

Volunteers Step Up to Pull Garlic Mustard in These Unusual Times

By Bryn Scrivner, Preserve Volunteer and Outreach Coordinator

As March arrived Preserve staff was gearing up, as usual, for the annual spring garlic mustard pulling season. Then the COVID-19 pandemic hit and all volunteer events were canceled. While the world paused to figure out what this new disease was, and the weeks turned into months, our small staff nervously watched this invasive herbaceous plant bolt from its small spring basal leaves into 1-3 foot tall, white flowering plants. If left unchecked, garlic mustard can crowd out all other plants on the woodland floor.

For years volunteers have been the work force behind garlic mustard's removal in the Preserve. Each spring around 150 volunteers contribute a total of 500-900 hours to the removal

of this invasive plant in the Preserve. While yearly removal efforts will be necessary for the foreseeable future, we have seen a trend of declining dominance. Staff worried that a missed year of control would set back our woodland restoration efforts by years—once in the soil garlic mustard seeds can stay viable for up to 7 years, and each plant can produce up to 8,000 seeds!

On May 1, after laying out a plan to safely engage volunteers during a public health emergency, we got the go-ahead to recruit. Within a few days we had twenty-two individuals answer the call. Volunteers worked on their own schedule in designated areas, sometimes with a household member,

to pull and bag garlic mustard plants. They provided their own work gloves, digging tools, and trash bags. Staff supervision, to coordinate work areas and make sure volunteers were safe, was provided mainly via text messaging and emails. It worked remarkably well.

Volunteers worked against time and weather to pull as much garlic mustard as possible before the plants dropped their seeds. *In just over a month, those 22 volunteers contributed 763 hours to search for and pull garlic mustard across 90 acres!* What an accomplishment and what a boon to the health of the Preserve's woodlands!



Glenn Teschen-dorf



Matt Chotlos



Doris Dubielzig



Christy Lowney



Bryn Scrivner



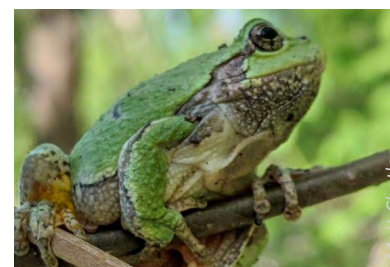
Glenda Denniston
Camille & Ginny Jackson



Galen Hasler
Stephen Sentofo



Glenda Denniston
Matt Chotlos



Matt Chotlos

Here are *just a few* of the volunteers who stepped up this spring to pull garlic mustard in the Preserve.

Left to right from top to bottom: Glenn Teschen-dorf, Matt Chotlos, Doris Dubielzig, columbine flower uncovered by Christy Lowney, Glenda Denniston, Camille & Ginny Jackson, Grace & Galen Hasler, Monica & Stephen Sentofo, gray tree frog found by Matt Chotlos

From the Director...

By Gary Brown, PLA, FASLA



The summer of 2020 will long be remembered by many of us as one of working from home, having to get used to wearing face coverings, and keeping our distance from those we don't know and sometimes even those that we love. It's been tough to say the least and I am happy to report that the Preserve staff have stepped up and met the challenge well. Even though we haven't been able

to get out on the land as much as we would have liked, we did have our job responsibilities defined as "essential services" which allowed staff to do some land management tasks and regular safety checks of the Preserve since the middle of March. We had excellent help with garlic mustard by a team of hardy pullers, working alone or in same household pairs and they were able to scour 90 acres

of the Preserve pulling this invasive species! Job well done by all!

I'm happy to report that the long-awaited Lakeshore Nature Preserve Strategic Plan is complete and will be posted on our website. It took a little extra time, but we wanted to make sure it was done well and would be a long-standing guide for protecting this amazing resource as the largest outdoor laboratory on campus. Please take time to read through the report and look for ways that you can help provide support to our Preserve staff team and the many stakeholders that support the Preserve moving forward. This inclusive, transparent and robust planning process was funded fully with gift funds. We continue to be thankful for the many private donors that help provide support to the Preserve to ensure we have the resources needed to maintain the Preserve as a living laboratory for research, teaching and outreach here on campus.

Stay well! ... and On, Wisconsin!

Volunteer Suzy Will-Wolf Tracking the Path Toward Recovery

By Adam Gundlach, Preserve Field Projects Coordinator

Shrouded in a dense understory of invading buckthorn shrubs, swatting mosquitos, and trying to keep a bearing due south, a group of Prairie Partners intern crew members and volunteers waded through Eagle Heights Woods looking to set up their first survey plot. Before entering a thicket, the surveyors were briefed by Senior Scientist Emerita Suzy Will-Wolf, "Set your compass bearing, line up the arrows in your sighting mirror, and pick a landmark in the distance to guide your path—that crooked-stemmed tree ahead looks good."

Leading learners through Eagle Heights Woods is nothing new for Will-Wolf. Before her retirement in 2013 as a Senior Faculty Associate in the Botany Department, she led numerous cohorts of Ecology 460 lab students in sampling exercises demonstrating the effect of slope aspect on community composition, among other ecological observations.

In retirement Will-Wolf is still teaching and contributing to ecological observations in the Preserve by developing a survey protocol to compare vegetation responses to invasive brush



For the last 5 years Suzy Will-Wolf has led interns and other volunteers in vegetation surveys in Eagle Heights Woods. Here she and seasonal employee Leo Roth use their compasses to locate a plot.

removal in Eagle Heights Woods. Systematically over the past five plus years, invasive brush has been removed section by section in Eagle Heights Woods, following a management plan approved in 2013. Beginning in 2015, Will-Wolf's survey protocol was implemented twice a growing season—in the spring and again in summer. Each year, she has donated around 80 hours of her time preparing for and leading vegetation surveys and performing post-survey data entry and analysis. This data on plant species presence and cover will allow Preserve land managers to assess the impact of management activities and determine whether the treatments are meeting objectives.

The work continues in 2020, marking the first post-treatment surveys in the Indian mounds zone at the top of Eagle Heights Woods. With thickets of invasive brush eliminated by cutting and prescribed fire, surveying effort is greatly reduced (though mosquitos still abound). Where thickets remain, they are comprised mostly of native shrubs—elderberry, nannyberry and choke cherry to name a few. While the pandemic prevented Will-Wolf from participating in the spring vegetation surveys, she continues to support survey efforts by entering the latest batch of data collected by Preserve staff.

Long-term dedication and observation is critical to management of urban natural areas. The Preserve and numerous UW students have been fortunate to benefit from Will-Wolf's dedication and expertise.



Senior Scientist Emerita Suzy Will-Wolf instructs Prairie Partner Interns in sampling procedures.

Citizen Science—Thinking Like the Birds

By Gisela Kutzbach, Friends of the Lakeshore Nature Preserve Board Member

During this pandemic, we miss our usual connections with people and places. Citizen Science not only helps us better understand science and learn about the environment, it also connects us with a vast network. A small part of such networks are the Purple Martin House and Biocore Bluebird trail projects sponsored by the Friends of the Lakeshore Nature Preserve, with the goal to provide needed nesting cavities for these declining bird populations. These projects are connecting two enthusiastic teams of twelve monitors—to each other, to local groups and national bird associations, and to the lands of the Preserve. The volunteers follow a weekly schedule of monitoring: they communicate with each other, share successes and challenges, solve problems, analyze data and post them to the Friends website, Preserve staff and larger data analysis centers, and then plan for the next year.

Here is a snapshot of this learning process at the Purple Martin House: In 2017, we installed the beautiful birdhouse, featuring generous cubicle nest compartments, on top of the Biocore Prairie, away from trees and with plenty of insects to catch on the “fly” over the prairie and the close-by lakeshore. That year, the house attracted one breeding couple, followed by two unsuccessful years. The suggestion surfaced to install two hanging gourds from the house, another popular option of Purple Martin housing. We tried to think like the birds. Martins return every year from their wintering place in South America to the same house. The young they raised in the previous year, now subadults, have to find housing on their own. Their parents return more than a month before them, leaving no vacancies in their old home. We reasoned that if these subadults were raised in gourds in one of the area’s longer established martin houses, they might look for gourds after their return.

And so it happened. We now have one parent couple breeding and two other martins on the premises. The three nestlings in the roomy gourd are growing their primary flying feathers and are expected to fledge around



Top to bottom: Richard Ness lowers the Purple Martin house to check a nest. Adult Purple Martins. Three five-day-old Purple Martin nestlings in a roomy gourd.

August 1. We are planning to install two more gourds next year. Once these are filled, we reason, other subadults likely will use the house itself, for martins are social birds and happiest when living in colonies.

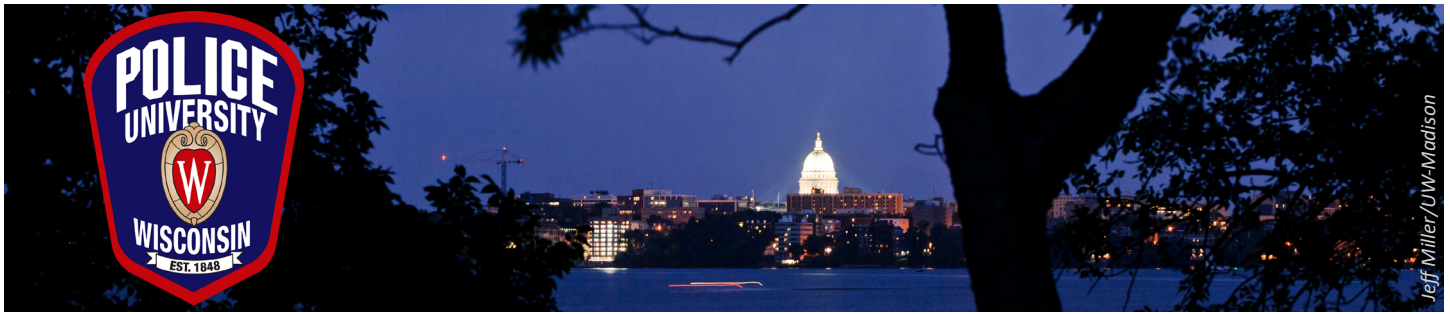
Similarly, the Eastern Bluebird trail monitors keep learning about the best options for locating the Bluebird nest boxes. In contrast to Purple Martins, Bluebirds nest by themselves, at least 200 yard from others of their kind. In addition, they are competing with other cavity nesters for the eight trail boxes around the Biocore Prairie, Trees Swallows and House Wrens. Our monitors recognize who is using the boxes by the way the nests differ and by the color of eggs. Location is important, for Bluebirds are choosy, looking for a place to perch nearby and guard their nest and for open space like the prairie offering plenty



Top to bottom: Volunteer Maggi Christianson, trains as a Bluebird trail monitor. Bluebirds perch on a nesting box. Five five-day-old Bluebirds in a nesting box.

of food. This year two boxes were claimed by Bluebirds. So far five have fledged. Over the last 5 years, we have helped increase the once declining Bluebird population in Wisconsin by 50 fledglings.

The Friends’ citizen science projects also help visitors to connect to nature in the Preserve, sparking their interest and providing knowledge about birds. Future fieldtrips sponsored by the Friends, free and open to the public, will further strengthen these connections after COVID-19 restrictions allow is to do so. For more details, visit the [Friends of the Lakeshore Nature Preserve website](#).



Police Activity in the Lakeshore Nature Preserve: By the Numbers

By Jeff Kirchman, UWPD Natural Areas Liaison Police Officer

Recently, I was conducting one of my regular foot patrols in Tent Colony Woods when I met some hikers. They mentioned they had been visiting the Preserve for years, and never before saw a police officer there. The encounter left me thinking some Preserve users may be interested to know how much police activity actually occurs on the property.

With the help of my colleague, UWPD Records & Data Analyst Jessica Rodin, I studied all identifiable police activity in the Preserve from June 1, 2019, through May 31, 2020. The result: 925 police actions in that one-year time frame. *See table below for the raw data.*

The vast majority of activity (83.5%) is categorized as Check Area, Check Parking Lot, or Foot Patrol. These 'proactive policing' actions result from officers taking the initiative to randomly check for problems. I should also point out that many of the other actions listed likely began as a proactive visit but were then converted to another category when the officer found something needing further investigation.

Looked at another way, 925 actions over a year translates into an average of 2-3 visits by officers per day. Or, about once for every police shift (three per day) over the year.

So, why is it that many Preserve visitors, like those hikers, don't frequently see officers in the area?

First, a single officer or squad car doesn't leave much of a footprint in the Preserve's 300+ acres. Personally, I think that's a good thing, as we want to have as little impact on the natural area as possible. Most of the time, officers need to stay near their squad cars, which results in a need to drive our vehicles on the roadways and paths.

Second, much of that activity is occurring overnight, when the Preserve is closed and people aren't there to see it. Most inappropriate or unauthorized use of the area occurs under the cover of darkness, and I greatly appreciate the officers who do their checks when that sort of activity is more likely.

Finally, UWPD relies heavily on the eyes and ears (and cell phones) of visitors to report anything that doesn't seem right. A quick call to UWPD at 264-2677 (COPS) is all that's needed to get an officer sent to check things out.

You may not often witness our presence in the Lakeshore Nature Preserve, but rest assured we're nearby and always ready to respond if needed.

Officer Kirchman can be reached at jkirchman@wisc.edu or leave a message on his voicemail at 608-219-4698.

CATEGORY	QTY	%	CATEGORY	QTY	%	CATEGORY	QTY	%
CHECK AREA	563	60.9	LIQUOR LAW UNDERAGE ALCOHOL	3	0.3	CRIMINAL DAMAGE	1	0.1
CHECK PARKING LOT	168	18.2	MOTOR VEHICLE ACCIDENTS	3	0.3	DAMAGED PROPERTY NOT CRIMINAL	1	0.1
FOOT PATROL	41	4.4	ASSIST LAW ENFORCEMENT AGENCY	2	0.2	DISORDERLY CONDUCT	1	0.1
CHECK SUSPICIOUS VEHICLE	31	3.4	ASSIST MOTORIST	2	0.2	DOG AND ANIMAL BITES	1	0.1
CHECK PERSON	17	1.8	DRUG PARAPHERNALIA	2	0.2	DRUGS MARIJUANA POSSESS	1	0.1
INFORMATION OR ALL OTHER	14	1.5	GRAFFITI	2	0.2	FIREWORKS	1	0.1
CLOSING HOURS NATURAL AREA	10	1.1	OTHER ANIMAL CASES	2	0.2	FOLLOW UP	1	0.1
CHECK BUILDING ON PREMISE	8	0.9	OTHER UW CODE NOT LISTED	2	0.2	LOST PROPERTY	1	0.1
911 CELL PHONE DISCON OR OPEN	7	0.8	REQUEST FOR ASSISTANCE	2	0.2	LRAS ASSIST BOATER	1	0.1
FOUND PROPERTY	7	0.8	TRESPASS OR UNAUTHORIZED PRESE	2	0.2	STORM DAMAGE	1	0.1
TRAFFIC STOP MOTOR VEHICLE	7	0.8	ALARM FIRE	1	0.1	SUSPICIOUS PACKAGE OR DEVICE	1	0.1
911 AUTHORIZED TEST	6	0.6	ANIMAL OFF LEASH	1	0.1	THEFT OR LARCENCY	1	0.1
K9 TRAINING	4	0.4	CLOSING HOURS BUILDING	1	0.1	WARRANT SERVED	1	0.1
LIQUOR LAW ALL OTHERS	3	0.3	CONVEYANCE MEDICAL BY UWPD	1	0.1			

Monitoring the Nation's Precipitation

By David Gay, NADP Program Coordinator

Recently, the National Atmospheric Deposition Program (NADP) joined UW-Madison to continue its 40 years of measuring the quality of precipitation all across the United States and Canada.

In addition, the NADP established two local monitoring sites—one at the Lakeshore Nature Preserve and another at the UW Arboretum—both excellent locations in the area for measuring precipitation and quantity of pollutants contained in these precipitation samples.

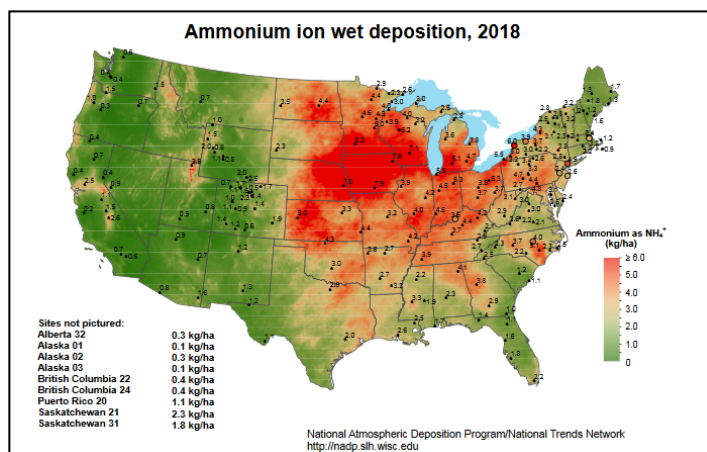


This apparatus, in the Preserve, on the water utility site, is the first of an eventual array of instruments that will be placed here by the NADP.

The original focus of NADP was on the acidity of precipitation (i.e. the national Acid Rain network), but has evolved to sample sulfate ion (sulfuric acid), nitrate, ammonium, and other cations including: sodium, chloride, and calcium. By making the same measurements week in and week out at all sites consistently, the NADP is able to make science-based conclusions about the trends over time of pollutant wet deposition over the continent. By putting these results into a geographic perspective, we can look at specific deposition over space, for example, deposition of ammonia during 2018 (see figure at right), or the changes of a deposition of a pollutant over time and space, for example, the reduction of sulfate (or sulfuric acid) since the mid-1980s across North America ([view series of maps](#)). We are now making the same weekly measurements of these pollutants at the UW Arboretum site.

At the Lakeshore Nature Preserve site (on the land leased by the Madison Water Utility) the NADP is establishing a quality assurance and testing site. Here, we will install an array of instruments which we will use to test new equipment to measure wet deposition, provide quality assurance testing to monitor the accuracy of our measurements, and design and develop ways to improve our measurements. We are also planning to measure other new pollutants in precipitation and add to the body of knowledge about our natural environment.

The NADP is a National Research Support Project affiliated with UW-Madison's State Agricultural Experiment Station and the U.S. Department of Agriculture, and a large array of federal government agencies, state agencies (the WI Department of Natural Resources), universities, tribal governments, and other organizations. The NADP is based at the Wisconsin State Laboratory of Hygiene. All data is available for use by anyone and can be downloaded at the [NADP website](#). Additionally, the NADP provides our data to many researchers around the globe, which annually results in many different research projects and over 200 scientific studies and journal articles.



JOIN THE FRIENDS OF THE LAKESHORE NATURE PRESERVE FOR THEIR 19TH ANNUAL MEETING, ONLINE TUES. SEPT. 8, 7:00PM

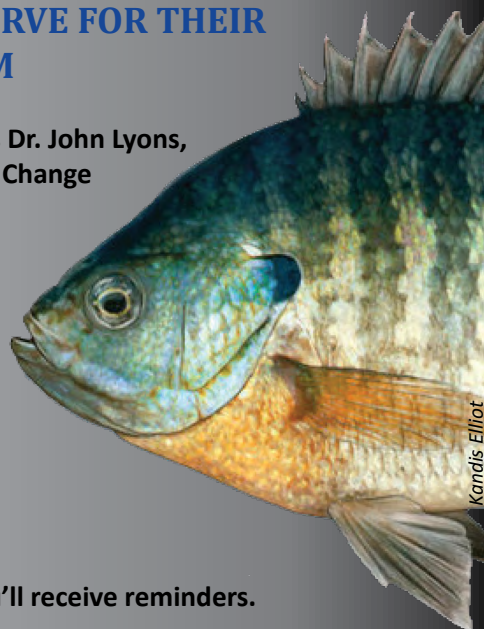
The Friends of the Lakeshore Nature Preserve's 19th Annual Meeting features Dr. John Lyons, who will give the keynote presentation, "Little Fish – Big Impact: 100 Years of Change in the Small-Fish Fauna of Lake Mendota."

Preserve Director Gary Brown will share the highlights of the new, forward-thinking Lakeshore Nature Preserve's Strategic Plan.

The virtual meeting is free and open to the public. To attend the meeting via Cisco Webex you must register with your name and email address at <https://go.wisc.edu/9j7pct>

Registration password: preserve

You can register on the day of the meeting, but if you register in advance, you'll receive reminders.



Lakeshore Nature Preserve Provides a Rich Birding Experience

By David S. Liebl, Emeritus Faculty, College of Engineering

During the first six months of this year, 176 birders in the Lakeshore Nature Preserve have reported 200 species of migratory and breeding birds to the Cornell Lab of Ornithology's [eBird database](#) (search "Lakeshore Nature Preserve"). By recording their daily observation checklists for: the Preserve in general (237), the Class of 1918 Marsh (72), Bill's Woods (137), Biocore Prairie (20), Frautschi

Point (48), Picnic Point (109), Muir Woods (12) and Willow Creek (30), these citizen scientists are helping to understand avian biodiversity and behavior.

The following photos show a few of the more interesting observations from the first half of 2020:



Many Baltimore Orioles have been seen this year, with several pairs nesting in the Preserve.



This Brown Thrasher was seen near the newly renovated Lot 130.



Warbling Vireos hung their woven nest over the Class of 1918 Marsh footpath, and advertised its location by singing.



It's unusual to see Orchard Orioles, but this bird was singing along the border of the community gardens.



Spectacular Prothonotary Warblers nested at the Picnic Point Marsh, and were very popular with birders



This Pileated Woodpecker was a regular late-winter visitor to the Preserve.

All photos by David Liebl



We're excited to share the release of the [Lakeshore Nature Preserve 2019 Annual Report](#)

In the report you'll find:

- How the Preserve serves as a lab for the study of forest functioning
- 2019 Student Engagement Grant awards
- Efforts and impacts of staff and volunteer activities in 2019
- The work of our partners
- 2019 financial snapshot

Introducing our New Seasonal Team Members

By Bryn Scriver, Preserve Volunteer and Outreach Coordinator

Connor Kotte joined the Preserve staff as a Natural Areas Technician this August as he prepares to start the fall semester of his graduate program. Originally from Oak Park, IL, Connor completed his undergraduate degrees in Conservation Biology and Environmental Studies at UW-Madison in 2016. Since last on campus, Connor has studied abroad with the Ceiba Foundation for Tropical Conservation in Ecuador, conducted conservation field work with the Bureau of Land Management in Nevada, and practiced land stewardship as a Huron Pines AmeriCorps member with the Leelanau Conservancy in northern Michigan. Returning to Madison, Connor is pursuing a graduate degree with the Environmental Conservation professional master's program (M.S.) in the Nelson Institute for Environmental Studies. Connor is extremely excited to continue his journey in conservation with the Lakeshore Nature Preserve, especially for ecological restoration projects in the diverse natural areas UW-Madison proudly protects.

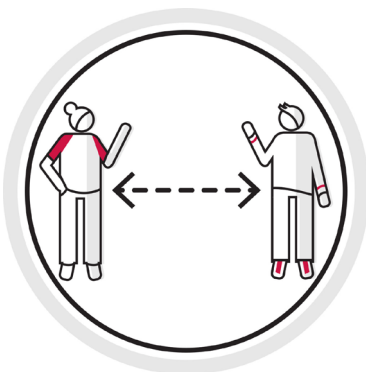


Heidi Belling is the Preserve's new Invasive Species Specialist. She earned a B.S. in Natural Resource Biology from Wisconsin Lutheran College. Since then, she has worked for environmental consulting groups, plant nurseries, and conservation agencies including the U.S. Department of Agriculture, the WI Department of Natural Resources, and for the last 7 seasons at the Horicon National Wildlife Refuge as a Range (Fire) Technician. At

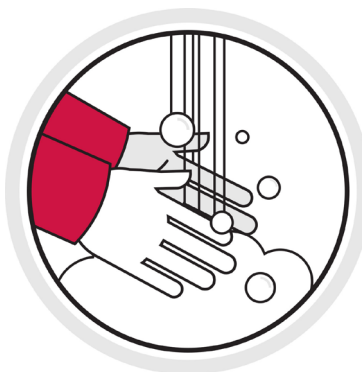
the wildlife refuge, in addition to conducting prescribed burns, Heidi also conducted waterfowl surveys, banded ducks and geese, stocked pheasants, controlled invasive species (carp and various plants), and maintained native prairie plantings. Heidi's prescribed fire experience also includes working on western fire details as a member of both hand and engine crews. In 2019, Heidi worked for UW Grounds on the tree and shrub crew, and that's when she learned about the Lakeshore Nature Preserve. We're pleased that she has joined our team.

HELP KEEP OUR CAMPUS HEALTHY AND SAFE

The Lakeshore Nature Preserve remains open to visitors.
Please follow these guidelines to keep everyone safe.



Maintain physical
distancing of at least 6 feet



Wash frequently



Stay home if you have
symptoms



smartrestart.wisc.edu



Some Sad News...

By Bryn Scriver, Preserve Volunteer and Outreach Coordinator

It is with great sadness that we report former Preserve team member Michal Michiels passed away on June 12, 2020 at the age of 23. Michal worked for the Preserve as a student natural areas assistant between September 2017 and May 2019. Michal graduated from UW-Madison in 2019 with a degree in Wildlife Ecology. During her time at the Preserve she transformed her classroom learning into

practical experience undertaking invasive brush removal, conducting prescribed burns, applying herbicide, identifying native plants for seed collecting, and working with volunteers. Michal was an enthusiastic addition to our team. She had a beautiful smile and clearly enjoyed her chosen profession to aid the natural world. Our thoughts go out to Michal's family, friends, and co-workers.



Starry false Solomon's seal, Willow Creek Woods

**TO SUPPORT
THE LAKESHORE NATURE PRESERVE'S
ONGOING MISSION OF TEACHING,
RESEARCH, AND LAND STEWARDSHIP,
MAKE A DONATION TODAY.**

Visit supportuw.org/giveto/lakeshore

Lakeshore Nature Preserve Staff

Gary Brown, Director

gary.brown@wisc.edu

Laura Wyatt, Program Manager

laura.wyatt@wisc.edu

Bryn Scriver, Volunteer and Outreach Coordinator

bryn.scriver@wisc.edu

Adam Gundlach, Field Projects Coordinator

adam.gundlach@wisc.edu

Follow us on Social Media



facebook.com/uwpreserve

twitter.com/uwpreserve

instagram.com/uwpreserve



**Facilities Planning
& Management**

UNIVERSITY OF WISCONSIN-MADISON

Lakeshore
NATURE PRESERVE
UNIVERSITY OF WISCONSIN