

# CLAYTONIA

Newsletter of the Arkansas Native Plant Society

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## Management Brings Botanical Bounties at Hobbs State Park-Conservation Area

By Jennifer Ogle

Saturday morning was sunny and pleasantly cool as our group of 11 ANPS Spring 2023 Meeting attendees gathered at Hobbs State Park-Conservation Area to hike the 1.5-mile long Shaddox Hollow Trail loop. I was grateful for the cool weather, as we were about to walk down a steep hill that we would eventually need to climb back out of, and we also planned to visit two limestone glades that had recently been restored to their naturally open condition, where we would be standing in the full sun as we talked and admired the native plants that had rebounded. I was also grateful to be joined by Mark Clippinger, park superintendent at Hobbs since before the developed park opened, who probably knows more about the area's natural features



*Mark Clippinger talks about Shaddox Hollow glade restoration. Photo by Jennifer Ogle.*

than anyone else around. He led the glade restoration work a few years ago, and he and his crew regularly conduct prescribed burns in many areas of the park.

Mark started off by showing us a map of the park, which at 12,054 acres is the largest land-based state park in Arkansas. Hobbs is located east of Rogers in a very rugged, highly dissected part of the Springfield Plateau Ecoregion called the White River Hills. Mark pointed out some of the interesting features of the property that are typical of the ecoregion, including large tracts of naturally occurring shortleaf pine (*Pinus echinata*), calcareous glades, and steep, cherty hollows. He also mentioned that the trail we were about to walk was the first on the property, a vision by longtime friend and park supporter Ellen Turner that was eventually built by Mark, Tim Ernst, and several volunteers in 1989.

We could see the result of the prescribed burns as soon as we stepped into the woods. As we took the trail in a clockwise direction through the cherty pine-oak woodland, we could see far into the woods. There were no invasive shrubs blocking our

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view! What a lovely sight. Mark explained that regular prescribed burns keep the woodland in an open condition. We passed Bradbury's beebalm (*Monarda bradburi-ana*), four-leaved milkweed (*Asclepias quadrifolia*), dollarleaf (*Desmodium rotundifolium*), hairy goldenrod (*Solidago hispida*), beaked hawkweed (*Hieracium gronovii*), and many other native wildflowers thriving in the understory, along with eastern bracken fern (*Pteridium aquilinum* var. *latiusculum*), low-bush blueberry (*Vaccinium pallidum*), and deerberry (*V. stamineum*). As we continued walking down slope, we gradually left the open pine woodland and found ourselves in a denser, mesic hardwood forest where fire does not reach as often as it does upslope. The tree layer included white oak (*Quercus alba*), bitternut hickory (*Carya cordiformis*), and some large basswood (*Tilia americana*) trees. We also saw several spicebushes (*Lindera benzoin*) in the shrub layer. We looked up as we passed below large rock outcrops and saw widow's-cross (*Sedum pulchellum*) on the ledges and wild hydrangea (*Hydrangea arborescens*) growing out of the cracks in the rocks.

The trail leveled out as we reached the bottom of the hollow, where we found a forest floor absolutely carpeted with native plants. The abundance and diversity was impressive – Jack-in-the-pulpit (*Arisaema triphyllum*), dwarf crested iris (*Iris cristata*), dwarf larkspur (*Delphinium tri-corne*), hairy woodland brome (*Bromus pubescens*), starry rosinweed (*Silphium aspernum*), what seemed like hundreds of yellow pimpernel (*Taenidia integerrima*) in full flower, wild hyacinth (*Camassia scilloides*), Ohio spiderwort (a.k.a. bluejacket, *Tradescantia ohioensis*), and black cohosh (*Actaea racemosa*) stand out in my memory on that part of the trail. Oh! And tall thimbleweed (*Anemone virginiana*), Seneca snakeroot (*Polygala senega*), clus-

tered black-snakeroot (*Sanicula odorata*), and so much more. It was dizzying, the array of plants we saw as we walked along that section of trail. It was so much to take in, I almost missed the tall bluff that was just above us until Mark pointed it out; and above that, through the trees a glade was barely visible.



**The Shaddox Hollow group walks down slope into a mesic forest. Photo by Jennifer Ogle.**

We took a spur trail toward the Beaver Lake shoreline, then Mark guided us back up through the woods to the glade to admire the results of the restoration. Several years ago, he and dedicated volunteer Darrell Rice cut thousands of eastern red cedar (*Juniperus virginiana*) trees from the glade and well over 50 dedicated volunteers dragged them downhill to the lake, where Jon Stein, Arkansas Game and Fish Commission fisheries supervisor for Northwest Arkansas, and his crew sank the bundled trees in the lake to create fish habitat. Jon indicated that it was the largest lake habitat restoration project in Beaver Lake's history up to that point in time. Mark explained that prior to the work, the entire glade was so choked with cedars that almost no sunlight reached the ground. Standing in the treeless glade amongst a dense, lush layer of native warm season grasses and wildflowers, it was hard to imagine such a sad scene could have ever existed. The strong, minty aroma of calamint (*Clinopodium* sp.) filled the air as we walked through the glade and found eastern shooting star (*Primula meadia*), pitcher's stitchwort (*Mononeuria patula*), more widow's-cross, green comet milkweed (*Asclepias viridiflora*), a coneflower (probably *Echinacea pallida*), noseburn (*Tragia* sp.), rose vervain (*Glandularia canadensis*), purple-stem cliffbrake (*Pellaea atropurpurea*), and southwestern bedstraw (*Galium virgatum*).

We were running short on time by this point, so we walked back down through the hollow to continue the



**Virginia snakeroot (*Aristolochia serpentaria*). Photo by Jennifer Ogle.**



loop and quickly visited a second, narrower glade. On the way there we discovered several new plants growing below the bluffs - Carolina larkspur (*Delphinium carolinianum* ssp. *carolinianum*), prairie Indian plantain (*Arnoglossum plantagineum*), and a flowering Virginia snakeroot (*Endodeca serpentaria*), which brought everyone to their knees (so they could take photos).

Mark and some more dedicated volunteers, including the Friends of Hobbs board, had also cut and removed the dense stand of cedars from this second glade, but because this one was pretty far from the shoreline, they dragged each tree UPHILL and into the woods instead of sinking them in the lake. The positive results of this incredible effort were evident to all of us, as we saw many of the same plants as we did in the first glade, but also some exciting new ones, including rough rattlesnake root (*Nabalus asper*), which is imperiled in Arkansas, and one

of the adder's-tongues (likely Limestone adder's-tongue, *Ophioglossum engelmannii*). On a previous trip, Mark, University of Arkansas undergraduate student Andrew Ruegsegger, and I spotted a Prairie Lizard (*Sceloporus consobrinus*) and a Southern Black Racer (*Coluber constrictor* ssp. *priapus*) in this glade, evidence that the restoration work was yielding benefits to wildlife too.

Habitat restoration is labor-intensive work that can be downright grueling in rugged places like Hobbs State Park-Conservation Area. But the myriad benefits, not only to the native plants that rebound and thrive, but to the insects, birds, mammals, and reptiles that rely on the plants and habitat for their very existence as well, make all the difficult work worth it. It was clear to all of us that Mark agreed as we left the glades and hiked back upslope through the pines.

## Pondberry: Spicebush's Interesting and Endangered Cousin

By Melanie Rudolf

Pondberry (*Lindera melissifolia*) is a shrub native to the southeastern United States. I got to know this plant intimately this spring, while traipsing through sandponds in Clay County, and it now holds a special place in my heart. You may be familiar with its cousin, spicebush (*Lindera benzoin*; same genus, different species), a shrub found in mesic forests with fragrant spice-y leaves and red berries. Pondberry looks very similar to spicebush but is quite rare.

Pondberry's leaves, when crushed, smell like melon and sassafras, less pungent and fruity than the Froot Loop blast of spicebush leaves. It flowers in early spring, beginning in February, and produces little yellow flowers

along its dark brown branches. After flowering, the shrub begins to leaf out with light green, slightly hairy leaves.

Interestingly, pondberry can reproduce sexually through fruit and seeds or asexually through clonal stems; it

switches between reproductive strategies based on site conditions. During favorable conditions (most notably high light availability), sexual reproduction is most common. During lean times, the plant reproduces through clonal ramets (independent members of a clone). Swamp rabbits (wetland cottontails!) are known to nibble on the stems and leaves.



**Pondberry (*Lindera melissifolia*). Artwork by Melanie Rudolf.**

Pondberry is listed as federally endangered; as of 2023, there are only 73(!) known natural populations of this plant, only 35 of which have been confirmed recently. Eighteen of these confirmed sites are in Arkansas! Multiple factors have contributed and continue to contribute to the decline of the species. Habitat destruction,

mainly the clearing and draining of wetlands for agriculture, has been the leading cause of pondberry decline.

In Arkansas and throughout much of the south, pondberry is associated with a rare wetland habitat called "sand

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**A small pondberry plant just beginning to leaf out this spring. You can see the dried flowers still attached on the lower side of the stem. Photo by Melanie Rudolph.**

(*Quercus pagoda*), and swamp red maple (*Acer rubrum* var. *drummondii*). Drier oak species, such as post oak (*Quercus stellata*) and blackjack oak (*Quercus marilandica*), and native grasses occur on the higher and drier dunes. Lower dunes often are a mixture of the two communities; pawpaw (*Asimina triloba*) and spicebush (*Lindera benzoin*) are common as the land becomes slightly drier.

As with many wetlands, logging activities, draining and ditching, and agriculture have impacted this habitat type. Very few intact dune fields ecosystems still exist in Arkansas. In addition to habitat loss, as a member of the laurel family, pondberry is susceptible to sassafras wilt (caused by *Diaporthe sociata* and *Botryosphaeria dothidea* fungi) and laurel wilt (caused by the fungus *Raffaelea lauricola* and spread by the redbay ambrosia beetle).

ponds,” depressional wetland ponds and swales associated with sand dune fields. These sand dune fields are series of low sandy mounds and shallow pools, with a mature overstory canopy, often a mixture of wetter oak species, such as overcup oak (*Quercus lyrata*) and cherrybark oak

Prescribed fire has been employed in some areas to help pondberry, as the fungi that cause sassafras wilt are thought to be susceptible to smoke. Fire most likely burned in the higher and drier dune communities adjacent to the sandponds, and smoke would carry and sit in the lower lying ponds. So, while pondberry is not necessarily a fire-adapted species, fire within the greater landscape may be a necessary ingredient to ensure its success. As laurel wilt is a fungal disease as well, smoke could be a helpful tool to manage and reduce this disease in the future. Further study and observation are much needed!



**Pondberry (*Lindera melissifolia*). Photo by Hugh and Carol Nourse.**

Unfortunately, laurel wilt has been spreading northward from the Louisiana border since 2015 and was detected as far north as Lonoke County in 2022. As laurel wilt continues to move further into Arkansas, the threat to pondberry populations will continue to increase, and continued monitoring of pondberry populations will be crucial to ensuring the species’ future.

## SAVE THE DATE!

SPRING 2024

MEETING

MAY 17-19

MOUNTAIN VIEW, AR



**Ozark bluff in Stone County, Ozark National Forest. Photo by Eric Hunt.**



# Plants to Entice a Child's Mind (Part 1)

By Sarah Geurtz

I find the lens through which children view the world very interesting and, quite frankly, educational to myself. They have a way of breaking things down into simple components that as adults, we tend to no longer think about. By utilizing this very characteristic of their minds, I find it easy and a delight to excite children with natives! Here are some plants and ideas of fun nature things to entice a child's mind! You could turn out to be the "hook" that leads them to a lifetime of nature loving!



**Crossvine (*Bignonia capreolata*).** Photo by Eric Hunt.

***Bignonia capreolata*** – Crossvine. From experience, I've learned that children love to put the flowers over the tips of their fingers. If the vine grows tall enough, they'll only be able to denude the lower portion of your vine! Ask them why in the world do they imagine the plant is called "cross vine" – such a strange name, isn't it? They will never guess why (adults couldn't even guess it). Then, cut one of the thicker woody vine sections and look at the cut end. The vine may or may not reveal its secret at first. You might see the answer then or you may have to put the vine aside for a number of hours. Towards the "bark" cut ends, four straight lines will appear – the ends of a cross/plus symbol.

***Asclepias*** species – Milkweeds. Grow our various species of milkweeds to give children the experience of watching the lifecycle of the Monarch butterfly. That's cool enough by itself; add to it the delight of playing with ripe seed pods and letting the seeds blow in the wind and it's a very cool plant!

***Baptisia alba*** – White Wild Indigo. When emerging from the ground, the shoots on these plants looks alien-like! It can be difficult to catch this plant emerging in time to view the odd-looking shoot before its foliage unfurls. If you happen to miss that first emergence, just wait for late summer when the seedpods form. Your children will be delighted because, as they will tell you, the pods resemble both butts and brains. However, if the children will leave the pods on the plant and not pop all of them (squeezing them until they pop is actually oddly satisfying), a fully-ripe seed pod can be shaken and the loose seeds inside will make a rattling sound! The children can have a dance party with their new musical instrument! Don't wait too long into the fall/winter though – the seed pods will eventually split open on their own to release the seeds.

***Cornus*** species – Dogwoods. Dogwoods have an interesting trait called elastic vascular bundles (which I, like many of you, learned from Eric Sundell). Before the foliage has begun to change colors in the fall, very slowly and carefully pull the leaf in half, *across* the veins. If you've done it very carefully, you'll be left with two pieces of leaf being "invisibly" held together. If you look closely, you'll see filamentous elastic vascular bundles at the points of the main veins holding the two pieces together! Next, have the children do this experiment with other tree leaves. My daughter has found another tree that does this. You ought to be able to keep the kids busy for a while trying this!



**Dogwood (*Cornus florida*).** Photo by Eric Hunt.

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***Euonymus americanus*** – Hearts a Burstin’/Strawberry Bush. The seeds of this native suckering shrub are held in red warty seed capsules. In the fall they burst open to reveal red seeds hanging inside. The common name, as well as the seed capsules, will fascinate your child! I for one, spent my whole childhood wanting this plant



***Hearts a Burstin’ (Euonymus americana)***. Photo by Eric Hunt.

in my yard. Alas, native plant suppliers back then were few and far between.

***Fragaria virginiana*** – Wild Strawberry. Grow this for the tiny strawberries that your children can search for



***Swamp mallow (Hibiscus moscheutos)***. Photo by Eric Hunt.

on their own. The berries are delicious. In both my and my child’s opinion, they taste better than store-bought

strawberries. Be warned, though, that the wildlife might beat you to them!

***Hibiscus moscheutos*** – Swamp Mallow. You can make a small flower doll out of the flowers of this plant! Take one open flower and set it petal-edge down on a surface. Then cut a flower bud so that a bit of the petals is peeking out of the end and, using its stem, stick it into the base of the opened flower. Voila! You have a lady in a wide-skirted dress. My great-grandmother used to do this with my mother, and she remembers it vividly today. This little trick will be sure to impress.



***Jewelweed (Impatiens capensis)***. Photo by Eric Hunt.

***Impatiens capensis*** – Jewelweed/Touch-Me-Not. You’ll find this growing in wet areas. Scout some out first, and make sure that the seed pods are at the “bursting” stage. Begin by explaining that this is our *native* annual *Impatiens* plant and that the common name of “Jewelweed” comes from the way the leaf appears when you place it under water or when water droplets fall on the leaves – the leaf has a hydrophobic quality that results in a silvery appearance with water. The kids will have fun experimenting with that. Also, tell them about this plant’s other common name, “Touch Me Not,” and have them touch a ripe seedpod. They will love the way the ripe seedpods explode in their fingers.

## Don’t forget about the ANPS Monthly Webinar Series

If you would like to receive webinar announcements and Zoom links, contact Eric Fuselier to be added to the email list ([anps.programs@gmail.com](mailto:anps.programs@gmail.com)). Watch past webinars at [youtube.com/channel/UCEIIEFuRaz0HbIgXxwRIHvw](https://www.youtube.com/channel/UCEIIEFuRaz0HbIgXxwRIHvw).



# ANPS Grant Supports Pollinator Garden at Logoly State Park

By Amber Overholser and Heather Runyan, Grant Recipients



**Pollinator garden at Logoly State Park. Photo by Heather Runyan.**

Found in southwestern Arkansas, Logoly State Park is Arkansas's first environmental education state park. They strive to interpret and protect the natural resources within the park, which are indicative of Arkansas's West Gulf Coastal Plain ecoregion. Over the course of the last two years, park staff, local Master Gardeners, and community volunteers worked to create a pollinator-friendly native plant garden behind the visitor center. Through the generous donations of the Arkansas Native Plant Society and the Rotary Club of Magnolia, Arkansas, that group of volunteers created a garden that fits in with the park's interpretive mission by providing visitors with an immersive experience into the world of our native pollinators and the plants that fuel them.

After volunteers secured funding through grants, and park staff selected the site, soil preparation required vol-

unteers to pull up their sleeves and remove logs, till the soil, and install landscape edging. A local horse stable donated multiple loads of free mulch and volunteers worked those amendments into the soil before Master Gardeners planned the layout of the garden. Finally, volunteers planted a variety of native flowers, vines, and shrubs including swamp azalea (*Rhododendron viscosum*), possumhaw viburnum (*Viburnum nudum*), spotted bee-balm (*Monarda punctata*), rose mallow (*Hibiscus moscheutos*), and purple passionflower (*Passiflora incarnata*). These were just a few of the chosen plants purchased from vendors including the Arkansas Audubon Society at their annual Native Plant Sale.

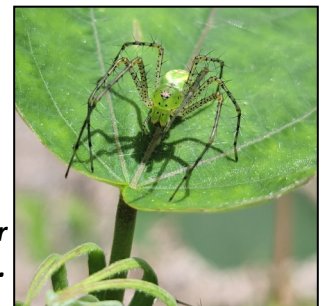


**Purple passionflower (*Passiflora incarnata*). Photo by Heather Runyan.**

The native plant garden stands as a testament to the power of volunteers and the interest in, and support for, native plants and pollinators. In recognition of their financial support, signage was created recognizing ANPS and Rotary Club of Magnolia for the project that is visible from the visitor center viewing area. A local artist has donated a set of paintings which community volunteers will sell in order to purchase more plants or supportive items for the native plant garden at Logoly State Park.



**Gulf fritillary (*Agraulis vanilla*) butterfly and caterpillar. Photo by Heather Runyan.**



**Lynx spider. Photo by Heather Runyan.**

# Synergy: ANPS and Master Naturalists

By Karen Seale

*Synergy, as defined by the Oxford Dictionary, is “the interaction or cooperation of two or more organizations, substances, or other agents to produce a combined effect greater than the sum of their separate effect.” Such is the greater sum taking place between ANPS and master naturalists around the state. As a Lifetime Member of ANPS and a 10-year member of Central Arkansas Master Naturalists (CAMN) I’d like to use this forum to highlight some of the commonalities between these organizations and its members.*



**Martha Nixon, Lynn Foster, and Karen Seale at Downs Prairie Natural Area. Photo by Morgan Meador.**

*If you are reading this newsletter, you already know about ANPS. But did you know that an increasing number of our members are master naturalists? Many of them join because, through their master naturalist training, they learn, among many other things, about the difference between native and non-native, invasive plants and what to do about them. The mission of Arkansas Master Naturalists (AMN) is to “develop a corps of well-informed volunteers to provide education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities.” AMN has six chapters composed of 785 members, who, in 2022, volunteered 25,642 hours of service. Almost 40% of that time and effort was dedicated to native plants and wildlife/habitat restoration. Sounds like a match made in herbaceous heaven with ANPS, doesn’t it?*

*It was a desire to get better acquainted with the native plants and their habitat at Downs Prairie Natural Area and to spend a day together just for fun that prompted three of us members of CAMN (a.k.a. CAMNers) to visit the prairie along with a more knowledgeable and experi-*

*enced (about native plants, anyway) field biologist. What follows is a slightly modified account of that trip that was published in the CAMN newsletter recently. I’m sharing it with you here to introduce you to some new ANPS members and to highlight how much our two organizations have in common. We have so much to offer each other as we work synergistically towards similar goals.*

## WAS IT WORTH IT?

Three CAMNers and a field biologist on her day off. An early morning drive. A walk in a prairie. Sun, heat and humidity in July. Was it worth it?

Being a master naturalist isn’t just about completing the 40 hours of course work and volunteering 40 (or more!) hours a year. It’s about opening a whole world of exploration, experiential education, and comradery among like-minded people who wake up early and drive an hour to tromp around a virgin prairie remnant. We revel in the beauty and diversity of blooming native flowers and grasses, hundreds of dragonflies, and the hum and buzz of incalculable other insects and birds. We celebrate the sighting of a black swallowtail butterfly caterpillar nestled among the floras. All this before ordering breakfast and coffee at the quaint Hurley House Café in Hazen where we are immediately pegged as “Y’all aren’t from around here, are ya’?” by some friendly locals.

Such were some of the highlights of a recent Saturday at Downs Prairie Natural Area for Martha Nixon, Lynn Foster, Karen Seale, and Morgan Meador. Downs Prairie, for those of you who might not know, is a 28-acre jewel of pristine prairie, owned and managed by the Arkansas Natural Heritage Commission (ANHC). Prior to settlement by Europeans, this little prairie was part of the estimated 400,000 acres, known collectively as the Grand Prairie, composed of native grasses, sedges, and wildflowers. Today, less than 1% of that larger prairie remains intact, most of it having been tamed, drained, tilled, and converted to abundantly producing monocultural agribusinesses. Progress, it is said. And while we all have benefitted from this progress, the ability to experience even a small sample of the diversity and “life” that exists on the remaining prairie is a privilege and a joy. Conservation of remnants of the Grand Prairie, such as Downs Prairie, is made possible by the methodical science-based manage-



ment practices of ANHC. As trained volunteers, we have the opportunity of aiding in those efforts from time to time by participating in invasive plant removal, controlled burns, trash pickup, and seed collections.



*Eastern black swallowtail butterfly caterpillar (Papilio polyxenes). Photo by Lynn Foster.*

We three CAMNers were joined by Morgan, a field biologist who works for Quail Forever. She enhanced our experiences as she was able to provide the names and interesting tidbits of dozens of native plants and grasses quickly and expertly as we ambled our way through the prairie.

Lynn, having been the brainchild behind CAMN's Arkansas Wild Spaces project

based on a similar program in St. Louis (*See side bar.*), shared her knowledge of native plants, too. In addition, she took some marvelous pictures using her astute photographer's eye and iPhone. Martha sharpened her own plant identification skills, asked great questions, and applied some of the knowledge she is acquiring as a Naturalist in Training (NiT). Karen just went along for the ride, using double walking sticks to keep her balance and trying hard not to fall and get lost among the tall grasses. Was the early rising, the drive, the sun, the heat, and the humidity worth it? As a master naturalist, you already know the answer!

Central Arkansas Master Naturalists are committed to planting more native species to bring back nature and restore ecosystems and removing non-native invasive plant species. Arkansas Wild Spaces is a CAMN project whereby specially trained volunteer habitat advisors visit yards of homeowners in the Central Arkansas area and advise them on how to restore native plants and animal habitat.

[Arkansas Wild Spaces](#)

## Welcome, New ANPS Members!

**These members have joined ANPS since the last issue of *Claytonia*, from March 12, 2023 to August 14, 2023:**

Rebekah Armstrong (Philadelphia, PA)  
 Leslie Bailey (Fayetteville, AR)  
 DeAnn Blackard (Hartman, AR)  
 Jenny Bourne (Fayetteville, AR)  
 Donna Brocka (Mountain View, AR)  
 Clifford Clifton (Alma, AR)  
 Connie Cottingham (Pea Ridge, AR)  
 Abigail & Spencer Dwire (Weitzel) (Hot Springs, AR)  
 Yannik Dwyer (Fayetteville, AR)  
 Dylan Gibson (Little Rock, AR)  
 Donna Gwaltney (Fayetteville, AR)  
 Robin Harris (Heber Springs, AR)  
 Brendan Kosnik (Jonesboro, AR)  
 Jack Looney (Batesville, AR)  
 Robin Mero (Berryville, AR)  
 Katherine D Meyer (Crystal Lake, IL)  
 Karen Moulton (Flippin, AR)  
 Constance Murray (Tulsa, OK)  
 Kasey Pfeifer (Bentonville, AR)

Amy Pierce (Searcy, AR)  
 Shayna Pollock (Little Rock, AR)  
 Ben Robbins (Fayetteville, AR)  
 Andrew Ruegsegger (Norfolk, AR)  
 Kate Spontak (Little Rock, AR)  
 Kathy & Terry Sutterfield (Fayetteville, AR)  
 The Native Plant Garden Project (Eureka Springs, AR)  
 Dan & Gia Voorheis (Eureka Springs, AR)  
 Sarah Weems (Conway, AR)  
 Sheryl Kae Willis (Eureka Springs, AR)  
 Chris Wilson (Fayetteville, AR)  
 Susan Young (Fayetteville, AR)

### **New Lifetime Members**

Dan Burns (Melbourne, AR)  
 Lynda Deer (Little Rock, AR)  
 Ralph Doty (North Little Rock, AR)  
 Robert & Barbara Kipfer (Springfield, MO)  
 Leigh Moravec (Greenbrier, AR)  
 Frank Swift & Michelle Andrews (Jacksonville, AR)

# “A Profusion of Beautiful and Curious Flowers”

By Virginia McDaniel

*In this direction the surface of the ground is gently broken or undulated, and thinly scattered with trees, resembling almost in this respect a cultivated park. The whole expanse of forest, hill, and dale, was now richly enameled with a profusion of beautiful and curious flowers. ...I found it equally undulated with the surrounding woodland, and could perceive no reason for the absence of trees, except the annual conflagration.*

Thomas Nuttall from his Journal of Travels Into the Arkansas Territory, During the Year 1819



**Restored Shortleaf Pine Woodland in the Ouachita National Forest. Photo by Eric Hunt.**

These quotes from Thomas Nuttall, an early botanist who travelled through Arkansas, tell a story about what the landscape, managed by indigenous people in the area, most likely the Osage and Caddo tribes, looked like in the early nineteenth century. His translation was spot-on, noting that fire kept the forests open and parklike and the woody vegetation at bay. While Traditional Ecological Knowledge (TEK) recognized fire as an essential process for people, plants, and animals, it would be over a century before Scientific Ecological Knowledge (SEK)\* would catch up.

In 1935, due to the perceived destructive force of fire, the Forest Service implemented the 10 a.m. Policy. It stated that all wildfires ignited on Forest Service land would be extinguished by 10 a.m. the following day. In the beginning, success was relatively easy in both the eastern and western US. Today, however, fire suppression is not easy, especially in the western US. Conifer trees with branches low to the ground grow where there were once grasses and forbs. Fires that once burned safely along the surface can now move through those

conifers from a ground fire to a crown fire and burn entire forests to the ground. Twenty-first century wildfires ARE destructive to both ecosystems and personal property. In the eastern US the results of fire suppression are different but equally destructive. The fuel build-up makes many areas less susceptible to fire, but at a cost. That cost is biodiversity. Without fire, trees that are tolerant of shade and sensitive to fire begin to grow in the understory and shade all the herbaceous plants that try to grow. Leaf litter piles up each year and without fire to burn it off, it forms a layer of duff that also stifles the growth of grasses and forbs.

The wake-up call for the Ouachita National Forest (ONF) came in the 1980s in the form of a 2-ounce bird. The Red Cockaded Woodpecker (RCW) was listed as Endangered in 1970, and at that time the ONF had a disjunct population that was not doing well. The main reason was because this bird required open forests with lots of insects (i.e., high understory plant diversity) on which to forage and old pine trees in which to build its home.

In the 1980s the ONF started thinning and burning small areas of the forest (10 to 100 acres). This management helped stabilize the RCW population but wasn't increasing the population size. Biologists, however, could tell that positive changes were happening in the understory plant community. They realized they need to increase the acreage and connect these islands of restored forest. They began managing for, as former ONF staff officer Larry Hedrick said, “a condition on the land” - one with large widely spaced trees with basically a prairie in the understory created through thinning and fire.



**Sensitive brier (*Mimosa quadrivalvis* var. *nuttallii*) and charred shortleaf pine tree (*Pinus echinata*). Photo by Virginia McDaniel.**

The ONF now has 150,000 contiguous



acres of restored open pine woodlands which they call the Shortleaf Pine-Bluestem Restoration Area. The RCW populations steadily increased with fire management and on their coattails came hundreds if not thousands of other species. Hundreds of studies were done comparing diversity of different species (birds, reptiles, amphibians, pollinators, deer, plants, etc.) in the open versus closed canopy forest. While a few species preferred closed canopy forest, the vast majority preferred the open woodlands condition. The SEK's qualitative data collected over a few decades validated the TEK's collective experiences over millennia. Thank goodness native seeds survived in the seed bank, and it wasn't too late to restore the area.

few of the over 600 species of plants found in the Shortleaf Pine-Bluestem Restoration Area, but it was plenty to keep everyone interested and entertained.

Knowledge comes in many forms. Perhaps if we had listened better a century ago it may have saved us some challenging times today. Maybe it wouldn't have. But in terms of SEK and TEK, we have come to a similar understanding, at least in the Ouachita Mountains Ecoregion. Hopefully our understanding of the relationship between fire and biodiversity will continue to spread and bring back other ecosystems to their most productive and diverse state so we can all keep appreciating a "profusion of beautiful and curious flowers."



**Winecup (*Callirhoe pedata*) growing in Restored Shortleaf Pine Woodland in the Ouachita National Forest. Photo by Eric Hunt.**

\*SEK is a term I heard Robin Wall Kimmerer use in a talk for the USDA Forest Service.

If you would like to see a professionally produced video about the Shortleaf Pine Bluestem Restoration Area please visit <https://www.youtube.com/watch?EufqU2tyS9I>



**Painted Lady butterfly (*Vanessa cardui*) on pale purple coneflower (*Echinacea pallida*). Photo by Virginia McDaniel.**



**Samantha Heller, Jennifer Ogle, Willa Thomason, Heath Geister, and Virginia McDaniel talk about amazing woodland plants. Photo by Eric Hunt.**

On May 25<sup>th</sup> Jennifer Ogle and I lead a field trip of the Shortleaf Pine-Bluestem Restoration Area. I will admit, while I have been to the area many times, this was the first time I had been there at the end of May and W.O.W.! We hit it at one of the floral peaks with every color in the rainbow displayed. It was stunning!

The iridescent blues of Carolina larkspur (*Delphinium carolinianum*), sunflower yellows of large-flower tickseed (*Coreopsis grandiflora*), bright pink puff balls of sensitive brier (*Mimosa nuttallii*), soft pink of pale purple coneflower (*Echinacea pallida*), purples of stalked wild petunia (*Ruellia pedunculata*) and deep magenta of winecup (*Callirhoe pedata*). We also saw rattlesnake-master (*Eryngium yuccifolium*), flowering spurge (*Euphorbia corollata*), cream wild indigo (*Baptisia bracteata*), trailing and creeping bush-clover (*Lespedeza procumbens* and *L. repens*), and goat's-rue (*Tephrosia virginiana*). Closer to the creek were Indian-pink (*Spigelia marilandica*) and red-ring milkweed (*Asclepias variegata*). These were just a



# OCANPS Fall News and Field Trip Reports

## Lake Wilson

Fayetteville, April 8, 2023



**Ozark green trillium (*Trillium viridescens*).** Photo by Eric Hunt.

This was a joint trip between the OCANPS and Wild Ones Ozark Chapter. When the original leader, Eric Fuselier, had to step down Danny Barron agreed to take over and shared his knowledge with a group of approximately 35 people.

The weather could not have been better with sunny skies and temperatures in the 60s. We saw a good number of plants in bloom including Ozark green trillium (*Trillium viridescens*), several species of both buttercups (*Ranunculus* spp.) and violets (*Viola* spp.), redbud (*Cercis canadensis*), flowering dogwood (*Cornus florida*), rue anemone or windflower (*Thalictrum thalictroides*), wild geranium (*Geranium maculatum*), wild ginger (*Asarum canadense*), blue phlox (*Phlox divaricata*) and yellow fumewort (*Corydalis flavula*). We walked along an old road and then cut down to the creek. After exploring this area, Danny lead some of us back to the parking area along the edge of the lake while others continued on the trail around the lake.

— Sue Hubbard

## Faith and Michael Shah's Infinity Garden Eureka Springs, June 3, 2023

Faith and Michael Shah bought their hay farm in the Keel's Creek area in 2005 because her brother lived just down Petit Road. They commuted from Washington D.C. for seven years to renovate an old farmhouse and build a passive solar guesthouse. They started planting trees and



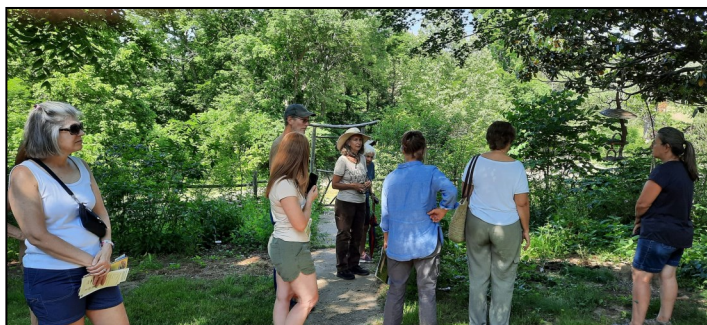
**Indian-pink (*Spigelia americana*).** Photo by Mariellen Griffith.

after turning their business over to their son, moved to Arkansas to work full-time with SAVE THE OZARKS (STO).

Several utilities were planning to build an unnecessary high-voltage transmission line along a wide

swath of the Ozarks. STO proved it was not needed and the utilities pulled their application 21 months after they applied. Faith learned about native plants while spending time with Susan and Kei Pang who were also active with STO. In 2005, they started the small "rooms" of natives, continued planting trees on the borders, and re-wilded several tracts of hay fields. In 2018, they started inviting people to experience InfinityFarm by offering tours. Every year the place gets wilder; the upper, middle and lower layers of plants that we learned about by reading Doug Tallamy's book Bringing Nature Home plus his subsequent book have created an environment we could NEVER have imagined had we not used his material as inspiration. Their tours include discussions about Solar Energy and the importance of building passive solar dwellings in order to conserve energy.

Between 20 and 25 people met at the Shah's to



**Faith Shah talking about her gardens.** Photo by Mariellen Griffith.

enjoy seeing the progress on their Infinity Garden. We visited several years ago and wanted to see what changes may have happened to the landscape. People from the surrounding area, from just down Petit Road literally to Beaver Lake, Holiday Island, Berryville, Fayetteville, Mountain Home and Farmington attended.

The gardens today are a testament to how much they have learned and how hard they have worked to get their native landscape covered in gardens, in building a covered resting area that offers shade from the sun and from which one can admire the surrounding landscape, native wildflowers, trees and shrubs. The land itself is beautiful, an old homesite with home, old trees, and rolling terrain along with pools they had constructed were ready to explore.

Among the flowers we saw in bloom were purple penstemon (*Penstemon cobaea* – one of the largest showiest flowers found in NWA); purple poppy mallow (*Callirhoe involucrata*); blue false indigo (*Baptisia austra-*



lis); prairie larkspur (*Delphinium carolinianum*); goat's-rue or Devil's shoestrings (*Tephrosia virginiana*); slender mountain-mint (*Pycnanthemum tenuifolium*); downy wood-mint or pagoda mint (*Blephilia ciliata*); Indian-pink (*Spigelia marilandica*); Texas baby-blue-eyes (*Nemophila phacelioides*); butterfly milkweed (*Asclepias tuberosa*); Texas green eyes (*Berlandiera texana*); American white water-lily (*Nymphaea odorata*); and purple coneflower (*Echinacea purpurea*).

Thanks to Mariellen Griffith for photos she shared with us. Thanks to Faith and Michael Shah for sharing both their gardens and their knowledge of restoring hay fields to natural meadows and forest.

## Lake Atalanta

May 7, 2023

On May 7<sup>th</sup>, 12 people met Nate Weston at Lake Atalanta for a plant walk. Built in 1936 by the Works Progress Administration, it is east of the Rogers Square at the end of Walnut Street. Sandy Tedder introduced me to the site while I was teaching Plant Biology and Plant Survey at NWACC. Our classes visited every semester, and we witnessed the changes in plant populations over time, both natural and man-made changes.

In 2016, a major renovation connected Lake Atalanta to the bike trail. The lake is now bordered by a parking lot, pavilion, and has a playground and viewing



**Northern maidenhair fern (*Adiantum pedatum*). Photo by Eric Hunt.**

area. One can walk the trail parallel to Spring Creek through the woods. Canada geese were enjoying the water and edible vegetation along the edges of the impounded water. Bike and walking trails now

thread throughout the southern area and the gravel road is now paved. With all the changes, we saw many of the native plant species that have been there for decades. Nate Weston, our knowledgeable and entertaining guide, pointed out various plants of interest and discussed their roles within the ecosystem.

We met at the parking area and took a wooden walkway to the northeast woods. Trees, shrubs, as well as wildflowers lined the walkway and roadside and were showy as expected at this time of year. Bladdernut (*Staphylea trifolia*); Midwestern ninebark (*Physocarpus intermedius*); Sassafras (*Sassafras albidum*); Blue-eyed grass (*Sisyrinchium* sp.); Virginia waterleaf (*Hydrophyllum virginianum*); black medick (*Medicago*

*lupulina*); Jacob's ladder (*Polemonium reptans*); blacksnake-root (*Sanicula odorata*). Northern maidenhair fern (*Adiantum pedatum*); ebony spleenwort (*Asplenium*



**Ozark trillium (*Trillium pubescens* var. *ozarkanum*). Photo by Eric Hunt.**

*platyneuron*) and Christmas fern (*Polystichum acrostichoides*) were growing on the banks of the forested area at the northeast end where the walkway ended and the forest trail began. Aquatic plants were present at lake's edge and along the southern creek drainage. Duckweed (*Lemna* sp. [either the *minor* or *major*]), the smallest flowering plant, was present in the lake and a food of the geese. Duckweed also helps in removing heavy metals like lead, copper, zinc and arsenic from waters with non-lethal concentrations in bioremediation (Gardenia, Carl Broadbent, February 22, 2022). The author also warns that geese and ducks need other sources of food and are omnivores, depending on the duckweeds and other aquatics for nutrients.

Invasives are prolific at Lake Atalanta as it has long been a well-used area. Ozark trillium (*Trillium pubescens* var. *ozarkanum*), is found on the south side of the parking lot up the trail and it was feared bike trails might take out those populations; however, a complete plant inventory of the area was done by Theo Witsell and efforts were made at the time to preserve the rarer species. We still saw plenty of the usual suspects: Asian bittersweet (*Celastrus orbiculatus*); Japanese honeysuckle (*Lonicera japonica*); Chinese privet (*Ligustrum sinense*); wintercreeper (*Euonymus fortunei*); and burning bush (*E. alatus*). Ellen Turner and community volunteers conducted a major removal of invasives at Lake Atalanta less than ten years ago. Pickup trucks removed several loads of them from the area, but in many places they appear to have recovered. Spring Creek provides the water for the lake as its springs did for early settlers and the railroad helped provide jobs. The spring was the main supply of water for the city for a long time. Many people use the playground and picnic areas.

Lake Atalanta as an ecosystem is home to many types of wildlife and provides a large green space for the city of Rogers. It is valued by humans for hiking, bicycling, fishing, bird watching, flower hunting – but don't pick them! – picnicking, exploring, photographing, or just being around nature; you will not be disappointed.

- by Burnetta Hinterhuer



# 2023 Research Grant and Scholarship Recipients

Through fundraising activities and donations, ANPS sponsors two awards for undergraduate and graduate students who show exceptional interest in acquiring a botanical education or who wish to conduct research projects involving the native or naturalized flora of Arkansas. This year, ANPS awarded five Aileen McWilliam Scholarships and two Delzie Demaree Research Grants, for a total of \$9,000 in awards.

The 2023 award recipients are (clockwise from top left) Sawyer Henderson, University of Arkansas, Fayetteville -

\$1,000 Scholarship; Brendan Kosnik, Arkansas State University - \$1,000 Scholarship; Jacob Nowlin, University of Central Arkansas - \$1,000 Scholarship; Alex Price, Hendrix College - \$1,000 Scholarship; Emiley Purvis, University of Central Arkansas - \$2,000 Research Grant; Willa Thomason, University of Arkansas, Fayetteville - \$2,000 Research Grant. Not pictured: Hanna Cravens, University of Arkansas, Fayetteville - \$1,000 Scholarship. Congratulations to these students!





# Brent Baker Receives Carl Amason Award

By Jennifer Ogle

At our 2023 Spring Meeting Virginia McDaniel and I had the honor of presenting the Carl Amason Conservation Award to Brent Baker, a person who can be described similarly to Carl - a long-time ANPS member, past president, and occasional auctioneer during our fall native plant auction. Brent is also one of the most knowledgeable botanists in the south.

Brent was nominated for the award by Eric Sundell, who requested ANPS recognize “the extraordinary work he did for our state as the ANHC botanist. True, that was his job. But he did that with unfailing dedication and excellence.” The ANPS board unanimously and enthusiastically agreed.

I spoke a bit on Brent’s unfailing dedication and excellence before his career at ANHC. We were co-workers at the University of Arkansas Herbarium for a time, where he had been hired by Johnnie Gentry to work on *Atlas of The Vascular Plants of Arkansas*. He quietly and methodically pored over tens of thousands of specimens at UARK and other herbaria in the region, checking the identifications and locations of each plant and keeping meticulous notes on reported and excluded taxa to make sure each piece of information we included in the book was as comprehensive and as accurate as possible.

I had asked Theo Witsell, Brent’s former supervisor at ANHC, to jot down a few notes about him and he sent me two full single-spaced pages, which I read to the membership in its entirety. In it, he remembered the exceptional work Brent did on the atlas, noting that he also “took on the titanic job of indexing that entire book (a job that would have sent me out the window before I was done with the Asteraceae).” He continued, “Brent is a man of few words but is one of the best field and herbarium botanists I’ve ever worked with. He is super dedicated and is methodical, careful, and very well-organized

– a perfect counterpoint to my own somewhat scattered, hectic, and loose approach. This made him a super valuable collaborator and team member for me, and I really appreciated his skills and demeanor. My wife says he was the Bert to my Ernie. That’s a compliment to him by the way. I sometimes go into the ANHC herbarium after eve-



ryone else has gone for the day and just look through the specimens and marvel at its quality and organization – that was all Brent, who served us all well as the collections manager and did the bulk of the conceptual design work for that facility. He was also a reliable human index for the herbarium, and when I lost track of the latest name for a species or what family something had been moved to, he would always know.”

Theo continued, “You may not know... that Brent is fearless when it comes to heights and working on cliffs. He’s made me (and no doubt many other field companions) plenty nervous with his cliff walking. Whatever mechanism most people have that tells them they

shouldn’t walk out on a tiny ledge 50 feet up on a blufftop? That’s busted in Brent.”

During the award presentation, Virginia expounded on Brent’s dedication and busted fear-of-heights mechanism with a hilarious story that involved him climbing nearly 20 feet up into a thin willow tree to determine its identification, all while she and Susan Hooks cheered and photographed the episode from the ground.

We wrapped up our animated and somewhat lengthy presentation by joking that a person can be the absolute best in their field, but if they’re a jerk, no one will want to give them an award. Brent is a kind person and a good friend. He received a standing ovation from the membership as he accepted his award, a good sign that everyone wholeheartedly agreed with the sentiment.

Congratulations, Brent, on this well-deserved award!

# Spring Business Meeting Minutes

Arkansas Native Plant Society Business Meeting Minutes  
May 20, 2023

Illinois River Watershed Partnership, Watershed Learning  
Center  
221 S. Main St., Cave Springs, AR 72718

The Arkansas Native Plant Society held its 2023 Spring Business Meeting on Saturday, May 20, 2023. The Business Meeting began at 6:14 PM.

President Joe Ledvina called the meeting to order and thanked the members for coming. He also thanked Eric Fuselier for organizing the Spring Meeting and Jennifer Ogle for her help. It has been several years since we have held an in-person meeting because of the Covid 19 pandemic and it was challenging to get things back on track after the three year break.

The Saturday field trips went really well. Joe Ledvina, Virginia McDaniel, Eric Fuselier, and Jennifer Ogle, the field trip leaders, reported that the days' field trips found members enjoying a glorious day on their hikes. They had many opportunities to find species – including new additions to the list for one well-visited natural area, enjoy and identify spring native plants in bloom, stumble upon critters (including a very young fawn) and noisy songbirds and enjoy fellowship with other native plant enthusiasts. The field trips were described as the best ever after this long break from meeting in person.

Joe Ledvina welcomed our new ANPS officers: Sarah Geurtz, Vice President; Leslie Patrick, Treasurer; and Molly Robinson, Membership Chair. Joe also thanked Kate Lincourt for her service as Treasurer.

Leslie Patrick presented the Treasurer's Report. The 2022 Fall Treasurer's Report was published in the Spring edition of *Claytonia*. Since then, there have been some changes. The current balance is \$24,338.94 and Leslie provided pie charts to display the percentage of income and expenses by category. Leslie said that these expenditures included the purchase of T-Shirts, hats, books, and stickers which were available for sale. They also included the expense for the publication of the ANPS Directory and *Claytonia* which are big expenses. Leslie said our purpose is to support individuals who are studying and researching native plants in Arkansas, so we are investing in people. And those benefits will accrue to our organization.

It was suggested that we might save some money if we mailed *Claytonia* electronically. Leslie explained that this was

an option for members, and we already include it in our distribution list. Members who prefer electronic copies can contact the Membership Chairman, Molly Robinson.

Jennifer Ogle, Memorial Awards Officer, presented the Awards Committee recommendations for the Aileen McWilliam Scholarships and the Delzie Demaree Research Grants to the Membership. In 2023, ANPS received the highest number of applications ever. Jennifer first reviewed the scholarship applicants and their areas of study: Hanna Cravens, Sawyer Henderson, Brendan Kosnik, Jacob Nowlin, and Alex Price. The Awards Committee recommended that we provide each applicant with a \$1,000 scholarship.

Jennifer Ogle then presented the applicants for the Delzie Demaree Research Grants and the Awards Committee recommendations. Emily Pervis and Willa Thomason had each applied for a \$2,000 research grant. The Awards Committee recommended that we provide each applicant with \$2,000.

Jennifer responded to questions about the Committee's recommendations. Cheryl Willis moved that ANPS fund the 5 scholarship applicants \$1,000 each and the research grant applicants \$2,000 each. Susan Harden seconded. The motion passed.

Jennifer Ogle said that the Fall ANPS meeting would be held in Little Rock. Jennifer asked the Membership to approve a Lifetime Achievement Award to Eric and Milanne Sundell at the Fall meeting. This would be a new award for a member who had worked tirelessly to promote native plants and the study of botany in Arkansas academically and practically. Eric Sundell and his wife, Milan, have spent decades in service to ANPS and its members and Jennifer asked that the members honor his service by instituting a new, special award. There was some discussion regarding the criteria for future awards to honor those who have gone above and beyond in their service to our organization. Also, there was discussion about whether the award should include a monetary award or another kind of acknowledgement such as a plaque, a digital album, a scrapbook or some other tangible award. Sarah Geurtz moved that we award Eric and Milanne Sundell a Lifetime Achievement Award this Fall of up to \$2,000 or some other tangible recognition, and that we make appropriate changes to the bylaws for future honorees in accordance with our Bylaws. Becky Hardin seconded the motions. The motion passed.

Sue Anne Jenkerson, an ANPS member from Batesville, asked members to support the Independence Museum in their es-



establishment of a native plant garden with the donation of native plants and seeds. Sue Anne provided a wish list of the plants and/or seeds to grow those plant that they were hoping to obtain for the garden. They had already received support for signage from the Smithsonian Institution.

Field Trips have been planned for the summer and were listed in the Spring *Claytonia* including two in the coming week: Ecological Management of Glades at Eureka Springs on Wednesday, May 24<sup>th</sup> from 10:00 AM till noon and the Waldron Forest Service Office Field Trip on Thursday, May 25<sup>th</sup>. Members were encouraged to check out Facebook for

future field trip information.

Eric Fuselier, Program Chair, reported that four webinars were planned for summer and they included two presentations by Richard Abbott on plant identification, and also presentations by Karen Willard and Theo Witsell. Members will be notified by email if they are on the list for notification.

The meeting adjourned at 7:00 PM.

Respectfully submitted, Margaret Lincourt, Secretary

## Q & A with UARK Herbarium's New Director

*The University of Arkansas Herbarium's new director, Dr. Maribeth Latvis, holds a Ph.D. in Biology with a specialization in plant systematics from the University of Florida and completed her B.S. in Anthropology/Zoology from the University of Michigan. Prior to her arrival at the University of Arkansas, she was a Postdoctoral Research Scientist at the University of Idaho, followed by several years as an Assistant Professor and Herbarium Director at South Dakota State University.*



### **What type of research do you do?**

My research revolves around plant systematics. Using genomics, bioinformatics, and morphological and ecological study, I try to disentangle how plant species are related to each other, patterns of variation within species, and understanding processes or traits correlated with diversification. Many projects have focused on *Agalinis* and *Castilleja* within the family Orobanchaceae, the largest clade of plant parasites, but I've also conducted research on other groups. For example, my lab is

investigating the *Salsola tragus* species complex (family Amaranthaceae) to understand the evolution of invasiveness.

I apply evolutionary approaches to conserve and manage our biodiversity and share that information with stakeholders. For example, I am assessing the impact of phylogenetic diversity on pollinators and soil health and creating tools for land managers when planning their seed mixes.

I am also fascinated by mountain ecosystems, as they hold disproportionately high levels of biodiversity and may act as barriers, bridges, and refugia for species. Global climate change is shifting the distributions of many species, and populations without the ability to adapt or migrate may be on an "escalator to extinction". I am exploring mechanisms underlying migration, genetic distinctiveness, and the fate of mountain lineages under climate change.

### **What do you plan to do in your first year at the University of Arkansas?**

My priorities include getting my lab up and running, submitting new ideas for funding, and establishing connections with regional stakeholders (e.g. state/federal agencies)—hopefully to develop collaborative research in the future. My "dream projects" involve 1) tackling phylogenetic relationships across the entire family Orobanchaceae using very dense species sampling and phylogenomic data and using this as a framework to understand the evolution of parasitism in the group, and 2) understanding patterns of endemism and species dis-

(Continued from previous page)

junctions in isolated mountains.

As the incoming director of the UARK herbarium, I will also write a Strategic Plan for the collection and outline research priorities. This will be an important step in mobilizing creative uses of these important specimens, but also to secure extramural funding for improved infrastructure and outreach.

The University of Arkansas is an ideal spot for me to further my research, teaching, and outreach goals, and I feel very fortunate to have this opportunity! The Department of Biological Sciences is already very strong in evolutionary biology, so I think that will spark a lot of new ideas. Having the Ozarks and Ouachitas—biodiversity hotspots in the central United States— in my backyard is a dream for future botanizing and research projects. I'm also very excited to contribute to expertise in the region and, hopefully, train the next generation of botanists.

#### **Do you have a funny botanical story?**

Probably, but I'm terrible at telling funny stories. Most involve field mishaps and finding humor in frustrating situations: popped tires while on a class field trip or wading through rivers carrying equipment trunks in Haiti to arrive at the airport sopping wet at the last minute (we did get on that flight!). Some, of course, involve plant

misidentification. Like the time during my postdoc I was corrected for calling a sedge a grass on a field trip... and then using it as a teaching moment in subsequent classes!

#### **What is your favorite plant?**

I don't know if I have a favorite, but I have several that I really, really like. I love *Mitella pentandra* (Saxifragaceae) for its crazy, thinly divided petals, and because it looks like a little bird's nest when it goes into fruit. *Castilleja salsuginosa* (Orobanchaceae) for its narrow endemism (only found in alkaline soil of hot springs). It looks dull purple-grey from a distance, but closer inspection reveals a beautiful hot pink flowers concealed within the bracts. *Schizachyrium scoparium* (Poaceae; little bluestem) for its green and purple Fall color and "fuzzy zigzag" inflorescence.

#### **Who are your mentors/heroes?**

My formative mentors have been Drs. Doug and Pam Soltis, my PhD advisors at the University of Florida, and Dr. David Tank, my postdoc advisor. Not only are they incredibly accomplished scientists, they are also fantastic people who care for their students. Their mentoring approach centers on kindness, empathy, and patience.

## ANPS Fall Meeting

September 29 - October 1, 2023 in Little Rock, Arkansas

Everybody is welcome to attend! Meeting registration is only \$10 with no pre-registration required. Registration will begin at 5:00 PM on Friday, September 29<sup>th</sup>.

#### **Meeting Location:**

##### [Little Rock Audubon Center](#)

4500 Springer Boulevard, Little Rock, Arkansas 72206

#### **Hotel:**

##### [Hampton Inn West Little Rock](#)

1301 S. Shackleford Rd., Little Rock, AR 72204

Phone: (501) 537-3000

15 king rooms have been reserved at the reduced rate of \$109.00 plus tax per night. Reservations must be received by **September 8, 2023** to guarantee the reduced rate. Be sure to mention that you are with the Arkansas Native Plant Society when making your reservation. Rate includes free parking and free breakfast. Individuals are responsible for their own room and tax. All cancellations must be made 42 hours prior to arrival.

**Dining Options:** We will have a Potluck meal Friday and Saturday evenings. Bring a dish or just come and eat! There are also many dining options in the Little Rock area near the hotel.

**Field trips:** Several field trips to local areas of top botanical interest will be scheduled for Saturday 8:30 AM - 5:00 PM and Sunday 8:30 AM—12:00 PM.

**Auction:** Don't forget to bring plants and items Friday night's live and silent auctions!

We will offer something for everybody, whether you want to take it slow and easy or something more vigorous. You must sign up for field trips on Friday evening to allow for adequate logistical planning.

For complete and up-to-date details, go to [www.anps.org](http://www.anps.org) or contact Eric Fuselier, [anps.programs@gmail.com](mailto:anps.programs@gmail.com), (501) 231-7455.



# Arkansas Botanical News

## Riverscour

Eastern Riverscour is a globally significant open grassland or shrubland plant community that is poorly understood and not well described. In a recent article in *Natural Areas Journal*, a group of riverscour plant experts (including our very own Theo Witsell!) got together to develop a clear and concise definition, map its extent in the eastern US, and provide some descriptive characteristics of this unique plant community across its range. Whereas many prairies and open grasslands are maintained by fire or lack of rain, riverscour prairies are maintained by annual



**Riverscour prairie along the South Fourche La Fave River in the Ouachita National Forest. Photo by Virginia McDaniel.**

flooding. The scouring action of water and debris carried with it literally beats back the trees and prevents them from establishing. The area they cover is usually small but they house a disproportionate number of rare, endemic and undescribed species. In one five county area in Tennessee “riverscour makes up significantly less than 1% of the area but contributes at least 37 (25%) of the region’s 150 state- and federally listed vascular plant species.”

Arkansas is a major region of this globally significant habitat. Check it out:

[Estes, D., C. Tracy, E. Zimmerman, W. Knapp, J. Vanderhorst, J. Singhurst, and T. Witsell. 2023. Riverscour ecosystems of Eastern unglaciated North America: a review. \*Natural Areas Journal\* 43\(3\): 148-168.](#)

## The Dodders

Are you crazy or wish to become insane? This article is for you: The dodders (*Cuscuta* sp.)! Dodder is a parasitic vine that absorbs its nutrients from green plants. If you have

ever walked through the woods and seen something that looks like someone just squirted silly string, that’s dodder. It is a very challenging group of plants to ID, but some folks have



**Dodder (*Cuscuta* sp.). Photo by Eric Hunt.**

taken on the *Cuscuta gronovii* group and attempted to unravel its mysteries. Check it out here: Costea, M.; M.A. Wright; M. Glofcheskie; W. Genter; and S. Stefanovic. Draining the swamp dodders: systematics of *Cuscuta gronovii* s.l. (Subgenus *Grammica*, Sect. *Oxycarpae*).

## Flora of Pine City Natural Area

Three of our very own Arkansas botanists (including ANPS president Joe Ledvina) have published a paper on the vascular flora of Pine City Natural Area! If you were at the ANPS Fall meeting in Stuttgart, you may have heard Diana Soteropoulos give a talk on her project. Of the 576 taxa they found, 9 were species of state conservation concern and a whopping 184 !!! were new county records for Monroe County. Can we say understudied county?



**Loblolly pine-post oak flatwoods with *Phlox glaberrima* at Pine City Natural Area. (from Fig 7 Soteropoulos et al. 2022).**

This research, that was supported in part by a grant from ANPS, can be found here:

[Soteropoulos, D.L.; J.A. Ledvina and T.D. Marsico. 2022. An exploration of the vascular flora of Pine City Natural Area, Monroe County, Arkansas, U.S.A. in comparison to the Mississippi Alluvial Plain in Eastern Arkansas \(U.S.A.\). \*J. Bot Res. Inst. Texas\* 16\(1\):165-194.](#)



# Kings River Natural Area Field Trip Report

By Jennifer Ogle

My husband grew up in Madison County and knew all the best secret swimming holes in the area. He took me to Kings River Falls for the first time in 1993, and for many years after it was our favorite hike-to-swim spot in the summer. It was well over an hour's drive from our house, but back then it was never crowded (we often had the place to ourselves) and it was a beautiful trip down Highway 16 that I never tired of driving. Sometimes we'd take even longer routes down different backroads, with Isaac revisiting areas he hadn't been to in years and me discovering new remote places in the Ozarks to fall in love with.

We would occasionally bring visiting family and friends to the falls to swim. On one memorable trip with my parents, a local-looking man and woman suddenly appeared out of the woods from the eastern slope and asked if we minded them skinny dipping. My dad quickly and cheerfully responded, "No, not at all!" at the same moment my stepmom, annoyed with everyone involved in the conversation, immediately shouted, "Yes, we mind!" The disappointed locals kept their clothes on and eventually disappeared back into the forest.

Kings River Falls Natural Area, located in southern Madison County in the steep and rugged Upper Boston Mountains, was acquired in 1979 by the Arkansas Natural Heritage Commission. Additional land has been added over the years and the property now totals 1,059 acres and includes the Dripping Springs and Mink Creek areas south of the falls. The preserve protects more than three miles

of the Kings River close to where it originates near Boston. According to ANHC's website, the river is somewhat unique in the Ozarks because it flows from south to north. It also has a diverse flora due to the many different habitat types that occur on the property – from the dynamic Kings River channel and mesic riparian forests that border it, to sandstone blufftop glades, and dry oak savannas. ANHC staff would likely say they conserved the property to protect the river, plants, and animals, but I have a feeling they also had their eyes on that stellar swimming hole. Today, Kings River Falls is one of their most visited natural areas, likely for just that reason, so if you want to visit in summer, I recommend either heading out early on a weekend or, better yet, going on a weekday to avoid the crowds.



*Kings River Falls. Photo by Alan Atkins.*



*Early azalea (Rhododendron prinophyllum). Photo by Alan Atkins.*

Sunday morning, May 21, the last day of the ANPS Spring 2023 Meeting, a large group joined me and Virginia McDaniel for a walk to the falls.

The mostly flat, out-and-back trail starts at Mitchell Creek then turns north to follow the Kings River for about a mile to the broadly horseshoe-shaped, 6-ft high waterfall. This preserve has a wide variety of native woody and herbaceous plants growing along the trail that passes through the riparian forest, under sandstone bluffs, and along rocky riverbanks. Once at the falls, hikers can stop there or make their way up through a lush, rocky (and slippery!) creek drainage on the steep western slope. This route leads to the top of the sandstone bluffs and into the glade and dry oak savanna habitat above the falls, where there is a narrow trail that leads to a great view of the river before continuing up to yet another tall sand-





**Kings River Falls group part 1. Photo by Jennifer Ogle.**

stone bluff.

Some of the group went with me down the trail where we saw so many cool native plants, I couldn't keep track of them all. But some of the highlights were Flax-leaved Aster (*Ionactis liniarifolia*), a large Green Dragon (*Arisaema dracontium*) in fruit, American Alumroot (*Heuchera americana*), American Royal Fern (*Osmunda spectabilis*) filling the cracks of large rocks in the river channel, flowering Early Azalea (*Rhododendron prinophyllum*), which we smelled long before we saw, New Jersey Tea (*Ceanothus americanus*) in fruit, and Eastern Leatherwood (*Dirca palustris*), the stems of which we of course tied into a knot to demonstrate how flexible they are. We



**Royal fern (*Osmunda regalis*) along Kings River Falls. Photo by Alan Atkins.**

neither of which had previously been reported for the site. Others walked around the falls and took photos, some sat on the rocks and had lunch, and a few climbed up past the bluff to explore the glade and oak savanna

also passed Strawberry-bush (*Euonymus americanus*), American Wahoo (*Euonymus atropurpureus*), Ninebark (*Physocarpus intermedius*), and Fringetree (*Chionanthus virginicus*), all in full flower.

When we reached the falls, some folks continued into that rocky creek drainage I mentioned earlier to see American Spikenard (*Aralia racemosa*) and Short-hair Sedge (*Carex crinita* var. *brevicrinis*),

above.

Virginia headed up a separate group that included Brendan Kosnik of Arkansas State University and several others, and they spent most of their time identifying all the sedges (genus *Carex*) they saw on and near the trail. Brendan, a master's student who is studying the distributions of rare sedges in eastern Arkansas, was the recipient of the Delzie Demaree Research Grant in 2022 and the Aileen McWilliam Scholarship this year. On Friday evening during the meeting, he gave an enthusiastic talk about his research and included many excellent photographs he had taken of the plants he is studying. Virginia and Brendan discovered several new sedges to the natural area during their survey, adding six additional species from that group to ANHC's plant list - Thicket Sedge (*Carex abscondita*), Eastern Woodland Sedge (*C. blanda*), Spreading Sedge (*C. laxiculmis*), Sallow Sedge (*C. lurida*), Black-edged Sedge (*C. nigromarginata*), and Flat-spiked Sedge (*C. planispicata*).

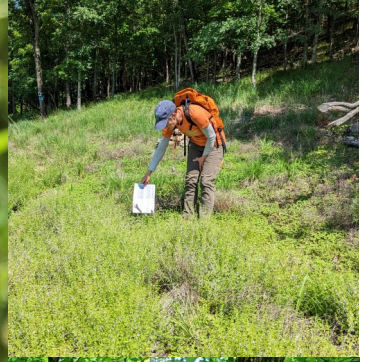


**Kings River Falls group part 2. Photo by Jennifer Ogle.**

The falls is a wonderful place to visit, whether to botanize or to swim, or both! But to me, the more remote area south of the falls is even better in some ways. It requires fording the river to get to it, but the area features a rocky mountain creek that cuts through a rich mesic forest, with massive, towering boulders and bluffs almost everywhere you turn. It is such an amazing place that it's the setting I think of when I remember the story of the trolls turning to stone in *The Hobbit*. It's where I saw Umbrella Magnolias (*Magnolia tripetala*) and wild orchids for the first time. It's also where I recently saw an Eastern Garter Snake chilling on a Christmas Fern (*Polystichum acrostichoides*) frond and an American Woodcock (*Scolopax minor*) bobbing around in the woods, both acting completely unconcerned that I was there. Even farther south of that area, I hear there are mesic cove forests and box canyons with alternate-leaf dogwoods (*Cornus alternifolia*) growing in them, but I have yet to make it to that part of the property to see them. A walk through this very rugged and isolated part of the natural area would make a great ANPS field trip at a future meeting!



# Spring Meeting Highlights





# 2023 Fall Treasurer's Report

2023 Fall Treasurer's Report					
			1 Jan - 15 Aug 2023		
			Start 2023	→	\$25,663.40
	2022 Actual	2023 Budget	2023 Actual		
<b>INCOME</b>					
Membership Dues	\$7,085.00	\$7,000.00	\$3,113.30		
Meeting Registration	\$360.00	\$1,500.00	\$860.00		
Plant/Silent Auction	\$653.00	\$2,500.00	\$573.00		
T-Shirt, Hat, Book Sales	\$394.32	\$1,000.00	\$1,770.00		
Contributions	\$2,447.00	\$1,500.00	\$1,102.00		
<b>TOTAL</b>	<b>\$10,939.32</b>	<b>\$13,500.00</b>	<b>\$7,418.30</b>	<b>→</b>	<b>\$7,418.30</b>
<b>EXPENDITURES</b>					
ANPS.Org (website domain/wordpress)	-\$99.00	-\$111.00	-\$189.96		
Claytonia (Print & Distribute 2 Issues)	-\$2,273.97	-\$2,300.00	-\$1,098.23		
Directory (Print and Distribute)	-\$1,444.61	-\$1,450.00	-\$1,432.57		
Memorial Awards/Scholarships	-\$6,000.00	-\$6,000.00	-\$10,000.00		
Grants/Support to Public Gardens	\$0.00	-\$1,000.00	\$0.00		
Meeting expenses (space, copies, speaker,etc.)	-\$440.00	-\$1,000.00	-\$464.41		
SWS: AR Eco Tour	-\$250.00	-\$250.00	\$0.00		
Ecology Camp	\$0.00	-\$500.00	\$0.00		
Bulk Mail	-\$265.00	-\$265.00	-\$290.00		
PayPal/Square fees	-\$50.45	-\$60.00	-\$45.70		
Zoom (webinar series)	-\$162.83	-\$164.00	\$0.00		
Supplies/postage/fees/misc	-\$69.99	-\$100.00	-\$80.36		
T-shirts/Hats/Books Purchases	\$0.00	-\$1,000.00	-\$1,373.49		
Tabling (ASB, MG)	-\$375.00	\$0.00	\$0.00		
<b>TOTAL</b>	<b>-\$11,430.85</b>	<b>-\$14,200.00</b>	<b>-\$14,974.72</b>	<b>→</b>	<b>-\$14,974.72</b>
			<b>Total as of 15 Aug 2023</b>	<b>→</b>	<b>\$18,106.98</b>

Respectfully submitted by Leslie Patrick, Treasurer

# President's Message

Hello again, native plant enthusiasts! It seems like interest in protecting, promoting, and increasing native plants has really begun to snowball in Arkansas. I occasionally field inquiries from members of the public interested in establishing native meadows on their property or finding native plants for their yard.

These have been slowly increasing in frequency, from just a couple per year to at least a couple per month. This spring, the City of Little Rock became the newest municipality in the state to impose a ban on invasive plant species. The Little Rock Board of Directors approved an ordinance prohibiting the planting of 32 invasive plant species on commercial properties, while adding dozens more natives to its list of

species recommended for planting. I especially seem to see more and more young people interested in native plants, including interest in undertaking research involving native plant species. This past year, the number of student grant and scholarship applications received by ANPS was among the largest ever. Not only that, but the vast majority of the applications featured excellent writing, solid research design, and evident enthusiasm, enough that ANPS funded by far the largest number of awards in the program's history!



The number of educational events, both in-person and webinars, and even the number of organizations promoting native plants both seem to be growing. Eric Fuse-lier, by volunteering to become our first Program Officer, is doing his part to add to our own educational opportu-

nities, providing us with fascinating webinars from native plant experts. Meanwhile, ANPS continues to get back into the swing of in-person events. The spring meeting in Cave Springs was a success! We had several excellent speakers, some great hikes led by members, and, as always, excellent food in the potluck. Thank you again to everyone who attended and made it such a wonderful event!

I now look forward to see you once again at the Little Rock Audubon Center for our Fall Meeting. Eric, our President-Elect, has planned an excellent program, and I'm sure we all look forward to the annual plant auction! Make sure to pot something up to contribute and get excited about what will be on offer that you can add to your yard!

– Joe Ledvina, ANPS President

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## Arkansas Native Plant Society Membership Application

### Membership Categories

- \$10 Student
- \$15 Individual
- \$20 Supporting
- \$25 Family
- \$30 Contributing
- \$150 Lifetime (age 55+)
- \$300 Lifetime (under age 55)

- New Member
- Renewal
- Address Change

Opt out of receiving paper *Claytonia*

Name(s) \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Phone \_\_\_\_\_ Email \_\_\_\_\_

Mail this completed form with a check made payable to the Arkansas Native Plant Society to:

Leslie Patrick, Treasurer  
15 Pinecrest Court  
Conway, Arkansas 72032

**JOIN OR RENEW ONLINE INSTEAD! Details at [anps.org/join](https://anps.org/join).**





## CLAYTONIA

Virginia McDaniel | Editor  
virginiamcd31@yahoo.com

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### Please check your mailing label!

The calendar year is the membership year. If your mailing label says "22" or earlier it's time to renew. Life members have an "LF" on their label.

To renew your membership, fill out the application for membership on page 22 and mail it to the address on the form.  
Or renew online at [anps.org/join](https://anps.org/join).

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### You Might Be a Botanist If:

When you go on a hike you don't make it out of the parking lot.

You name your kid *Linnea* or *Chrysanthemum* or *Liriodendron*.

Your most embarrassing moments involve you telling a more staid botanist that you're sure you found a rare plant only to realize it's common as dirt.

You get vertigo while trying to ID plants from the car window going 60 mph.

You have a hand lens on your key chain.

When you are at the bar and a friend says they are going to get a Mimosa you give them a lecture on why they shouldn't because non-native invasive species are bad for the environment.

Some version of your name is the species epithet for half of the flora in the eastern US.

Your spouse is always annoyed with you because your refrigerator is full of bags of non-edible plants that you PROMISE to press soon.

Your life is full of hand written plants lists. Everywhere.

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