

THE FRINGED GENTIAN

A PUBLICATION OF FRIENDS OF THE WILD FLOWER GARDEN, INC.

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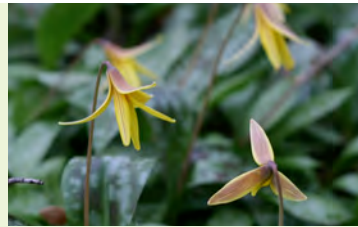
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GARDEN CURATOR, EX OFFICIO

Susan Wilkins



DEAR FRIENDS,

I dare say this is a most truly welcome spring for all of us in Minnesota. Having spent about half the winter in warmer climes, I hereby raise my metaphorical glass of tribute to all of you who endured and indeed overcame, perhaps even flourishing masterfully, through the many days of bitter cold and more snow, as well as shudderingly low wind chills. Like you, I thought about the birds, raptors and animals, hoping they would survive the harsh winter and live to see another spring.

I even thought about the plants. Of course, we Garden fans often think about the plants. Will all of the ephemerals reappear after a hard winter? Will high or low extremes of snow cover affect them adversely? And, this year, will the Garden's ash trees be spared the emerald ash borer due to the severe cold?

Do you ever wonder, though, if plants suffer or actually experience environmental stressors that beings with consciousness do? The concept of plant neurobiology, explored in depth by Michael Pollan in an article entitled, *The Intelligent Plant*, in the last December issue of *The New Yorker*, is a source of conflict among plant biologists and ethologists because it implies that plants have brains with neurons and "intelligence." Scientists do, however, agree that plants have extensive sensory capacities in their roots, as well as communication functions measurable by chemical and electrical changes. The debate is sure to continue, and more research on the lives and capacities of plants will animate our ideas about ecology, biodiversity and the challenge of invasives.

But let's get back to the domain of our own dear Garden of amazing plants, and the Friends' plans for 2014. First, I can report that definite progress has been made in the planning and design of the section of the Garden boardwalk project honoring Cary George, the Garden's fourth Gardener. Highlights of the design include an adjustable floating foundation system specifically made specifically for the wetland's soggy conditions, as well as several modest boardwalk amenities where some seating and gathering space will be added. The deck surface will be local ash that has been

heat treated for durability. The Minneapolis Park and Recreation Board has initiated the bidding process for installation of Phase I, and we now expect fulfillment by late summer or early fall. The Friends have contributed \$25,000 to the project so far. And we have been approached by People for Parks, offering to match up to another \$12,500, if we can raise some additional funds this year. Ongoing updates will be posted on our website and in the next *Gentian*, as well.

I am delighted to announce that we have a new Shelter Volunteer Coordinator for 2014. Lauren Husting has volunteered in the Shelter for several years and has been mentored and tutored by Melissa Hansen to take over this essential role. We welcome her gratefully and look forward to her presence on the Board. I am equally pleased to report that Melissa will continue as a director. She plans to focus her energy and creativity on membership growth and community outreach. Thank you, Melissa, for all of your excellent work!

Looking further ahead in the season, we are planning another Garden Party fundraiser to replenish the Student Transportation Grant monies, so that we can continue to pay for buses bringing students to the Garden for nature classes. At our first Garden party, in July 2012, attendees enjoyed Garden tours, a silent auction, refreshments and music. Once again we will gather in the beautifully remodeled Wirth Pavilion on Sunday August 3—Eloise Butler's birthday—from 3 p.m. to 6 p.m. Please mark your calendar and plan to join us for a fun time and a good cause.

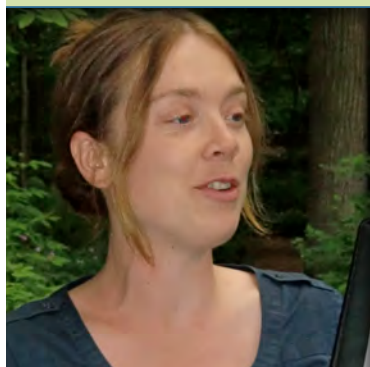
In closing, allow me to share one tiny tidbit from the Pollan piece in *The New Yorker*: "Plants dominate every terrestrial environment, composing 99 percent of the biomass on Earth." Perhaps we are in touch with their immense importance as we tend to our very special 15-acre plot. Happy spring!

Sincerely,

J Pam Weiner



Top, left to right: False rue anemone, trout lilies, wild geranium. Above: Ferns.
Photo credits: Mike Hoium



GARDEN CURATOR'S LETTER

By Susan Wilkins



*Life will be richer
by the discovery
of beauty
that we have
hitherto passed
unheeding.*

—Eloise Butler

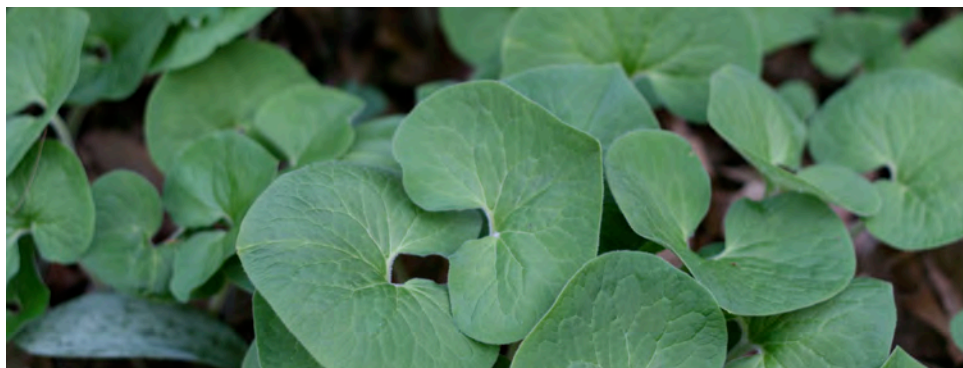
Ah, Spring. The delights of this ephemeral season seem nearly endless: The fresh scent of newly awakened earth, rich from winter's melt and ripe with the warming sun's fertile promise; the tips of leaves poking up through duff and dampened soil; flowers dangling off still-bare branches and emerging from tender stems; and birdsong, a few voices at first, and then, the morning choirs begin. It is the time of a return of scents and sights and sounds not smelled, or seen, or heard since last year's spring appeared and quickly blossomed into another summer. Now, this delightful season is upon us, and where better to explore its magnificent and fleeting expression in our wonderful community than at the Eloise Butler Wildflower Garden?

This season at the Garden we have much to be pleased about and many exciting projects to bring to fruition. Please take a look at some of the highlights below and stay in touch via Facebook and the Garden's website throughout the 2014 season.

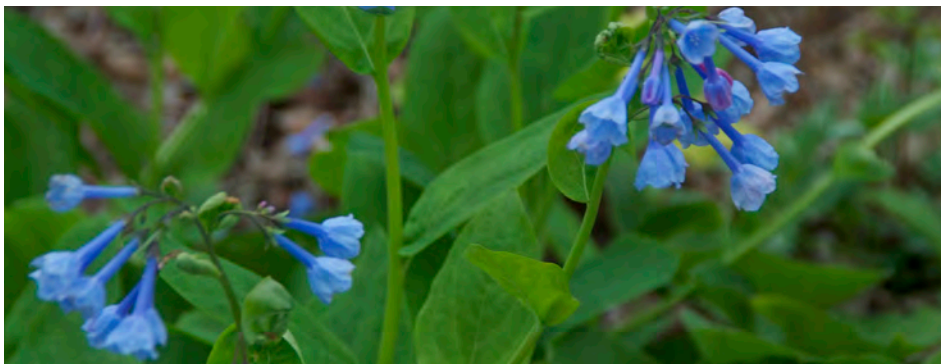
- ☞ The design of the new bridge and boardwalk that will replace the wood-chipped wetland trail will be completed, with plans to begin construction on Phase 1 of the project this year. Updates will be posted on the Garden's website.
- ☞ Analysis of data collected during the 2013 Garden bee inventory by entomologist Elaine Evans will be completed and made available to the public.
- ☞ A complete census of the vascular plants in the Garden will be taken by celebrated botanist Barbara Delaney.

Data will be available at the Shelter and on the Garden's website once it's been compiled.

- ☞ The Urban Birding Festival will be held June 6 - 8 and will include many fun, family-focused birding programs and activities in the Garden and Theodore Wirth Park. The festival is made possible with the support of volunteers from the Minneapolis Audubon Chapter.
- ☞ Planting in prominent woodland garden areas along Trillium Trail and Violet Way Trail will continue as efforts to enhance the beauty and richness of both areas continue.
- ☞ Wonderful programs including Nature Tots and the Homeschool Program Series, as well as a range of programs for youth groups and students from public and private schools, will be led by Garden staff this season.
- ☞ New and returning teachers will offer several special classes for those who want to delve into topics such as landscape photography, watercolor painting, medicinal plants of the Garden and more.
- ☞ Honeybees will be housed for a third season at the Garden and pollinator-focused programming for the public will be offered, including Intro to Honeybees and Basics of Beekeeping led by The Beez Kneez. Bumble-Bee surveys will be guided by entomologist Elaine Evans.
- ☞ The newly refurbished gates at the Garden's south entrance are now in place. ♦



Above: Wild ginger. Right: Virginia bluebells.



To find out more about current and future happenings at the Garden, visit:

- www.minneapolisarks.org/ebwg
- www.facebook.com/pages/Eloise-Butler-Wildflower-Garden-and-Bird-Sanctuary/166629750054157

Q&A WITH MELISSA HANSEN

By Donna Ahrens

For visitors to the Eloise Butler Wildflower Garden, a Melissa Hansen “sighting” is commonplace. As Volunteer Coordinator, she’s frequently at the Visitor Shelter or on the trails, helping with the day-to-day operations of the Garden. This spring, she’ll move into her next phase of volunteering, as a Legacy Steward. We spent a few moments talking with Melissa about the Garden and the Friends organization.

Q *How and when did your interest in gardening/wildflowers begin?* In the early 1980s, I moved to an apartment that included a patch of yard. It was there I began to become a gardener. A few years later, our first house gained me space, but also came with established gardens that helped me learn about the plants already in residence. As I watched plants emerge, I had to research those I didn’t know (gas plant [*dictamnus albus*] was one) and find out how to care for those I recognized but had no experience growing. I was not going to let a mature raspberry patch go improperly tended! In 1991, a move to another house with too much lawn coincided with the native plant movement gaining attention, locally and nationwide.

Q *How long have you volunteered at Eloise Butler Wildflower Garden?* I have lived in Golden Valley since 1991 and I knew the Garden was right here, but I did not visit until summer 2006. “All those wasted years!” was my first thought when I did visit—and by August I was a weekly volunteer. You could say I was smitten.

Q *You’ve been Volunteer Coordinator for five years. What role do volunteers play in the operations and offerings of the Garden?* The simple answer: a big one! For most visitors to the Garden, a Shelter volunteer is the most likely person they will interact with while visiting. Volunteers are in the Shelter or on the trails more hours per week than the staff are. They greet all who visit the Shelter and help with questions, directions and program scheduling. When not occupied with visitors, they do Shelter housekeeping, birdfeeder and birdbath tending and trail monitoring. There are two other groups of volunteers that the visiting public is less aware of: Legacy Stewards, the quiet figures that can be glimpsed eradicating invasive species off trail in the Garden and around the perimeter fence; and the small groups doing scheduled invasive plant pulls. These volunteers are truly gatekeepers for the Garden.

Q *What are a few events in the EBWG that you’ve found especially memorable?* It’s only been eight years since I’ve involved myself, so each season is different and special, but here are some favorite recollections. My second year of volunteering was the 100th Anniversary of the Garden. Among the many special events during the season was one that featured included a lovely actress portraying

Eloise Butler for the day. I’ve always wanted to see her return to the Garden and read more of Eloise’s words.

One early spring, my volunteer shift in the Shelter coincided with Susan [Wilkins, Garden Curator] and Minneapolis Park and Recreation Board staff burning the prairie. When my shift ended, I was allowed to walk through the prairie as it still smoked a bit, charred in every direction except on the paths. It was a magical scene. I happened to have a camera with me and enjoyed watching how quickly the prairie came back to life. I would look back through my burn photos and marvel.

Q *What do you see as the challenges and opportunities for the Friends of the Wildflower Garden?* I see a strong need to increase the size of our membership, to better support the Garden. Along with increasing in size, I like to imagine more events and programs for Friends members would be possible ... special walks, a book club of nature writing, winter meet-ups, and more.

Q *Is there anything else you’d like to pass along to the Friends of the Wildflower Garden?* Yes. Please help promote membership in the Friends organization. We all need to be active advocates for the Garden. And every year, bring one new person to the Garden to walk with you. ♦

—Donna Ahrens is a Shelter volunteer and copyeditor of the *Fringed Gentian*.



Melissa Hansen

Photo credit: Lars Hansen

PHENOLOGY IN THE GARDEN

By Karen Katz, Garden Naturalist



Wild plum

Spring. In Minnesota, we live in a natural world that is constantly changing, four distinct seasons always turning one to another. But spring is the season we anticipate with the most expectant of hearts. Or maybe that's just me. A spring baby, I long for warm breezes that bring the scent of wild plum blossoms—a coveted birthday present and a sure promise that bare feet and sweet berries are on the way.

But there is more to spring than excitement and beauty. The mottled green and brown leaves of trout lilies, skunk cabbages poking up out of the wet, black earth, flashy warblers migrating north and ice discreetly melting back into the lake are also an important area of natural science called phenology. A simple definition of phenology is “the study of the timing of natural events,” and it is one of my favorite natural history subjects.

In college, I had the good fortune to take an interpretation class with Jim Gilbert, a lifelong naturalist and co-author of the Freshwater Society's Minnesota Weatherguide Calendar. I'll never forget the excitement in his voice as he exclaimed, “A leaf falling! A leaf falling! A leaf falling!” during one of our nature walks as we witnessed a red oak leaf float down from the canopy—evidence of the progression of winter into spring as the tree prepared its new bud. Phenology truly is an exciting subject and it is critical to understanding just how our ecosystems may respond to climate change.

Researchers across the country are collecting data on leaf-out dates, arrivals of bird migrations and much more. How exactly plants and animals will adapt is

uncertain, but problems could arise as some events occur earlier and others later. When it comes to phenology data, more is better, so researchers are collecting data from citizen scientists in order to expand their data sample and make better predictions.

The Garden is a magnificent place to study phenology. The notes of previous curators and naturalists are a valuable historic resource. Current Garden naturalists keep a phenology log detailing animal sightings and the first bloom of species in the Garden. It's a useful tool to inform visitors of flower highlights and adds to our decades of collections.

The Garden's Education Program Coordinator, Lauren Borer, leads the Phenology Club, a program designed for homeschooled students. Participants meet every other week all season long to hike through the Garden and record their observations in a phenology notebook. This will be the program's second year, and Lauren is looking forward to the beautiful drawings of butterflies and blooms that her enthusiastic students create during each meeting. She also hopes to extend the program by developing a partnership with the local elementary and middle schools.

Interested in learning more about phenology? There are many different citizen science projects that you can get involved with, including the National Phenology Network's Nature's Notebook campaign, Project Budburst and programs run by the Cornell Lab of Ornithology. And I would be happy to provide guidance to those interested in collecting and reporting data.

While the sunlight returns to us, start thinking about the next glorious season. And make your best guess as to when we'll see those lady's slipper orchids blooming in the wetland. ♦



Prickly ash flower

Photo credits: Karen Katz

Skunk cabbage



COOPERATION IN NATURE

By Diana Thottungal, Retired Garden Naturalist

Pretty much everyone's heard of "survival of the fittest"; the words conjure up a mental image that likely includes a fierce carnivore doing its carnivore thing, attacking some poor, helpless prey. Of course there are such critters, and they definitely don't play well with others. But in nature, there are also many organisms that cooperate—all the way from bacteria, insects, plants and fungi to people.

Here are a few examples of cooperation in nature that can be found here in the Garden.

FERNS

In the area between stations 9 and 11 there is a large swath of interrupted fern (*Osmunda claytoniana*). Eloise Butler considered it to be the most magnificent display in the garden, and for good reason. Not only do the ferns prevent other species from growing among them, they also encourage healthy spacing of new specimens. So, while they are competing with other species for space, they're also cooperating among themselves.



Interrupted ferns. Photo credit: Diana Thottungal

ANTS AND PLANTS

The cooperative arrangement between bees and flowering plants is well known. But did you know that some ants have even more elaborate arrangements? Spring-flowering plants like trillium, violets and bloodroot provide food for wandering, hungry ants. In return, ants spread the flowers' seeds far and wide.

The food that the ants get comes in the form of elaiosome, a sweet-tasting outgrowth attached to the outer surface of many seeds. Seeds aren't harmed when ants eat the elaiosome, and some studies have even shown that removing it may improve germination. In addition to spreading seeds, ants carry seeds back to their nests, they toss the leftovers into their underground "landfills," which are rich in ant droppings, dead ants and other things that help seeds get a great start in life. ♦



The Garden's front entrance. Photo credit: Mike Hoium

LICHENS

Here in the Garden you'll also find grayish-green (or sometimes yellow or red) things that sort of look like plants, but aren't. They're lichens and are actually a combination of fungi and algae with lives so intertwined they reproduce as one unit.

About 20 percent of fungi have developed these cooperative living arrangements with certain species of green or blue-green algae. The fungus protects the algae while the algae, through photosynthesis, gather nutrients to feed the fungus. If the fungi are attached to rocks, acids produced by the feeding fungi help break down the rocks, providing minerals for the algae.



Lichens. Photo credit: Gary Bebeau



PLEASE JOIN US FOR OUR ANNUAL MEMBERSHIP MEETING

Sunday, May 4, from 3 p.m. to 6 p.m. in the Community Room at the Lyndale Farmstead Park Building, 3900 Bryant Ave., S., Minneapolis.

Hear the latest from the Garden Curator and the Friends while enjoying refreshments and good company. And we would love to hear your ideas and suggestions about our work on behalf of the Garden.

FRIENDS INVASIVE PLANT ACTION GROUP

For many years, the Friends Invasive Plant Action Group (FIPAG) has been working to establish a buffer or Preservation Zone around the Garden. The purpose of this zone is to help ensure that as invasive plants are eliminated from the Garden, they aren't immediately reintroduced by eager invasives in the surrounding area.

But what is the size and shape of this Preservation Zone? Where are its edges, its boundaries? In the early stages of the project, when the need to do something immediately seemed paramount, just starting to create a buffer seemed to be the most important thing. Discussions of boundaries could come later, we reasoned.

Under Jim Proctor's leadership, after much slow and steady work in the areas with the greatest need, answers to questions about boundaries began to emerge from the work itself. The boundary became, for the most part, the walking path that rings most of the Garden. But it isn't that simple. In some places the path is a very clear, broad dirt swath. Sometimes it's very narrow and you have to squint to really see it. There's a stretch outside the Garden's prairie and fern area where the path doesn't really exist at all. In some places, the distance between the path and the Garden's fence is more than 50 feet; in others, barely 5 feet.

And in what sense can we call any of it an edge, anyway? Where is the real boundary in restoration work? Birds fly over it, animals run across it, winds blow in all directions—and the distinctions immediately begin to blur. As we work to protect the beautiful thing that is the Garden, the beauty in the newly restored areas can be likewise breathtaking. The desire to expand the Preservation Zone is as natural as breathing. But we are always asking: "Where does one thing stop and another thing begin?"

There are practical questions too. Minneapolis Park and Recreation Board maintenance staff mow around the Garden, maintaining paths and accessibility, creating edges with each pass. Last year, Susan Wilkins, Pam Weiner, Jim Proctor and Liz Anderson worked with Park Board staff to expand the boundaries at the southeast edge of the Preservation Zone. Last fall, signs were installed, declaring our intention to enlarge the restoration area and indicating the Park Board's willingness to recognize and support the effort. The signs are a visible result of cooperative work over time among the Garden, the Friends, and the Park Board.

When the Garden opens, it will be pure delight to head into the Preservation Zone, sniff the air, listen to the birds, see the results of last year's work—and pull some garlic mustard! Those of you on FIPAG's email list will receive scheduling information, and signs will be posted in the Shelter. Invasives events generally last about 2½ hours on a handful of Saturdays or Sundays in May and June. If you're not on the email list but would like to get involved or just keep up on what we're doing, please contact us at invasives@friends-of-eloisebutler.org ♦

—Jim Proctor & Liz Anderson,
Invasive Plant Action Group co-chairs



Above right: Wood poppy. Below: Moss on tree roots. Photo credits: Meleah Maynard



NEW MEMBERS

- Roger Battreall, Golden Valley
- Valerie Bauer, Golden Valley
- Mary Elizabeth Borgh, Minneapolis
- Faith Clover, St. Paul
- Kathleen Conklin, Minneapolis
- Mark Leblanc, St Louis Park
- Terrance & Barbara Nagle, Golden Valley
- Janet Olfe, Golden Valley
- Amy Overby, Golden Valley
- Carol Stone, Minneapolis
- Cora Wortman, Brooklyn Park

—Jayne Funk, membership co-chair

Correction: In the fall issue of the *Gentian*, the train wrecker mushroom was incorrectly identified as *Ganoderma lucidum*. The correct botanical name is *Lentinus lepideus*.



MEMORIALS AND DONATIONS

OCTOBER 2013 ~ JANUARY 2014

MEMORIALS

For Lawrence Davis
from Pam Weiner and Gary Bebeau

In Honor of Hayes MacArthur
from Barbara Levie

In Honor of Ann Lebens
from Mary Abbott

GIFTS *In support of our programs from:*

- Michael T. Anderson
- Elizabeth Kreibich
- Mary Stanley
- Elaine Eschenbacher
- Gerald Kollodge
- Susan B. Warde
- Jeffrey Haines
- Lyle Lofgren
- Steven Leuthold Family Foundation
- Heather J. Ilse
- Mary Jane Pappas

Memorials and gifts to the Friends are much appreciated and constitute an important part of keeping the Garden a special place for generations of people to enjoy. Memorials and gifts are tax deductible. When sending a memorial, please provide the name and address of the family being honored so we can acknowledge that a memorial has been received. An acknowledgment will be provided to all donors. Memorials and gifts should be sent to: Treasurer, Friends of the Wild Flower Garden, P.O. Box 3793, Minneapolis, MN 55403. Checks are payable to: Friends of the Wild Flower Garden or donate on our web site, www.friendsofthewildflowergarden.org.

—Gary Bebeau, *memorials chair*

Wild geranium.

Photo credit: Meleah Maynard

MEMBERSHIP FORM

☐ Individual \$15 ☐ Family \$25 ☐ Sponsor \$100 ☐ Life \$500 ☐ Other \$_____

Memberships can be ordered online at
www.friendsofthewildflowergarden.org
or mailed with a check payable to:

Friends of the Wild Flower Garden, Inc.
Membership
P.O. Box 3793
Minneapolis, MN 55403-0793

Please specify if the membership is a gift.

*Each membership is tax-deductible to the extent
allowed by law.*

Name _____

Address _____

Telephone _____ Email _____

This is a gift membership from: _____

The recipient of your gift will receive a letter of welcome from the Friends of the Wild Flower Garden.

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Donations of gifts or memorials may be made
at www.friendsofthewildflowergarden.org
or mailed with a check payable to:

Friends of the Wild Flower Garden, Inc.
P.O. Box 3793
Minneapolis, MN 55403-0793

*Thank you for helping to sustain the Eloise Butler
Wild Flower Garden and Bird Sanctuary.*

All gifts are tax-deductible.

Name _____

Address _____

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This is a gift from: _____

In Honor / Memory of: _____

THE FRINGED GENTIAN

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The Eloise Butler Wildflower Garden and Bird Sanctuary is comprised of cultivated but naturalistic woodland, wetland and prairie environments, 2/3 mile of mulch-covered pathways and a rustic shelter where educational programming and materials can be found. It is the oldest public wildflower garden in the United States. The 15-acre site is located within the city of Minneapolis and is owned and operated by the Minneapolis Park and Recreation Board. The Garden is open from April 1 through October 15 from 7:30 A.M. to a half hour before sunset.



The Friends of the Wild Flower Garden, Inc. is a 501(c)(3)

Minnesota nonprofit corporation, formed in 1952. Its purpose is to educate by enhancing Garden visitors' appreciation and understanding of Minnesota's native plants and natural environments and to offer assistance for the Garden in the form of funding and other support.

The Fringed Gentian is published for members and supporters of the Friends.

For changes to your mailing address, please write membership co-chair Susan Dean at: members@friendsofeloisebutler.org or 602 Thomas Ave. So., Mpls, MN 55405.

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