

# Bluffviews

A quarterly newsletter by Clifftop

July, 2016

Vol. 6, No. 3

## Right Place, Right Time

By Joann Fricke

Does it sometimes feel like the harder you look for something, the less likely you are to find it? In my quest to find wildflowers I haven't seen before on my property, I've been blessed with what some might call "dumb luck." Others would say that I was just in the right place at the right time. Let me give you two examples.

During the Spring of 2015, I was volunteering at the Salt Lick Point Land and Water Reserve. We had a posse hiking the Newman Trail hunting for one of the Reserve's nemeses—garlic mustard. We tromped hither and yon along the trail, pulling bags of the stuff in spots known previously as the mustard's hideout. At nearly day's end, our leader pointed out an interesting plant she called a Michigan lily. The leaves were in whorls around the stem, but, we were told, the plants would not flower because they were growing in deep shade. Fast forward a couple of months and I was tooling up my driveway in our Gator after retrieving the morning paper, when something orange caught my eye. I threw the Gator in neutral and engaged the parking brake so I could hop out and take a look. Could this be one of those Michigan lilies? And what was it doing in Illinois? Sure enough, after checking the copy of Illinois Wildflowers by Don Kurz that I keep in the Gator, that's what I'd found (see photo below, left). Now, what if I'd been in my car? Would I have even noticed it? I like to think I was just in the right place at the right time.



Also in the Spring of 2015, after hosting a morning field trip on my property for the Illinois Audubon Society's Spring Gathering, Debbie Newman and I took a short hike after lunch on a trail north of my house that is bounded by a small creek. In the brown leaf litter, she spied a brown, hardly discernable plant called a Wister's coralroot orchid. How cool! I didn't know I had orchids on my land. Jump forward to August and I am again in my Gator, this time as passenger with my husband driving. We are in the vicinity of where the Wister's orchids were spotted and I tap Mike's arm and ask him to stop. Something white has caught my eye.

I get down on my hands and knees and see the tiniest little orchid I have ever seen. It's something called a Three birds orchid (see photos at right). I find out later that this may be the first reported sighting of this orchid in Monroe County. This was never confirmed, but I was excited, nevertheless. I also learned that the flowers last only a few days. Always on the lookout for something new, I hope I will continue to be in the right place at the right time. Bill McClain, former IDNR botanist and INPC commissioner continues this theme in the Guestviews article that follows.



# Rare Plants and Xeric Limestone Prairies in the Illinois Ozarks

By Bill McClain

It was April 4 and I was on my way in my trusty old pickup to Fults Hill Prairie Nature Preserve in Monroe County to meet Marty Kemper, the former IDNR District Natural Heritage Biologist for this part of the state. Our objective was a visit to a xeric limestone prairie where we would look for early blooming plants. We had conducted a quantitative study of this community in the fall of 2015, so the purpose of this trip was to increase our knowledge of the site's plant diversity.

You may be wondering what is meant by a xeric limestone prairie? Well, these communities are really old friends with a name change. They have been (and likely still are) known as limestone glades for as long as I can remember (and that's a long time). They occur in many states throughout the eastern half of the nation, including, Alabama, Georgia, West Virginia, Pennsylvania, Ohio, Indiana, Illinois, Tennessee, Kentucky, and Missouri.

However, botanists at the University of Kentucky, Drs. Jerry Baskin, Carol Baskin, and Patrick Lawless, noted confusion caused by the application of the same name to two vastly different plant communities. These were what we know as limestone glades and the limestone glades (cedar glades) in the Central Basin of Kentucky and Tennessee. Our limestone glades or xeric limestone prairies are dry, sloping, and dominated by the warm season bunch grasses big and little bluestem and side-oats grama. In contrast, limestone glades in the Central Basin are flat, seasonally wet, and dominated by annual dropseed grass species. These distinct differences prompted them to develop a classification to distinguish the two communities and eliminate further confusion.



Study participants Martin Kemper and Bill McClain at Fults Hill Prairie Nature Preserve. Photo courtesy Martin Kemper.

Xeric limestone prairies are present in Monroe County and Marty and I recently completed a study on two of them on the farm of Ralph and Karen Buettner. Xeric limestone prairies are also present within Fults Hill Prairie Nature Preserve and we wondered if they contained plants not present in the Buettner prairies. Further study would answer this question.

Searching for small, annual, early-blooming plants was the prime reason for our April trip. I was focused on finding a tiny annual plant known as wedge-leaved Whitlow grass (it's really a mustard). You may know that Monroe County is the only place of occurrence for this plant in the entire state, a bit of knowledge that gave our trip added importance.

Early blooming plants in prairie or grassland communities tend to be small, annual species that flower, produce seed, and often disappear within a few weeks following seed production. These traits and the rapid growth of other vegetation makes it difficult if not impossible to find these plants later in the growing season. Early visits and a discerning eye are essential in finding these plants.

Marty hiked up the hill and I chugged behind (it happens with time) to our study site. There, we were



delighted to find over 100 individuals of the wedge-leaved Whitlow grass growing in the xeric limestone prairie. Mohlenbrock's Vascular Flora of Illinois lists limestone ledges as its habitat, but we can also list it as a bona fide member of xeric limestone prairies. This discovery is significant locally, but is potentially nationally significant as we continue to learn more about these communities.



Our discovery needed to be tested. If wedge-leaved Whitlow grass is a member of xeric limestone prairies, then it should be present in the Buettner prairies a mile or more east of Fults. We drove there and found the plant in both prairies in a matter of minutes. It was such an exciting moment for an aging botanist. This plant was not found previously in the Buettner prairies because we assumed no plants would be blooming in early April. This experience told us that geology is not the primary influence determining the distribution of this plant. Habitat is the primary factor because its largest, most robust populations are in xeric limestone prairies. Perhaps visits by botanists have been too late to find it in the xeric limestone prairies.

Wedge-leaved Whitlow grass, *Draba cuneifolia*.  
Photo courtesy Martin Kemper.

We have since noticed other rare plant species in the Fults prairie. The botanical texts describe all of these as "edge" species, meaning they grow only on cliff margins. We have found them in profusion (if a rare plant can do that)

in xeric limestone prairies. Now each trip has me wondering if we will find another rare plant. Unfortunately, the recent hot, dry period greatly affected plant growth, but it is a xeric (very dry) limestone prairie and our study is short term, like my frustration regarding shriveled plants. The plants have been here for millennia, waiting for someone to find them.

What are these other plants and how do the Monroe County prairies compare to those in other states? Well, Marty and I are planning a program about our study, so you will learn the rest of the story at that time. Our study proves we are still learning about the biodiversity of the Illinois Ozarks after nearly two centuries of botanical exploration. Being at the right place at the right time is critical to making new discoveries. That next rare plant may be just over the hill (better the plant than us).

Watch for an announcement in the newsletter regarding our program. Until then, let us know of your finds in other xeric limestone prairies, or any other nature discovery. We will be anxious to learn about them.

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Upcoming events...(please visit <http://www.clifftopalliance.org/upcoming-events/> for details)



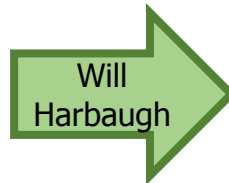
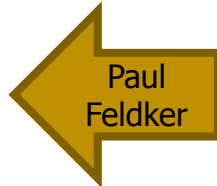
**Dragonfly Field Trip**—Saturday, July 30, 10 am until 2 pm, Paul Wightman Subterranean Nature Preserve. Join us for this fascinating look into the life of dragonflies and damselflies. Call 618-458-4674 or email [clifftop@htc.net](mailto:clifftop@htc.net) for reservations.

**Starry Night**—Saturday, August 13, 8 until 11pm, Paul Wightman Subterranean Nature Preserve. Join us for an evening of viewing and even "wishing on falling stars." Call 618-458-4674 or email [clifftop@htc.net](mailto:clifftop@htc.net) for reservations.



# Photo Workshop Results

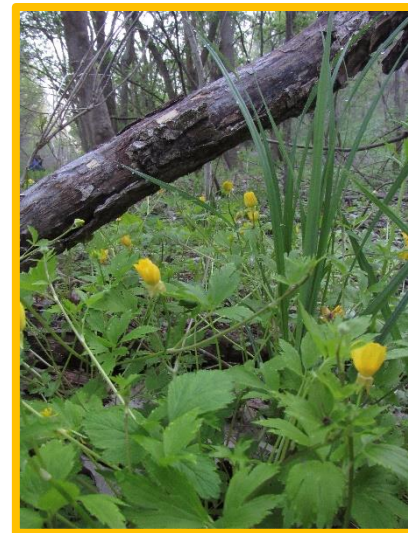
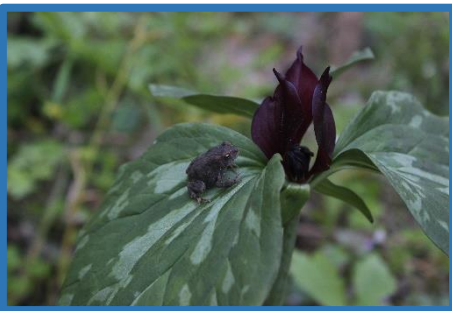
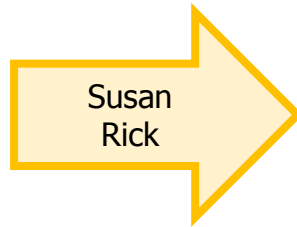
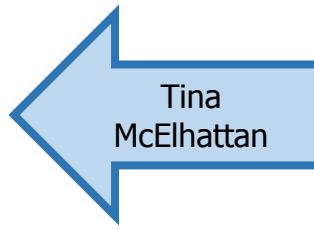
In April, Clifftop sponsored our first Photo Seminar and Workshop. We met for several hours on a Friday night, learning about the balance between ISO, aperture and shutter speed, how to adjust exposure based on available light, photo composition, light direction and length, etc. Some of us had to learn what wheel to spin and what buttons to push to change the settings on our cameras. The next morning, we went out in the field (on Johnson Trail at Salt Lick Point Land and Water Reserve) to put into practice what we learned the night before. Here are the favorites from the participants who responded to our request for photos from the workshop\*:



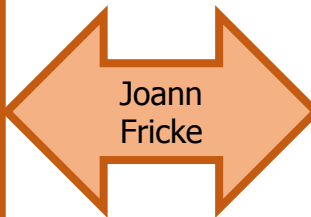
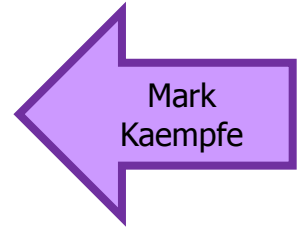
\*Please note that the photos are outlined in the corresponding arrow color, denoting the photographer.











# Paul Wightman Subterranean Nature Preserve

## Native Land Cover Update...

"That's wonderful...that's such a good thing!" Bill McClain had the happiest look on his face as he gazed at the Eastern gama grass and its tall stalk loaded with separate male and female flowers. Even more smiles greeted the late-May former soybean fields now filled with blooms of coreopsis, butterfly weed, spiderworts, and coneflowers. Tall spikes of blazing star still showed only buds that promised to open and the first bee balm flowers began to cast a lavender glow in happy contrast to the black-eyed Susans and golden coreopsis.



Bill McClain standing in a field of coreopsis at PWSNP.

Photo courtesy Pen DauBach

Our prairie restoration – at just more than one year since planting – has done remarkably well. Excellent germination and growth due to the favorable weather that followed our 7 May 2015 seed broadcasting, and the tiresome mowing of the entire acreage that summer and fall to eliminate weedy annuals and non-native grasses, more than matched our most hopeful hopes for this very large planting. Through the rest of last year we watched and marveled at the many tufts of native grass that began to carpet the land and at the numbers of flowers that germinated and grew, many blooming on short stalks in seeming defiance of the mowing. In late winter and spring of this year, we watched again as tiny plants unfurled, grew bigger and bigger, and began blooming.

Clifftop volunteers conducted a series of monitoring checks in the fields and found nearly all areas had good results, with solid growth of our native seedlings. Our original species mix of 12 grasses and sedges and 41 flowers all had germinated and examples of every species sown have been found. As planned and following the recommendations of prairie restoration experts, we began mowing the fields again this year to once again set back weedy and unwanted species. One field of about 30 acres will not be mowed simply because it is so thick with desired species and so thin on "bad stuff" that Bill McClain advised -- to our satisfaction and happy agreement -- that we let it grow on undisturbed. Volunteers have even begun to harvest seed from the field.

That harvested seed will come to very good use as not all areas of the restoration planting get the A+ grade of the un-mowed field. We'll use the collected seed to enrich areas that did not "grow native" to the same degree.

Six weeks after Bill's visit, purple prairie clover has begun blooming, rattlesnake master plants are welcoming Buckeye butterflies to nectar among the spikes of the ball-like blooms that bring to mind the dangers of a medieval mace, and neon-purple liatris demonstrate that a blazing star really does blaze in the sun. Side-oats gramma grass have started to unfurl their dainty red flowers, fox sedge plants have set seeds, and butterfly weeds now sport fruits filled with downy parachute-ready seeds. Tall coreopsis flower stalks stretch five feet upwards, cup plants already provide a sip of leftover rainwater to various insects and thirsty finches, and asters and goldenrods stand as guarantors of nectar sources for migrating Monarch butterflies pushing south on their fall journey.



# PWSNP Volunteer Highlights...

Restoration to native land cover and trail preparation requires a fair amount of labor and, thanks to our volunteers, the PWSNP is receiving good amounts of important stewardship work.

Four Clifftop Board members divided the mowing of the prairie restoration area for a total of 80.5 hours this late spring and early summer.

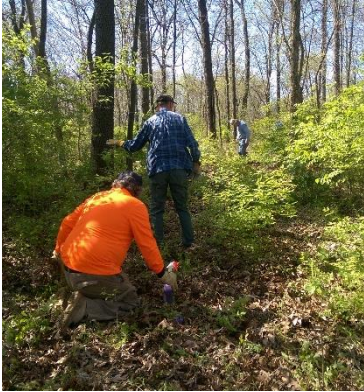


Photo courtesy Tina McElhattan

Additional woodland trail areas were cut in by our visiting Southeast Missouri State students and faculty member Dr. Diane Wood along with expert sawyer Kevin Slavin in late May.



Photo courtesy Pen DauBach

Cindy Helms, right, who adopted one of the ponds as her own special area, has added blue flags (*Iris virginica*), cardinal flowers (*Lobelia cardinalis*) and great blue lobelia (*Lobelia siphilitica*) around the edges of the pond.



Photo courtesy Joann Fricke

17 CLIFFhangers and Kevin Slavin, Rock Road Ecological Services, spent an unseasonably warm April morning and early afternoon chopping and cutting brush (including LOTS of bush honeysuckle) to sculpt in areas of trail that pass through woodlands. Participating CLIFFhangers included: Paul Feldker, Tina McElhattan, Hugh Gilbert, Andy Kniffen, Jim Gilpatrick, Dennis Groom, Mike McCarrin, Susan Rick, Cindy Roth, Tim S. Voyda, Tim M. Voyda, Carl and Pen DauBach, Linda Wiederhold, Steve, Nate, and Vincent Gonzalez.



Photo courtesy Pen DauBach

Kierstin Lipe, left, a student at Southern Illinois University-Carbondale, sought out some 'boots-on-the-ground' experience with land stewardship and is volunteering regularly at PWSNP.



Photo courtesy Pen DauBach

Cindy, Kierstin and Pen DauBach also have teamed together to eradicate a number of bush honeysuckle plants at Cindy's pond, and enjoyed the challenge of keying-out a plant species at the site, American germander (*Teucrium canadense*). Susan Rick made the trio a quartet for monitoring areas of the restoration and the group added control of musk thistle to their duties. Cindy, Kierstin and Pen also held the very first – of many to come – seed collecting expeditions to the prairie restoration area that will not be mowed. Eight CLIFFhangers collected more seed on July 16. Many thanks to all who helped on both days.



# Paul Wightman Subterranean Nature Preserve

## Science & Surveying Update...



Photo courtesy Aaron Addison

Washington University, St. Louis, has just published an article on the mapping and survey efforts underway at the Fogelpole Cave system. Aaron Addison, Director of Scholarly Services, University Libraries, and his colleague and fellow caver Bob Osburn, laboratory administrator for the Department of Earth and Planetary Sciences, discuss the discoveries they are making and the efforts to remap the cave with modern technologies that will allow a GIS-layered look into and through Illinois' largest and most biologically-diverse cave system. The article, and its fantastic photos and maps, can be read at: <https://source.wustl.edu/2016/07/mapping-fogelpole/>

The benefits of the large-scale restoration to native land cover began to come into a bird's-eye-view focus during the winter and spring. Agriculture fields often host large flocks of horned larks, a species that prefers bare grounds and that had been the most frequently noted species during bird surveys in the winters of 2014 and 2015. During the winter and early spring of 2016, small flocks of savannah sparrows and vesper sparrows were sighted on a regular basis. As the grasses began to green up and the earliest prairie flowers, golden alexanders, started to bloom, lark sparrows, bobolinks, and even greater numbers of savannahs and vespers, appeared. The big thrill, and a sure sign of appreciation of new habitat, was a sighting of an American Bittern in the grasses close to one of the many ponds. During nesting season, numerous dickcissels, field sparrows, turkeys, quail, Eastern kingbirds, and indigo buntings, all have brightened the days with territorial calls as they stake out and use a sector of wildlife-friendly space.



Photo courtesy Joann Fricke



Ben Jellen and Bob Weck, left, reported on the results of their radio tracking research on Copperhead snakes during a Clifftop field trip in June.

Pat and Joe Roti Roti continue their dragonfly and damselfly surveys at the PWSNP, helping us understand the changes in species and populations. Pat and Joe will share their skills at an upcoming field trip.

Photo courtesy Joann Fricke Steve Taylor, Illinois Natural History Survey and University of Illinois-Urbana and our lead science advisor, continues to expand research projects at the site. Steve and Aaron Katz, a doctoral candidate in entomology, recently collected springtails at Fogelpole and PWSNP and at the former White Mine at White Rock Nature Preserve, a sample that will be used for comparative analysis of the natural and manmade underground habitats. Matt Safford, another graduate student working with Steve, is beginning fieldwork to research the relationships among bats, insects and landscape structure.



# White Rock Nature Preserve and Land & Water Reserve Update...



Photo courtesy Joann Fricke

Our beautiful complex of forests, glades and hill prairies, continues to inspire and to provide outstanding healthy wildlife habitat. Our small population of the state-listed climbing milkweed, *Matelea dicepiens*, sported its deep blood-red flowers again this May (see photo, left).

Cerulean warblers, tiny tree-top dwelling birdlets, called out territories and mating proposals throughout the spring and early summer. This state-listed species maintains good populations at White Rock and other large forested blocks in our area, in testament to the benefits of protecting and conserving resources.

Another state-listed species made delightful viewing for Pen DauBach, Debbie Newman, Bob Caveny and members of Bob's Illinois Recreational Access Program team during a visit to the LWR in mid-June. For Pen, the sighting of an Eastern Timber Rattlesnake was an especial thrill as this was her first view of a non-captured, in-the-wild, rattlesnake (see photo, right). Just as thrilling, because it can make the snakes' habitat even better, is a work proposal for stewardship at the LWR that Clifftop and the I-RAP folks are discussing.



Photo courtesy Bob Caveny, IDNR



Photo courtesy Pen DauBach

Recent Volunteer activities at White Rock include a morning workout on the steep-slope White Mine trail on the Nature Preserve. Southeast Missouri State students and SEMO Biology Department Professor Dr. Diane Wood, dug-out and re-sculpted the rainwater drainage areas along the trail (see photo, left).

Joann and Mike Fricke continue to devote themselves to maintaining White Rock Nature Preserve trails and the parking area. Joann and Mike spend many hours keeping the parking area weed free, mowing the trails, clearing downed trees and limbs from the trails, whacking weeds from Madeline's Rest,

keeping the clearing an open and restful spot for visitors. The work isn't easy, especially with summer heat and the swarms of mosquitoes that arise during their efforts, and all visitors appreciate the careful maintenance and stewardship.

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To view photos from our many programs, workdays and other activities, please visit our Facebook page at: <http://www.facebook.com/pages/Clifftop/162533970518561>

Our page is public, so there is no need to join in order to view what we publish.

Many of our seminars have been recorded and are available at YouTube. To view, please visit: <https://www.youtube.com/user/clifftopnfp>







# Clifftop Wants You!



As an all volunteer organization, the Clifftop Board of Directors has voted to adopt a committee driven division of labors in 2017. We look forward to working with you, our members, on these committees and so, ask you to consider being a part of one. The three committees and their duties are:

**Finance Committee:** develops financial plans; monitors cash flow; helps guide the organization's financial health; oversees organizational investments; monitors organizational budget; recommends appointment of independent auditors, reviews audit reports, consults with auditors as to the adequacy of internal controls; leads organizational fundraising (annual giving and capital campaigns); oversees organizational risk management, insurance coverages, and indemnification; oversees and ensures (with the President, Executive Director, and Secretary-Treasurer) regulatory compliance.

**Stewardship Committee:** develops site management and restoration plans; advises and provides recommendations on new land acquisitions, transfers and easements; provides technical and grant-writing support for land acquisition; seeks program and grant funding for site restoration and management; manages site contractor operations; prepares budget estimates for site management; manages and maintains organizational equipment; manages volunteer stewardship training programs and volunteer stewardship workdays and activities.

**Outreach Committee:** drives membership growth and sustains existing membership; promotes awareness of organizational programs and initiatives; monitors membership trends and behaviors; co-oversees (with the President, Executive Director and Secretary) organizational publications and news releases; manages special public events; conducts public presentations marketing the organization; manages the organization's Facebook account and website, and additional social media and public contact venues; issues calls for volunteer workdays.

Please contact Joann Fricke at [cliffmbr@htc.net](mailto:cliffmbr@htc.net) or (618)935-2542 if you are willing to serve and on what committee. Thank you!

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## Grant Makes Clifftop Wishes Come True!

One of the best rewards for good work is the ability to do more. Because of your support, the Illinois Clean Energy Community Foundation has awarded Clifftop a SECOND Community Stewardship Challenge Grant.

Want to quadruple your donor dollars? This new challenge grant makes that possible!

Funds raised through this grant will be applied to Clifftop's Paul Wightman Subterranean Nature Preserve to improve wildlife habitat and especially to enhance the forested areas adjacent to the 282-acre prairie restoration. Illinois Clean Energy Community Foundation's Challenge Grant has three parts:

- 1. Cash Donations:** \$3 for every \$1 of actual cash contributed toward stewardship work at the Wightman Nature Preserve, up to \$21,000.
- 2. Equipment:** 80% of the amount paid for stewardship equipment to be used to improve natural habitat at Wightman NP, up to a maximum of \$5,000.
- 3. Volunteer Labor:** An outright gift of \$4,000 for a minimum of 400 hours of volunteer work completed at Wightman NP within one year.

So please consider helping Clifftop meet this new challenge! Just fill out the form on the next page, attach a check made payable to Clifftop NFP and follow the directions on the form. Again, we thank you!





Illinois Clean Energy  
*community foundation*

Yes, I want to help Clifftop with the  
Community Stewardship Challenge Grant Project!

Enclosed, please find my donation in the amount of \$\_\_\_\_\_\* . I understand that for every **one dollar** that Clifftop raises for stewardship at Paul Wightman Subterranean Nature Preserve in the next 17 months, the Illinois Clean Energy Community Foundation will contribute **three dollars** in matching funds, up to **\$21,000**. ICECF will also contribute 80% of the amount paid for stewardship equipment to be used to improve natural habitat at PWSNP, up to a maximum of **\$5,000**. In addition, for a minimum of **400 hours** of stewardship documented at PWSNP, ICECF will donate **\$4,000**.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP: \_\_\_\_\_

PHONE: \_\_\_\_\_ EMAIL: \_\_\_\_\_

\_\_\_\_\_ Sorry, I can't help financially, but I am willing to volunteer for stewardship work. Please contact me.

Send your check payable to Clifftop to:  
P. O. Box 131  
Maeystown, IL 62256

Please note in the memo line of your check  
that this is a donation for the stewardship  
challenge grant. THANK YOU!!!

\* Clifftop is a 501(c)(3) non profit organization,  
incorporated in Illinois. Donations in support of  
Clifftop's activities are tax deductible to the extent  
allowed by law.

