



# Preserve!

FRIENDS OF THE LAKESHORE NATURE PRESERVE

WINTER 2017–2018

## EAGLE HEIGHTS WOODS UPDATE

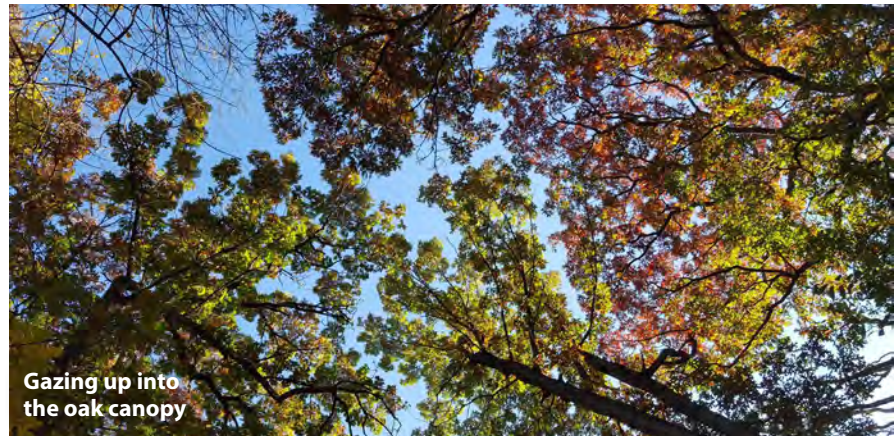
### Oaks—engineers of their environment

Adam Gundlach, field projects coordinator for the Lakeshore Nature Preserve

“No tree symbolizes strength and longevity more than the mighty oak. It has been revered by people all over the world for thousands of years.” This quote from the article “Wisconsin Native Oaks,” by Johnson Nursery’s Mike Yanny, sums up the oak perfectly.

Revered they should be. Oak trees act as engineers of their environment, altering many biogeophysical processes, including soil development, water and nutrient cycling, fire regimes, and associated ecosystem dynamics.

Research in the mid-Atlantic region by the University of Delaware’s Doug Tallamy and Kimberly Shropshire showed *Quercus* species (oaks)



Gazing up into the oak canopy

Adam Gundlach

supported 534 Lepidoptera (butterfly/moth) species, leading all plants studied. The larvae produced by the moths and butterflies are a vital food resource for insects, birds, and small mammals. The thick, gnarled bark of a mature oak tree provides refuge for many insects, which in turn provide additional food for insectivores. Acorns were a staple of Native American diets, and are an important, nutrient-dense food source for numerous wildlife species.

During a tour of Eagle Heights Woods with Friends members in July, a keen eye among the group identified a cluster of three white oak seedlings along a trail. While the discovery was encouraging, the long-term survival of such oak seedlings will depend on increasing sunlight to the understory. Oaks dominate much of the canopy in Eagle Heights Woods, but young and

middle age classes are mostly absent. Young oaks, especially white (*Q. alba*) and bur oak (*Q. macrocarpa*), require abundant light to grow into maturity. With a long-term goal of maintaining the oak community, we are making it a priority to selectively remove trees to create gaps in the canopy to encourage oak regeneration.

Chicago Wilderness, a regional alliance of conservation organizations, has drafted an Oak Ecosystem Recovery Plan for the Chicago Wilderness Region, which extends into southeastern Wisconsin. The plan highlights this critical management need: “Lack of oak regeneration is paramount to the challenges that oak ecosystems face. Without age diversity in our oak population, we run the risk of losing this vital regional resource.”



Oak seedling discovered along the Indian Mounds loop.

Adam Gundlach

FRIENDS OF THE LAKESHORE NATURE PRESERVE

2017-18

# Winter field trips

## December

24 **Birding and Nature Walk** (Sunday, 1:30–3:00 p.m.). See box.

## January

7 **Animal Tracking in the Preserve** (Sunday, 1:00–3:00 p.m.). Join UW wildlife specialist and professor David Drake on a winter day as he shows how to track foxes, coyotes, and other denizens of the Lakeshore Nature Preserve. Meet at UW parking lot 129 at Picnic Point entrance. Leader: David Drake, 890-0445 (ddrake2@wisc.edu).

28 **Birding and Nature Walk** (Sunday, 1:30–3:00 p.m.). See box.

## February

3 **The Eyes Have It** (Saturday, 1:30–3:00 p.m.). Dick Dubielzig, emeritus professor of Veterinary Pathology, will talk about visual adaptations by different animals to their varied environments, and demonstrate examples from the Comparative Ocular Pathology Lab. This event is limited to the first 20 registrants. Park in UW lot 62 and enter the School of Veterinary Medicine through the 2015 Linden Drive entrance. Register with Dick Dubielzig (richard.dubielzig@wisc.edu).

25 **Birding and Nature Walk** (Sunday, 1:30–3:00 p.m.). See box.

## March

25 **Birding and Nature Walk** (Sunday, 1:30–3:00 p.m.). See box.

### 4<sup>th</sup> SUNDAYS— Birding and nature walk

(1:30–3:00 p.m.). The Friends sponsor birding and nature walks in the Preserve with the Friends of Urban Nature (see the website for details). Expert, interesting, and informative leaders alternate monthly. Meet at UW parking lot 129 at Picnic Point entrance. Contact: Paul Noeldner, 698-0104 (paul\_noeldner@hotmail.com).



Linda Deith



Linda Deith

## SAVE THE DATE April 3, 2018

**Please plan on attending our annual meeting** this spring. Join us at the Arboretum Visitor Center to be inspired by our guest speaker, learn about current projects, and visit with fellow members.

## Call for ongoing volunteers

Want to do more? The Preserve is looking for ongoing volunteers to act as trail monitors, to adopt a native plant bed, or become involved with other projects.

For details about one-day and ongoing volunteer opportunities, please contact Bryn Scriver, bryn.scriver@wisc.edu, 220-5560.

## Volunteer opportunities

Volunteering is a great way to enjoy the Preserve. Long pants (not leggings) and closed-toe shoes required. Dress for cold, wet weather. Tools and gloves provided. Groups and youth are welcome with advance notice.

**TIME:** 9:00 a.m.–noon

Date	Meeting place
Feb 18 Sun	Frautschi Point lot
Mar 3 Sat	Picnic Point, Lot 129
18 Sun	Picnic Point, Lot 129
Apr 7 Sat	Picnic Point, Lot 129
22 Sun	Picnic Point, Lot 129

## REFLECTIONS

## A hike around the Class of 1918 Marsh

John J. Magnuson, *Friend of the Lakeshore Nature Preserve*



Female red-winged blackbird

Arlene Koziol

I always enjoy the easy walk around the Class of 1918 Marsh. I think about the marsh, its history, animals, and plants, and ponder the effects of developments in this area on the health of the marsh. A great way to learn about the marsh is to walk the circle trail with a mobile phone and listen to 17 brief stories along the Stanley Dodson Audio Trail (signs along the way provide contact information).

The marsh's story is one of change over thousands of years. The land you stand on was once covered by a huge glacier hundreds of feet thick. The retreat of the glacier left a large glacial lake that was 12 feet higher than the Lake Mendota we know today. All the flat land around the marsh used to be the shallows of this large lake. As the water levels fell, this part of the glacial lake transformed into a wet sedge meadow.

The wet sedge meadow would have been important for the early Native Americans who would have hunted migratory waterfowl, trapped muskrat, and captured northern pike entering the sedge meadow to spawn. European settlers, who came in the 1800s and early 1900s, would have made use of the same fish and wildlife as the Native Americans, and would also have harvested the sedge meadow for "marsh hay" to use as bedding for livestock.

When the University acquired this land in 1910, the wet sedge meadow was thought to be "unproductive". To make it more useful, it was drained and tiled. The old pump-house is still just east of the marsh on University Bay Drive. Once drained, 84 acres of sedge meadow was transformed into

84 acres of corn. However, farming turned out not to be a sustainable land use, so the University let the land re-flood and used it as a dump.

In 1969, an environmental studies class led by Jim Zimmerman began to restore the marsh with the hope it could again be wildlife habitat. The Class of 1918 provided the funding through its 50-year anniversary gift. However, the marsh never again became a large sedge meadow.

As you walk around the east edge of the marsh you will see a landscape of tall plants with leaves that look like swords. By late summer these cattails now form an almost secret passage that hides and encloses a hiker. For the Native Americans, cattails were important resources. They were woven into mats. The fluffy mature cattail spikes were used to insulate moccasins and papoose boards. Cattail cores, roots, and early green blooms were eaten. Cattails can be good habitat for birds. The brightly colored male red-winged blackbirds perch on them and proclaim the rights to a nesting area, while the more drab and secretive females build their nests in safety among the stalks. However, too many cattails can be bad for the ecological functioning of a marsh. They spread, squeezing out the open water used by wildlife, such as feeding puddle ducks and Canada geese.

Space here precludes telling all the stories of the Class of 1918 Marsh. So, use the Dodson Audio Trail to call up the topics of interest to you. Find out about its resident toads, frogs, fishes, sandhill cranes, waterfowl, and dragonflies, as well as its microscopic life. Learn about the marsh in winter, the ice cover and dissolved oxygen so necessary for many under ice animals. Learn about the importance of the movement of the waters through the marsh.

The story of the Class of 1918 Marsh is not over. The marsh will continue to change. Already, there is the possibility of creating a circle wellness trail accessible from the adjacent University Hospital. Already, we have documented the need to address threats from the high levels of chloride in the waters in and around the marsh that come from the use of road salt and from chlorides in the snow storage pile adjacent to the marsh. Already we have become aware of threats from changing land use on the playing fields that could alter the quality of water entering the marsh. We have, thus, become aware of the need for more proactive management to retain the ecological and human values that the marsh provides. And we recognize the need to preserve this earliest part of what is now the University's Lakeshore Nature Preserve.

Note: Webpages of the Lakeshore Nature Preserve and the Friends of the Lakeshore Nature Preserve contain extensive information on the marsh.



Draining the marsh



**NATURE OBSERVATIONS**

## American coots: We're not ducks!

*Arlene Koziol, Friend of the Lakeshore Nature Preserve*

The American coot, *Fulica americana*, is a plump, chicken-like bird that lives in wetlands across North America. It has a distinctive dark gray body and bright, white bill. It's a member of the rail family.

Although the coot swims like a duck, it does not have webbed feet. The American coot is a great diver and swimmer, aided by a pair of unusual-looking feet. Called fissionalmate, meaning lobed, their large, knobby feet help them walk over floating vegetation.

Coots are clumsy, awkward fliers. They run across the water to get airborne, making them an easy target for bald eagles. As Lake Mendota begins to freeze, if it remains open along the shoreline, you may be able to see bald eagles on the hunt for coots. Once the coot becomes airborne, it has a chance of escaping.

The coot's diet mainly consists of aquatic plants, but they also eat insects, snails, and small vertebrates such as tadpoles and salamanders.

In the fall and winter, coots form large groups called rafts, numbering in the thousands. I enjoy watching the large rafts of coots foraging on Lake Mendota in the winter. Sometimes they swim in dense groups, often colliding with each other. The flock often forms a geometric shape, and the coots appear to swim at the same speed in the same direction. Then suddenly, some coots take off for a short distance and the other parts of the flock take off in sequence, running on the water before becoming airborne. Other times I have observed coots foraging in a very long single line formation. The lead coot will alternate with two or three coots accelerating behind it. It reminds me of



flight formations of ducks, swans, and geese, where the lead bird alternates with other birds.

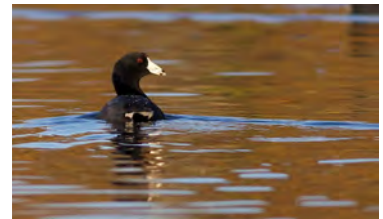
Keep looking for coots over the next week as Lake Mendota freezes. They might be forced close to shore for great observation.

(Information from Cornell Lab Ornithology Birds Online and from the *American Coot Collective On-Water Dynamics*, by Hugh Trenchard.)



*Dark gray birds with bright white bills, coots lack the webbed feet of ducks. Their large knobby toes allow them to walk on floating vegetation. They typically swim together in large rafts, diving to forage for plants. To become airborne, they run across the water, kicking up a spray of water.*

(Photos by Arlene Koziol.)



**EVALUATING PLANT SUCCESS**

## Surveying plantings at Frautschi Point

*Glenda Denniston, Gisela Kutzbach, Monica Sentoff, and Susan Will-Wolf*

For some time, Friends have planted flowering plants and grasses along the popular path from Frautschi Point parking lot to Frautschi Point. This past summer we surveyed the two planting areas to evaluate our success (see map).

The Frautschi Point area had received little care for decades. During the 1970s, buckthorn and honeysuckle began to move in, smothering existing ground vegetation. Reclamation of the land began in the south area in 2009 as a Boy Scout project.

Between 2013 and 2016, during our spring planting festival, Friends planted about 700 plants annually. Our goal was to improve diversity of understory plants.

For the south area, we selected plants that would thrive in open woodlands; for the shadier north area we looked for plants suitable for dense canopy cover. Before each planting, the areas were cleared of woody invasive regrowth, volunteer maples, and prolific woodbine. Planting days were a time of great fellowship, with over two hours of hard work and then shared refreshments. Typically, 15 to 20 volunteers and Preserve staff filled the woods with chatter and laughter while planting trays and trays of wildflowers and sedges. We put in about 30 species at each planting.



Surveying plants

Gisela Kutzbach

Last winter we developed a protocol for surveying the two areas. Each area was divided into about 20 plots measuring 20 feet square. This past spring and summer, each plot was evaluated by a plant expert and a recorder, for both planted and non-planted vegetation. Our data experts digitized results and applied statistical analyses.

How successful were our plantings? Not surprisingly, some species did better than others. Competition was strong, after all. In the north area, we found that fewer than 1 of 5 species present (17.5 percent) had been planted, the rest were already there or had self-colonized. In the much more disturbed south area, about 2 of 5 species present (43 percent) had been planted.

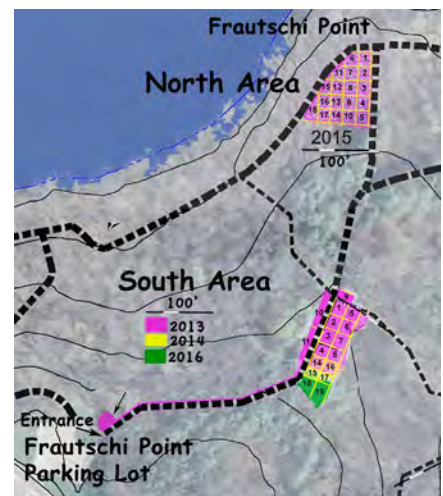
The table shows relative success of some of the plant species. Several of the planted species, listed in the table, were very successful in one or both areas, with survival rates of greater than 50 percent. For example, large-flowered bellwort loved the moister conditions in the southern planting area while blue lettuce and spiderwort thrived in the dappled sunlight of the northern planting area. Six species planted only in the south area were also very successful, including wood fern and Virginia bluebells. Other plants, such as Jacob's ladder,

cardinal flower, lady fern, and mayapple, showed moderate success with 10 to 50 percent survival rates. Still others had low success or none at all, like many of the grasses and sedges. Some showy native plants colonized on their own in both areas, for example Jack-in-the-pulpit and white trout lily.

### Plant species that thrived in at least one planting area

Common name	Planting areas	
	North	South
blue lettuce	high	low
eastern bottle-brush grass	med.	high
false Solomon seal	high	med.
giant hyssop, purple	high	med.
giant hyssop, yellow	high	med.
hairy heart-leaved aster	high	high
hairy wood mint	high	high
large-flowered bellwort	none	high
spiderwort	high	none
Sprengel's sedge	med.	high
sweet joe-pye weed	high	high
wild geranium	med.	high

**Relative success:** high = 50–100%, med. = 10–50%, none = 0–10%



All in all, the Friends planting efforts significantly increased both the diversity and the abundance of flowering plants and grasses in the two planting areas at Frautschi Point. It was an effort well worth it, and we thank our many volunteers who cheerfully endured dirty hands, sweat, and aching backs.

Read more: <http://FriendsLakeshorePreserve.com/survey2017.html>

**HELPING HANDS**

# Thanks to our many volunteers—together we care for the Preserve

A special thank you to our many volunteers. More than 30 of our members volunteered in the field and on Friends projects this past year. Our super volunteers Roma Lenehan and Glenda Denniston labored tirelessly most days of the year. Other volunteers worked countless hours on organizational tasks and in educational and outreach activities. All in all, about 50 members volunteered this past year, making the Friends the vibrant nonprofit organization it is.

Our thanks also go to the Preserve staff: Bryn Scriver, who coordinated most field volunteer events in the Preserve; Adam Gundlach, who supervised the summer interns; Laura Wyatt, who collaborated closely with the Friends Board and volunteers; and Gary Brown, who makes sure the Friends voice is heard at the administrative level.

We invite our members to become actively involved. Please consider these volunteer opportunities—you will enjoy working with and meeting other Friends:

- Citizen Science – monitoring bats, the bluebird trail, or purple martins
- Online educational projects using the app iNaturalist for sharing nature observations in the Preserve
- Science Expeditions educational event in the spring, sponsored by the UW for the community
- Friends committee work, such as the education, communication, membership, and financial committees, as well as special projects
- Volunteer days in the Preserve, joining Preserve staff, students and Friends

To get involved, please contact [PreserveFriends@gmail.com](mailto:PreserveFriends@gmail.com)

**Field and project volunteers**

Patricia Becker  
Ann Burgess  
Janis Cooper  
Diane Dempsey  
Glenda Denniston  
Doris Dubielzig  
Peter Fisher  
Martha Frey  
Cindy Galloway  
Kennedy Gilchrist  
Galen Hasler  
Chuck Henrikson  
Jeff Koziol  
Lynne Krainer  
Gisela Kutzbach  
Roma Lenehan

Seth McGee  
Thomas Mitchell  
Lisa Munro  
Karen Nakasone  
Paul Noeldner  
Mark Nofsinger  
Anne Pearce  
Paul Quinlan  
Craig Roberts  
Steve Sentoff  
Monica Sentoff  
Susan Slapnick  
Suzy Will-Wolf  
Levi Woods

**Field trip leaders**

Paul Borowsky  
Carolyn Byers  
Susan Carpenter  
Diane Dempsey  
Sue Denholm  
Glenda Denniston  
David Drake  
Doris Dubielzig  
Sean Gere  
Adam Gundlach  
Chuck Henrikson  
Alex Jeffers  
Arlene Koziol  
Gisela Kutzbach  
Roma Lenehan  
John Magnuson  
Dave Mickelson  
Paul Noeldner  
Paul Quinlan  
Jim Lattis  
Phil Sana  
Edgar Spalding  
Glen Stanosz  
Ryan Treves  
Quentin Yoerger  
Will Waller

**Organizational volunteers**

Jean Bahr  
Patricia Becker  
Amanda Bydyak  
Carolyn Byers  
Susan Carpenter  
Sarah Congdon  
Linda Deith  
Margaret Dentine  
Doris Dubielzig  
Richard Dubielzig  
Peter Fisher  
Kennedy Gilchrist  
Brent Haglund  
Galen Hasler  
Gisela Kutzbach  
Blair Mathews  
Olympia Mathiaramanam  
Seth McGee  
Paul Noeldner  
Mike Parsen  
Paul Quinlan  
Marcia Schmidt  
Steve Sentoff  
Mitchell Thomas  
Will Waller



Patricia Becker



Bryn Scriver



Gisela Kutzbach



Gisela Kutzbach



**FROM THE DIRECTOR...**

## Your energy, generosity help fuel the Preserve

Gary Brown, Director of the Lakeshore Nature Preserve

Each fall I am reminded of the amazing number of people it takes to manage and maintain the Lakeshore Nature Preserve. With new and returning students, we see a new energy and enthusiasm for why we do what we do to protect this special place we call the "Preserve." Of course, we couldn't do it without the support of the Friends of the Lakeshore Nature Preserve, a great partner in helping to get the word out, leading tours and

work parties, and helping us instill a sense of environmental stewardship that many students are craving these days. The Friends supplement and assist in providing guidance to those students who venture out to volunteer in the Preserve.

At this time of year, we also are thankful for the many private gifts that help us manage the land. The University administration funds our Preserve staff and general operations, but private gifts provide a significant part of our budget for land management and capital improvement projects. Your gifts of volunteer time, talent, expertise, and important financial backing help us reach out to our over 43,000 students, over 18,000 faculty and staff, and the many, many community members who enjoy the Preserve.

In this season of reflection and thanksgiving, we encourage all, as you consider your gift to the Friends, to also consider making a gift to the UW Foundation or the Wisconsin Alumni Association, directing that gift to the Lakeshore Nature Preserve Stewardship or Endowment funds. Your continuing generosity helps us move the Preserve FORWARD each and every year. Thank you in advance for keeping the Preserve in mind as you consider your annual giving while enjoying the sights, smells, and sounds of the season in the Preserve. Please contact me if you have questions at [gary.brown@wisc.edu](mailto:gary.brown@wisc.edu) or 608-263-3023.



Student Leadership Program, collecting seed

Bryn Scriver

**I WANT TO MAKE A DIFFERENCE** by joining or making an additional gift

## Friends of the Lakeshore Nature Preserve

Name \_\_\_\_\_  
 Street \_\_\_\_\_  
 City \_\_\_\_\_  
 State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone \_\_\_\_\_  
 Email \_\_\_\_\_

- I'd like to VOLUNTEER—please send me information by email.
- I'd like to GO PAPERLESS and receive my newsletter by email.

Please mail this completed form and your check payable to:

**Friends of the Lakeshore Nature Preserve**  
 P.O. Box 5534  
 Madison, WI 53705



Join    Renew    Gift

### ANNUAL MEMBERSHIP

- Student . . . . \$10
- Individual . . . . \$20
- Household . . . . \$35
- Steward . . . . \$50
- Patron . . . . \$100
- Other . . . \$\_\_\_\_\_

### ADDITIONAL GIFT

*(For members—does not include membership)*

- Woodland . . . \$500
- Savanna . . . . \$250
- Wetland . . . . \$100
- Prairie . . . . \$50
- Other . . . \$\_\_\_\_\_

Friends of the  
Lakeshore Nature Preserve

P.O. Box 5534  
Madison, WI 53705

Ideas and *Friends* announcements for our newsletter and website are welcome. If you'd prefer to go paperless and receive your newsletter electronically, please email us at [preserveFriends@gmail.com](mailto:preserveFriends@gmail.com)

- President:* Gisela Kutzbach
- Vice President:* Doris Dubielzig
- Secretary:* Steve Sentoff
- Treasurer:* Amanda Budyak
- Newsletter:* Linda Deith and Patricia Becker
- Friends Volunteer Coordinator:* Galen Hasler, 608-206-5218

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*Friends of the Lakeshore Nature Preserve* is a 501(c)(3) non-profit organization.

Please visit our website: [www.FriendsLakeshorePreserve.com](http://www.FriendsLakeshorePreserve.com)



**NEW GUIDE AVAILABLE**

## Picnic Point's fieldstone wall geologic treasures revealed

If you've ever wondered about the origins of the colorful rock wall that graces the entrance to Picnic Point, a new guide to the geologic features of the wall is available on our website at <http://FriendsLakeshorePreserve.com/rockwall.html>.



Chert

Picnic Point's wall was built along University Bay Drive in the late 1920s. Although the rocks came from local farm fields, they were carried great distances by glaciers. Learn about the types of rocks and minerals visible in the roadside face of the wall, and how they came to be found in Dane County.

*Key to the Glacial Erratics in the Rock Wall at Picnic Point Entrance* was prepared by Phil Brown, David Liebl, and Dave Mickelson.

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