



Waterloo News

The “Coral Reefs” of Waterloo: Vernal Pools

Vernal pools are temporary bodies of water that typically form in the spring melt and dry up in the summer and are found throughout the Waterloo Recreation Area. Often referred to as the “coral reefs” of the Midwest due to the diversity of species found, these short-lived wetlands are home to complex, miniature ecosystems supporting a wide array of interesting critters both big and small.

Vernal pools are important because they provide critical habitat for several species that are adapted to living in these temporary wetland environments. And because they don’t last long enough to support fish, many species of amphibians and invertebrates rely on vernal pools for breeding and raising their young. In addition to providing habitat, vernal pools also play important roles in the ecosystem. They can help filter and purify water and serve as a source of water for other species during dry periods. They also reduce the impacts of storms by slowing the flow of water and allowing it to soak into the ground.

Due to the seasonal nature of these vernal pools, many animal species have developed special adaptations for survival. Some crustaceans and aquatic insects lay eggs that can tolerate drying and/or freezing. Eggs that don’t hatch this year may hatch in the following year. Invertebrates and amphibians that inhabit vernal pools tend to lay their eggs early in the Spring, so that their young can hatch and develop before the pools dry up.

Vernal pools are important food and water sources for many animal species, including a number of invertebrates, amphibians, reptiles, birds and mammals. Green frogs, eastern garter snakes, wood ducks, great blue herons and racoons are just a few of the species that feed at vernal pools. Others, including many mammals, use vernal pools as a water source.

Despite their importance, vernal pools are often threatened by development and other land use activities. This February, you can join WNHA in collecting information about vernal pools found in the Waterloo Recreation Area and contribute to statewide efforts to collect more data about these often-overlooked habitats. (Page 2)

There are a few characteristics that can help you identify a vernal pool, and it helps to observe the area during different times of the year to look for the presence of standing water. Some of the most common indicators of a vernal pool include:

1. Seasonal standing water: Vernal pools typically fill with water in the spring and dry up in the summer or fall.
2. Lack of inlet or outlet streams: Vernal pools are typically isolated from other bodies of water and do not have a permanent inlet or outlet stream.
3. In Michigan vernal pool indicator species include: fairy shrimp, blue salamander, spotted salamander & wood frogs.
4. Presence of a hardpan or clay layer: This layer can be identified through soil testing or by digging down and exposing the layer.

Little information is currently available about the status of vernal pools in Michigan. Because these pools are important to maintain healthy forest ecosystems, it is important to catalog their locations and monitor their condition so that we can better protect them. The statewide vernal pool mapping and monitoring program in Michigan is working to achieve this goal, and you can help!

For more information on vernal pools, see the Michigan Vernal Pools Partnership website... <http://vppartnership.iescentral.com/index.html>



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Discovery Center Building Hours Winter 2023

Saturday

10am-5pm

Sunday

Noon-5pm

Closed Monday-Friday

Waterloo Recreation Area
Trails and Grounds open
From Dawn to Dusk Daily

A \$12 annual Recreation Passport is required for entry in the Waterloo Recreation Area. A self-pay station is located at the upper parking lot of the Discovery Center or at the Secretary of State with license plate renewal.

WATERLOO NATURAL HISTORY ASSOCIATION

SUNDAY PROGRAMS

January-March 2023

HOW DO BIRDS FLY?

*Sunday January 22
2:00 – 3:00 p.m.*



Learn the answer to this question while observing the flight adaptations of live raptors brought to you by Michigan Avian Experience. See the miracle of flight in action as a red-tailed hawk flies over your head. Find out how feathers, wing shapes and body shapes allow these natural hunters to survive in the wild.

Please call to register for this program in advance.

ARK ANIMAL ENCOUNTERS

*Sunday February 12
2:00 – 3:00 p.m.*



Join us for a fun and entertaining afternoon with Rebecca Barrett and her delightful live animals. Everyone will have the opportunity for a special hands-on experience with each of these creatures while learning about their lifestyles and characteristics.

*Program limited to 40 participants.
Call to reserve a space at 734-475-3170.*



ANIMAL TRACKS

*Sunday, January 29
2:00-3:00 p.m.*

Are you curious about the tracks you see on winter walks? Join Naturalist Robert Ayotte for an illustrated discussion of animal tracking in Michigan. We will focus on print patterns found in snow and learn about track *stride* and *straddle*. We will also review some common mammal signs and scats. If there is snow, we will add a one-hour hike on Discovery Center trails to look for tracks and other signs. Be prepared for icy trails. *Please call to register for this program in advance.*

WINTER ORIENTEERING

*Sunday February 5
2:00 – 4:00 p.m.*

Bring the family and challenge yourselves to an afternoon adventure in the forest. Winter is a great time of year for learning how to use a compass to find your way in the woods. Suitable for all ages and skill levels. Compasses will be provided or bring your own.

Program limited to 35 participants. Call to reserve a space at 734-475-3170.



Find us online at:

wnha.org

*Like us on Facebook @
Friends of Waterloo Recreation
Area*

*Follow us on Instagram @
friends_of_waterloo*

VERNAL POOL PATROL

*Sunday, February 19
2:00 – 3:00 p.m.*

From frozen frogs to floating fairies and fragile fingernail clams, Master Naturalist Doug Jackson shares the wonders of our enchanted woodland pools.

Learn about the fascinating creatures that inhabit these pools and find out how you can participate in a statewide program collecting data about them. Your data will help to protect these often overlooked, yet delicate and important, ecosystems referred to as the coral reefs of the Midwest.

Free admission

Please call to register for this program in advance.



WINTER WOODY PLANTS

*Sunday, February 26
2:00 – 3:30 p.m.*



How do you tell the dogwoods apart?... by their bark, of course! Join Naturalist Robert Ayotte for a basic introduction to the identification of our local trees, shrubs, and vines during winter. We will focus on buds, branching patterns, tree silhouettes, and bark. The illustrated introduction will be followed by an exploratory hike in the woods around the Discovery Center. Be prepared for icy trails. *Please call to register for this program in advance.*

SPIDERS AND THEIR KIN

*Sunday, March 26
2:00 – 3:00 p.m.*

Dr. Cara Shillington will introduce you to live spiders, tarantulas, scorpions and other intriguing invertebrates. Learn about poisonous spiders in Michigan, where they hang out, and how to avoid them. *Please call to register for this program in advance.*



HERPS! MICHIGAN'S AMPHIBIANS AND REPTILES

Sunday, March 5, 2:00 – 3:00 p.m.

Nature Discovery will bring live snakes and turtles that can be found in Michigan. Observe these intriguing creatures up close as you learn about their diverse life styles and how they survive in our state. Following the program, you will have the opportunity to handle some of them and watch them eat. *Please call to register for this program in advance.*



EYES ON THE FOREST: HOW YOU CAN HELP PREVENT NEW FOREST PEST INVASIONS

Sunday, March 19, 2:00 – 3:00 p.m.

Exotic invasive pests continue to put pressure on Michigan's forest health, and early detection of new invaders is critical for minimizing damage. Dr. Georgia Peterson will introduce you to some of these pests that are threatening Michigan's forests. Learn how you can become a citizen scientist and adopt a 'sentinel tree' to help spot these invaders before they become widespread.



Free admission.

Please call to register for this program in advance.

Volunteer Needed

The Waterloo Natural History Association is committed to educating people about our natural world and encouraging them to visit the Waterloo Recreation Area. With this in mind, we bring in outside presenters to give programs on weekends during the school year. We publicize our programs in as many places as possible, which includes posting them online. We are looking for a volunteer to assist with posting these programs on several websites that have events calendars. This job can be done on any computer and requires approximately 5 hours three times a year.

If you are interested in volunteering, please contact Kathy Claflin at ksclaflin@gmail.com.

We are also looking for a volunteer to assist Kathy with program scheduling. New ideas and suggestions are always welcome!

Advance reservations are requested for all programs!

To make reservations call the Discovery center at 734-475-3170 and leave a message with your name, phone number, number in your party. An annual \$12 state passport is required for entry to the Eddy Discovery Center in the Waterloo Recreation Area located at 17030 Bush Road. To reach the Discovery Center from I-94 take exit 157, go north and follow the signs.

All WNHA sponsored indoor programs are \$2 per person or \$5 per family unless noted.

WNHA members are admitted Free.

Please check our website wnha.org for additional classes that may be added!

Don't Miss Out On These Fun Events at the Eddy Discovery Center!!!!

OLD-TIME MAPLE SUGAR FESTIVAL

**Saturday, March 11
10:00 am. – 4:00 pm**

*It's time for that traditional rite of spring –
tapping maple trees.*



Take a guided walk to see various methods of collecting sap and how it is boiled down to make syrup. Antique equipment for making syrup will be on display from the Waterloo Farm Museum, and maple products will be available for purchase. Perfect family activity to look forward to the coming spring!

Free Event sponsored by the WNHA



The following activities are sponsored by Michigan Department of Natural Resources Marketing and Outreach Division- Eddy Discovery Center. www.michigan.gov/dnr

Lantern Lit Hikes, Ski, or Snowshoe: Fridays, January 13, 27, February 3, 24; 7 p.m. to 9 p.m.

Embrace your Pure Michigan Winter with a healthy lantern lit activity. One half-mile loop lit for skiers, unless snow levels prevent skiing, and one half mile loop lit for walking and snowshoeing. There will also be a fire ring for warm up, in between laps. A few pairs of snowshoes are available to borrow. Cost: Free.

Winter Games: Saturday, Jan. 14, 11 a.m. or 2 p.m. Using a GPS receiver, navigate the trails at the Discovery Center to find hidden caches of “treasures.” Compete for snowball throwing accuracy, learn to build a winter survival shelter, create snow graffiti. Activities semi-dependent on snow cover. Cost: Free.

Make a Kid Friendly Ice Fishing Jig Stick: Saturday, Jan. 28, 1 to 3 p.m. Put together your own stick with line and tackle for lots of winter fun! If there are six inches of ice, we will go to Mill Lake and drill a few holes for fishing. Bring warm winter gear and a 10-gallon bucket to sit on. Participants ages 17 and older must possess a valid fishing license. Cost: Free.

Cross Country Ski Outing; Saturday, Feb. 4, 1 to 3 p.m. Meet at the Mill Lake Boat Launch off McClure Rd. This is an informal group ski for those with traditional skis on non-groomed hilly terrain. Wear wicking layers and a waterproof shell that can be adjusted for comfort. We will ski two loops and host an après-ski campfire with hot tea, cocoa, and snacks. Bring a camp chair to sit by the fire après ski. If we do not have enough snow, we will still hike and provide refreshments. Cost: Free.

Snowshoe or Winter Boot Hike to the Bog: Saturday, Feb. 11, 9 to 11:30 a.m. A 1.5-mile hike through forests and wetlands to a habitat most often found farther north. Bogs occur in some of the pitted outwash regions of Waterloo. We will talk about the adaptations of bog species to handle cold snowy winters. Wear sturdy boots and studs (like Yaktrax) or snowshoes with four or more inches of snow. Cost: Free.

Snowshoe or Winter Boot Hike Oak Woods Trail: Saturday, Feb. 25, 9 to 10 a.m. This 1.8-mile hike over rugged terrain follows glacial topography beside beautiful Mill Lake along the Waterloo-Pinckney trail. Wear sturdy boots with studs (Yaktrax) or, snowshoes with four or more inches of snow. Approximately 1.5 hours. Cost: Free.

Owl Prowl: Saturday, Feb. 25, 6:30 to 8:30 p.m. Bundle up for a hike to call in the owls of Waterloo. We will start in the visitor center learning about these fierce birds, then prowl the trails, calling in some curious birds to observe. Cost: Free.

Great Backyard Bird Count: A Citizen Science Project: Saturday, Feb. 18, 11 a.m. to 4:30 p.m. Help us count birds around the Visitor Center and we will submit the data to the Cornell Lab of Ornithology and the National Audubon Society in a worldwide count of the earth's avian species. To date, over 180,000 checklists have been turned amassing a tally of 28-million birds and 6,455 species. Join scientists in this massive collection of data.
Cost: Free



Wild Turkey Reporting: The DNR is asking for help from the public in turkey sightings in the month of January. Information from observations will benefit wild turkey management in Michigan. The comeback of the wild turkey is one of the greatest wildlife conservation stories. Wild turkeys can now be found in parts of every county in the Lower Peninsula, plus areas of the Upper Peninsula. Do a search for Wild Turkey Observation –DNR Reporting to find a link to the online survey.



A Message from the Chair

Happy 2023! We're planning a great year of events and programs for you, and I'm so excited for you to enjoy them.

Thank you to those of you who completed the survey in our last newsletter. We had a lot of positive feedback about our activities, and you helped settle some internal debate in our board about our name – "Waterloo Natural History Association" is here to stay. Seems like most people are happy with who we are and what we do, so we're going to just keep doing that.

Speaking of thanks, I must extend my heartfelt gratitude to Jennifer Puntenney, trustee of the WNHA, for her 12 years of service to the board. Jennifer announced her retirement this week but will continue to stay in touch and volunteer running the books section of the gift shop. (Let her know if you've had any good reads recently!) Jennifer oversaw our annual events like the Maple Sugar Festival and Member Potluck, so we'll have some big shoes to fill. Fortunately she is very organized and has a checklist for everything that Jen Koppin and I will be studying closely. Thank you, Jennifer, for all you've done for WNHA! We'll do our best to keep things going!

A few other notable updates: The new interpretation signs are getting closer to production, so I'm hopeful that we'll see those installed before 2023 is over. We also split the cost of a snow blower with the DNR to clear the sidewalk and upper parking area and encourage more winter visits. With the interest rates going up, Patrick Muldoon saw an opportunity to move some of our savings into higher-yield accounts to get us a better return – every little bit helps! It also looks like the state will begin planning some much needed improvements to the Discovery Center building, which is something that we'll be watching closely to see how else we can help.

This spring, Robert Ayotte and I will be heading up to the DNR Friends Summit, which I'm really excited about. I've never actually been able to make it to one of these – it always seems to happen when I'm out of town or when some other life event is going on. The Friends Summit is a networking event the DNR puts on every year. The idea is you get to meet other "friends" organizations across the state, learn from each other, and swap ideas. Since I only know how one "friends" non-profit works, I stand to learn a lot from others.

Finally, because it's a new year, I encourage everyone to resolve to spend more time outdoors. We could all benefit spending a little more time outdoors, don't you think? Don't you always feel better after spending time around trees, away from devices that vie for our attention? There's wisdom in the saying "a bad day fishing is better than a good day at work". So this year I'm resolving to get my whole family outdoors more in every season. I hope you do the same. Happy New Year!

Erik Zempel, Chair



GIFT SHOP OPEN ON WEEKENDS IN WINTER!

Visit the WNHA Discovery Center Gift Shop this winter on weekends to find outdoor related gifts and books for all ages!

All proceeds benefit the Discovery Center Activities!

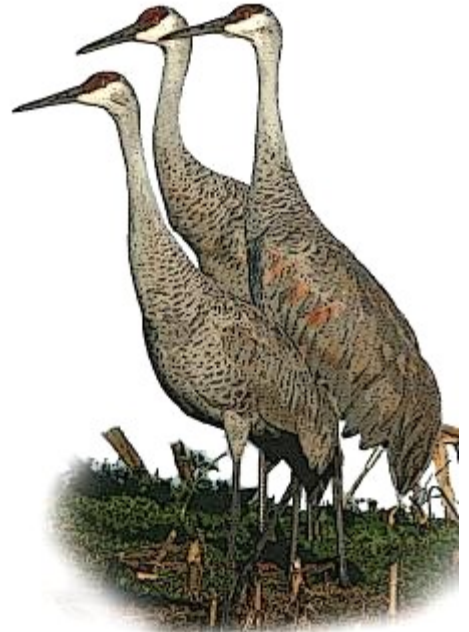


Is it time for you to renew your membership?

Your address label will show your renewal month!

We appreciate your support of our organization and hope you will continue to be an important part of WNHA!

Waterloo Natural History Association
PO Box 504
Chelsea, MI 48118



Official Newsletter of the Waterloo
Natural History Association

MEMBER'S CORNER The Waterloo Natural History Association gratefully acknowledges the support of the following new members and those who have recently renewed their memberships September 2022 through December 2022.

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Kirk Coppemoil
Barbara Webb

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Timothy & Anne Marvin
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