



Spring/summer field trips

2018

Arlene Koziol

April

8 Exploration Stations at Picnic Point (Sunday, 2:00–3:30 p.m.) Learn the natural and cultural history of Picnic Point with the Friends of the Lakeshore Nature Preserve. Stop at our four exploration stations to learn from experts about rocks and fossils, trees, birds, and effigy mounds. We'll have binoculars and a spotting scope available. Children can engage in related activities at each station. For more information about the event, see www.science.wisc.edu/science-expeditions/. Meet at the UW parking lot 129 at the Picnic Point entrance.

18 Beyond Backyard Birding (Wednesday, 7:30–9:30 a.m.) This trip is especially for backyard birders looking to improve their skills. Come to have your bird questions answered and get help identifying those small streaky brown birds and other early spring migrants as we visit prairie and woodland habitat. The walk will be on even trails at a leisurely pace, so bring the whole family. We will have binoculars for loan. This trip is limited to 20 people—registration is required! Register with the Madison Audubon office (255-2473, bmarsicek@madisonaudubon.org). Meet at the UW parking lot 129 at the Picnic Point entrance. Leader: Kenny Younger.

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

29 Bill's Woods Spring Wildflowers (Sunday, 1:30–3:00 p.m.) Explore the restoration area at Bill's Woods—the first Friends project, started in 2001. We will look for spring ephemerals and other tender new growth that is poking up through leaf litter. Learn how to identify spring ephemerals such as wood phlox, violet, bloodroot, Jacob's ladder, and wild strawberry. This is a family-friendly hike. Meet at the UW parking lot 129 at the Picnic Point entrance. Leader: Glenda Denniston (231-1530, denniston@wisc.edu).

May

4 The Night Sky in the Preserve (Friday, 8:00–9:00 p.m.) Weather permitting, join the staff of the University of Wisconsin Space Place in viewing the spring sky. After a short introduction about the stars and planets, take a closer look by telescope. Meet at UW parking lot 131 (at the intersection of University Bay Drive and Lake Mendota Drive). Leader: Jim Lattis (262-4779, jim.lattis@gmail.com).

16 Warblers of Frautschi Point (Wednesday, 7:30–9:30 a.m.) We will focus on seeing warblers through leafy foliage and will look for other spring migrants. Bring binoculars and a field guide if you have them. Meet at the Frautschi Point parking lot on Lake Mendota Drive. Leader: Roma Lenehan (238-5406, rlenehan@charter.net).

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

June

3 Vision at the Lakeshore Nature Preserve: Our Nocturnal Neighbors (Sunday, 1:00–3:00 p.m.) Co-sponsored with the McPherson Eye Research Institute, this special field trip, to be held at the Eagle Heights Community Center, will feature short presentations on the opossum and the flying squirrel by comparative ocular pathologist Gillian Shaw and wildlife ecologist David Drake, followed by hands-on stations and a hike in the Preserve. Park at the Eagle Heights Community Center at 611 Eagle Heights Dr.

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

27 Lake Mendota Boat Trip (Wednesday, 9:00–11:30 a.m.; weather date: Friday, June 29) Learn about Lake Mendota and the shoreline of the Lakeshore Nature Preserve from a different perspective aboard LIMNOS, the research vessel for teaching, research, and outreach operated by the UW Center for Limnology. Group size is limited to 12; reserve your place early for this popular field trip. Meet at Hasler Limnology Laboratory one block west of Memorial Union. Register with John Magnuson (john.magnuson@wisc.edu).

July

15 The Biocore Prairie Experience (Sunday, 10:00 a.m.–noon). Get a behind-the-scenes summer look at natural restoration efforts and various student-related research projects. The UW Biocore Prairie provides a unique and successful natural classroom experience that supports the goals of the Lakeshore Nature Preserve. Meet at UW parking lot 129 at the Picnic Point entrance. Leader: Seth McGee (265-2870, seth.mcgee@wisc.edu).



Linda Deith

**4th SUNDAYS—
Bird 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).

Field trips, *continued*

- 22 Birding and Nature Walk**
(Sunday, 1:30–3:00 p.m.) See box.
- 29 Native Pollinators in the Preserve**
(Sunday, 9:00–11:00 a.m.) Join us in searching for bees and other pollinators while learning about their diversity and lifestyles as well as the importance of these intriguing insects. Meet at UW parking lot 129 at the Picnic Point entrance. Leader: Susan Carpenter (886-7504, susan.carpenter@wisc.edu).

August

- 4 Bird Banding in the Preserve**
(Saturday, 7:00 a.m.–noon)
Join Jackie Sandberg, Wildlife Rehabilitation Training Coordinator for the Dane County Humane Society to learn about bird banding, how banding helps expand our knowledge of birds, and our efforts towards conservation. Stop by any time between the listed hours. Park at UW parking lot 129 at the Picnic Point entrance and walk up to the Biocore Prairie above the Eagle Heights Gardens. Leader: Jackie Sandberg (838-0413, jsandberg@giveshelter.org).
- 11 Pretty Things with Wings**
(Saturday, 10:00 a.m.–noon) Join in a search for butterflies, dragonflies, and an occasional bird. Bring your binoculars. Co-sponsored with the Madison Audubon Society and the Southern Wisconsin Butterfly Association. Meet at UW parking lot 129 at the Picnic Point entrance. Leader: Edgar Spalding (265-5294, spalding@wisc.edu).
- 26 Birding and Nature Walk**
(Sunday, 1:30–3:00 p.m.) See box.

CITIZEN SCIENCE

Record your sightings in the Preserve

An app called iNaturalist is designed to be used by citizen scientists who want to collect data on species observed and share their data online. We've been exploring the app's potential for use with new projects and would like to recruit you to add your observations.

How does it work? Sign up to join iNaturalist.org. Then upload images using your smartphone or through their website. Identification is done by the community of users, so you can add observations even when you don't know what organism it is.

To help you get started, Steve Sentoff is planning a training session for early May. If you have questions, or would like to join the training session, contact him at shsentoff@nameplace.us.

To see what others have spotted in the Preserve—it's a fascinating collection—search for Lakeshore Nature Preserve as a "place."

The iNaturalist community has already helped the Preserve by identifying a new invasive plant. Last July we spotted a plant we didn't recognize and posted it. Another naturalist identified it as Siberian motherwort, an invasive species never before recorded in Wisconsin. That small patch of plants has been removed and a voucher specimen has been saved in the state herbarium.

Another benefit of the app is that it allows users to connect with each other, building a community.

We look forward to seeing your observations and hearing what you think of this app.

JOIN US FOR SPECIAL VOLUNTEER DAYS

Garlic mustard pull

Sunday, May 6, 1:00–4:00 p.m.
Frautschi Point lot

You'll be amazed at how many plants can be pulled in just 3 hours. Bring your own gloves. Refreshments will be provided.

Spring planting

Saturday, May 19, 9:30 a.m.–noon
Picnic Point, Lot 129

Join us to help plant perennials by the Picnic Point kiosk and create "pollinator patches" along the pathway.

Volunteer work parties

Volunteering is a great way to enjoy the Preserve. Long pants (not leggings) and closed-toe shoes required; tools and gloves provided. Groups and youth are welcome with advance notice. For more details, contact Bryn Scriver, bryn.scriver@wisc.edu, 220-5560.

TIME: 9:00 a.m.–noon (unless noted)

Date	Meeting place
Mar 18 Sun	Picnic Point, Lot 129
Apr 7 Sat	Picnic Point, Lot 129
22 Sun	Picnic Point, Lot 129
May 6 Sun	Garlic Mustard Pull! Frautschi Point lot Time: 1:00–4:00 p.m.
12 Sat	Frautschi Point lot
19 Sat	Spring Planting Picnic Point, Lot 129 Time: 9:30 a.m.–noon
Jun 10 Sat	Frautschi Point lot
23 Sat	Picnic Point, Lot 129
Jul 15 Sun	Frautschi Point lot
28 Sat	Picnic Point, Lot 129
Aug 12 Sun	Frautschi Point lot

ANNUAL REPORT

Preserving the Preserve

by Gisela Kutzbach

This year Friends members gave generously of their time and talents to our education and outreach activities, fieldwork, projects, and operations. Thank you to all involved.

reach out

Our family-friendly field trips attracted 500 visitors in 2017—a highly successful outreach to the community on behalf of the UW Lakeshore Nature Preserve. As part of the campus-wide UW Science Expeditions event in April, our Destination Stations at Picnic Point attracted over 100 adults and children. Families enjoyed opportunities to identify rocks, learn about effigy mounds, identify trees, and spot birds. The loyal following of the 4th Sunday Bird and Nature Outings was strengthened. New special topics field trips included exploring habitat diversity, animal tracking, and a cultural history walk for the PLATO lifelong learning hiking group. Field trip participants often share their appreciation of these opportunities to learn about the Preserve.

support

The Friends' finances remain strong. Thanks to your generosity, we were able to fund five summer Prairie Partner interns, contribute to the Preserve Stewardship Fund, purchase nursery plants, and support the Eagle Heights Woods Rejuvenation Project.

volunteer

Many Friends volunteered for field and organizational tasks, including the spring planting at Frautschi Point and the Garlic Mustard pull that filled more than 50 bags. Many joined Preserve Volunteer work days, monitored the Bluebird Trail, or served on committees, events, and projects. Board members coordinated the newsletter, field trips, annual meeting, communications, membership, finances, and special projects, working closely with Preserve staff. Check out the work party dates on page 3 or contact preserveFriends@gmail.com for opportunities to get involved.



Gisela Kutzbach



Gisela Kutzbach

2017 Annual financial report

BEGINNING BALANCE	\$89,903
Income	\$20,695
Memberships	\$14,760
Donations and memorials	\$5,875
Dividends and interest	\$60
Expenses	-\$14,327
Summer interns	-\$6,297
Committees, supplies, newsletter	-\$2,576
Gifts to Preserve	-\$2,500
Special projects	-\$1,300
Postage	-\$917
Financial review	-\$405
Annual meeting	-\$332
ENDING BALANCE	\$96,271

get involved!

Share your passion for the Preserve by joining our vibrant group of volunteers.

Volunteering is a great way to help out at the Preserve and meet fellow Friends. See page 3 for opportunities. To help with organizational tasks, contact preserveFriends@gmail.com.

DEPARTING BOARD MEMBERS

Help us thank the following for their years of dedicated service:

Galen Hasler, volunteer coordinator and summer intern liaison (6 years)

Mike Parsen, chair of the financial, nominations, and projects committees (3 years)

Carolyn Byers, annual meeting coordinator (1 year)



Arlene Koziol



Arlene Koziol

BOARD CANDIDATE BIOGRAPHIES

Nominees to the Friends of the Lakeshore Nature Preserve Board

The Friends nominating committee—Gisela Kutzbach (chair), Jean Bahr, and Doris Dubielzig—recommends the following candidates. The board has endorsed this recommendation. Other candidates may be nominated by the membership at the annual meeting. All current members of the Friends of the Preserve present at the annual meeting (April 3, 2018) are eligible to vote. Board members are elected for 3-year terms; two student board members are elected for 1-year terms.



Gisela Kutzbach *Second 3-year term*—Gisela has served on the Board of the Friends for the past 3 years, and previously for another 6 years. She will continue to co-chair the membership committee and manage the website of the Friends. She has chaired the Friends Project Committee and led significant fund drives for the Heritage Oak and Eagle Heights Woods restorations. She has served as president of the Friends for 3 years. Most recently she has become involved with Citizen Science projects, the purple martin house and the Biocore Prairie Bluebird Trail.



Olympia Mathiapparanam *Student nominee*—Olympia is a UW–Madison junior double majoring in psychology and biology. She is a board member of the UW Habitat for Humanity Chapter and works with the Bradley Learning Community helping freshmen assimilate to college. In her hometown, Olympia participated in a 4-year effort to create a community center with prairie and organic garden landscaping, and is currently investigating germination success in the endangered prairie species, prairie bush-clover (*Lespedeza leptostachya*).



Steve Sellwood *New nominee*—Steve is a hydrogeologist at TRC, a national environmental consulting firm with an office in Madison. His work includes investigation and cleanup of soil and groundwater contamination. Steve has a PhD in hydrogeology from UW–Madison, where he studied groundwater flow in aquifers in south-central Wisconsin.



Mitchell Thomas *Student nominee*—Mitch is a third-year veterinary student at UW–Madison's School of Veterinary Medicine. After spending several summers volunteering with primates and manatees in Belize, he looks forward to beginning his clinical rotations and serving a fourth term on the Board. As a member of the Bluebird Restoration Association of Wisconsin he participated in creating the Biocore Prairie Bluebird Trail. Now he hopes to continue to work towards improving habitat in the Preserve and increasing awareness of the wildlife that call it home.



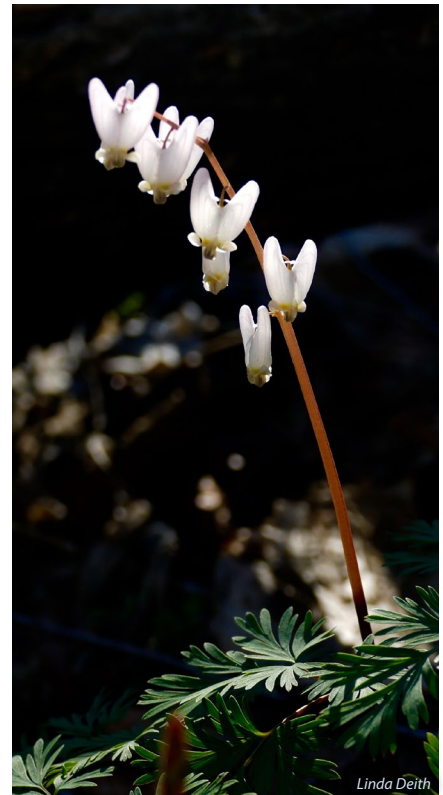
Lillian Tong *New nominee*—Lillian has recently retired from UW–Madison after 39 years, doing neuroscience research for the first 12 years and the remainder at the Center for Biology Education/WISCIENCE working with faculty/staff on improving undergraduate science education. She was a member of the Ad Hoc Diversity Planning Committee and is committed to equity and inclusion. Her childhood experiences of cross-country camping visiting national parks all the way, translated into a love of backpacking, hiking, and canoe-camping. She is a member of Friends of Merrill Spring, a gem on Lake Mendota.

BOARD-RECOMMENDED CHANGES TO BYLAWS

Since 2009, the Friends has had student members on the Board of Directors. A single board position and vote was shared between two students. The proposed change defines the number and term length of student directors and removes the language about a shared vote, giving them each a full vote.

The board recommends that members approve the following change to Article 3.2 of the bylaws at the 2018 annual meeting:

The positions of no more than two directors may be reserved for student candidates, who shall serve repeatable 1-year terms.



Linda Deith

NIGHT LIFE AT THE PRESERVE

Night vision: Evolution of opossums and flying squirrels

by Richard Dubielzig

Have you ever noticed that most birds are active during the daytime and sleep at night? There are, of course, some exceptions, including owls, whip-poor-wills, and nighthawks. It is not quite as obvious, but most mammals are not strictly dependent on daylight as a requirement for being out and about. Most wild mammals are active at dawn or dusk when light levels are low and when most birds are inactive. How does science explain this phenomenon? One needs to go back hundreds of millions of years to understand these behavioral patterns.

Birds split from theropod dinosaurs about 100 million years ago. At that time, theropod dinosaurs were at the top of the food chain. They were excellent daytime hunters with excellent daytime vision. Birds then came into being as daytime specialists. They live extremely active lives and depend on acute vision.

Mammals have an evolutionary history just as long as birds, but during the dinosaur years, mammals survived by coming out at night. They were warm-blooded and survived

during the cold and dark of night when the risk of dinosaur predation was minimal. Thus mammals developed eyes that specialized in having useful vision in dim light.

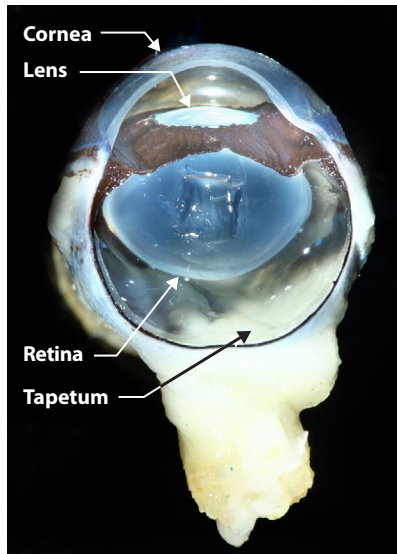
About 70 million years ago several things happened which drastically changed the way animals interacted on Earth. First, the non-avian dinosaurs went extinct, most likely due to a massive asteroid colliding with our planet. Suddenly the little nocturnal mammals, free from the risk of dinosaur predators, were safer exploiting the daytime world. Mammals ascended probably because they already had big brains, which served them well as competitors for daytime niches. Second, placental mammals rose to dominate the earlier marsupials. At the same time, the continent of Australia split off from Antarctica and became an island with no placental mammals and only marsupials and monotremes (like the duck-billed platypus). In the subsequent millions of years, the Australian marsupials radiated to fill many niches. In the Americas, however, the few remaining marsupials all

retained strictly nocturnal vision. That is why the opossum is a nocturnal creature, restricted to dim light vision.

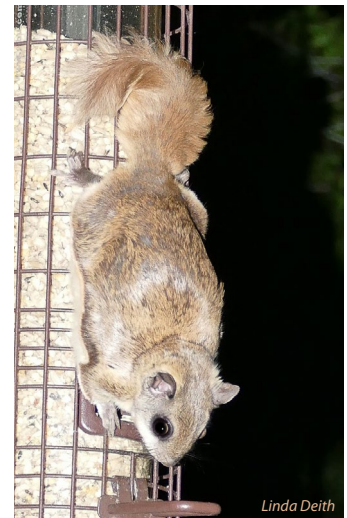
Tree squirrels and ground squirrels are diurnal and forage mostly during the day. Flying squirrels split from the tree squirrels about 35 million years ago, and are strictly nocturnal. They have a rod-rich retina and no longer have any color vision. This switch runs counter to the larger story of mammals being mostly dim-light foragers, and is an example of a group in which a nocturnal lifestyle reemerged from a diurnal group of mammals. Thus a review of evolutionary trends helps us understand the origins of night vision in the only marsupial and the only nocturnal squirrel to be found in the Lakeshore Nature Preserve.



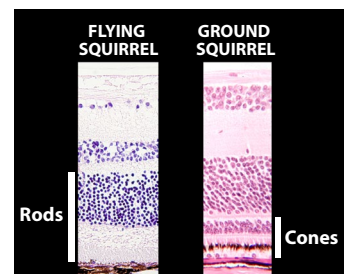
Linda Deith



Opossum eyes are designed to function in low light: The large cornea maximizes the amount of light gathered, the round lens focuses that light on a small area of the retina, and the tapetum reflects light back through the retina for a second pass at the photoreceptors.



Linda Deith



Compared to ground squirrels, the retinas of flying squirrels have significantly more rods (used for night vision) and very few cones (used for day vision).



Great horned owl

BIRDING TIPS

Owl prowling in the Preserve

by Carolyn Byers

Our Preserve is a wonderful place to observe birds, especially owls. Something about their silent flight, nocturnal behavior, and haunting vocalizations makes every encounter magical. Great horned and barred owls are regularly seen in the Preserve.

Here are some tips for finding owls yourself.

March is a great time for owling. Both species of owl spend late winter renewing pair bonds and calling to defend territories, and will likely have eggs by early spring. They are extremely vocal during these months, the male and female often calling back and forth, making them easier to locate than at other times.

Plan your trip for directly after dawn or before dusk. Spot great horned owls in tree line edges near open

fields and check wooded areas for barred owls. Both species roost on branches near the tree's trunk during the day, but also frequent tree cavities.

The easiest way to find an owl is by following other birds. Flocks of crows or songbirds regularly mob hawks and owls. If you see a group of noisy birds diving at a thick clump of pine branches, take a closer look: you might find a hidden owl.

Finally, owl-viewing etiquette is extremely important—please minimize the impact of your visit. If an owl seems agitated or flies away as you approach, you've gotten too close. Try to find a viewing location that offers better coverage or is farther away from the owl. Also, avoid flash photography, as owls have extremely sensitive eyes.

Good luck, and good owling!



Barred owl

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

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

- 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

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



PLANTS IN THE PRESERVE

Spring ephemerals: Hepatica by Gisela Kutzbach

Looking for the first ephemeral wildflowers is one of the highlights of visiting the Preserve in early spring. One of the loveliest of the ephemerals is hepatica (*Anemone acutiloba*). The blue, lavender, or even white and pink flowers come up from the ground each on its own hairy stem using energy stored in the roots of the plant. The flowers face upward in clusters, absorbing heat and attracting pollinators active on the forest floor before the trees leaf out.



CONTENTS | spring 2018

Effigy mounds, annual meeting – 1
Field trips – 2-3
iNaturalist (citizen science) – 3
Volunteer opportunities – 3
Annual report – 4
Board nominees – 5
Night vision – 6
Owls – 7
Spring ephemerals – 8

What looks like flower petals are really sepals, first protecting the buds and later performing the function of petals to attract pollinators. A single flower can have up to 20 sepals, and if the plant likes a spot, it will form large bunches of flowers. Blooming so early in spring, there is the risk that few pollinators will be present. Hepatica can produce seeds in any case, via self-pollination.

As the bloom ends, bright green leaves unfurl. Each leaf has three lobes, reminiscent of the shape of a human liver, hence the name hepatica or liverleaf. The species found in the Preserve has pointed leaf tips; another common species has rounded lobes.

Watch for hepatica flowers beginning in early April, along the spring flower trail in Bill's Woods. When you visit, enjoy, but out of respect for our wildflowers and others, take away only memories and photos.