't take on more than you can manage at a time," says Jack Boeing. Start small with clearing, keep at it, and know that it may take four or five years to see substantive changes, adds Spaul. "Decide what you can do and do that well so you don't feel overwhelmed and give up."

Be curious and adapt Restoration is a boots-on-the-ground learning experience. "Sometimes things aren't going to go well. Sometimes they do. It's important to learn to adapt and find methods that work right for you," says Spaul. "Patience is really important."

Stay inspired Take time to appreciate the natural wonders around you. Working on land restoration can help us appreciate things we didn't notice before, says Nancy Braker, who worked for TNC for more than 20 years in land management and focused on fire management. Nancy, who now serves as director of the Carleton College Cowling Arboretum in Northfield, Minn., was one of the Boeings' early TNC contacts. She helped organize the first burn at the Pickerel Lake Fen.

"Being outdoors gives us the opportunity to really observe," she says. "That kind of observation changes people. It makes us more at home with the land and ourselves."

Don't forget to celebrate "There's nothing more beautiful than a bur oak. No two are alike," says Jim Marrari. Just as oaks differ, so does each restoration project. Savor your successes, however small.



TNC adds to the Crooked Creek Preserve

The Nature Conservancy (TNC) announced that it has expanded its Crooked Creek Preserve in the Mukwonago River watershed with the acquisition of the Chapman Hills Girl Scout Camp. This beautiful property with its wetlands, oak savanna and upland forest will connect formerly-isolated parts of the preserve and create a larger expanse of habitat for wildlife. This property is important because it joins The Nature Conservancy's Baker and Scout Road tracts, which are part of the larger Crooked Creek Preserve. The addition of the 107-acre Chapman Hills Tract increases the Crooked Creek Preserve to 569 acres.

The Conservancy purchased the property from the Girl Scouts of Northern Illinois with funding provided by the estate of Newell and Ann Meyer. The Meyers were Milwaukee residents whose gift of land and assets to the Conservancy in 2006 helped create a nature sanctuary named for them about three miles northwest of the Crooked Creek Preserve.

"It was Newell and Ann Meyer's dream to create an oasis of quiet beauty amidst the hustle and bustle of southeast Wisconsin," said Mary Jean Huston, who directs The Nature Conservancy's work in Wisconsin.

"Girl Scouts of Northern Illinois is pleased that The Nature Conservancy has purchased Camp Chapman Hills," said CEO, Fiona Cummings. The land has been used as a Girl Scout camp since 1960, and contains a stretch of the Mukwonago River, forest, wetlands and globally-rare oak savanna. It is home to several uncommon plants and animals, including the cerulean warbler and Blanding's turtle.

Chapman Hills, which was acquired from the Girl Scouts of Northern Illinois, which established their camp there in 1959. The tract has about 45 structures, most of which will be removed over the next year or so. The main lodge and a few other structures will remain. The 27 wood tent platforms with shingle roofs and canvas sides are being offered to area camps at no cost. Area municipalities have expressed interest in some of the large, open-sided picnic shelters, again, at no cost. Other buildings will be removed and taken to licensed dumps after lead and asbestos testing and abatement are completed. The sites later will be restored with native seeding.

Land management work will focus first on the removal of a large population of invasive Amur maple, Acer ginnala, throughout the tract. Future work will target invasive buckthorn, honeysuckle and Oriental bittersweet. Over time, Nature Conservancy land managers and volunteers will remove invasive species and bring fire back to oak savannas and other fire-dependent plant communities to restore and maintain their health.

About one-and-one-half miles of existing hiking trails on the property eventually will be linked up to a trail at the Baker Tract. About 245 feet of the Mukwonago River flows along the northeast corner of the tract after coming through the Baker Tract to the north. The property will eventually be open from sunrise to sunset for nature-based recreational activities including hiking, cross-country skiing, sledding, hunting, fishing, birding and wildlife watching.



WCLC restores Mukwonago River Wetland

Waukesha County Land Conservancy (WCLC) secured a \$886,000 grant from the WDNR to restore the 52-acre Davis Property from farmland to a highly functioning wetland. The grant includes a \$300,000 endowment for long-term stewardship to ensure the wetland is perpetually maintained. This restoration will have a positive ecological impact locally and at a larger scale.

The Davis Preserve on the Mukwonago River is considered one of Wisconsin's biological gems. The river is home to over 50 species of fish, including the threatened Longear Sunfish. The river also supports 16 species of mussels, including the endangered Rainbow Shell, making it one of the most diverse mussel habitats in Wisconsin. The watershed also features a diverse and extensive system of intact wetlands that help support its high water quality and species diversity.

WCLC received this grant due to the ecological significance of the restoration project and the strong team of partners assembled to deliver the project, including TNC, which brings a strong science-based approach to the project along with other recognized wetland experts.

This grant is part of the WDNR's new wetland mitigation program that restores wetlands lost to development. Funds are obtained from the property developer before the wetlands are filled or removed and are held by the WDNR until a proper mitigation site is found. These funds are competitively awarded to projects that will restore the same acreage of wetland lost located in the same geographical area.

Restoring wetlands is crucial to ensure healthy and biologically diverse ecosystems. In addition, wetlands are essential for flood control, the filtering of ground and drinking water, provide food sources and offer a unique habitat for many important wildlife and plant species.





Wetlands are among the most productive and biologically diverse ecosystems in the world. They provide a wide range of vital services, including flood control, water filtering, providing food and unique habitat for different species.

Flood control Wetlands function as natural sponges, trapping and slowly releasing water, rain, snowmelt, groundwater and flood waters. Wetland vegetation, such as sedge meadow, also assist in slowing down the speed and distribution of flood waters. Think of the waters that Houston had to handle in Hurricane Harvey.

Water filtering Acting as Earth's filter, wetlands improve water quality by absorbing chemicals, removing pollutants and sediments, breaking down suspended solids and neutralizing harmful bacteria.

Food source A wide range of products are derived from wetlands such as fish and shellfish, blueberries, cranberries and wild rice. Some medicines are derived from wetland soils and plants as well.

Wildlife habitat Wetlands shelter more than one-third of the country's threatened and endangered wood ducks and cattails can only ally, they provide a nursery habitat for many commercially important



Recap of the annual fish survey and mussel monitoring

By Sarah Hlavenka, Friends volunteer

This September I had the pleasure of volunteering for the WDNR's annual Mukwonago River fish survey in the lower reaches below the Phantom Lake dam to the Fox River, also called the Annual Index of Biotic Integrity (IBI). Lead by John Lyons, the day began as the WDNR staff collected fish in the river area located below Phantom Lake using an electroshocking device to temporarily stun them for the survey. Then we all participated in identifying and sorting the fish and measured the lengths of certain species.

The diversity and abundancy of the fish community was soon apparent. The river includes several state-threatened and endangered fish and numerous gamefish and panfish species. The 2017 survey captured 32 different species, with the total number Of that total, 868 of the beautiful state-threatened



vey, all fish were safely returned to the river.

Although the Mukwonago River watershed continues to of fish, a whopping 4,529, the highest ever recorded. maintain its health, it is at risk due to the impact of urban sprawl in Waukesha County. Using the annual survey, the northern (longear) sunfish and 13 state-endangered WDNR is able to assess the overall health of the ecosystem starhead topminnows were surveyed. After the sur- and identify early indicators of environmental concern.

Words from John Lyons on this year's survey:

To me, the most interesting aspect this year was that there was a record abundance of piscivores (top predators that primarily eat other fish), mainly driven by very high bowfin numbers. But the abundances of juvenile largemouth bass and several other piscivore species were also well above average. Most of the piscivores had been born in spring 2017. Major fluctuations in piscivore numbers are not unexpected, and are typically caused by natural yearly variations in environmental conditions, particularly weather (e.g., temperature, rainfall), but this year's surge in bowfin was pretty extreme.

Why 2017 was such a good year for piscivore reproduction is uncertain, but could relate to the extended high-water we had this spring, which may have created and maintained more of the vegetated channel-edge and backwater habitats where these species spawn. Probably because of all the piscivores, the abundances of several of the small minnows and darters, which are prey for many piscivores, were down substantially. Yet overall, the number of species and individuals we caught was within the range of past years. This illustrates that even though there may sometimes be major fluctuations in fish community composition from year to year, a healthy ecosystem like the Mukwonago still retains high fish diversity and numbers every year.

It will be interesting to see if the piscivore abundances drop down to a more typical number and the small fishes rebound in 2018. The IBI is available if anyone is interested.



Mussel Observations

By Todd Levine, Carroll University

A big development in our mussel observation work is that we did some searching elsewhere in Southeast Wisconsin in Summer 2016 for another project and have made an effort to observe lures in other populations of Lampsilis cardium, building on the observation of two distinct lure types that we identified from the Mukwonago River in 2014-2015. While we found variation in the "spotted" lure type that we didn't note within the Mukwonago River, we have not found any examples of the "striped" type outside of the Mukwonago River.

While I think that we need to collect some additional data, this may indicate some unique intraspecific (genetic) variation in the area. This would be especially interesting to work on using both basic observations (pigmentation and morphology) and genetic tools. We are pursuing opportunities to fund ongoing work in the Mukwonago River and even without funding, I would hope to spend a few days in the Mukwonago River to help support ongoing efforts to monitor the mussel population (and enjoy the beautiful area), but definitely hope that we can find support to spend more time there this summer than I could as a volunteer.

In other news, I plan to run my "streams" field trip for my Aquatic Ecology class at Carroll University in the Mukwonago River again this year. I have yet to contact the TNC this year, but will likely start that conversation in early March for an April field trip; we plan to trace the river from its headwaters to the Fox, likely measuring discharge, habitat quality, substrate size and stream macroinvertebrates along the way.

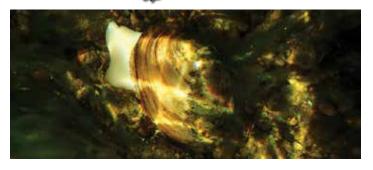
Mussels play an integral role in freshwater ecosystems. As filter feeders, they are important contributors to water quality. They accumulate nutrients from the water column and convert it into food that is direct-



Plain Pocketbooks (Lampsilis cardium) in the Mukwonago River displaying "lures" to mimic fish and attract a host as part of reproduction.

ly used by fish and other invertebrates. Since they are quite sensitive to changes in habitat, they are good indicators of changing environmental conditions.

The Mukwonago River is home to an impressive 16 mussel species and remains one of the most prized habitats in the state. Currently half of Wisconsin's 51 mussel species are endangered, threatened or are species of special concern due to overharvesting (for buttons and nuclei for cultured pearls), stream degradation and displacement by invasive zebra and quagga mussels. The Mukwonago River contains Wisconsin's only remaining viable population of the state-endangered rainbow shell (Villosa iris).



The Mukwonago River is home to an impressive 16 mussel species and remains one of the most prized habitats in the state.

FOREST continued from page 4

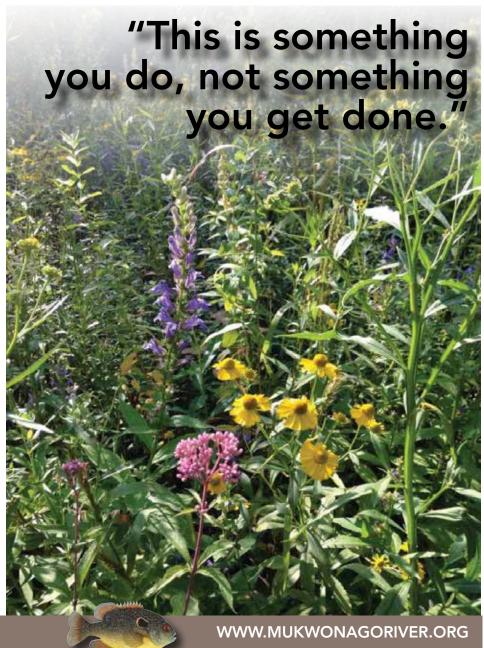
planted 1987-1992, which they started to burn, but she mistakenly assumed the woods would be self-sufficient and self-sustaining - wrong! They learned a new concept in the 1990s when a prairie conference had a session on burning woodlands. Burning in the woods seemed too scary to embrace at the time. They initially didn't recognize the threat of the growing presence of buckthorn, and the property was described a few years ago by a senior DNR ecologist as "one of the worst buckthorn infestations" he'd ever seen.

As their knowledge and interest progressed, they discovered that prolific invasives can be controlled, allowing native plants to return and thrive. Their techniques have improved; the most-effective tools are basal bark treatments, a forestry mower, and more extensive controlled burns. The Forest Weed Management Grant from the Friends was a wonderful boost, helping to get an additional few acres cleared professionally with a forestry mower, and to build a mobile water pump to facilitate controlled burns on remote parts of the property.

About 10 acres of former oak savanna and an acre of the original creek bed have been opened up with beautiful results, and more will come!

As Jacki says, "This is something you do, not something you get done." Jacki has been a wonderful teacher of others in the watershed, and Friends values the contributions she and Dick have made.





News on the Friends front

Friends of the Mukwonago River has stayed pretty busy finalizing two grants and working to complete a third over the past three years.

The Friends' Aquatic Invasive Species grant to expand citizen water monitoring efforts and community education with collaboration with Carroll University and UW Waukesha on invasive removal, was completed on June 30, 2017. We were able to elevate the concerns around the invasive Asian clam species, Corbicula Fluminea, to the general public, and hopefully monitoring will continue on the river as we move forward. The final report will be available soon.

The 2015-'17 WDNR Forest Weed Grant and a 2016-'18 WDNR Forest Weed Grant to assist landowners in removing invasives from their properties are finished or still in progress. Friends will have reimbursed 24 landowners with 50 acres of invasive removal. Although the dollars per acre are fairly small compared to the dollars and work required, these grants are extremely helpful to jumpstart landowner projects in their private forested lands. We just had applicants for another eight acres, which will be announced soon. The work done by landowners under these grants are models for neighbors, municipalities and others in the watershed. We think this is a great use of WDNR funds to enhance the properties in the watershed and mitigate the threat invasive species has become.

Friends is pleased to announce that we received an unsolicited, unrestricted grant from the Lakewood Farms Foundation, which we greatly appreciate and will use wisely to further our mission. Thank you for this very kind gift! Lakewood Farms is a large property along the main stem of the Mukwonago River with another tributary flowing through the property as well. The property has an amazing blend of wetlands, river and upland oak and hickory woodlands.

We are currently looking at applicants for a part-time Outreach and Engagement Coordinator to assist us with paddles and hikes, and more timely social media and educational outreach. As always, we would love to find more volunteers to assist with the on the water events we like to encourage. Are you one of those volunteers?



Community Paddles & Hikes

A list of selected paddles and hikes that explore the Mukwonago River Watershed

HIKE CROOKED CREEK NATURE PRESERVE

Directions: Turn west onto Bluff road at the intersection of Nature Road/Bluff road. Travel .6 miles to the preserve access point, which is on the north (right) side of the road and marked by a sign. There is a narrow pull-off along-side the road for parking.

With dramatic topography and overlooks, Crooked Creek Preserve is a stunning place to visit featuring dozens of springs that provide an estimated 70% of the water flowing into the Mukwonago River system. An approximate 1.5-mile hike should provide good birdwatching with many waterfowl species making use of the two impoundments on the preserve.

PADDLE MUKWONAGO RIVER

Directions: From the main entrance to the Mukwonago River Unit of the Kettle Moraine State Forest (former Rainbow Springs). The parking lot is on County Highway LO approximately a mile east of County Highway E.

Seven culverts were removed in 2013 and the river has returned to its original path. Increases in populations of important river flora and fauna have already been observed now that the river has been allowed to flow naturally. The paddle will end at Beulah Road, although you can go on to County Highway I certain times of year before the wild rice takes over. Use caution paddling beyond Beulah/Marsh Road.

HIKE PICKEREL LAKE FEN

Among the most rare wetland type in North America, fens rely on natural springs and require very specific conditions. Pickerel Lake Fen is biologically diverse and supports a number of rare or endangered species. Oak openings are being restored, an ecosystem

characterized by large bur and white oaks with a prairie-like understory of grasses and wildflowers.

HIKE MEYER NATURE PRESERVE

Directions: The preserve is located at S104-W38319 Highway 67, about 2.5 miles southwest of Eagle. The entry drive is one mile southwest of the intersection of Highway 67 and Highway LO.

A picturesque combination of woodlands, restored prairies and wetlands, this 625-acre preserve is a primary headwaters for the Mukwonago River. There are 3 miles of hiking trails on the preserve to explore.

PADDLE LAKE BEULAH TRIBUTARY

Directions: From County Highway J (west of Double D's bar). Vehicle access limited. The unnamed tributary that flows over Lake Beulah dam on the north end under County Highway J. Vehicle access limited.

Flowing through lush wetlands and sandy bottomed, this little visited tributary offers a beautiful paddle route through an ecologically significant area of the watershed that supports abundant mussel populations. Paddlers have a choice of routes at the Mukwonago River fork: Paddle upriver to Beulah Road or extend the trip downriver to Highway I.

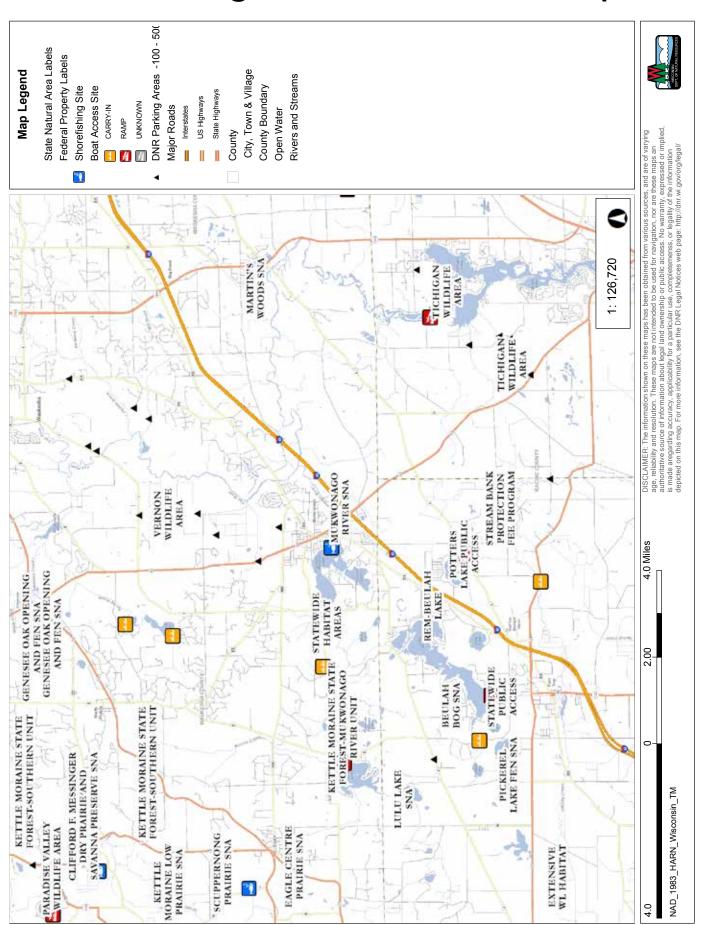
PADDLE EAGLE SPRINGS LAKE TO LULU LAKE

Directions: WDNR Eagle Spring Boat Launch, Wambold Road off County Highway E.

The classic Mukwonago River paddle. Boat rentals available at Eagle Springs Pub. Lulu Lake is a 95-acre kettle lake with excellent water quality and surrounding fens, bogs, sedge meadows, prairie remnants and oak openings.



Mukwonago River Boat Access Map



THANK YOU!

Thank you to all our members, donors, volunteers and partners who made this past year a success. You helped preserve the health of the Mukwonago River watershed and educate others about its importance. We appreciate all you do and thank you for your support!

Mark Alper

M.E & Warren Andrews

Anich's Liquor Ben & Sandy Ariss

Mike Backus

Jeff & Deb Bacon

Susan Baumann

Jill Bedford

Larry Benner

Linda Berg

Susan & Paul Bergmann

Dorothy Bethke

Thomas Biddick

Dave Boebel Susan Brown

Eagle Spring Yacht Club

Dale Brugger

Galen Buchanan

Wendy Burt

John Canning

Linda Cannon

Christina Clancy

Mark Conrad

William Cooper

Timothy Crain

Phantom Lake Yacht Club

Dan Davies

John & Judy Day

Tom Day

Joseph Derra

David Dulin

Dean Falkner

Karen Friemoth

Vern Gardner

Sam Green

Matt Haeger

Rex Hanger

Kristie Hansen

Paula & Ron Harris

Barb & Andy Holtz

Martin Holzman

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Patricia Holzman

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Michael Koltz

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John Lyons

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Jane Zeman

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We Welcome Your Support

Your generosity is critical to protecting this pristine resource







The Mukwonago River watershed is one of four "Last Great Places" in Wisconsin. Because of its high-quality waters and diverse wetlands, it was selected in the early 2000s as one of three focal sites of the Global Wetland Network. The Mukwonago River is home to over 50 species of fish, several species of rare freshwater mussels, an incredible diversity of wetlands, and some of the best water quality in Southeastern Wisconsin.

The mission of the Friends of the Mukwonago River is to protect this natural treasure, including its associated tributaries, lakes, wetlands and buffer zones, through education, advocacy and promotion of sound land use throughout the watershed. Friends works collaboratively with many other public and private organizations that have also recognized the importance of preserving the ecosystem.

The need for the preservation of this resource gem is clear and compelling. The 18 miles and 74 square miles of the watershed include seven major lakes, seven minor lakes and numerous tributaries, sustained by natural springs, seepage from wetlands and moraines and runoff from surrounding farms and developed lands. We have four program areas we have focused on for over 15 years:

Conservation initiatives

Utilize scientific concepts, scientists and technology to analyze and protect the valuable resources in our watershed. This watershed is studied by citizens and scientists alike as we continue to monitor its health and preserve its pristine qualities.

Watershed protection

Projects with local citizens which demonstrate and educate about the watershed and the needs to protect and preserve its habitat, animals and resources. We work with our Education Consortium to educate youth and adults about the benefits of the watershed.

Policy for protection, preservation and restoration

With our partners we support legislative protections for our waters, work with local governments to educate our constituents of its value, and teach and use best practices for watershed wide protection.

Promotion of sound land use

We work with local municipalities, developers, landowners and stakeholders to ensure that planning and zoning efforts include river and watershed protection.

These programs areas are of concern to the management districts of our major lakes, since these influences can positively or negatively impact the system. We hope to continue our partnership with riparian residents to protect our shared, valuable resource. We will further the work we can do together to implement the recommendations of the Mukwonago River Watershed Protection Plan.

FRIENDS OF THE MUKWONAGO RIVER

PO Box 21 Eagle, WI 53119

Become a Friend of the Mukwonago River

Your support is critical to protecting this pristine resource!

Name				
Address	STREET	CITY	STATE	ZIP
Email				
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		ND \$25 ORGANIZATION \$40	CORPO	RATE \$50

Or, donate securely online via PayPal at www.mukwonagoriver.org/donations

Mail donations to Friends of the Mukwonago River, PO Box 21, Eagle, WI 53119

