



PRESERVE!

friends OF THE LAKESHORE NATURE PRESERVE

Winter 2014-15

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Introducing Laura Wyatt

*New Administrative Program Manager
brings experience, enthusiasm to the Preserve*

By Gary Brown, Director, Lakeshore Nature Preserve

We are pleased to announce that Laura Wyatt has joined the Lakeshore Nature Preserve staff as our Administrative Program Manager. Laura oversees the work of Bryn Scriver, our Volunteer Coordinator, and Adam Gundlach, our Preserve Project Coordinator, along with our LTE Gardner Rowyn Noe.

Laura comes to us after serving eight years with the Department of Natural Resources' Urban Forestry program. She was the liaison to the Wisconsin Urban Forestry Council, an advisory council reporting to the State Forester and DNR Secretary. She also served on special assignments with communication and partnerships. Her most recent project was the completion of a US Forest Service Great Lakes Restoration grant facilitating urban tree planting designed to improve stormwater management, in partnership with the Green Bay Packers. The project also included the development of a Playbook for working with professional sports franchises and featured DNR tree planting programs with the Packers and the Milwaukee Brewers.

Before moving to Wisconsin, Laura served as an Extension Educator for the University of Illinois and was the founding director of the Northern Illinois Botanic Society. The latter

group eventually developed the Klehm Arboretum and Botanic Garden in Rockford, IL where Laura became its first director. She also worked for the Morton Arboretum and the Chicago Botanic Gardens.

Throughout her career, Laura has displayed an interest and enthusiasm for building people-plant connections while promoting and protecting natural resources. Her work has been recognized with awards for conservation from the Daughters of the American Revolution and from the Betty Ann Keegan Award for Public Service by the Rockford YWCA Leader's Luncheon Program.

Laura holds a MS in Horticulture from UW-Madison and a BS in Horticulture from Purdue University specializing in woody plants. She has been a certified arborist with the International Society of Arboriculture for 20+ years.

In her free time Laura volunteers and currently serves on the Dane County Tree Board. She formerly served on the Board of Directors for Community GroundWorks (Troy Gardens) and the Wisconsin Arborist Association as TREE Fund Liaison spearheading fundraising for urban tree research and scholarships.

Laura lives in Madison with her

husband Dan and Border collie, Max. She enjoys traveling to visit their son, Nicholas in Washington, D.C. and daughter Natalie, in Seattle, Washington.

Please join me in welcoming Laura to the dedicated professional staff of the Lakeshore Nature Preserve.

Photo by Bryn Scriver



Administrative Program Manager, Laura Wyatt, with Gary Brown, Director of the Lakeshore Nature Preserve.

News Briefs & Notes

3 reasons to visit the Friends website So you forgot the date of the field trip on Fungi? It's one click away- on the Homepage of the *Friends* website. This page gives you news-at-a-glance on the field trips, workdays, Preserve news, Friends events, lectures. It's a bit like a calendar with quick links to details.

One click away, you find *People and Events*- always up to date with stunning photos and interesting stories about *Friends* activities. Stories also include lists of birds, butterflies, or fungi seen on field trips, or profiles of the people engaged in activities important for the Preserve.

One click away from the Homepage is our interactive blog- it features postings on sightings in the Preserve, such as early spring flowers or the first two Barred Owlets bred in the Preserve. Here you find the saga of turtle crossing at the University Bay this summer. You are invited to comment and add your observations to these posts.

While many members enjoy being outside in the Preserve no matter the season, others prefer to snuggle up in front of a warm fire these winter months. Either way, you can explore the Preserve today by going to www.FriendsLakeshorePreserve.com. We have one of the most complete and in depth websites around. And please help contribute to the *Friends* website – submit your requests and observations to webmaster Gisela Kutzbach (preserveFriends@gmail.com).

Henry Hart's life celebration took place on November 16 and it was well attended, as expected. Henry passed away on November 12, surrounded by family, just a few days before his planned 98th birthday party. Henry was a charter member of the *Friends of the Lakeshore Nature Preserve*. He was a popular professor in the Political Science Department at UW, well-known for his efforts in the organization of the University's Department of Indian Studies. He spent much time in India in residence both teaching and traveling. Henry and his late wife, Virginia helped to start the Group Health Cooperative in Madison. Henry was a true environmentalist and advocated for causes that promise long-lasting, far reaching and forward thinking results. At nearly 98, he was as passionate about life as ever. Henry was a truly unique and genuine treasure to the *Friends*. For a profile on Henry Hart, please see the 2012 Winter issue of *Preserve!* (http://www.friendslakeshorepreserve.com/uploads/2/6/9/3/26931781/2012_winter_friends_newsletter.pdf)

It's the holiday season, a time for end-of-year giving, a time to consider a donation to the *Friends*. This year we accomplished a great deal, thanks to members like you who spent many hours participating in our work parties and/or donated funds to support our 100% volunteer-driven organization. Your additional financial support now will help to continue and expand our vital restoration and outreach efforts. The *Friends of the*

Lakeshore Nature Preserve is a 501©(3) non-profit organization. We invite you to make a tax-deductible donation using the form on Page 7.

Photo by Glenda Denniston



Adam Gunlach of the Preserve Staff explains the Buckthorn removal process in Eagle Heights Woods.

The Eagle Heights Woods Restoration Project field trip led by Adam Gundlach in September drew worthy praise, with more than 20 attendees. The catalysts for the long-term project are three Native American burial mounds being obscured and damaged by invasive vegetation and erosion in the area. Renovating the area is no small task. Adam pointed out the areas where professional crews, as well as volunteers, have been removing Buckthorn since last January. The ongoing progress is a small part of the major project mapped out in a 5 year plan developed by Preserve Staff. The *Friends* look forward to supporting the Preserve in this effort. For more detailed information, please see <http://www.friendslakeshorepreserve.com/eagle-heights-woods.html> where you can read about the history of Eagle Heights Woods and link to plan implementation details. More tours of this historical Preserve treasure and a major *Friends* fundraiser to support this vital project are planned for spring. Please contact us if you'd like to help.

Preserve Breeding Bird Study Summary 2013-2014

By Roma Lenehan

The breeding birds of the Preserve have changed little between 2000-2002 and 2013-2015. Common birds stayed common and rare birds remained rare. Despite restoration, neither grassland nor savanna bird diversity has increased. For a complete list, see the Friends website. The number and species diversity of marsh birds have declined, possibly due to declining habitat quality in the Class of 1918 Marsh.

Results and Comparison with Previous Study

The Preserve Breeding Bird Study 2013-2015 found 55 Confirmed (C), 16 Probable (Pr), and 8 Possible (Po) breeding bird species (2000-2002 had 69 C, 12 Pr, and 5 Po). The birds that are Probable and Confirmed, called likely breeding birds, are similar in the two periods. All 47 likely species with more than five breeding pairs in 2002 are still likely breeding birds now. Only the most elusive and irregular species were not found: 3 (none Confirmed) of the 15 uncommon and 8 of the 19 rare breeding birds (see chart). In summary, 70 of the 81 (86 %) likely breeding birds from the original study are still likely breeding birds.

2000-02 Preserve Breeding Birds Not Found 2013-14

Name	Status	Pairs	Habitat
Pied-billed Grebe	1C, 1Po	2	Marsh
Mute Swan	2C, 1Po	1	Marsh
Ruddy Duck	2Pr	1	Marsh
American Coot	2Pr	4	Marsh
Red-headed Woodpecker	1C, 2Pr	2	Savanna
Purple Martin	C1, 1Po	2	House
Least Fly-catcher	2Pr, 1Po	4	Savanna
Chestnut-sided Warbler	C1, 1Pr	1	Forest
Field Sparrow	1C, 1Pr, 1Po	1	Grassland
Savannah Sparrow	1Pr, 2Po	3	Grassland
Pine Siskin	1C, 1Pr	1	Evergreen

Of the 55 Confirmed birds, the two new birds are Cliff Swallow, which nested on campus buildings near the Bay and the Willow Creek bridges, and the Wild Turkey (C 2008, both years). In addition, the study Confirmed Barred Owl (Po 2002, Arlene Koziol 2014) and the previously Probable Sandhill Crane (pair present 2001, nested annually since 2003), Bank Swallow (Tent Colony Woods shoreline 2014), Rose-breasted Grosbeak (both years), Prothonotary Warbler (both years, attracted by houses at Picnic Point Marsh), and Broad-winged Hawk (Eagle Heights Woods 2013). Of the 16 Probable breeding birds, 14 were previously likely breeding

birds. New birds included two rare Probable species, Orchard Oriole and Nashville Warbler, and 5 of 8 rare Possible birds, Turkey Vulture, Black-billed Cuckoo, Sedge Wren, Eastern Towhee, and Lincoln's Sparrow.

Changes in Marsh Birds

The diversity (see chart) and abundance of marsh birds in the Preserve has decreased, continuing a 25-year trend. Heavy rains both years caused water fluctuations and persistent high water in the marshes, making successful nesting difficult. The lack of plant diversity, the predominance of hybrid cattail, and the shallowness of the Class of 1918 Marsh may contribute to the decline of marsh birds. Both Virginia and Sora Rails declined, in 2014 attempting to nest in the Bay Marsh rather than the Class of 1918 Marsh. Other birds that usually nest in this Marsh, like Blue-winged Teal, Sandhill Crane, and Spotted Sandpiper, tried to nest in the small Picnic Point Marsh.

Contribute to the Breeding Bird Study

Next summer will be the last year of the Lakeshore Nature Preserve Breeding Bird Study. Please share your sightings (rlenehan@charter.net) and help make this project a success.

Barred Owl at Frautschi Point



Photo by Arlene Koziol

In addition to supporting physical activity, the Preserve is an accessible green space that offers support to our mental health.



Photo by Glenda Denniston

Human Health and the Preserve:

How this urban greenspace impacts the community

By Eric Obscherning

An astounding 80 percent of the world's population will live in cities by 2050.¹ This unprecedented level of urban migration, combined with increasing rates of urbanization and environmental change, has numerous and complex impacts on our health. A lack of infrastructure for public transportation can promote sedentary lifestyles; vertical development and high-density urban planning can hinder airflow and threaten respiratory health; overuse of concrete and other impervious surfaces can intensify the effects of heat waves; and the urban experience of sights, sounds, hustle, and bustle can stress our mental and emotional health.

This all said, our hope for mitigating these impacts and the most promising plan for sustaining healthy lives in our built environments is the very thing to which we commit in common: the protection, preservation, and restoration of urban 'green spaces' like the Lakeshore Nature Preserve. Improving and supporting human health can be powerful motivations behind advocating for the Preserve.

The Preserve offers several 'services' that work in tandem to improve and protect both individual and public health. The well-kept infrastructure of paved paths and trails promotes active transport and recreation, like biking along the Lakeshore Path and walking and jogging to and from work and

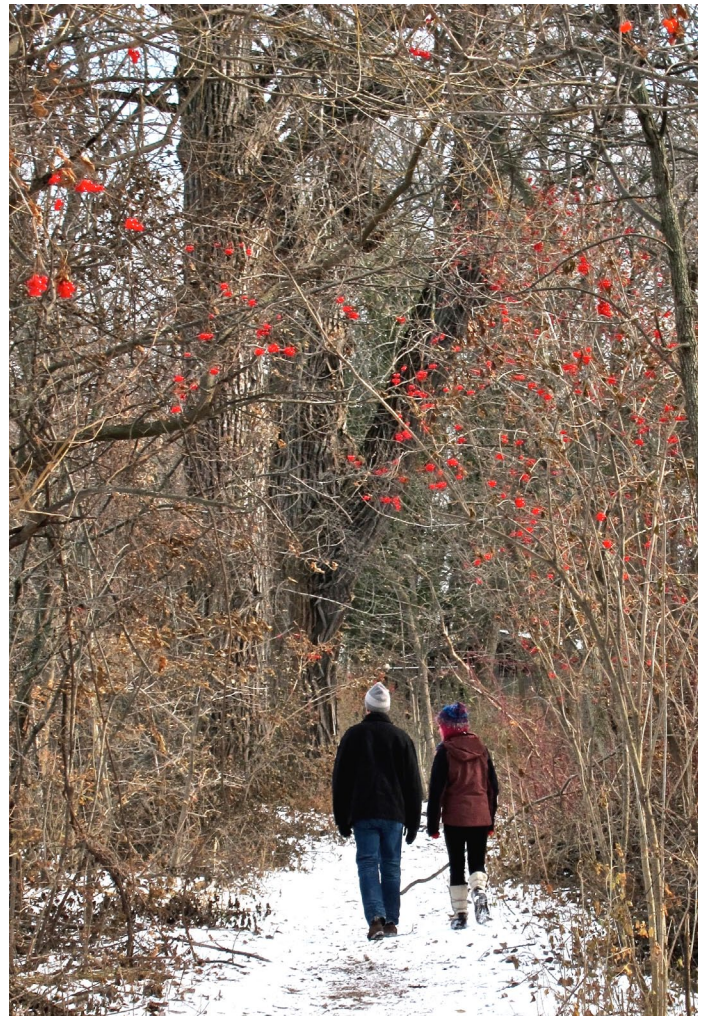


Photo by Gisela Kutzbach

for pleasure. Accessible green space supports mental health and can even improve creativity and cognitive performance. Protected forest and prairie landscapes aid in managing storm water, stabilizing extreme temperatures, and creating a space for community, all with respective and well-documented health benefits.

Active Transport and Recreation

Though not all trails in the Preserve are bike-friendly, and for good reason, the crucial one for active transport- the Howard Temin Lakeshore Path- is open to bicycles. A daily round-trip bicycle commute for a student from Dejope Residence Hall to Helen C White College Library via Lakeshore Path is a quick two mile ride, but could reduce risk of cardiovascular diseases by as much as 35 percent and some cancers by as much as 40 percent, as well as risk of type II diabetes and obesity.^{2,3} A commute by a graduate student from Eagle Heights Drive could add up to a four mile round-trip and result in even greater preventative health benefits. The accessibility and dedicated upkeep of the Preserve and its network of paths and trails support healthy lifestyle behaviors like walking and jogging in a more refreshing, aesthetically pleasing, and safer environment than do the busy roads of Madison, even with our nationally-recognized bike lanes and trails.

Mental and Emotional Health

In addition to supporting physical activity, the Preserve is an accessible green space- an escape to a natural sensory experience- that offers support to our mental health. A handful of studies reviewed at the University of Washington suggest that experiencing nature can help restore the mind from the mental fatigue of work or study and encourage learning, inquisitiveness, imagination, creativity, and alertness.⁴ Engaging with and within the Preserve can also help alleviate symptoms of Alzheimers, dementia, stress, and depression, especially in people with other chronic illnesses. Even symptoms of Attention Deficit Disorder (ADD) can be managed through regular exposure to green space alongside traditional medicine and behavioral approaches. In fact, college students with more natural views from their dorm windows scored higher on attention tests and rated themselves as able to function more effectively than those without such views; similarly, those who participated in a nature walk performed higher on a subsequent attention test than those on an urban walk or seated in a comfortable room. Indeed, one might say that the services for mental health such as those that the Preserve provides are crucial for an intellectual bastion such as Madison.

Water Runoff, Heat Waves, and Social Networks: Indirect Health Benefits

While the Preserve provides services for physical and mental health directly through its transport and recreation infrastructure and natural beauty, it also serves as an indirect source of other health benefits related to water quality, temperature, and community.

The waters of Lake Mendota have long been a favorite for swimming during the infamous Madison summers. However, poor water quality as a result of algal and cyanobacterial blooms in particular can cause dermatological and respiratory issues for swimmers, as well as gastrointestinal complications if ingested accidentally. The Dane County and Madison Public Health Department sees an average of about four toxic algae reports per year, almost always accompanied by non-lethal health reports.⁵ However, Wisconsin found itself home to the first ever recorded human death attributed to toxic algae in 2002 when a 17-year-old high school student died two days after swimming in a pond with friends.⁶

While these blooms are often a natural part of the seasonal cycle of temperate inland lakes, stormwater runoff can also stimulate growth of these organisms. According to a UW Stormwater Report in 2004, green spaces on campus, including the Preserve, are essential for the management of stormwater and thus the reduction of toxic algal blooms.⁷ Whereas impervious surfaces like concrete allow stormwater runoff to empty directly into the Lake Mendota, the Preserve acts as an ecological buffer, allowing runoff to infiltrate into the soil instead. In fact, areas of the Preserve had an average annual runoff depth of 0.03-0.2 feet while neighboring, largely impervious areas had a runoff depth of anywhere from 0.21 to 1.10 feet.

In addition to protecting water quality and consequently, our health, the Preserve also offers indirect protection from extreme heat waves, which are expected to increase in frequency and severity with climate change. Green space like the Preserve can decrease ur-

ban surface temperatures by up to four degrees Celsius and reduce heat-related fatalities, especially in the elderly and people with pre-existing conditions. While the proximity and volume of our lakes act as the primary heat sink for the greater area of Madison, the Preserve also helps to reduce urban heat stress.

The final and perhaps most subtle health benefit the Preserve provides is simply a place for building community and social networks, which are shown to significantly improve health outcomes, especially for the elderly and for economically disadvantaged communities.⁸

In conclusion, the Lakeshore Nature Preserve impacts human health on individual and public scales through both direct and indirect mechanisms. We look forward to a future of daunting ecological challenge, yet immeasurable opportunity for this urban greenspace. The Preserve offers numerous services that prove vital to the health and sustainability of the city, both for those who interact with the Preserve, and those who do not, but nonetheless benefit from the *integrity, stability, and beauty* of this place, as Aldo Leopold might have said.

Eric Obscherning is a senior at UW Madison studying Biology, Creative Writing, and Global Health. He is currently a student member of the Friends of the Lakeshore Nature Preserve Board of Directors.

1. Mander, Ūlo, Carlos Alberto Brebbia, and Enzo Tiezzi, eds. The Sustainable City IV: Urban Regeneration and Sustainability. Vol. 4. Wit Press, 2006.
2. Xu, Huilan, Li Ming Wen, and Chris Rissel. "The relationships between active transport to work or school and cardiovascular health or body weight a systematic review" Asia-Pacific journal of public health 25.4 (2013): 298-315.
3. Transport, environment and health. Copenhagen, World Health Organization, 200.
4. Wolf, K.L., and K. Flora 2010. Mental Health and Function - A Literature Review. In: Green Cities: Good Health (www.greenhealth.washington.edu). College of the Environment, University of Washington.
5. Toxic Algae: Coming soon to a lake near you? A joint report from Resource Media and National Wildlife Federation, September 2013
6. Coroner sites algae in teen's death,' Milwaukee Journal Sentinel, September 6 2003
7. Innovating Stormwater Management on the University of Wisconsin-Madison Campus, 2004
8. Seeman, Teresa E. "Social ties and health: The benefits of social integration." Annals of epidemiology 6.5 (1996): 442-451.

Photo by Glenda Denniston



The Preserve helps build community and social networks.

Thanks to Our Many Volunteers

Together we care for the Preserve.



Photo by Galen Hasler

Our two super volunteers and Preserve Stewards, Glenda Denniston and Roma Lenehan, are an inspiration. Their presence and labor of love in the Preserve, day after day, add beauty and treasured spaces in many parts of the Preserve, such as the riot of spring flowers in Bill's Woods and along the Big Oak Trail, or the savanna edge emerging along Eagle Heights Woods and the University Houses gardens. From when the snow is still covering the ground in spring until it returns in November, Roma and Glenda weed, pull, dig up invasives of many kinds across significant areas of the Preserve, as well as raise and plant native plants. Together they contributed almost 1000 hours of service this past year in the field. They also led field trips, raised plants in the Greenhouse, and contributed organizational work.

Friends' other volunteers in the field contributed about 200 hours of service. A total of 60 individual members of the *Friends*, or 20% of our membership, have contributed to making the *Friends* a vibrant non-profit organization. *Thank you.*

Field Volunteers

Kathy Anderson
Patricia Becker
Diane Budyak
Cathie Bruner
Ann Burgess
Susan Denholm
Glenda Denniston
Eduardo Dominguez-
Munaiz
Doris Dubielzig
Dick Dwelle
Kathi Dwelle
Martha Frey
Kennedy Gilchrist
Galen Hasler
Ryan Hassemer
Noriko Jackson
Lynne Krainer
Jeff Koziol
Gisela Kutzbach

Roma Lenehan
Tal Levanony
Michelle Louis
John Mason
Jean Meanwell
Jeremy Mittag
Karen Nakasone
Biss Nitschke
John Pfender
Rick Rezko
Brian Riley
Marcia Schmidt
Susan Slapnick
Louisa Waller
Will Waller

Organizational Volunteers

Kris Ackerbauer
Patricia Becker
Paul Borowsky

Kathy Brock
Ann Burgess
Amanda Budyak
Susan Carpenter
Diane Dempsey
Susan Denholm
Glenda Denniston
Margaret Dentine
Doris Dubielzig
Peter Fisher
Kennedy Gilchrist
Brent Haglund
Galen Hasler
Evelyn Howell
Arlene Koziol
Gisela Kutzbach
John Kutzbach
Dolly Ledin
Roma Lenehan
Michelle Louis
John Magnuson

David Mickelson
Bill Muehl
Paul Noeldner
Eric Obschering
Olivia Sanderfoot
Marcia Schmidt
Susan Slapnick
Mitchel Thomas
Will Waller
Paul Williams

Field Trip Leaders

Bill Barker
Ted Bier
Paul Borowski
Susan Carpenter
Susan Denholm
Glenda Denniston
Doris Dubielzig
Peter Fissel
Jessie Glaeser

Adam Gundlach
Jim Lattis
Steve Laubach
Roma Lenehan
John Magnuson
David Mickelson
Mara McDonald
Paul Noeldner
Edgar Spalding
Will Waller
Eric Wood

Special thanks to Bryn Scriver of the UW Preserve staff. Bryn coordinates most volunteer events in the Preserve and works closely with the *Friends*.

You Can Volunteer in the Preserve:

Volunteering is a great way to find out what's going on in the Preserve. Tools and training provided. Dress to work outdoors, and prepare to meet new people and have fun. Youth and groups are welcome with advance notice. For more information please contact: Bryn Scriver, Preserve Outreach Specialist, bscriver@fpm.wisc.edu, 220-5560.

February

*Sat., Feb 14 (Valentines Day), 1-3pm
Sun., Feb 22, 1-3pm

March

*Sun March 8 (daylight savings), 1-3pm
Sat., March 21, 9-Noon

April

Sat., April 11, 9-Noon
Sun., April 19, 9-Noon

*Meet at Frautchi Point parking lot
All others meet at Picnic Point parking lot 129

Note: Work parties are cancelled in case of severe weather (snowstorms, thunderstorms, temperatures lower than 10 degrees F or above 100 degrees F), or if the ground is too muddy or snowy for work.

Come volunteer with UW Preserve Staff member, Bryn Scriver (waving, below). Bryn coordinates most volunteer days. It's a fun way to explore the Preserve, learn, and actively make a difference.



Photo by Galen Hasler

I want to make a difference by joining *or making an additional gift to the*

Friends of the Lakeshore Nature Preserve.

Name _____
Street _____
City _____
State _____ Zip _____
Phone _____
Email _____

- I'm interested in volunteering. Please send me information by email.
 I'd like to go paperless & receive my newsletter by email.

ANNUAL MEMBERSHIP

Student _____ \$10
Individual _____ \$20
Household _____ \$35
Steward _____ \$50
Patron _____ \$100
Other \$ _____

ADDITIONAL GIFT

(If you are already a member- does not include membership.)

Woodland _____ \$500
Savanna _____ \$250
Wetland _____ \$100
Prairie _____ \$50
Other \$ _____

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.

Ideas and *Friends* announcements for our newsletter and website are welcome. If you would prefer to go paperless and receive your newsletter electronically, please email us at:

preserveFriends@gmail.com

President: Will Waller 608-231-6260

Vice President: Galen Hasler

Secretary: David Mickelson

Treasurer: Gretel Dentine

Friends Volunteer Coordinator:

Galen Hasler 608-206-5218

galenhasler@gmail.com

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Please visit our website- www.FriendsLakeshorePreserve.com



**"In seed-time learn,
in harvest teach,
in winter enjoy."** -William Blake

How does the Preserve impact human health?

See pages 4 & 5

Which new birds are breeding in the Preserve?

See page 3

Have you met Laura Wyatt?

See cover story

Like to volunteer?

See pages 6 & 7

What's the news in and around the Preserve?

See page 2

Save the Date-

Tuesday, April 7, 2015,

7 pm, at the Arboretum Visitor Center,

Friends of the Lakeshore Nature Preserve

Annual Meeting.