photo: Michael Jeffords

nov/dec 2015

friends

The American kestrel (Falco spaverious) also known as the sparrow hawk, is the smallest falcon in North America.

of the cache river watershed

Field Notes

Four questions for Travis Neal Noyce Project Manager Southern Illinois University

What is the Noyce program?

The Robert Noyce Master Teaching Fellowship, funded by the National Science Foundation, is designed to transform the way teachers engage elementary and middle school students in science and math. The program was initiated in 2011 by the Department of Plant Biology and the College of Science at SIU, in partnership with Shawnee Community College. To date, nineteen "Master Teaching Fellows" have been trained and are now leading efforts to infuse place-based learning (also known as "backyard science") and research activities into classrooms throughout southern Illinois. Many more area teachers have participated in annual two-week Summer Research Experience for Teachers (SRET) institutes.

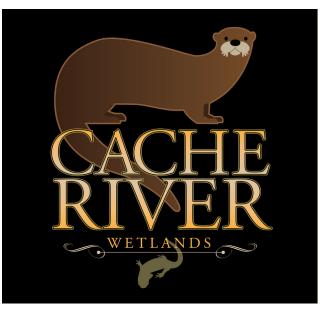
What kind of research is conducted?

Many of our projects have centered on the Cache River Wetlands, exploring topics such as water chemistry,

continued next page

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





Friends of the Cache is offering some exciting new items for sale at our kiosk in the lobby of the Cache River Wetlands Center! Check out our newest t-shirt, featuring a familiar and beloved Cache resident, the river otter. And, don't miss our new field bags, produced by Women of the Cloud Forest and embroidered with various birds, amphibians, insects and mammals. We'll also feature a new line of plush toy animals, books and more. Please note that the popular "Swamp Geek" t-shirt, which sold out quickly this summer, will return in Spring 2016 as the official Nature Fest Shirt.

Friends of the Cache who present their current membership card at the Wetlands Center receive a 10 percent discount on Friends merchandise. Also, be sure to

look for our booth at this year's Alternative Gift Fair, Sunday, December 6, 2-5pm at the Carbondale Civic Center. All sales proceeds are used to support educational programs on behalf of the Cache River Wetlands.



Field Notes continued

rock weirs and hydrology, macroinvertebrates, swamp rabbit occupancy, parasites infecting wood ducks, the impact of beavers on the riparian zone and Asian carp sampling, just to name a few. Teachers learn to take advantage of the outdoor laboratories provided by the lakes, streams and forests often accessible to rural schools, and walk away feeling they have a better grasp on science through their hands'-on research in the Cache.

What is the impact of the program?

I have seen a dramatic change in the way teachers undertake science in the classroom. Pam Plunkett, who received the Sigma Xi Teacher of the Year Award for her work with her school district and the Noyce Program, said, "I thought it was a great opportunity to expand my knowledge about teaching science and I was excited about taking part in actual scientific research in the Cache." Another participant, Paige Liddell, agreed: "My experiences in the Cache have increased my love of science. It also helped me learn new ways to better serve my students and help other science teachers." Through creating partnerships between educational



institutions, we can improve the quality of education in southern Illinois as a community.

How can more teachers get involved?

In January of 2016, we will open applications for the June 2016 Summer Research Experience for Teachers. Anyone wanting more information is welcome to e-mail me at <u>tneal88@</u> <u>siu.edu</u>. Area schools we have worked with include Murphysboro Middle School, Caruthers, Unity Point, Marion Jr. High, Herrin Elementary, Creal Springs Elementary, Carbondale Middle School, Sesser-Valier Jr. High, Crab Orchard CUSD, Waterloo High School, Goreville and many more.



Southern Illinois Alternative Gift Fair

Sunday, December 6, 2-5pm Carbondale Civic Center, 200 S. Illinois Avenue

Find unique holiday gifts while supporting Friends of the Cache and other community organizations.

Annual Christmas Bird Count

Monday, December 14 6:00am - Sunset Cypress Creek Refuge Office

This annual all-day census of early winter bird populations has been conducted throughout the U.S. for more than 100 years, resulting in the longest-running database in ornithology. All ages and skill levels welcome. Questions, call Cypress Creek Refuge at 618-634-2231.

Coming Soon! 2016 Calendar of Programs and Activities

Photo: Joy Dry

Notes from My 3x5 Notebook by Susan Post

As you are driving around the Cache River Watershed in late autumn and early winter, look for northern harriers flying low above grassy fields, hunting for voles. Male harriers, in their coloring, resemble gray ghosts—females and juveniles are brown.

Take time to observe the fallen oak leaves on the trails. Most trails are covered with a crazy quilt pattern of leaves—lobed, pointed, scalloped, colored in chestnut, russet and sienna, large and small. At least 13 species of oak may be found in the Cache. Make sure you visit the Cypress Creek Refuge office and check out the large winterberry shrubs near the parking lot. Their bright red berries offer a bit of color during gray winter days, and don't be surprised to find a mockingbird lurking among the bushes.

Due to a very dry September and October, Refuge staff have been pumping water at the Bellrose Waterfowl Reserve in preparation for the fall waterfowl migration. Keep your eye out for pintails, gadwalls, widgeons, mallards, blue-winged teal, shovellers and more.



Do you know who I am? Answer on pg 4

photo: IDNR

The Cache River and You

Participants head out to collect some of the 73 monarch butterflies captured, tagged and released for Monarch Watch at the Cache River State Natural Area in October.





The **Pollinator Interpretive Trail** at the Cache River Wetlands Center is quickly becoming a reality. Twelve eight-byfour-foot garden plots have been laid out along the existing concrete path behind the center, and the soil treated to remove grass and weeds. In November, the plots will be rototilled and prepared for spring planting. Pollinator-related themes have been selected for each garden, and many of the plots have been adopted by various volunteer organizations.

Volunteers are now working on garden designs and gathering ideas for trail signage and educational materials. Demonstration plots will include a bumblebee garden, a wetland bird garden, a trial garden for various types of milkweed, swallowtail food gardens and many more. A number of plants have been purchased from regional nurseries and are being over-wintered at Cypress Creek NWR. One of the unusual varieties acquired is rootstock from the Tartarian aster originally planted at Warbluff Valley Sanctuary by Dr. Jean Graber.

Development of the Pollinator Interpretive Trail is being overseen by Friends of the Cache River Watershed, and is made possible by a grant from The Nature Conservancy. The ultimate goal is not only to help restore pollinator habitat, but also provide visitors with concrete examples of what can be done in their own yards and gardens. Several plots are still available for adoption and additional volunteers are welcome to help plant and maintain the gardens.

For more information, contact **Lorie** Allen at <u>touchingpaws@gmail.com</u>.

LINOIS JOUBON VIETY On October 2-4, Illinois Audubon sponsored an Illinois

Wilds Institute for Nature in the Cache. The class focused on reptiles and amphibians, and was taught by Friends of the Cache board members **Jodie Delaney, Tony Gerard** and **Michael Jeffords**, with botanical expertise provided by **Connie Carroll Cunningham** from the Illinois Natural History Survey. As part of their registration fee, all participants received one-year memberships to Friends of the Cache.

In spite of gray skies and chilly temperatures, the class managed to locate 16 different amphibians and nine reptiles. Highlights included a pair of female marble salamanders guarding their egg clutch; cave, dusky and Northern slimy salamanders; a worm snake, eastern king snake, black racer and cottonmouth; an adult newt and many bird-voiced tree frogs. Perhaps one participant summed up the class best while on the trail: "I'm a finder. I don't care about names, I just love looking."

Students and teachers from Anna-Jonesboro Community High School helped Cypress Creek Refuge staff and AmeriCorps members plant 730 native trees on an agricultural field recently removed from the farm program. Upland and bottomland species, including white oak, walnut, pecan, cherrybark and overcup oak, were planted in various locations on the site, based on soil properties and topography.



photo: Cypress Creek NWR

Cypress Creek Updates

As colder temperatures arrive, Cypress Creek staff are wrapping up a successful season monitoring Indiana bats. All eight artificial roosts installed on the Refuge in 2014 had documented use by bats this summer. On a single evening in August, emergence surveys recorded a total of 236 bats at Hickory Bottoms and 389 bats at the Egner tract. Sixteen bats were also tagged and tracked as part of the Indiana Bat Science Support Project. Refuge staff have also focused efforts to minimize the spread of invasive plants, especially within wetland units, trails and boat accesses. Approximately 100 acres of forest in the Limekiln, Bellrose and Brushy units are being monitored and treated for Japanese chaff flower (*Achyranthes japonica*). Three acres of phragmites have been treated in the Brushy Moist Soil Unit.



Melody Siron (pictured left) a fish and wildlife major at Shawnee Community College, is currently assisting site interpreter Molie Oliver at the Cache River Wetlands Center. The Goreville resident, who hopes to follow in Oliver's footsteps one day, says she has learned a great deal about running a nature center during her fall semester internship. Siron expressed her gratitude to Friends of the Cache, who provided matching funds for the internship program, and says she plans to return as a volunteer in the spring.



This stunning photo by **Jeremy Schumacher** of Carbondale was the winning entry in the 2nd Annual "Prettiest Box Turtle" photo contest on the Friends' Facebook page.

Coming next: the first-ever "Best Game Cam Photo" contest! To find out more, be sure to like our Facebook page and watch your newsfeed for updates.

Answer Do you know who I am?

Red velvet ant (*Dasymutilla occidentalis*): also known as "cow killer" because of its painful sting, this is actually a wingless wasp.

Bec	om	e a	Fr	iet	าด

□\$15	Individual
□\$25	Family

□ New Member

□ \$50 Cor	itributing
□ \$100 Su	pporting
□ Current	Member

□ **\$250** Sustaining □ **\$1,000** Lifetime

Name		Date	
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City	State	ZII	
Phone	Email		

To remain budget and environment-friendly, all communications are sent via e-mail.

 \Box 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.