



Website: www.fermilabnaturalareas.org

Blog: fermilabnaturalareas.blogspot.com

Contact us at fermilabnaturalareas@gmail.com or 630-840-4845

Fermilab Natural Areas (FNA), is a 501(c)(3) not-for-profit tax-exempt corporation formed in 2006:

- * to study and restore Fermilab's unique combination of ecological communities
- * to inform and enrich local residents' knowledge of Fermilab (FNAL), and
- * to contribute to the preservation of global biodiversity.

A Message from FNA President Rod Walton fermilabnaturalareas@gmail.com

We often speak of this time of year as the "dead" of winter, but as you can see from the pictures and stories in this newsletter, neither the humans nor the animals come to a halt when the temperature goes down! I'm always so impressed, as well, when I'm reminded of how many wonderful people have come to Fermilab to foster the natural areas. We hope you enjoy reading about just some of those in this edition. FNA is busy during the winter as well, preparing for our annual general membership meeting. This year, we will meet on February 17, in the One West Conference Room in Wilson Hall. I'll be giving an overview of what we've accomplished in 2010, and Ryan Campbell will talk about the range of restoration and conservation projects we have planned for the upcoming season. We'll also elect five members to the Board of Directors. Between now and the meeting, a nominating committee will be looking for good Director candidates. If you, or someone you know, would like to serve in this capacity, please [email](mailto:fermilabnaturalareas@gmail.com), or call me at 630-840-2565 -- and, have a Happy New Year!

FNA Calendar of Events

Jan 20 FNA Board meeting, 2 Northeast, Wilson Hall, 7 pm. All are welcome to attend.

Feb 3 Fermilab [ELM Committee](#) meeting, Wilson Hall, One East, noon

Feb 17 **Annual Meeting** 7:00 pm, Fermilab's [Wilson Hall](#), room One West (1st floor). Everyone is invited to the FNA Annual General Meeting. We will have an overview of 2010 activities and plans for 2011, a presentation by Ryan Campbell about current restoration projects, and hold elections for the Board of Directors.

Feb 27 Fermilab Science Education Office Family Open House, Wilson Hall atrium, 1 pm to 5 pm. Registration required, http://ed.fnal.gov/ffse_new/openhouse/
*"This is a party for children **who bring an adult with them** to learn about the world of physics. (There's plenty for the grown-ups, too.)"*

FNA will have a booth in the atrium and welcomes any volunteers to help! Contact [Rod Walton](#) (see above) if you can spend some time with us on that busy Sunday afternoon.

Mar 3 Fermilab [ELM Committee](#) meeting, Wilson Hall, One East, noon

Mar 19 [Habitat restoration work day](#) resumes, *weather permitting*. Meet at 9 am in the [Lederman Science Center parking lot](#), work until noon. Please check the web page at http://www.fnal.gov/pub/about/campus/ecology/prairie/habitat_restoration.html.

Watch your email or the [FNA Blog](#) for last-minute announcements from FNA about changes in plans, or additional events.



Fermilab

Long-time Big Woods' volunteers and cross-country skiing enthusiasts Jane & Dwaine Johnson. Jane passed away in December 2010.



Fermilab

Introducing a Few More of our Dedicated Multi-talented FNA Volunteers -

Artist:

Marlene Rosecrans of Glen Ellyn is pictured at right with Martin Valenzuela of Fermilab's Roads & Grounds. Marlene was a Summer Seed Volunteer in 2010, but that's just the tip of the volunteering iceberg for her. A few years ago, she painted a life-sized mural of prairie plants on the wall at the "greenhouse", the seed processing building in the Fermilab Village. Not only do the plants grace the wall, but their painted roots sprawl across the floor making a distinct impression of the depth of a prairie. A retired teacher, Marlene was a student of [Dr. Robert Betz](#), founding father of Fermilab's prairie restoration. She is currently a steward, frog monitor and naturalist for [DuPage County Forest Preserves](#). Learn more about frog monitoring and Marlene's role, in this article from the DuPage Conservationist:

<http://www.dupageforest.com/WorkArea/linkit.aspx?LinkIdentifier=id&ItemID=4294968966>.



M. Rosecrans

Forester:



Denis Bowron was a facility operations supervisor when he [retired from Fermilab](#) in 2005. Many years ago while he was here, Denis took oak seedlings and acorns from his backyard, and supervised their progress at [Site 38](#), the Lab's support area that includes warehouses and the fire station, among other things. He planted those little seedlings and acorns by the woods behind the fire station, protected them, and watched them grow. Denis also worked all summer removing buckthorn in those woods. The photo at left shows Denis recently in front of one of the oaks he planted in the 1980's. In the closeup at right, you can see that he's holding a little potted oak seedling, which is the same size that he planted originally. Fermilab Today wrote about Denis and his



efforts: see http://www.fnal.gov/pub/today/archive_2010/today10-09-22.html. In addition to his forestry handiwork, Denis's woodworking skills have also benefited nature at Fermilab. Denis built bluebird boxes that were placed in the bison pasture. That brings us to our next volunteers ...

Bluebird helpers:

Evalyn Campbell and Bob Mathieu have dedicated their time and energy to seeing that bluebirds have comfortable homes in our prairie areas. They have been maintaining onsite bluebird boxes for about six years. In addition, they have been looking after three kestrel boxes.

In Evalyn's words: "We helped Bill Wickenburg the first three years; he helped us locate approximately 35 houses. The boxes were already in place when we started cleaning them. Originally, we cleaned the boxes in the fall, left them open during the winter and closed them in the spring. But, we found we could not predict when the birds would return, so presently we clean and close the boxes in the fall. The count of bluebirds using the boxes has varied, but there has been much success with nesting. Also tree swallows and wrens have nested in the boxes. And lest we forget, the field mice and hornets!!"

When Evalyn and Bob are not providing for the bluebirds, and evading hornets, they also [monitor DuPage County frogs](#) with Marlene Rosecrans. Evalyn's numerous other FNA activities include 2010 Summer Seed Volunteer, Arbor Day tree planting, and serving on the Board of Directors.



E. Campbell



What Butterflies and Moths Do in the Winter; Tom Peterson, Fermilab

Where do [butterflies and moths of Fermilab](#) go in the winter? The remarkable migration of monarch butterflies all the way to central Mexico may be the best known answer to this question. Although other butterflies also migrate, most are actually right here on the Fermilab site all winter!

Each species of butterfly or moth has its own particular method of surviving the winter. 37 of the 56 species of butterflies observed at Fermilab hibernate through the winter on the Fermilab site. Hairstreaks do so as eggs, fritillaries as caterpillars, swallowtails as chrysalids, and morning cloaks and commas hibernate in the woods as adult butterflies. (The photo shows a hibernating giant swallowtail chrysalis, which I found on one of the bridges on the trail in the woods here a few years ago.) The hibernating insects have a chemical “antifreeze” in their blood which prevents freezing during the cold winter temperatures.

Some of our common adult butterflies, like the monarch, do not survive subfreezing temperatures. Red admirals, buckeyes, and painted ladies do not survive winters here, but all disperse again to the north each spring, often becoming quite common here in the summer. Just as with the monarchs, several generations occur in the south between migrations; no individual butterfly makes the entire round trip.

Moths also have their unique ways of surviving winter. Giant silk moths, like polyphemus and luna, overwinter in a cocoon. The common, furry, banded woolly-bear caterpillars, often seen running across walking paths in the autumn, hibernate as a fully grown caterpillar. They spin a cocoon in the spring, using fur from their bodies, and emerge a few weeks later as an orange moth, the Isabella moth.

In whatever form they hibernate, butterflies and moths remain inactive and well hidden. Even in winter as we walk through a snowy woods or prairie, butterflies and moths are all around us, waiting for the warmth of spring.

Learn more about Fermilab butterflies & moths: <http://www.fnal.gov/pub/about/campus/ecology/wildlife/butterflies.html>



T. Peterson

Fermilab Christmas Bird Count, Saturday Dec. 18, 2010; Dave Spleha

The Christmas Bird Count (CBC) is a census of birds conducted within a 7.5 mile radius circle and is held between December 14th and January 5th. CBC's have been held for the past 111 years, the Fermi Circle Count has been conducted for the last 35 years. Close to 2000 "count circles" are now participating, mostly in the United States and Canada (some in Central & South America). The Fermi Circle count is centered in Fermilab, covers much of DuPage County and extends into Kane County and past the Fox River. This year's count was held on December 18. The following data pertains just to the data collected within the Fermilab property. For more detailed and complete information on the Fermi Circle CBC, refer to Peter Kaspar's web page at <http://www.fnal.gov/ecology/wildlife/cbc/>.

Cold, wind and ice proved to be formidable foes for the 2010 Christmas Bird Count. We managed to attain a species count of 48, equal to the previous 10 year average. Ice was one of the major factors affecting the extremely low individual bird count of 1669, which is well below the 10 year average of 5512.2 birds, and the lowest individual count in 20 years. A key reason for the low numbers is that typically the bulk of individual birds counted consists of waterfowl, especially Canada Geese and Mallards. With very little open water at the time of the count, the number of both these species was way down: Canada Geese, 170 seen (average for all CBC's is 4531.2), Mallards, 178 seen (average for all CBC's is 858.8).

Some of the key highlights on the count day within the Lab:

New high counts for Common Goldeneye (353), Common Merganser (27), American Coot (3)
Tied high counts for Ruddy Duck (2), Bald Eagle (1)

Other highlights:

Ring-necked Pheasant (1) - only third sighting in last 13 CBC's
Rough-legged Hawk (3) - highest count in last 15 CBC's
Long-eared Owl (2) - only second sighting in last 12 years
Blue Jay (11) - approximately double the average number seen in all CBC's
Golden-crowned Kinglet (1) and Rusty Blackbird (1) - typically only seen in 1 out of 5 CBC's
Yellow-rumped Warbler (1) - typically only seen in 1 out of 7 CBC's

For Your Reference

Wild Things 2011 Conference, Saturday, March 5, 2011, University of Illinois at Chicago.

<http://www.habitatproject.org/WildThings2011/index.html>

“The fourth biennial Wild Things conference is coming this winter ... This day-long conference brings together the region’s best experts, hardest working professionals, most dedicated volunteers and anyone interested in nature. Technical presentations and interactive workshops will explore the latest in natural areas conservation, wildlife protection and monitoring.”

For help with plant identification, visit the website created by the Fermilab Science Education Office:

http://eddata.fnal.gov/lasso/plant_search/search_kids.html

Enjoy Peter Kasper and Dave Spleha’s birding reports at: <http://www.fnal.gov/ecology/wildlife/diary.shtml>

For Sale by FNA

Perfect for cold weather layering, FNA has long sleeved tee-shirts for sale. We also still have the short sleeved shirts. Both sport the FNA logo on the front, and our website on the back. Short-sleeved shirts are \$15 and long-sleeved are \$18. Order yours by calling us at 630-840-4845.



Membership/Donations

<http://www.fermilabnaturalareas.org/membership.html>

Help us enhance Fermilab's ecology.

FNA is a 501(c)(3) not-for-profit charitable organization. All donations to FNA are tax deductible. Donations can be made in memory or honor of a friend or loved one.

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

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Thank you!

