



## FNA News Winter 2016



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Fermilab Natural Areas (FNA), is a 501(c)(3) not-for-profit tax-exempt corporation formed in 2006. Our mission: *To conserve, restore and study the natural areas within Fermilab while encouraging employees and neighbors to experience and enjoy Fermilab's natural beauty.*

We envision a future:

- \* *Where our natural areas and ecosystems are rich in biodiversity.*
- \* *Where conservation and restoration are sustainable activities.*
- \* *Where we are a regional leader in natural areas research.*
- \* *Where Fermilab's open spaces contribute to a high quality of life for the community.*

### **A Message from the FNA President** [fermilabnaturalareas@gmail.com](mailto:fermilabnaturalareas@gmail.com)

Warm winter greetings!

As the new year begins, the FNA Board of Directors and I would like to express appreciation for all of the hard work and thoughtful generosity from all of our FNA supporters; donors, stewards, monitors and volunteers. Your time and money have made a huge impact on the success of this organization for the past 10 years!

This past autumn, I was honored to accept the role of president of the FNA board. As a docent at Fermilab for the past 6 years, I have seen many of the improvements in the Fermilab natural areas. These improvements have impacted hundreds of school children who visit and learn about our prairies and woodlands on their field trips. It's inspiring to see a child's first encounter with the prairie, especially if they see a wild snake!

There have been many FNA accomplishments in the past ten years. In 2015, FNA sponsored the first ever 'Incredible Bats' presentation. Please read about this in this newsletter. Last February, the first FNA Volunteer Recognition Dinner was held at Chez Leon to thank our dedicated volunteers for all they do in conserving and restoring the natural areas at Fermilab. Thanks to a generous grant from the Illinois Clean Energy Coalition, we have been raising funds toward reaching our goal of \$4000 by the end of 2016. These funds will help us to restore our oak savannas and provide needed supplies and materials for other site restoration projects.

I invite you to join us at our General Membership meeting on Wednesday March 2, 2016 in the 1 West conference room in Wilson Hall. We will have a presentation by Dr. Allison B. Sacerdote-Velat, Reintroduction Biologist from the Lincoln Park Zoo on the effects of invasive species (buckthorn) on native animals. Our ecologist, Ryan Campbell will share the results of FNA volunteers' work efforts in the wonderful natural areas at Fermilab.

Thank you for your support!

Best Regards,  
Toni Mueller  
FNA President

### **FNA Calendar of Events**

Check the calendar at our new, improved web site: <http://www.fermilabnaturalareas.org/calendar.html>

All workdays are free and open to the public. No experience required. Meet in the [Lederman Science Education Center](#) parking lot for all events. Please dress for outdoor work & wear sturdy shoes or boots. Rain or hazardous weather cancels. Those under 18 years of age must be accompanied by an adult or have written permission. Please follow our [facebook page](#) or the calendar on our [website](#) to see the latest updates for work days. Here's an example:

**Monday Strike Team** - traverse the site hunting invasive species

**Wednesday Morning Warriors** - collect, process, mix, and spread native seeds

**Steward Workdays** - assist FNA Stewards in their habitat restoration projects

*Seasonal activities may include:* invasive species control, native seed collecting, seed processing & mixing, seed mix spreading, and wildlife monitoring. Stewards try to have some environmental education involved with each workday, and provide refreshments. Receive workday announcements & reminders by sending a request to [fermilabnaturalareas@gmail.com](mailto:fermilabnaturalareas@gmail.com).

**March 2** FNA Annual Meeting, 7:00 pm, Wilson Hall, atrium level room 1West. See page 2 for details.

**April 7** Save the date for FNA's Volunteer Recognition Dinner!

Please watch your email, [facebook](#) or [our calendar](#) for last-minute changes or additional events.

## Morgan's Woods Workdays Lead to the Owl's Tree *Lori White & Patsy Hirsch, FNA*

*Editor's note: This article kicks off our look at the FNA stewardship units in Fermilab's natural areas. We plan to feature one or two units per newsletter. Lori White and Patsy Hirsch are the FNA stewards of Morgan's Woods, \_and\_ (being multi-talented folk, like many of our volunteers) are also University of Illinois Extension Master Naturalists. They will introduce us to their stewardship unit and its very special attraction ...*



“OH, that’s where the Owl’s Tree is!” Many FNA Stewards and Workday Volunteers say this while walking in Morgan’s Woods. Over time, each of the FNA Steward’s woodland becomes known for its special feature or places. For Morgan’s Woods, it’s a tree, or rather what’s under that tree. During restoration workdays, stewards and volunteers wander about the woods in search of invasive plants to remove. Our meandering usually bring us to the base of this special tree, the Owl’s Tree, the roost. This roosting tree has become the icing on a cake, the cherry on the top, the owl pellets at your feet.

WHAT, really, owl pellets? Yes, a pile of them! Just begging to be explored! Beneath the Great Horned Owl’s favorite roost, we poke through the pile of pellets to find little femurs, skulls, and tiny teeth tangled within fur or feathers, depending on the meal caught. The owl’s pellets are a real prize for those who are fascinated by the ‘remnants of nature’, and for those who have not yet been introduced to what an owl regurgitates after a meal. The pellets offer a window into the science of the wildlife’s edible world. This is Morgan’s Woods’ reward for a job well done in this beautiful and peaceful woodland.

## Hear Ye, Hear Ye! All are Invited to Upcoming FNA 2016 Annual Meeting

Our annual meeting will be held on Weds March 2<sup>nd</sup> at 7:00 pm in Fermilab’s Wilson Hall (the “High Rise”) conference room 1 West on the atrium level.

Please join us for our annual business meeting and special keynote speaker. The meeting begins at 7:00 p.m. with our keynote lecture, followed by the annual meeting activities. No registration is required, members and non-members are welcome to attend.

Fermilab Natural Areas is honored to announce that **Dr. Allison Sacerdote-Velat** will be the keynote speaker at the Annual Meeting to be held Wednesday, March 2, 2016 in Wilson Hall, Room 1 West. She will share with us the effects that buckthorn has on the habitat and wildlife. **Ryan Campbell**, Fermilab’s ecologist, will also present a brief review of the past year’s activities and successes. Dr. Allison was a seasonal wildlife biologist for several years with a variety of state wildlife agencies, universities, the Wildlife Conservation Society and the National Park Service. She completed her doctoral work at Northern Illinois University, studying the reintroduction of extirpated amphibians into restored flatwoods wetlands in northern Illinois. Allison began her current position as Lincoln Park Zoo reintroduction biologist in May 2010. She works collaboratively with the Lake County Forest Preserve District on conservation and recovery planning for smooth green snakes, an Illinois “species in greatest need of conservation.”

Ryan grew up in Batavia, and spent two years as a Summer Student at Fermilab. He then received a Masters of Science in Plant Biology from Southern Illinois University Carbondale while conducting grassland restoration research in Illinois, Kansas, Nebraska and the South African Veld. Ryan began working full time with Fermilab in 2011 as a Natural Resources Specialist.

## “Incredible Bats” at Fermilab *Liz Copeland, FNA*

Halloween came early to Fermilab this year thanks to an event sponsored by Fermilab Natural Areas (FNA), and it was INCREDIBLE. Thanks to Sharon and Daniel Peterson, over 60 adults and children were treated (not tricked) to an informative program entitled *Incredible Bats*. The myths surrounding these wonderful creatures of the night are plentiful, but the Peterson’s presentation dispelled them all.

**Myth #1** *Bats are blind*; rather they use highly sophisticated echolocation to maneuver through the skies with ease. Bats produce ultrasonic high pitched sounds with their vocal chords and one species even echolocates through its nostrils. Each species has its own echolocation call and these sounds are quite varied. As a bat searches for food, it emits 10-50 calls per second. But, once prey has been detected these, calls can increase to 200 or more calls per second.

**Myth #2** *Vampire bats drink your blood*. Rest assured, no vampire bats live in North America; however, Mexico, Central and South America counties are not as fortunate. These winged creatures feed entirely on blood from unsuspecting animals. They don’t remove enough blood to harm their host, taking only about a tablespoon, while their saliva prevents the blood from coagulating. Blood is lapped up with the tongue rather than sucked up.

**Myth #3** *Bats are afraid of daylight*. In truth, the most common bat in North America, the little brown bat, enjoys dining on insects during daylight.

**Myth #4** *Bats are relatives of rats and mice*. Instead, bats are in their own order called Chiroptera, which in Latin means “handwing”. Their long “fingers” are actually in their wings. As the only flying mammal, bats are wonderful insectivores eating up to 1,000 insects an hour and 7,000 per night~ that’s a lot of mosquitoes!

**Myth #5** *All bats carry rabies*. Although bats can carry the rabies virus, most bats are NOT infected with it. According to the Illinois Department of Public Health, less than one percent of the bat population would carry the virus. Regardless, like any wild animal, they should not be approached or handled.

**Myth #6** *Bats only live in warm climates, and they all resemble each other*. Although bats are typically brown or black, some may be white, red, grey, orange and even spotted! Their shapes and size vary from the smallest, the Kittie’s hog-nosed bat of Thailand which measures a mere (1.14–1.34 in) in length and weighs less than a penny, while the giant golden-crowned flying fox fruit bat weighs 4 pounds and has a wingspan of almost six feet! Found in every continent except Antarctica, bats are even important pollinators of the Sorro cactus and agave plants in the southwest. 95% of rainforests are reforested by bats.

The Peterson’s mission is to educate everyone about the importance of bats in our ecosystem and allay any fears people have of these flying mammals. Rather, bats should be encouraged! Putting up a bat house in your yard is an excellent idea as they are incredible insectivores.

In addition to allowing their audience to see, photograph, and touch live, hand raised bats, Sharon and Pete brought their two beautiful skunks, Bella and Baxter. To learn more, go to [www.incrediblebats.com](http://www.incrediblebats.com).



**2015 Christmas Bird Count in Fermilab**    *Dave Spleha, FNA*    *Photo by Dave Spleha*

Once again the Fermi Circle Christmas Bird Count (CBC) was conducted this past December. This 2015 count was conducted on Saturday, December 19. As a review for our readers, the Christmas Bird Count is a full day of birding devoted to performing a census of the birds within the "Fermi Circle". The "Fermi Circle" is a 7-1/2 mile radius circle with Fermilab at the center. Note that CBC's are conducted between December 14 and January 5 in many locations throughout the country. There were 584 CBC's conducted in 2015 with over 16 million birds recorded. The results referred to here just pertain to the count performed within the boundaries of Fermilab and not the entire "Fermi Circle".

The old Fermilab CBC record species count of 55 in 1998 was blown away with this year's total of 62 species. Interestingly, except for the very large numbers of Canada Geese and Mallards, the overall number of birds was not noticeably large. As an example, 9700 birds were tallied on this 2015 CBC, while the record high for the Lab was 26,611 birds in 1986. As Peter Kasper, physicist and Fermilab bird monitor, said: "things just came together today".

Except for the constant winds, we had a near perfect day for the 2015 CBC. It was sunny most of the day with temps a little below freezing. It was just cold enough to keep the ground from becoming sloppy. Following are the highlights of the 62 species found for the day. Waterfowl highlights found were Greater White-fronted Geese (18), Snow Geese (2), Cackling Geese (5), Wood Ducks (1), Northern Shovelers (1), Green-winged Teal (2), Common Goldeneyes (31), Hooded Mergansers (10) and Common Mergansers (17). There was also a Pied-billed Grebe (1) and American Coots (2) found. Raptors were well represented by a Bald Eagle (1), Northern Harriers (6), a Sharp-shinned Hawk (1), a Cooper's Hawk (1), Red-tailed Hawks (20), American Kestrels (5) and a Peregrine Falcon (1). Only found twice before during a CBC, a dozen Sandhill Cranes were seen as flyovers heading south. A regular for most of the last CBC's, only a single Wilson's Snipe was found in an open ditch with running water. Owls were well represented with Great Horned Owls (9), Long-eared Owls (4) and a Short-eared Owl (1). A couple of recently irregular species were found, namely Red-breasted Nuthatches (2) and Brown Creepers (2). Sparrow highlights were a Savannah Sparrow (1), Swamp Sparrows (7), White-throated Sparrows (4) and White-Crowned Sparrows (5). Finally, blackbirds and their relations were represented by Red-winged Blackbirds (19), Eastern Meadowlarks (7), Rusty Blackbirds (2) and Common Grackles (2).



*Long-eared Owl*

Now for misses and noticeably low counts for the day. About the only missed expected species were Gadwall and Lapland Longspurs. These were expected because they had been quite regular around the Lab leading up to the count. Some other found birds were in quite low numbers including Cooper's Hawk (only 1), Horned Lark (only 2), Cedar Waxwing (only 1) and Song Sparrow (only 9).

When we all met at lunchtime during the Count, I think each of the three groups thought it was going to be an average count. But when the bird species were totaled collectively, I think many of us thought it could turn out to be a special day if each group scored just a few more species. As it turned out that's just what happened, which makes Peter's statement "things just came together today" ring true.

You can see the complete data on prior Fermilab CBCs, and drill into the details by visiting this web page: <http://www.fnal.gov/ecology/wildlife/cbc/>

## Triple the Exciting News! FNA Receives a “3 to 1 Challenge Grant” *FNA Board of Directors*

*There’s never been a better time to support our efforts!*

The [Illinois Clean Energy Community Foundation](#) has awarded an eighteen-month “Stewardship Challenge” 3 to 1 grant to Fermilab Natural Areas! For every \$1 that we raise up to \$4,000, the Foundation will match it with \$3, resulting in \$16,000 to be used for the care of habitat at Fermilab. (Any additional dollars donated won’t be matched, but *will* be used for the same purpose). Qualifying donations include all dollars specifically earmarked for the challenge grant, and any annual donations received above and beyond the \$25 cost of renewing a general membership. The Foundation will also grant us an extra \$1,000 when 100 hours of documented volunteer work is completed.



Fermilab Natural Areas (FNA) will be able to restore and maintain 250 acres of savanna and woodland ecosystems because of your donation and the grant match! Savanna restoration efforts will take place within the Main Ring Savanna and Site 29 Woods using contractors. The second part of FNA’s plan challenges eight of our volunteer stewards to commit at least 100 hours each toward removing invasive species within their stewardship area. They will then be eligible for grant monies to purchase native plants, seeds, shrubs, and tools to continue improving the health of their woodland area.

*Please help us move these restoration efforts forward by donating generously to this challenge!*

Use the handy form below to pay by check. Make sure to mark your tax-deductible donation ‘FNA 3 to 1 Challenge’ in the memo area.

To donate online using credit card or PayPal, go to <http://www.fermilabnaturalareas.org/fna--3-to-1-grant.html> - it will open to our web page with details and a specific form for this Grant.

Make your check out to “*Fermilab Natural Areas*” and add “*FNA 3 to 1 Challenge*” to the memo area.

Name: \_\_\_\_\_

FNA 3 to 1 Challenge Donation:

Address: \_\_\_\_\_

\$ \_\_\_\_\_

City: \_\_\_\_\_

Mail this form and your check to:

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Fermilab Natural Areas  
P.O. Box 500, MS 444  
Batavia, IL 60510

Email: \_\_\_\_\_



*Thank you!*

