

of the cache river watershed

Congratulations to our 2019 Cache Champion, Martha Schwegman!

The Cache Champion Award was created in 2018 to celebrate those often-unsung heroes who love the Cache River Wetlands and put their passion into action as advocates and volunteers. Martha Schwegman, who was honored by Friends chair Tony Gerard at the Cache Annual Meeting on August 29, is well known in southernmost Illinois as a conservationist, avid birdwatcher and gardener, talented needlewoman and someone who always has information to share, whether it's about native

plants, geology or native peoples. All of these talents have been shared generously through her involvement with Friends of the Cache, Massac County Nature Study Society, Kinkaid Mounds Support Organization, Southern Illinois Audubon Society, Shawnee Quilters, Illinois Native Plant Society, Natural Areas Association, Metropolis Garden Club and other organizations. Thank you, Martha, for all you have done for the local community, and for all your hard work in the Cache.



Photo: Rob Streit

Meet New Friends Chair, Tony Gerard

A true "son of the Cache," Tony Gerard grew up in Joppa, Illinois. After attending high school in Paducah, he completed a two-year degree at Shawnee Community College (SCC), a B.S. in biology from Morehead State, Kentucky, and an M.S. in zoology from SIU-Carbondale. He has taught biology and earth science at SCC for 30 years, and is well known throughout southern Illinois for his many presentations and outreach programs. Although his specialty is reptiles and amphibians, he says that "it's all cool - the older I get, the more interesting things I discover." Gerard is also widely recognized as a historic interpreter of 18th century frontier history.

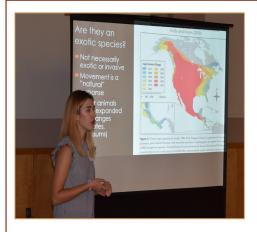
As new board chair of Friends of the Cache, Gerard hopes that, in addition to keeping up the good things the Friends are already doing, we can expand our member base of nature enthusiasts to even more local residents of the Cache. "Regardless of whether your primary interest is experiencing and studying nature, or if you're more in tune with the recreational opportunities offered by the Cache River Wetlands, the Friends support all of that, and would welcome your participation, as members and volunteers," says Gerard. "At a time when resource management agencies are stretched thin, we encourage volunteers to step up and do what they can to help, especially by participating in the many local opportunities for 'citizen science' programs." Gerard's first new project as Friends chair will be partnering with SCC on a series of speaker programs highlighting various Cache-related issues of local interest. He invites members to contact him at tonyg@shawneecc.edu with any ideas for topics you'd like to see covered, or other projects.

To learn more about the Friends, like "Friends of the Cache River Watershed" on Facebook, or email friendsofthecacheriver@gmail.com



Thanks to all the great volunteers who helped make Nature Fest at Cache River Days a success! Activities organized by Cypress Creek National Wildlife Refuge and cosponsored by Friends of the Cache included free canoe tours

(pictured above), a close-up look at snakes, turtles and other cold-blooded creatures of the Cache, nature crafts and exhibits, carp fry and live "Birds of Prey" shows by Bev Shoffstall of FREE AGAIN Wild Animal Rescue.



Armadillos were the star of the evening at the 2019 Cache Annual Meeting, as SIU graduate student Carly Haywood shared field observations and facts about the natural history of this fascinating creature. Attendees learned that the nine-banded armadillo (Dasypus novemcinctus), commonly thought of as a desert animal, actually prefers a swamp habitat. Scientists do not necessarily consider it an exotic or invasive species in Illinois, because it is moving here on its own as a natural reaction to changes in climate.

According to Haywood, researchers have not yet found any significant evidence to suggest that the armadillos migrating into southern Illinois are carrying either leprosy or Chagas' disease. A possible theory is that the strongest and healthiest individuals are the ones most likely to travel long distances to new territory. As part of her master's research in the parasitology lab of the zoology department at SIU, Haywood will be constructing a spatial distribution map linking armadillos to their current habitat associations and determining if specific disease pathogens are present. (Note that the map in the photo above, which she showed as a sample, illustrates the distribution of coyotes, not armadillos.)

For updates on ongoing research, visit and like **Southern Illinois Armadillo Project** on Facebook. If you'd like to report armadillo sightings, Haywood encourages you to contact her at Carly.Haywood@siu.edu.

Our Fall Membership Drive is Underway!

If it's been awhile since you last paid your membership dues, we hope you'll use the form at the end of this newsletter to mail your contribution, or make a secure and easy online payment by visiting www.friendsofthecache.org and clicking JOIN. Thanks so much for your support!

New Firefly Species Spotted in the Cache

The Cypress firefly (Photuris walldoxeyi), named for Mississippi's Wall Doxey State Park, was first documented earlier this year in high quality cypress swamps in Mississippi, Tennessee and Indiana. The 2019 species description published by Lynn Faust and Jeff Davis lists those three states as the species' known range. However, researchers suspected that the firefly might also be present in Illinois, and reached out to IDNR to help search for it. As a result, IDNR natural heritage biologist Christina Feng reports a confirmed sighting of the cypress firefly during a night-time survey at the Heron Pond boardwalk in late June, when thousands of individuals were observed. Feng explains that the firefly is distinguished by its strong preference for cypress swamp interiors, which makes swamp boardwalks crucial for its detection. She describes the insect's unique glow train pattern as consisting of several quick flashes followed by a "swoopy" glow. Based on observations in other parts of its range, peak flight for adults is late May to mid-June, and they emerge around 8:45pm. Looking ahead to spring of 2020, Feng says serious photographers are invited to help capture photos and footage of the cypress firefly. The BBC was actually scheduled to film the species in Mississippi this year, but was flooded out.





Photos: Lorie Allen

Boo at the Slough Oct27

Gather your family, deck the kids out in their Halloween gear and get ready to meet some misunderstood creatures of the swamp! Boo at the Slough, Sunday, October 27, 1-3:30pm at the Cache River Wetlands Center, offers a trick-or-treating adventure along the Egret Slough Trail, an easy, half-mile loop directly behind the Wetlands Center. As they collect their treats,

kids will encounter volunteers dressed as various swamp critters, who will provide games, activities and a bit of natural history education. This fun family event is co-sponsored by Friends of the Cache. Volunteers are still needed to help facilitate activities: if you'd like to be part of the "Boo Crew," contact Kim Rohling at the Wetlands Center, 618-657-2064.

Fall Migration Mini-Sit Oct5



It's not too late

to register your team for the 2019 Fall Migration Mini Sit, Saturday, October 5 from 9am to noon. Birding teams will be assigned locations throughout the Cache River State Natural Area, where they will sit in a circle and use eBird to record all birds heard or seen during the three-hour sit. Want to participate but don't have a team? Join the Friends of Cache count circle at

Marshall Ridge Access. To get there, follow your GPS to 930 Sunflower Lane, Belknap, IL 62908. Drive past the headquarters building until you get to the parking lot. The Friends' count circle will be on the overlook deck for the Michael Wolff Wetlands. Beginning birders are welcome; for more information or to register your team for an assigned location, call the Wetlands Center at 618-657-2064.

Kicks to the Cache, sponsored by Friends of the Cache River Watershed, provides \$250 grants in the spring and fall to help local schools cover transportation costs for field trips to the Cache River State Natural Area and Cypress Creek National Wildlife Refuge. Deadline to apply for spring semester grants is January 30. If you have questions or need an application form, please contact Fran Wachter at franceswachter@gmail.com.



Which Grass Is Which?

Thursday, October 3, 2-4pm Cache River Wetlands Center

Erin Medvecz will share tips and techniques for identifying 30 different grasses in southern Illinois.

2019 Fall Migration Mini Sit

Saturday, October 5, 9am-12pm Cache River State Natural Area (CRSNA)

Teams of birders will sit in an assigned area, recording all the birds they can identify in a three-hour period. To register your team, call the Wetlands Center at 618-657-2064.

Glass Hill Hike

Saturday, October 19, 10am-12pm Glass Hill Access, CRSNA

Join Mark Guetersloh for a challenging hike to learn about the unique natural history of this protected archaeological site near Cypress, Illinois.

Sunday Story Hour: Bats

Sunday, October 20, 2-3pm Cache River Wetlands Center

Nature-themed story and activity for children 3-6; please pre-register at 618-657-2064, so staff can prepare activities for each child.

Senior Van Tour/Tunnel Hill State Trail

Friday, October 25, various departure times

Guided van tour for seniors and persons with physical limitations, covering a section of the Tunnel Hill State Trail between Tunnel Hill and New Burnside. Limited seating, advance reservation required: call 618-657-2064.

Guided Hike at Cedar Bluff

Saturday, October 26, 12-2pm Cedar Bluff Natural Area, Ferne Clyffe State Park

Enjoy 50-foot bluffs, a shelter cave and dramatic views of southern Illinois fall color on this guided hike led by Molie Oliver. For directions to meeting place, call 618-657-2064.

Boo at the Slough

Sunday, October 27, 1-3:30pm Cache River Wetlands Center

Bring the kids on a guided trick-ortreat adventure to meet some misunderstood creatures of the swamp!

Guided Hike to Max Creek

Saturday, November 2, 12-3pm Shawnee National Forest, Max Creek

Visit the site of a legendary "vortex" where some hikers have experienced feelings of dizziness, disorientation and unease. Join guide Molie Oliver – if you dare! For directions to meeting place, call 618-657-2064.

National Bison Weekend Celebration

Saturday, November 2 and Sunday, November 3, 11am-3pm Cache River Wetlands Center

Learn more about our national mammal, the North American bison, which once roamed southern Illinois. Open houses each day will include 2-3pm showings of the film "Thunder Beast."

Wildcat Bluff Wander

Saturday, November 16, 10-11:30am Wildcat Bluff Nature Preserve, CRSNA

One-mile hike led by Kim Rohling along Lookout Point Trail, featuring spectacular views of the Cache River Basin and floodplain.

Sunday Story Hour: Trees

Sunday, November 17, 2-3pm Cache River Wetlands Center

Nature-themed story and activity for children ages 3-6; please pre-register at 618-657-2064, so staff can prepare activities for each child.

Turkeys on the Silver Screen

Saturday, November 30, 2-3pm Cache River Wetlands Center

Cap off Thanksgiving weekend with this free matinee showing of the PBS documentary, "My Life as a Turkey."

2019 Southern Illinois Alternative Gift Fair

Saturday, December 7, 11am-2pm Carbondale Civic Center, 200 S. Illinois Avenue, Carbondale

Shop for unique gifts while supporting Friends of the Cache and other local non-profits, part of a full day of holiday happenings in downtown Carbondale. Includes light refreshments and silent auction, plus plenty of NEW Cache merchandise!





are on the move

this fall, as they migrate towards their winter dens. It's a good time to view them in the Cache, especially at Heron Pond and, of course, along the famous Snake Road at LaRue-Pine Hills (open to foot traffic only, through October 30). It's also a good time to remember that these beautiful animals, often feared and needlessly killed, are generally harmless as long as they are left alone and treated with respect.

Plain-bellied watersnake (above), northern watersnake (below), diamond back watersnake (top right), cottonmouth (bottom right)

The western cottonmouth (*Agkistro-don piscivorus*), pictured at lower right below, is one of only three venomous snakes found in southern Illinois. Also called a water moccasin, the cottonmouth opens its mouth wide when startled, exposing the distinctive white mucous membrane inside. It has a thick, muscular body and protruding venom glands that make its blocky, triangular head wider than its neck. Heat-sensing pits can also be seen between its eyes and nostrils.

The cottonmouth can be found in and around swamps and other shallow and slow-moving bodies of water. It is often confused with non-venomous watersnakes, such as the three species also pictured here. Note their longer, more slender bodies and heads that are the same width as their necks. They do not have venom glands or heat-sensing pits; and their pupils are round, unlike the "cat-eye" pupils of the cottonmouth. The **northern watersnake** (Nerodia sipedon), pictured at lower left, can often be found basking on stream banks, looking for plants and small fish and mammals at the water's edge. The diamond back watersnake (Nerodia rhombifer), pictured stretched out on a log below, likes to bask in branches over slow-moving water, and will hang

down and dip its head under the water to fish for prey. The **plain-bellied** watersnake (*Nerodia erythrogaster*), seen at left periscoping from a crayfish hole, is so named because of its unmarked yellow underside. If threatened, it will strike repeatedly and flatten its head to look more like a cottonmouth.

You should be able to view and enjoy snakes safely by following a few common-sense guidelines. Wear boots and long pants when hiking and stay on the trails, avoiding underbrush and tall weeds. Be sure to inspect logs or rocks carefully before picking them up or sitting down. If you do encounter a snake, don't touch or pick it up, even if it's not moving. If the snake does move, stand still and let it go on its way. A snake moving toward you is most likely headed for the nearest cover; so, step aside and give it the right of way. If the snake rears its head, that's your cue to move away slowly, keeping your eyes on its location as you vacate its space.

All photos on this page were taken within a half mile of Heron Pond by Friends member Rob Streit, who often travels down to the Cache for herping adventures with fellow members of the Chicago Herpetological Society.





The world's leading

scientific journal, Science, published a ground-breaking study in September by researchers from seven institutions who concluded that, since 1970, the bird population in North America has dropped by a staggering **2.9 billion**. That's 29 percent, or more than one in four birds lost, in less than the span of a single human lifetime. The study brought together information on 529 bird species, much of which was collected by thousands of volunteer bird enthusiasts across the U.S. and Canada. Grassland birds, such as sparrows and goldfinches, took the hardest hit, losing more than half their population; shorebirds lost more than a third of their numbers. Scientists point to destruction of habitat and use of toxic pesticides as two probable causes of the birds' decline, calling the situation an "environmental crisis" that should serve as a "wakeup call." Senior wildlife ecologist Thomas J. Benson of the Illinois Natural History Survey says the status of Illinois birds is even more dire: "We've lost more than 80 percent of individuals for many grassland-dependent bird species over the past 50 years, and more than 80 percent of redheaded woodpeckers and whippoorwills, just to name a few. Even common species like blue jays and common grackles have declined by more than 60 percent in Illinois."

However, the news from the report is not all bad. The number of raptors (hawks, eagles and their kin) has doubled since the 1970s, thanks to a ban on the pesticide DDT and hunting restrictions imposed by the Endangered Species Act. Waterfowl, such as ducks and geese, have increased by 56 percent, after hunters and conservationists alike lobbied for legislation to protect wetland areas. As Nicole Michel, an ecologist at the National Audubon Society, points out, these success stories show that "when people band together and take action, it is possible to reverse population declines and bring species back from the brink."

The organizations involved in the report have compiled a list of seven personal actions that people can take to help protect North America's remaining birds:

- Make windows safer with products that prevent collisions.
- Keep cats indoors.
- Reduce lawns and plant more native plants.
- Limit use of pesticides.
- Choose bird-friendly, shade-grown coffee.
- Reduce use of plastics, especially single-use.
- Participate in citizen science projects that help monitor and track bird populations.

For more information, visit www.3billionbirds.org.



Christmas Bird Count

Join this year's Annual Christmas Bird Count at Cypress Creek National Wildlife Refuge and put your citizen science skills to work in service of the longest-running database in all of ornithology. The all-day count will be held on Monday, December 16, 6am-5pm, and bird watchers at all levels, including beginners, are welcome. This early winter bird census is conducted at local sites all over North America, and has provided crucial data for more than a century, helping scientists track and monitor the health of bird populations. For more information, please call Cypress Creek at 618-634-2231.

Communities of the Cache:

Thebes

When the village of Thebes was platted on March 2, 1846, it was initially named Sparhawk Landing, after George and Martha Sparhawk, and quickly became an important fueling station for Mississippi steamboats. Thebes (later renamed after an ancient Egyptian city) was the seat of Alexander County from 1846 to 1859, and the old courthouse, completed in 1848, still stands on the crest of a high hill overlooking the river. The building was designed by Prussian immigrant Ernst Barkhausen, and Abraham Lincoln and John A. Logan were both said to have practiced law there. Dred Scott, the former slave whose lawsuit demanding freedom was denied by the U.S. Supreme Court in 1857, is believed to have been held overnight in one of the basement jail cells. After the Alexander County seat moved to Cairo, the little-used courthouse gradually fell into disrepair. Thanks to



a generous private donor and the hard work of the Thebes Historical Society, the 170-year-old structure (pictured above) was recently restored and is open to visitors on weekends from April through October.

With the completion of the Chicago & Eastern Illinois Railroad in 1899, Thebes became a gateway for rail traffic to and from the southwest. Two large steamboats, the Davis and the Fordyce, were used to ferry railroad cars across the river between Thebes and Grays Point, Missouri. In 1900, the Southern Illinois and Missouri Bridge Company was incorporated to construct a railroad bridge over the Mississippi. The Thebes Bridge, completed in 1905 and still in use today, was reported at the time of

its construction to be the world's largest steel cantilever bridge. Several sizeable industries were once located in the Thebes area, including the Actna Power Company, which in its heyday was the biggest dynamite plant in the country. A large, modern hotel was opened in 1901 and became a favorite layover stop for train crews and other business travelers. Later, when the hotel was sold and torn down, its bricks were used to construct a school in the nearby town of Olive Branch.

Much of the material for Edna Ferber's popular 1926 novel, "Show Boat," later made into a hit Broadway musical and film, was gathered in the vicinity of Thebes and Cairo, where the annual visit of the Cotton Blossom Showboat was always a major event.

"Communities of the Cache" features a different town in each issue. We thank Evelyn Caldwell for contributing most of the information about Thebes. If you have historical photos or tidbits to share about your community, contact newsletter editor Paula Havlik at phavlik@illinois.edu.



From My 3x5 Notebook By Susan Post

September 10, 2019: Today is the final full day of a ten-day butterfly holiday to Panama. We are at Metro Park, a national park in the middle of the city, looking for butterflies to add to our growing list. Fall migration of birds has

also begun and some familiar "faces" are in the park – American redstart (Setophaga ruticilla), black and white warbler (Mniotilta varia) and a male cerulean warbler (Setophaga cerulea). After walking the circuit of blooming plants and vines several times and seeing nothing new, it's time to head to a different location. I hear a call from our leader, "I have an interesting metalmark here!" (Metalmarks are represented in Illinois by one species. In the tropics there are a dazzling diversity of shapes, sizes and colors. This was a butterfly family that I wanted to see as many of as possible.) While I heard the guide's call as a shout, the other members of our group must've only heard a whisper. They were otherwise engaged by the antics of a male **prothonotary**

warbler (Protonotaria citrea). Our fellow travelers were from Britain and this was a new warbler species for them. The butterfly, a periander metalmark (Rhetus periander), was imbibing on wet gravel, a perfect backdrop for showing off its iridescent blue color. All too soon, the butterfly left and my traveling companions returned, wondering why I didn't linger over the prothonotary warbler. I explained that I see and hear these birds every spring in the Cache. Not only were they envious that I experienced prothonotaries yearly, but my photo of the metalmark, which was a top species on everyone's list, sealed the deal. No matter where I am, the Cache always seems to surface and never disappoints.



Despite an extremely wet spring and summer, Cypress Creek National Wildlife Refuge staff were able to renovate approximately 130 acres at the Bellrose Waterfowl Reserve. The waterfowl units (pictured above) are looking good, with a variety of moist soil plants like yellow nut sedge, wild millet, smart weed, panic grass and bidens. We are eagerly looking forward to the arrival of migrating waterfowl. Duck and goose nesting production was good this season, so we hope to see many birds this winter.

U.S Fish and Wildlife Service hydrologist James Stack visited Cypress Creek

to assist with several ongoing monitoring projects, including collecting bathymetry data at Limekiln Slough in order to better understand the hydrology of this unique system and its relation to the Cache River. Monitoring also focused on impacts from bank clearing along the Cache River that was completed by the Big Creek Drainage District in 2017. This work is especially important to document, so we can compare bank erosion rates to other sites on the river that were not cleared of vegetation. Additional data collected included water temperature and clarity in cleared versus non-cleared areas.



Answer from page 4 Do You Know Who I Am?

Striped blister beetle (Epicauta vittata): Lots of people consider me an agricultural pest. I produce two generations a year in southern Illinois and my larvae feed on grasshopper eggs. I generate cantharidin, a toxic compound that causes blistering of skin and mucous membranes: horses that eat me accidentally in hay may become very ill. Frogs are immune to my toxin, but it builds up in the frog's muscle tissue and is secreted in its mucous for a short time. Any predators that consume the frogs can be poisoned – including humans who eat frog legs!

Become a Friend

□ \$15 Individual	□ \$50 Contributing	\square \$250 Sustaining
□ \$25 Family	□ \$100 Supporting	□ \$1,000 Lifetime
\square New Member	☐ Current Member	
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.



One of the coolest observations we've seen on iNaturalist lately is cobalt crust fungus (*Terana caerulea*), also known as velvet blue spread. Typically found on the undersides of fallen logs in warm, damp hardwood forests, cobalt crust fungus has been especially common in the Cache this year. We encourage you to post your observations of Cache flora and fauna on iNaturalist, which can be accessed through its website or via its mobile application. For more information, visit inaturalist.