



# **Fermilab Natural Areas 2008-2016 Update**

## **ABOUT US**

**Fermilab Natural Areas (FNA) is an Illinois 501(c)(3) nonprofit organization founded in 2006, and incorporated in 2008, to continue the work of habitat restoration, environmental education, research, and community involvement that began in 1975 when Dr. Robert Betz began restoration of 13 acres of tallgrass prairie within the 6,800 acre Fermilab site. Over the past 40 years, hundreds of people have invested thousands of hours successfully restoring nearly 1000 acres of tallgrass prairie at Fermilab, plus hundreds of acres of woodland, oak savanna, and wetland.**

### **Mission**

**To conserve, restore and study the natural areas within Fermilab while encouraging employees and neighbors to experience and enjoy Fermilab's natural beauty.**

### **Vision**

**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**

#### **How FNA and Fermilab Work Together**

FNA is an independent organization and it is not part of Fermilab. FNA's main functions are to recruit and organize volunteers; perform environmental research; organize educational events; and raise funds to assist in ecological restoration and monitoring. We work closely with Fermilab's Roads and Grounds crew and its Ecological Land Management Committee. FNA conducts its work in agreement with Fermi Research Alliance, LLC, and is continuing to work on forming a stronger partnership.

## Importance of our Natural Areas

The great number (over 2,600) of acres of restored areas is important because large, intact blocks of natural areas are most effective for protecting a diversity of habitats and for conserving large populations of wildlife. The Fermilab areas include natural corridors and greenways (such as streams, trails, utility rights-of-way and unused railroad rights-of-way) that are essential in linking larger patches of habitat.

The Fermilab prairie restoration has connected fragmented woodlands and remnant wetlands to create large, core areas for nature. These natural areas also support and conserve unique landscape features, endangered and threatened species, and significant habitat and resources for pollinators, including the monarch butterfly.

Fermilab's prairies and wetlands naturally conserve water and prevent runoff and erosion, thereby helping aquifer levels, protecting topsoil and reducing the extent of flooding. Wetlands also can filter pollutants from water, which can improve water quality. Natural areas also store carbon, helping to reduce the effects of climate change.

The ecosystems that are being built and enriched maintain and protect many native plant and animal habitats. As these habitats improve, increased types and numbers of birds, mammals, reptiles and insects appear.

Experts say that less than one tenth of one percent of the Illinois prairie remains in its original condition. Members of the public can now visit Fermilab's natural areas to see the prairie plant species that are now flourishing.



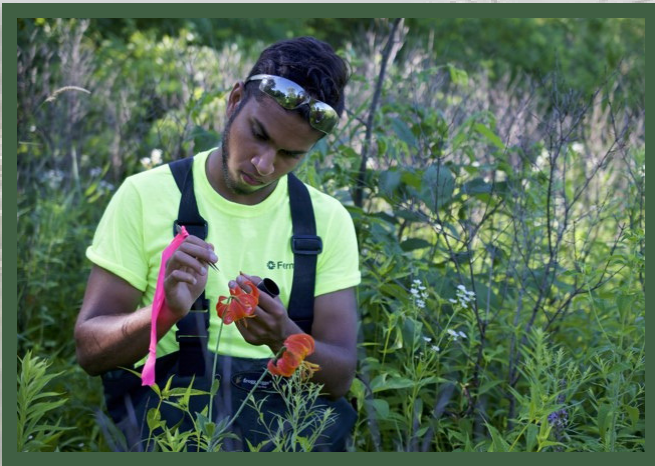
Coyote at Fermilab, Tina Smth 2016

## Community Outreach and Education

With Fermilab, FNA co-hosts the Arbor Day and Autumn Prairie Seed Harvest events, educational tours, and talks. Educational tours include multiple walks each year to observe and learn about wildflowers, butterflies, birds, bees, and dragonflies. Educational talks were presented at our annual meetings, the ELM Committee meetings, and other programs such as Incredible Bats (pictured below) which are all open to the public.



**Fermilab's Tom Peterson shares his knowledge and enthusiasm for butterflies and moths during a Butterfly Talk in July 2016. Tom has hosted these talks for many years.**



**Betz interns gain valuable experience in the field.**

FNA honors the legacy of Dr. Robert F. Betz who was a pioneer of tallgrass prairie restoration, leading Fermilab's initial restoration efforts beginning in 1975, by supporting budding ecologists with the Betz Internship.

FNA is a member of the Batavia Chamber of Commerce and the Chicago Wilderness Alliance. FNA and Fermilab also cooperate with the Master Naturalist program of University of Illinois Extension Service; students complete volunteer hours that are required to obtain their certificates while restoring Fermilab's ecosystems. In addition, FNA participates in select conferences, volunteer fairs, 'green' events, and Fermilab programs.

FNA's quarterly newsletter is sent to more than 1,200 people. It includes news about the stewardship units, the educational programs and talks, and other events. Betz interns describe their learning experience, and monitors write about Fermilab's wildlife. You may sign up for the newsletter on the Fermilab Natural Areas website.



**Our 'Incredible Bats' program gave participants an opportunity to get up-close and personal with live bats!**

**For up-to-date information about our programs, follow us on Facebook and Instagram!**



**@fermilabnaturalareas**

## Restoration and Conservation Accomplishments: Achieving Rich Biodiversity



**Volunteers enjoy an outdoor workday removing harmful invasive species.**

FNA volunteers and stewards are crucial to conducting the restoration work needed to maintain and conserve Fermilab's natural areas.

Volunteers of all experience levels participate in outdoor ecological restoration workdays organized by stewards and Fermilab staff. Weekly workdays are held year round in addition to our larger annual events which include Earth Day and Arbor Day plantings, and two Autumn Prairie Seed Harvests.

Stewards are trained volunteers who have committed to long-term regular work in an area that they have adopted. FNA's stewardship program continues to grow; in 2016, there were 15 stewards that have adopted woodlands where they host workdays and conduct restoration tasks.

In 2015, stewards, monitors, and other volunteers recorded more than 5,100 hours of outdoor restoration activities. Volunteering is a great opportunity to experience nature, to learn about native plants and wildlife, and to make big improvements in the natural areas.

How do we know that our efforts are succeeding? One measure is the Floristic Quality Index (FQI) which is an indication of native vegetation quality. The FQI has been increasing in the woodland areas being restored, thanks in large part to FNA volunteer efforts and donor support.

Stewardship Area	2009	2010	2011	2012	2013	2014	2015	2016
Indian Creek Woods			43	65	68	70	71	71
Big Woods South				52	56	62	66	70
Morgan's Woods	27	40	42	47	47	53	55	58
Big Woods North			32	41	47	49	49	56
Site 29 Woods West				31	31	48	48	56
Owl's Nest Woods				29	33	44	50	51
Ed Center Woods			28	40	44	46	46	48
Kingnut Woods					12	24	29	42
Girl Scout Woods						26	37	38
Lederman Woods							25	36

## Plants and Wildlife Monitoring



Plants and wildlife of the Fermilab natural areas are monitored in order to gather baseline data, measure the success of our restoration and conservation efforts, and to use the data for research.

FNA volunteers assist with data collection, generation of databases, and document scanning. Databases for many types of plants and wildlife are generated, including the following:

- Plants of Concern
- Birds
- Pollinators such as Butterflies, Moths, and Bees
- Dragonflies & Damselflies
- Frogs, Salamanders, Snakes & Turtles

Please visit our website for monitoring opportunities.

**Thanks to all of our past, current, and future plant and wildlife monitors for your time, expertise, and hard work.**



Top Left: Volunteer monitors, ready to head out into the field. Bottom Left: Cooper's hawk, 2016, Photo by Tina S. Smith. Right: Rusty-patched bumblebee, 2014, Photo by Terry Miesle.

# Accomplishments

## Fermilab Natural Areas Accomplishments 2008 - 2016:

- Supported the Robert F. Betz Internship since 2007 for over 10 young biologists!
- Host successful volunteer stewardship and wildlife monitoring program. In-kind value of volunteers averages over \$100,000.00 per year!
- Grantee of Illinois Clean Energy Community Foundations 3 to 1 challenge for habitat restoration and community engagement.
- One of 12 partners awarded the Monarch Butterfly Conservation Fund from National Fish and Wildlife Foundation.
- Work with over 15 dedicated stewards who 'adopt' a natural area and remove invasive species.
- Support volunteer wildlife monitors working on dragonflies, damselflies, native bees, reptiles and amphibians, birds and butterflies.
- Honor our volunteers with recognition awards and an annual appreciation dinner.
- Awarded tools and supplies from TNC Volunteer Stewardship Network and funds for educational supplies and website upgrades.
- Recipient of a DuPage Community Foundation grant for habitat restoration and Illinois Wildlife Preservation Fund grant.
- Built and installed nest platform at Nepese Marsh for state-endangered Osprey.
- Provided seasonal newsletter to FNA members and local communities since 2010!
- Co-Sponsor of Annual Autumn Prairie Seed Harvests.
- Co-Sponsor of Earth Day and Arbor Day at Fermilab.
- Host numerous wildflower walks and bird, butterfly and native bee hikes.
- FNA volunteers maintain dozens of bird houses for kestrels, bluebirds, purple martins and more!
- Host site for U of I Master Naturalist program participants earning volunteer hours.
- Received a Boeing Employee Community Fund grant for an Invasive Species Team Leader.
- Created Visitor's Guide map to the natural areas of Fermilab.
- Invited neighboring communities to FNA Discovery Days and offered private nature tours!
- Hold ecology events for teachers and students at Northern Illinois University, Aurora University, Benet Academy, DaVinci Academy, and more.
- Installed public bike rack at Pearson Interpretive Prairie Trailhead.
- Revegetated south shoreline of Swan Lake with native plants.
- Offered the popular Hawk Talk, Incredible Bats, and co-sponsor Ecology Winter Speaker Series.
- Fermilab Natural Areas Facebook page has over 2,500 likes! We have Instagram too!

# Acknowledgements

**FNA depends on membership dues, individual donations, and corporate sponsorship, and in-kind contributions and grants to accomplish its work. We thank the following donors for their generous support since FNA was founded (Category is based on the highest donation between 2008-2016):**

## **Benefactor (\$2,500+)**

Eleanor Betz,  
in memory of Dr. Robert F. Betz  
Barbara & Piermaria Oddone  
Fermi Research Alliance

## **Patron (\$1,000+)**

Kent Collins  
Contributions in memory of  
Denis Bowron  
The Wal-Mart Foundation  
The Weist Foundation

## **Supporter (\$500+)**

Steven Dixon  
Robert Lootens  
Jolie Macier  
Toni Mueller  
Northern Trust  
Rod Walton

## **Donors (\$250 +)**

Denis & Nancy Bowron  
JP Morgan Chase  
Marilyn Dixon  
Robert Geltz  
Susan Glad-Peterson  
Gregory Mitchell  
James Niehoff  
Randy Orgiesen  
Tom Peterson  
Thorne Electric

## **Sponsors (\$100+)**

Nathan & Mayumi Aaberg  
Mitch Adamus  
Ruthanne Baird  
Mike Becker  
Laurette Betz

## **Sponsors (\$100+)**

Craig Bowron  
Chuck Brown  
Rachel Burgess  
Evalyn Campbell  
Ryan Campbell  
Jose Cardona  
Cindy Conger  
Contributions in memory of  
Helen Becker  
Elizabeth Copeland  
Brent & Sue Coulter  
David S. Crooks  
D&D Home Improvements  
Don DeJongh  
Rosemary Dressel  
Dave & Sue Dumford  
Barbara Fetzner  
Patricia Franzen  
Garden Row Foods  
David Giese  
Julie Henseler  
Ronald & Patsy Hirsch  
Denise Hixson  
Jacques Hooymans  
Sara-Beth Hostetter  
Ralph Johnson  
Peter and Penelope Kasper  
Gerald Klemm  
Gordon Koizumi  
Adrienne & Rocky Kolb  
Paula Lambertz  
Nancy Lanning  
Joanna M. & C. David  
Livengood McKesson Foundation  
Kathleen Michael  
Larry H. Miller  
Bridget Mohamed  
MaryJo Murphy  
Louise Lee Reid  
Marlene Rosecrans  
Sue Sheehan  
Dave Shemanske  
Tina Smith

## **Sponsors (\$100 +)**

Dave Spleha  
The Morton Arboretum  
Dick Untch  
Glenn Vallone  
James Volk  
Wheaton Warrenville South  
High School  
Agnes Wojnarski  
Betsy Zinser  
Rudolph Zwetzig

## **Contributor (\$50 +)**

Sally Arnold  
Sandy Bemis  
Tricia Bethke  
Kay Campbell  
Darlene Carpenter  
Gail Chastain  
Jon Cooper  
Costco  
Meghan Czamanske  
Jane DiGiovanni  
Mark Donnelly  
Paul Fleming  
Susan Frankel  
Maureen Hix  
Maureen Huey  
Dee Huie  
June & Steve Keibler  
Barb Kristen  
Elaine & Ledo Lucietto  
Dolores & Carl Mennecke  
Terrence Miesle  
Gilbert Nore  
Mary Norris  
Keith Olson  
Rachel & Michael Pfaff  
Claus Pierach  
Leslie Pruyn  
Joe Pygott  
John & Margaret Rea  
Kurt Riesselmann

## **Contributors (\$50 +)**

Laura Rowan  
Richard & Martha Ryjacek  
Donna Schramer  
Stan Smith  
Theresa Stonehocker  
Paul & Carol Strand  
Susan Styer  
Michael J White  
Nels Wiberg  
Heather Williams  
Betty Zimmerman

## **Member (\$25+)**

Mohammad Al Sharo'a  
John & Cathie Anderson  
Anthony Barker  
Batavia High School  
Class of 1955  
Penny & Fritz Becker  
Bob & Ceryl Benson  
Boy Scouts of America  
Troop 7  
Harry Cheung  
John Clayton  
Shawna Coronado  
Spencer Cortwright  
Rita Dolan  
Matthew Domeier  
Marie Ekvall  
Stephen Fluett  
Paul Francuch J  
anet R. Freidheim  
Gordon Garcia  
Joyce Giaquinta  
Sarah Grimsley  
Alan & Eileen Hahn  
Edie E. Haller  
Richard & Karen Hattan  
Paul Heidebrecht  
Leah Hesla  
Ann Holt-Harris  
Martin Hu

## **Member (\$25+)**

John M Johnson  
Thomas Kilinski  
Cheng-Hwei Liu  
Dan Lobbes  
Donna Lundstrom  
Kristin MacArthur  
Bob & Carole Mathieu  
Joanna & Tim McAdams  
Emily McGrath  
Jessica Meyers  
John Michel  
Eric Mieland  
Jean Mozzooco  
Suzanne Myers  
Eileen Neuffer  
Mady Newfield  
Niral Patel  
Dave Peck  
Jennifer Rudderham  
Mary Anne  
Ryan Robert Schipp  
Dan Shanahan  
Bob Shaw  
Barbara Sheldon  
Jerry & Ann Sommer  
Bridgett Thomson  
Brian Tice  
Clayton Totz  
Robert Tyioran  
Martin Valenzuela  
Kathleen M Vranek  
Richard J Webb  
Tim Wyman

**We also thank the following organizations for their generous support:**

Fermi Research Alliance, LLC  
Batavia Women's Club



## Financial Information

Between 2010 and 2015, FNA's income from donations has ranged between approximately \$8,000 and \$12,000 per year. For the same time period, we recorded approximately 5,700 volunteer hours per year, with an estimated value of over \$100,000 (Source: Independent Sector.org)! In addition to our volunteers who work outdoors, other FNA volunteers include directors of the board, committee members, and people who help with special projects.

In 2015-16, Fermilab Natural Areas was awarded two types of grants: 1) The Nature Conservancy Volunteer Stewardship Network Fund grant was used to update our website and to purchase tools, equipment, and Discovery Days educational materials; and 2) An Illinois Clean Energy Community Foundation 3 to 1 Challenge grant (and matching funds raised by FNA) which will be used to remove invasive species and to purchase native plants, supplies and equipment for the Main Ring Savanna, Site 29 Woods West, and eight stewardship areas with over 100 volunteer hours.

In 2016, Fermilab Natural Areas, in a partnership with The Conservation Foundation, was awarded a two-year National Fish and Wildlife Foundation Monarch Butterfly Conservation Fund grant which will be used to establish and sustain rare native milkweeds and nectar plants in over 500 restored acres.

FNA's funds are used for the following annual program expenses:

- Stewardship program and annual volunteer event supplies and operating costs
- Robert F. Betz Internship
- Community outreach and education events

Our goal is to increase our funds in order to complete additional work in conservation, education, internships, and research.

## Board of Directors

### Current Directors :

Penny Kasper, President  
Liz Copeland, Vice-President  
Sarah Grimsley, Treasurer  
Rita Dolan, Secretary  
Ryan Campbell  
Paula Lambertz  
Emily McGrath  
Dave Shemanske  
Tina Smith

### Founding Directors :

Mitch Adamus  
Marlin Bowles  
Shawna Coronado  
Bob Lootens  
Jolie Macier  
Tom Peterson  
Dick Untch  
Jim Volk

### Past Directors :

Tricia Bethke  
Evalyn Campbell  
Patsy Hirsch  
Toni Mueller  
Vincent Olivares  
Rachel Pfaff  
Joe Pygott  
Marlene Rosecrans  
Rod Walton  
Betsy Zinser

**To all of our current, founding, and past board members - Thank you for your service!**

# Membership and Donations

Your donation really does make a difference with Fermilab Natural Areas. Consider a gift of monthly giving through PayPal, a memorial contribution, or add FNA to your estate planning. We couldn't accomplish this work without your generous support.

## Donations can be made in the following ways:

1. Online at <http://www.fermilabnaturalareas.org/membership.html>
2. Fermilab employees can donate online via the Employee Self Service website.
3. By completing the following information and mailing it to us at the address below:

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

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

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

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

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

Are you a student? \_\_\_\_\_

## Donation Amount:

- Benefactor \$2,500 and up
- Patron \$1,000
- Supporter \$500
- Donor \$250
- Sponsor \$100
- Contributor \$50
- Member \$25
- Student \$15
- Other \_\_\_\_\_

## Contact Us

Fermilab Natural Areas

P.O. Box 500, MS 444

Batavia, Illinois 60510

Phone: 630-840-4845

Fax: 630-840-2108

[fermilabnaturalareas@gmail.com](mailto:fermilabnaturalareas@gmail.com)