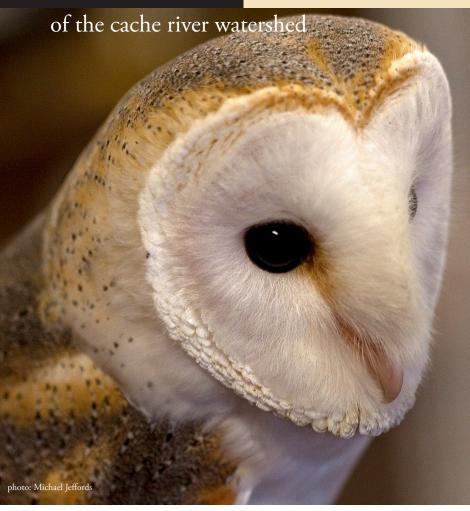
# nov/dec2017

# friends

## Featured Presentation: "Are Monarch Declines Explained by Trends in Midwestern Milkweeds?" By Dr. Greg Spyreas HOLE OF THE SPACE OF THE SPACE



# Field Notes

Five questions for Dr. Beth Middleton Research Ecologist, U.S. Geological Survey Wetland and Aquatic Research Center Dr. Middleton studies the effects of land use and environmental change on wetlands. She has written three books and established the North American Baldcypress Swamp Network, which studies the long-term function of bald cypress swamps across the southeastern U.S.

# What is your research history in the Cache?

I came to Southern Illinois University in 1990 as an assistant professor of plant biology. On a 110 degree summer day, while looking for places to conduct research on the impacts of water impoundment on seed dispersal, I discovered Heron Pond.

It was love at first sight, and inspired me to continue my research in the Cache, mostly in Buttonland Swamp, until I left for the U.S. Geological Survey and the University of Louisiana in 2002. Now, I have returned, focusing on my original research sites to compare data from 1990 and measure the impact of climate change over the past 27 years.

# Why is the Cache such a valuable research site?

My colleagues in Louisiana often ask why I spend so much time doing swamp research in southern Illinois. While there are a few small bald cypress swamps further north, in Indiana and (surprisingly) Delaware, the Cache is the northernmost swamp in the Mississippi River Alluvial Valley. Its location at the junction of multiple ecological regions and its unique combination

continued on page four

For more information, see www.friendsofthecache.org e-mail friendsofthecacheriver@gmail.com or like "Friends of the Cache River Watershed" on FACEBOOK.

#### Photo by Jon Voelz Limekiln Slough Night Hike

# he Cache After Dark

### From My 3x5 Notebook

#### By Susan Post

This summer, Michael and I conducted a series of insect spotlighting walks throughout the state. Our final one took place on September 8 at Limekiln Slough. While we anticipated seeing spiders, katydids and moths, it was the unexpected that captured the "I can't believe we saw that!" moments. The evening began with a barred owl serenading us almost directly overhead. A tawny emperor butterfly that had died while trying to exit its chrysalis led to discussion on how this summer's lack of moisture has affected emerging butterflies. A herd of tree cattle

(bark lice) garnered some attention and a giant camel cricket was quite unusual; but, the non-arthropods were the highlight. A large green tree frog (the size of a southern leopard frog) posed for photos. The most exciting encounter happened near the end of the walk, when we heard a shout from AmeriCorps member Kelsey Woodcock: "I have something here! Maybe a bat?! Not sure!" All lights were pointed at the spot. "FLYING SQUIRREL," we shouted in unison! A southern flying squirrel, startled by a spotlight, had fallen from a tree. While they can forage on the ground as well as in trees, the additional lights on its big dark eyes confused the squirrel as it clumsily tried to find a tree trunk to scurry up and glide away.



Do you know who I am?

Answer on pg 3



#### **Cache Annual Meeting**

Thursday, November 9, 6:30-8:30pm Carbondale Civic Center 200 S. Illinois Avenue

Snacks, door prizes, Cache merchandise, Friends' updates and a program by Dr. Greg Spyreas on monarchs and milkweeds. Please rsvp to Paula Havlik at <u>phavlik@illinois.edu</u> or call 217-649-4326.

#### Winter Plant I.D.

#### Saturday, November 11, 1-3pm Cache River Wetlands Center

Learn to identify wildflowers and grasses by their seedpods and winter silhouettes. Questions, call the Wetlands Center at 618-657-2064.

#### Southern Illinois Alternative Gift Fair

#### Sunday, December 3, 2-5pm Carbondale Civic Center

Find unique holiday gifts while supporting Friends of the Cache and other community organizations. Be sure to look for the Friends' booth – proceeds will support educational programs in the Cache!

#### **Annual Christmas Bird Count**

#### Monday, December 18, 6am-sunset Cypress Creek NWR

Calling all citizen scientists for this annual all-day census of early winter bird populations. All ages and skill levels welcome. Questions, call Cypress Creek at 618-634-2231.

Coming Soon --2018 Calendar of Programs and Activities!



#### Communities of the Cache Mound City, the seat of Pulaski County, is

located in far southern Illinois, just eight miles northeast of the confluence of the Ohio and Mississippi rivers, near the original mouth of the Cache. The town was founded in 1854 by Major General Moses Rawlings and named for the prehistoric earthwork mounds nearby (now incorporated into the Ohio River levee), built by the same Mississippian culture that erected Cahokia. The area had a checkered past: between the 1790's and 1820's, a river pirate named Colonel Plug allegedly ran an outlaw camp in the cypress swamps of the Cache. In 1813, several families of early settlers were killed by a band of Creek Indians, an incident known as the Mound City Massacre.



Mother Nature smiled on us with beautiful weather for Nature Fest at Cache River Days on September 9! This was the first time that Nature Fest and Cache River Days joined forces, and approximately 1,500 people turned out for the combined festivities at Ullin Ball Park. Visitors from throughout Illinois and neighboring states enjoyed exhibits and special programs on reptiles and amphibians, birds of prey and forest resources. Other highlights included a guided hike to Glass Hill, "Night of the Living Cache" spotlight hike, free canoe tours, Asian carp fry and, for the kids, the popular Cache Challenge. Mound City boasted more than 2,500 residents when it was incorporated in 1858, and served as a key port and shipyard for the North during the Civil War. Under the supervision of engineer James Eads (designer of the Eads Bridge in St. Louis), three Union ironclad gunboats were constructed at the shipyard: the USS Cincinnati, USS Cairo and USS Mound City. Other naval vessels were repaired and outfitted there, and the shipyard continued to operate through World War II.

Several buildings (now demolished) were converted into a hospital for the Civil War wounded brought up from battles downriver. Housing as many as 2,200 patients at its peak, the complex was one of the largest Union hospitals in the western states. A 10-acre plot of land set aside as a burial ground for those who died in the hospital, both Union and Confederate, was designated in 1864 as Mound City National Cemetery. The cemetery, which is open daily from dawn to dusk, features the Illinois State Soldiers and Sailors Monument, erected in 1874.

"Communities of the Cache" will highlight a different town in each issue. If you'd like to share historical photos and tidbits about your community, please contact newsletter editor Paula Havlik at <u>phavlik@illinois.edu</u>.

## Answer from page two Do you know who I am?

#### Slightly musical conehead

**katydid** (*Neoconocephalus exiliscanorus*). My distinctive, round-tipped cone is the longest of all the conehead species. My "zee-zee" song is, well, slightly musical! Watch out for my bite – I have powerful jaws made for chewing through plant fibers.



**Beth Middleton (left) prepares** to set leaf litter traps, assisted by Cypress Creek AmeriCorps member Kelsey Woodcock. Staff and volunteers from Cypress Creek NWR have been assisting Middleton in her research since 1990.

# Field Notes cont.

of northern and southern species give the Cache added value. Besides, quite simply, it's my favorite!

#### What has changed in the Cache since 1990?

One of the most striking measurements is that leaf fall is occurring later in the year, which indicates that the growing season may be getting longer. There has also been increased flooding in southernmost Illinois and the Chicago area, while other parts of the state and the Midwest are getting drier. Bottom line: within the next 30 years, the Cache River Watershed will most likely have a wetter and warmer climate, more like that of present-day Tennessee.

#### What is the projected long-term impact?

Climate change can be hard to visualize because it affects different parts of the U.S. in different ways. In Texas, where the climate is becoming hotter and drier, trees along the rivers are already dying. In the Cache, a longer, wetter growing season may actually have a positive impact on tree growth and regeneration. On the down side, we don't know the

long-term effects of a more "southern" climate on the Cache's unique diversity, particularly the northern species. Changes in the rates of growth, regeneration, decomposition and other functions are all possible, and will affect wetland management decisions, such as when to impound and when to release water.

#### Can citizen scientists help?

I am a big believer in citizen science, and have worked with volunteer data-gatherers on many projects all over the world. I'm often frustrated by television portrayals of scientists as mysterious or intimidating figures. Good science, like good detective work, boils down to common sense observations, conducted painstakingly and over time. Scientists obviously add additional layers of analysis to the process, but the kind of observation and data-gathering that anyone can do in their own backyard plays a crucial role in our shared quest to learn more about the world around us. Staff at the Cache River Wetlands Center and Cypress Creek National Wildlife Refuge can help identify opportunities for citizen science projects in the Cache.

# Become a Friend

□ **\$15** Individual

□ **\$25** Family

□ New Member

- □ **\$50** Contributing □ **\$100** Supporting
- □ Current Member
- □ \$250 Sustaining □ **\$1,000** Lifetime

Name		Date	
Address			
City	State	ZIP	
Phone	Email		

To remain budget and environment-friendly, most communications are sent via e-mail. Please let us know if you need to receive information via U.S. mail.

All contributions are tax-deductible. Please make checks payable to Friends of the Cache River Watershed and mail to: 8885 State Rt. 37 South, Cypress, IL 62923.



#### New Staff at Cypress Creek

We are happy to welcome Brian Miller as the new administrative support assistant to Cypress Creek National Wildlife Refuge. Brian brings training and experience from the U.S. Forest Service, Air National Guard and American Military University. Make sure to say hello next time you stop by the Cypress Creek office!