

# CLAYTONIA

Newsletter of the Arkansas Native Plant Society

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## Dr. Dwight Moore's Botanical Legacy

by Jennifer Ogle, with contributions from Gary Tucker

This month marks the 100<sup>th</sup> anniversary of Dr. Dwight Moore's arrival in Arkansas. ANPS members are familiar with the Dwight Munson Moore Award, which is given on the occasion of outstanding achievement in either research or publication on Arkansas botany. But what else do we know about him? Given that Moore died in 1985 at the age of 93, I feel it's safe to say that most of us did not know him personally. I would venture to add that many readers know little of his long and prolific career as a university professor, field botanist, herbarium curator, and author, or of the role he played in promoting a love of native plants among the public.

But thankfully, a few extant members of ANPS did know Moore personally. One of these is another Arkansas botanist, Dr. Gary Tucker, who, as a graduate student in the 1970s and later as a professor, was friends with Moore and several other botanists who

were active during the early to mid-20<sup>th</sup> century. I am grateful to Tucker, who I think of as Arkansas' Botanical Genealogist, for conducting research and telling stories about our botanical family tree, including for this article. Much of what we know about Moore is thanks to Tucker and his friend and collaborator, the late Ms. Gwen Barber (a charter ANPS board member), and also thanks to Moore himself. He was a meticulous record keeper who donated his copious correspondence, notes, and sketches to Special Collections at the University of Arkansas Libraries in 1975. What follows is taken, sometimes word for word, from Tucker's detailed research and a few other sources, such as early ANPS newsletters and my notes from the Dwight Moore Papers in Special Collections. Full references are listed at the end of the article.



*Dr. Moore sitting for a promotional photo in the University of Arkansas Herbarium (UARK). Photo: Special Collections, University of Arkansas Libraries, Fayetteville.*

(Continued from previous page)

Dwight Munson Moore (1891–1985), an Ohio native and holder of a PhD in plant physiology from Ohio State University, came to the University of Arkansas as a faculty member in 1924. Although trained as a plant physiologist, he began collecting botanical specimens for the university herbarium soon after arriving in Arkansas. He was especially interested in woody flora, and his collections include many rare or otherwise unusual members of the state's flora. Moore published a number of papers on Arkansas's flora, including checklists of the woody plants (1941) and grasses (1961) of the state. After retiring from the Univer-

ans, Pensacola, Atlanta, Knoxville, Washington D.C., Philadelphia, New York, on into Canada, back to Detroit, and finally to Chicago and back to Fayetteville. The students studied everything from botany to geology, history, economics, industry, etc. It must have been a grand experience as the students and Dr. Moore visited with personalities ranging from George Washington Carver at Tuskegee Institute to Jane Addams at Hull House in Chicago.<sup>2</sup> In 1944, as his contribution toward the war effort, Moore was regional supervisor of the Milkweed Floss Division, War Hemp Industries. That group was involved with the



**Dr. Moore, to the left of two nuns and operating a pole pruner, teaching a summer school class at the University of Arkansas. Photo: Special Collections, University of Arkansas Libraries, Fayetteville.**

collection of floss from milkweed seeds (genus *Asclepias*), useful as a substitute for kapok. Normal supplies of kapok, used by the Navy in life jackets and other flotation devices, were controlled by the Japanese and substitutes were vital to the American troops. To Dr. Moore's chagrin the war ended before the floss could be removed from the warehouses, but he delighted in telling how he had organized the collection effort, utilizing school children throughout the Midwest as collectors of the milkweed floss.<sup>2</sup>

sity of Arkansas in 1957, Moore taught forestry at the Arkansas Agricultural and Mechanical College at Monticello (now the University of Arkansas at Monticello). During 1961–1967, he was a Biology Department chairman and botany teacher at Arkansas Polytechnic College in Russellville (now Arkansas Tech University). He worked at establishing the South Arkansas Arboretum at El Dorado during 1967–1970.<sup>1</sup>

During his long tenure at the U of A, Fayetteville, he had several noteworthy absences from the campus. During the summer of 1934 he served as Professor of Botany with the Omnibus University, one of the first attempts in education with the so-called "open campus." The car used for the trip, a 1925 seven-passenger Packard with about 148,000 miles on it, was nicknamed Betsy. The group, with Moore in command, left Little Rock on 11 June and arrived in Chicago on 31 July; between those dates they had studied just about everything that came in their path as they moved from Little Rock to Memphis, Vicksburg, New Orle-

Moore discovered many Arkansas state record native plants during his career, and deposited thousands of specimens at UARK and other herbaria. He also discovered and described *Delphinium newtonianum* (Moore's delphinium), an Arkansas endemic species.<sup>1</sup> For more on that discovery, please see the delightful article written by historian, Arkansas Master Naturalist, and UARK volunteer Susan Young on p. 20 of this newsletter.

Moore understood the importance of bringing botany to the public. He was very active in the garden club movement, gave talks on native plants statewide, and wrote articles that appeared in popular magazines. He revised *Trees of Arkansas* in 1950, a book that made his name familiar to schoolchildren throughout the state<sup>1</sup> and which was used by so many of us for more than five decades, until the book saw another major revision by Dr. Eric Sundell.

Privately, Moore confessed he was not pleased with his

revision of *Trees of Arkansas*, responding to Maude Coulter of Ogden, who had written to congratulate him on the book, that “with the money available that was the best we could do.” He continued, “I hope before too long time has elapsed to have something that is complete on all of the woody plants, including trees, shrubs, and woody vines of Arkansas.” Replying to Coulter’s inquiry about whether a wildflower book would be next, he wrote, “Off and on I have been working on that for a quarter of a century or more, but anything of the kind to be adequate demands a great deal of attention and enormous field work. The latter is one thing that I must increase before I feel that my work is complete enough to publish a satisfactory book on wildflowers of Arkansas. However, I am becoming more hopeful about it, and perhaps before too long has passed we may get it into print.”<sup>3</sup> Unfortunately, he was not able to find time to write books on the complete woody flora or the wildflowers of Arkansas due to his teaching responsibilities. Had he been able to devote the necessary time, I am sure the result would have been a quality botanical resource for Arkansas equal in scope, depth, and heft to Julian Steyermark’s 1961 tome, *Flora of Missouri*. But for Moore, teaching and herbarium curation came first, and he did those things very well. During his career, Moore taught botany to hundreds of students and provided botanical training to many who either became professional botanists or served at state and federal agencies.<sup>2</sup> He left the UARK Herbarium in excellent condition, with tens of thousands of specimens that are still used today for research and teaching.



**Dr. Moore at Crystal Recreation Area. Photo: Arkansas Natural Heritage Commission.**

In a newspaper piece<sup>4</sup> reporting on a 1979 celebration at Tucker’s home for Moore’s 88th birthday, the senior botanist continued to promote nature and native plants to the public. He told the reporter that he and his wife spent their days revisiting favorite botanical sites in the “wilds of Arkansas” but noted that “such places are growing scarce” due to “industrial growth,” raising an early alarm about the loss of natural areas in the region.

Though long retired by the time the ANPS formed in 1980, he and his second wife Clementine were involved with the society (she served on the board in 1986<sup>5</sup>). Ever the botanical educator, he led a field trip during the Fall 1981 meeting in Hot Springs, titled *Trees and More with Dr. Dwight Moore*.<sup>6</sup>

Today, a full century after his arrival in Arkansas, Moore would have been proud to see what ANPS has become and encouraged by the movement to promote and use native plants widely in private gardens, public landscapes, and habitat restoration. His legacy is strong.

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# Sugarloaf Mountain

by Sarah Geurtz



**Fire Tower on top of Sugarloaf Mountain. Photo by Sarah Geurtz.**

Past family memories were what tipped the scales in my head to decide on attending the Sugarloaf Mountain hike at the spring 2024 meeting. My late grandfather, William Wolford, used to live in Batesville and had an airplane. I grew up with him pointing out “Sugarloaf Mountain” on every summer trip to Mountain View on which he’d take me. He’d point and tell me that he used that mountain to direct him as he flew. That must have been in the 40s or 50s. As time went on, I decided that any mountain that looked like a loaf of bread was a “Sugarloaf Mountain” – that it wasn’t really anything special. This hike turned out to be an educational hike for more than the plants. The rock outcrops on this

view from the fire tower on top of Sugarloaf Mountain. Photo by Sarah Geurtz.



**View from the fire tower on top of Sugarloaf Mountain. Photo by Sarah Geurtz.**

mountain must make it very distinctive from the sky, as would the wonderful old CCC-era home, cistern, cellar, and fire tower (which we of course climbed), all located at the top.

The VIEW was close to the most amazing part of the hike. Wait - I mean the PLANTS were amazing! Well, they both

were. I’m sure you understand. A portion of the mountain had been burned and the view off the mountain was stunning. It was the kind of view that can literally cause your breath to catch – and make you imagine yourself a hawk gliding through the air between the lush green of the bottom plane and the azure of the upper.



**Hairy lip fern (*Myriopteris lanosa*). Photo by Eric Hunt.**

For the plants that I found exciting (I said it wasn’t just the view that was fantastic!) we were treated with seeing the tough little ferns purple cliff brake (*Pellaea atropurpurea*), blunt lobed cliff fern (*Woodsia obtusa*), ebony spleenwort (*Asplenium platyneuron*), and my first natively-spied hairy lip fern (*Myriopteris lanosa*). We think of ferns as being delicate but if in their ideal environment, they can be tough. Their fossil record goes back to the Devonian period (383–393 million years ago) and maybe even further back than that. It’s a tough group of plants.

And then the hike got very exciting – we found a native bumblebee community beneath a rock outcrop! They had tunnels of soil coming out of the ground there in the dry soil. It was like viewing a miniature version of Mesa Verde. I wasn’t able to capture a photograph of the bees, unfortunately. Therefore, a simple “fascinating native bumblebee species” it will have to remain. The soil



**Purple prairie clover (*Dalea purpurea*). Photo by Eric Hunt.**



**Ben Thesing likes the open, fire maintained structure on Sugarloaf Mountain that is managed by the US Forest Service. Photo by Sarah Geurtz.**

gets exceptionally dry in areas over the rocks on Sugarloaf – and Arkansas calamint (*Clinopodium arkansanum*), sensitive-briar (*Mimosa nuttallii*), and purple prairie clover (*Dalea purpurea*) were some of the species we were treated to see in bloom.

At every hike I attend at our meetings, I learn something new from our excellent hike leaders (Virginia McDaniel, Andrew Ruegsegger, Diana Soteropoulos, and Joe Ledvina for this hike) and the fantastic places we have available for hiking thanks to our state’s natural areas. This hike did not disappoint. We saw a native *Echinacea*, but determination of its species was hotly discussed and never determined because its pollen wasn’t observable yet. In order to explain the difference between the two species it could have been, here you go, dear reader – the differences between our state’s three strappy-rayed



**While the purplish Echinaceas can be confusing, there is only one yellow purple coneflower, a.k.a. the paradoxical echinacea (*Echinacea paradoxa*), which we also saw on Sugarloaf Mountain. Photo by Eric Hunt.**

*Echinacea* species (coneflowers), as explained in “[Know Your Natives - Pale Purple Coneflower](#)” by Sid Vogelpohl.

- There is the more common pale purple coneflower (*E. pallida*). It’s pollen is **white**. This helps me remember – *pallida* translates to *pale* and white is as pale as you can get. I always thought *pallida* referred to the color of the ray flowers until this hike; now I know the truth.
- Sid’s article goes on to explain that glade coneflower (*E. simulata*) has ligules that droop less and are usually deeper pink than those of pale purple coneflower, and the pollen is **yellow**.
- Then there’s sanguine purple coneflower (*E. sanguinea*). It also has pale purple strappy rays but also shorter, wider leaves and stems and its involucre bracts tend to have purplish stalks and tips. Its pollen is **yellow**. Don’t worry, it is known in Arkansas only in the sandhills of Miller County (southwestern corner of the state), so if you see yellow pollen on a strappy pale purple-rayed coneflower, it’s likely glade coneflower.



**ANPS group in the fire tower on Sugarloaf Mountain. Photo by Sarah Geurtz.**

We were also treated to butterfly milkweed (*Asclepias tuberosa*) in bloom. Virginia showed the group how one of its ID features is that it does not have milky sap like the other species in that genus. Another interesting thing about this species (and a good way to remember its Latin name) is that it forms a large tuber (hence its species name of *tuberosa*); this is one of the ways it survives in harsh, dry environments.

In all, it was a lovely hike. I learned about the vegetation, the forest service’s management practices (a recent burn), and the history of the site. I also learned, after the hike, that this mountain is still used by pilots due to its distinctive features from the sky. It’s well worth visiting!

# Field Observations of *Dirca decipiens* - Ozark Leatherwood

by Stephen Dickey

Ozark leatherwood (*Dirca decipiens*) is a deciduous shrub that grows to a height of 6.5 to nearly 10 feet (2-3 meters). An early bloomer, its distinctive yellow flowers emerge in late March to early April,<sup>1</sup> before most of the surrounding plant community is ready to make their spring entrance (Center for Plant Conservation, 2024). The leaves eventually emerge from the same node as the bud, alternating along the very flexible stem.<sup>2</sup> *Dirca decipiens* closes out its year when the leaves turn a pleasant pastel yellow color, presenting an identifiable contrast with surrounding terrain and vegetation.<sup>3</sup>

Northwest Arkansas is one of the few locations that Ozark leatherwood calls home, and much remains to be discovered about its preferred habitat here in the Ozark Highlands. In a paper identifying *D. decipiens* as a new species, Floden et al. (2009) noted that it occupies a xeric limestone habitat, and that the three known non-contiguous locations were “all on northeast facing bluffs and slopes above rivers.” The shrub’s habitat description has expanded over time and was described in *Trees, Shrubs, and Woody Vines of Arkansas* as “calcareous bluffs, rocky stream banks, and steep dry to mesic forests and woodlands” (Ogle et al. 2020).

The following paragraphs present field observations that expand upon the rocky stream bank habitat and the plants presence in locations that experience intermittent high water flow rates, inundations, and associated soil saturation.

## ***Dirca decipiens* is a rugged shrub!**

The Ozark Leatherwood is able to survive and thrive in what could be called an intermittently hostile environment. Exploration of ephemeral streams and creeks revealed mostly shaded (dappled sun) populations of *D. decipiens* on banks, point bars, and mid-stream bars. The lean of the grasses and deposit of debris (large and small) indicated they experienced periodic heavy water flows and inundations. It was common to find parts of a plant damaged from apparent contact with waterborne debris.<sup>4</sup> Some trunks were found to be leaning downstream but still firmly anchored by thick and healthy root structures.<sup>5</sup>

## **Elliptic Trunks?**

In addition to leaning, some trunks had an elliptical shape with the major axis aligned with the apparent water flow.<sup>6,7</sup> Could this be an adaptation to reduce resistance and help prevent uprooting? More field work is necessary to determine the number of occurrences, measurements, locations, and alignments.

## **Rhizomes!**

At two separate locations, streamside erosion exposed rhizomes (stoloniferous rhizomes?), with new shrubs sprouting from nodes a short distance away from the parent plant.<sup>8,9</sup> While this may not add to the genetic diversity of the species, it certainly provides another option, and might even serve as a useful anchoring mechanism.

## **A Special Relationship**

*Dirca decipiens* appears to have a special relationship with streams and creeks, water drainage patterns, high flow rates, and periodic inundations. Maintaining this “rough-and-tumble” habitat will need to be part of the discussion regarding the species’ preservation and conservation.

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**Photos (next page): numbered images correspond to superscript numbers in the text.**



Photos By: S. Dickey

# Envisioning Old Growth Ozark Chinquapin

by Frederick Paillet

*As a retired adjunct faculty once working out of the tree ring lab at the University of Arkansas in Fayetteville, I have supervised students helping me with my investigation into the ecology of Ozark chinquapin - resulting in several technical publications.*

*As an amateur artist I have meanwhile worked to take the wealth of information we have from tree rings and forensic work to develop a vision of what the tree looked like in its prime, embedded in old growth forest. Although not worthy of a technical publication, I would like to share the results with our members who may be interested.*

That once beloved Ozark chinquapin (*Castanea ozarkensis*) was removed from our uplands by introduced chestnut blight decades ago, even if root sprouts remain today. Those sprouts are regularly pruned back by basal cankers providing the doubly unfortunate situation where susceptible individuals are not eliminated and generation of resistant individuals cannot be created by seed production from surviving trees.

Even the taxonomy of the species is contested – is it a shrub-like variety of Allegheny chinquapin (*Castanea pumila*) or its own distinct species? My academic colleagues and students have worked for some time on the ecology of our tree and its relation to other *Castanea* species (see for example Paillet and Cerny, 2012 in *Torrey Journal*). The remains of blight-killed chinquapins can

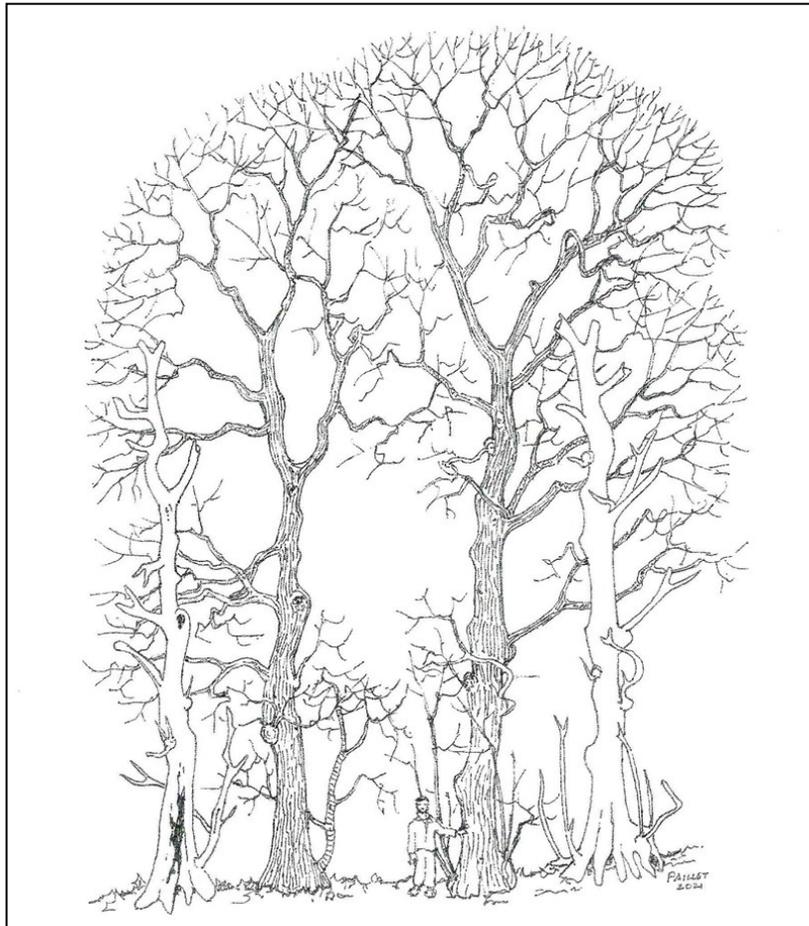
be seen in Northwest Arkansas, but often represent trees growing in disturbed situations in formerly grazed or logged forests. As an amateur artist experienced in reconstructing past environments, I searched for the best-preserved examples of former chinquapin trees in

locations that resembled what must have been old-growth conditions on upland sites. My students and I used release dates on oaks adjacent to the remains of large chinquapins to identify 1957 as the date when blight arrived in Benton County.

The size of remaining trees on old-growth sites clearly shows our chinquapin was a forest dominant tree and not a shrub. I selected a pair of fallen trunks about 45 feet long as the basis for my illustration – the carefully measured planforms of the evidence superimposed on the figure. I used diagrams of the crown structure of the largest living survivors and fragments of dead trees with reasonably well-preserved branches propped against other trees to fill out the crowns of my illustration. Using the artist as

a scale, this is the best representation of what our tree looked like in its prime that I know of.

Two specific points of interest to note: 1) our studies show that Ozark chinquapin in old growth situations had a single trunk rather than the multi-stemmed form often seen in disturbed situations; and 2) mature trees usually had small, suppressed sprout stems perched on the root collar.



***The attached figure shows the carefully documented remains of two large Ozark chinquapin hulks lying underneath obviously large black and mockernut hickories on a ridge in the Ozark National Forest. The diagrams of these remaining trunks have been fleshed out using the patterns available in the largest surviving specimens available. The figure pretty much speaks for itself, using my modest 6-foot self as a suitable scale.***

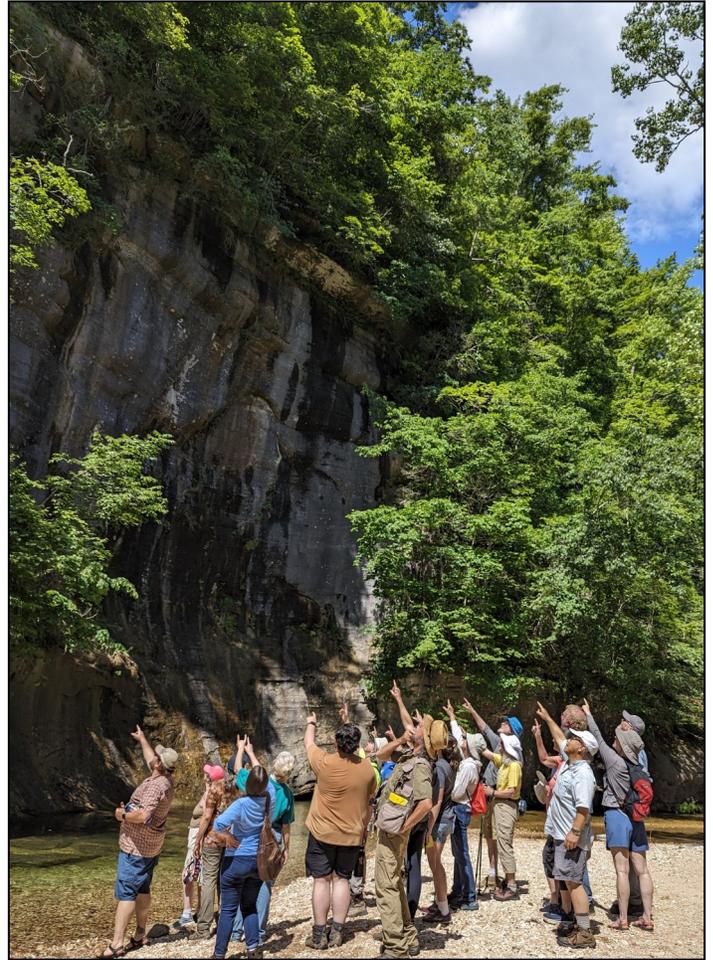
# Welcome, New ANPS Members!

## New Members to ANPS since the spring issue of *Claytonia* (between 06 March 2024 and 10 August 2024)

Anne C. Butcher (Kirby, AR)  
Michael L. Carnahan, DVM (Stuttgart, AR)  
Sandie Cloud (Mountain Home, AR)  
Seth Fleming (Booneville, AR)  
Stacy & John Fletcher (Little Rock, AR)  
Janet & J.D. Gingerich (Conway, AR)  
Denise Hilton (Searcy, AR)  
Dylan Jacobs (De Soto, MO)  
Rebecca James (Roland, AR)  
Sarah Labuda (Little Rock, AR)  
Summer Linn (Fayetteville, AR)  
Brett J. Savary (Jonesboro, AR)  
Wendy Shoffner (Little Rock, AR)  
JoAnn Steele (Damascus, AR)  
Steven Warmack (Little Rock, AR)

## New Life Members

Jennie G. Cole (Little Rock, AR)  
Marcia Erbland (Little Rock, AR)  
Elizabeth (Liz) Harris (Farmington, AR)  
Amy Hudson (Conway, AR)  
Peggy Kilpatrick (Rogers, AR)  
Steven Kortum (Hot Springs Village, AR)  
Maribeth Latvis (Fayetteville, AR)  
Lynn Michael (Claremore, OK)



*We are so happy to have you part of a wild group that randomly points at things. Photo by Virginia McDaniel.*

**SAVE THE  
DATE!**

**SPRING 2025**

**MEETING**

**MAY 2 - 4**

**MONTICELLO, AR**



*Warren Prairie Natural Area*

*Photo by Eric Hunt*

# Floristic Quality Assessment: Measuring What is Natural

by Andrew Ruegsegger

Picture this. You're standing in a patch of long-abandoned cropland. Tall fescue (*Lolium arundinaceum*), invasive cheat grasses (*Bromus* spp.), and ankle-grabbing dewberries (*Rubus* spp.) surround you. You're not sure when the soil was originally plowed and you're not sure when it was left fallow, but you know that it has a way to go before it resembles anything approaching the natural, stable grass-/woodland it once was.

But you want to know just how far it is from that place. Maybe you want to restore it, or maybe you're just curious. Whatever the case, you want to know how much this system has been destabilized. You begin to wonder how you might go about figuring this out. You could come up with a ratio of non-native invasives to natives, but that would be missing a lot that those early-successional, weedy natives could be telling you about the system's stability. Simply counting the number of plant species would also seem to miss the point. After all, invaded ecosystems can actually have more species than uninvaded ones, as the invasives often add to the pre-existing species count.

So, you do some research. And you stumble across this thing called Floristic Quality Assessment that a Chicago botanist named Gerould S. Wilhelm came up with in the late 1970s. Different plant species, he recognized, indicate different degrees of natural quality and habitat stability. For example, Johnson grass (*Sorghum halepense*), which grows abundantly in your old field, will grow in very unstable, degraded, chaotic places. On the other hand, dotted gayfeather (*Liatris punctata* var. *mucronata*)

will only grow in some of the most natural, intact woodlands and grasslands. To capture these differences, Wilhelm and his colleague Floyd Swink assigned values to each plant species growing within the Chicago Region, called a coefficient of conservatism (C-value, for short). They assigned C-values on a scale from 0-10, with 10 given to the species with the highest fidelity to intact, natural systems, and 0 assigned to the most ruderal species. Keep in mind, though, that high C-values shouldn't be conflated with rarity, especially on the state level, despite considerable overlap between rare species (especially those that are globally imperiled) and high C-values. For example, hardstem bulrush (*Schoenoplectus acutus* var. *acutus*) is a G5S1 species (G5 indicating the plant is se-



**Dotted gayfeather (*Liatris punctata* var. *mucronata*) has a C-value of 10 in Arkansas, indicating its fidelity to high quality habitats. Photo by Theo Witsell.**

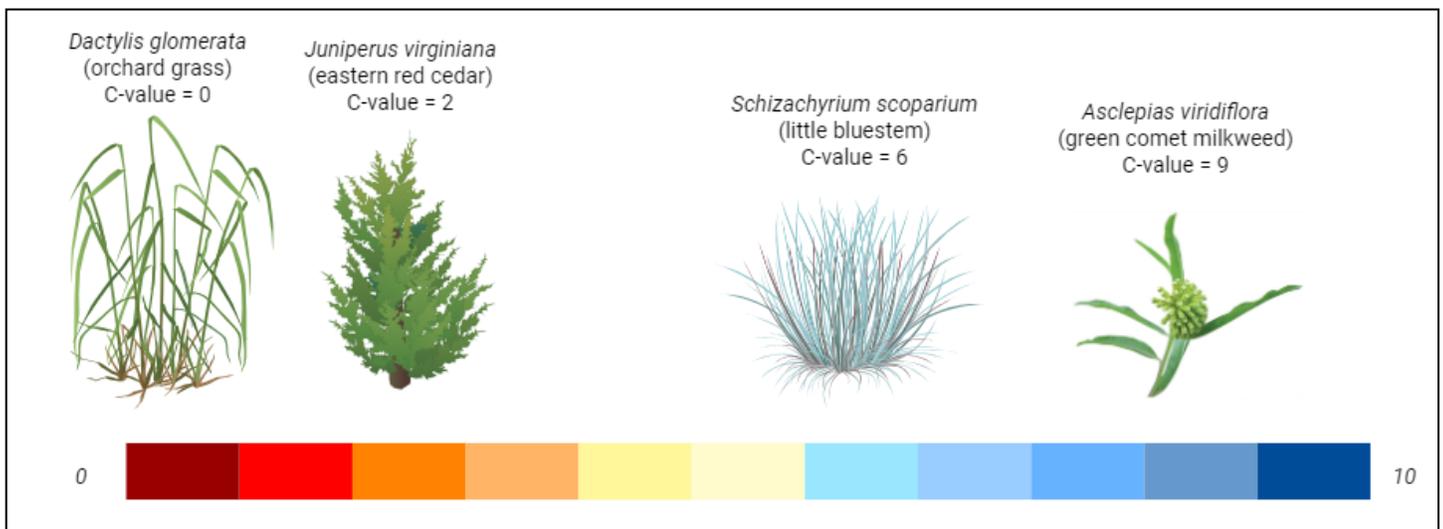


Diagram depicting the C-value scale with some example species found in Arkansas. Credit: Andrew Ruegsegger.



**Frank's sedge (*Carex frankii*) is much more abundant in Missouri than in Arkansas, an example of how species differ in their tolerance to environmental degradation in different regions. Photo by Andrew Ruegsegger.**

cure on a global level and S1 the most rare on the state level), but has a C-value of 4 in Arkansas.

Wilhelm and Swink came up with two ways of using their newly-assigned C-values in a meaningful way. For one, you could calculate the Mean C based on your species list for any given area. This is just the average of all the C-values for each species.

On the other hand, you could calculate the Floristic Quality Index (FQI), which multiplies the Mean C by the square root of the number of native species for your site. Research has shown, though, that Mean C is better at assessing ecological integrity, because FQI takes species number into consideration, which might vary for reasons unrelated to site quality (like site area or habitat type).

One last thing. C-values are assigned regionally, because what is actually an intact, stable community is different in different places. Frank's sedge (*Carex frankii*), for example, is found in a much wider range of habitats in Missouri (C-value = 2) than in Arkansas (C-value = 6), where it is more commonly found in moderate- to high-quality wet grasslands.

You live in Arkansas, which would have been a bummer a few months ago, when there was no C-value list for the state. Luckily, though, Theo Witsell (Southeastern Grasslands Institute), Virginia McDaniel (Southern Research Station and our *Claytonia* editor), Brent Baker (Pine Ridge Gardens), Doug Zollner (The Nature Conservancy), Gabriel De Jong (The Nature Conservancy), and Susan Hooks (Ouachita National Forest, retired) published an Arkansas list just this June covering 3124(!) Arkansas taxa. It is available as a free download at [phytonetron.net](http://phytonetron.net). According to this list, non-native species are assigned a 0. Weedy and successional taxa are given a 1-3. Taxa that enjoy intact, stable habitats but can tolerate

some disruption are 4-7, and conservative taxa with strong fidelity to intact habitats are 8-10.

You read that, generally speaking, a Mean C greater than 3.5 is an indicator of some natural quality and one higher than 4.5 indicates a remnant quality habitat. With this in mind, you spend a day recording as many species as you can identify in your field, which is regrettably less than you'd hoped. Still, you feel as though you got most of them. Besides, you remember reading a peer-reviewed paper showing that only about 60% of the plants needed to be accurately identified to get an effective Mean C. So, you feel about as good as one can when you calculate the average of your C-values and get a Mean C of 2.8. And because it's an average, you feel safe about comparing your field with your neighbor's.

But we can do a whole lot more with this kind of information than simply comparing sites (though powerful in itself). We can use it to measure the efficacy of different management strategies, or to measure the patterns of community recovery after disturbance. We can compare soil qualities to Mean C across sites to understand what kinds of soil conditions are conducive to remnant, intact, natural communi-



**Johnson grass (*Sorghum halepense*) is a non-native invasive species in Arkansas, and so it is given a C-value of 0. This species is highly tolerant to disturbance. Photo by Andrew Ruegsegger.**

ties. We can measure what kinds of human activity have the biggest impacts on habitat quality. A tool that gives us some indication as to how 'natural' a habitat is is pretty powerful. Without something like this, we have a tough time quantifying the goals of conservation, especially in the plant world. What a 'natural' habitat looks like isn't always straightforward, especially to the untrained eye. However, Mean C (and other measures that use C-values not mentioned here) offers a straightforward, accessible way of understanding how intact a habitat is without having decades of ecological and botanical experience. The experts did that part for us already.

# Spring Business Meeting Minutes

Arkansas Native Plant Society Business Meeting Minutes  
May 18, 2024

The Center @ Mountain View

116 W. Main St., Mountain View, AR 72560

The Arkansas Native Plant Society held its 2024 Spring Business Meeting on Saturday, May 18, 2024. The Business Meeting began at 6:03 p.m.

President Eric Fuselier called the meeting to order and thanked the members for coming. He encouraged everyone to express their gratitude to Sarah Geurtz for organizing the Spring Meeting. Eric invited comments from those who attended the field trips earlier that day; everyone who spoke expressed their appreciation of the natural areas they visited and the knowledgeable guides who led the walks.

**Dwight Moore Award.** Leslie Patrick announced that the recipient of the Dwight Munson Moore Award for contributions to Arkansas Botany was Sid Vogelpohl for *Know Your Natives*, a compendium of detailed information about selected plants native to Arkansas, published online over the past ten years. She noted that Sid researches each species, makes photographs that reveal in extraordinary detail each plant's physical characteristics, and writes the descriptive copy. Each entry is also reviewed by professional botanists prior to publication. Leslie credited Michael Weatherford for nominating Sid Vogelpohl, noting that *Know Your Natives* has served to educate ANPS members, Master Naturalists, Master Gardeners, and the general public. She went on to read three additional letters of support from ANPS members. Sid Vogelpohl received a standing ovation and graciously expressed his appreciation for the \$500 award.

**Upcoming Events.** It was announced that the Ozark Chapter would conduct a June 15 field trip at Lincoln Lake in Northwest Arkansas, led by Jennifer Ogle of the University of Arkansas Herbarium and Marson Nance of the Northwest Arkansas Land Trust. Webinars would be held on July 13 by Brendan Kosnik and on August 10 by Richard Abbott, the latter on the subject of opposite-leaved woody plants. Maribeth Latvis was invited to present a webinar later in the year, perhaps on grasses.

**Treasurer's Report.** Leslie Patrick noted that the 2024 Spring Treasurer's Report was published in the Spring edition of *Claytonia*, reflecting the organization's financial status as of March 4, 2024. She offered an update reflecting the current (May 18) status, which included additional revenue from meeting registration, membership

dues, and merchandise sales. On the expense side, grants and scholarships account for the majority (66%) of the organization's expenditures. Last year's expenses exceeded the budgeted amount, but a core purpose of ANPS is to support individuals who are studying and researching native plants in Arkansas so this is a justifiable investment in people, with benefits that accrue to the organization. Reducible expenses include printing and mailing *Claytonia* and the membership directory—these could be digitized. Currently, members can opt out of receiving the print versions by contacting Membership Officer Molly Robinson. Joe Ledvina reported that he was looking to digitize the ANPS membership system—when done, digital delivery would be the default for these publications; members would be able to opt in to receive print copies.

**Meeting Minutes.** Minutes of the fall business meeting were published in *Claytonia*. Sarah Geurtz moved to accept the minutes as published; Susan Hardin seconded and the motion carried unanimously.

**Memorial Awards.** Jennifer Ogle, Memorial Awards Officer, presented to the membership the recommendations made by the Memorial Awards Committee—and approved by the Board of Directors—for the Aileen McWilliam Scholarships and the Delzie Demaree Research Grants. Scholarship applicants recommended for award were Joshua Poland (\$2,000), Natalie Roell (\$1,000), and Andrew Ruegsegger (\$2,000). Research grants in the amount of \$2,000 each were recommended for Russell Morgan (taxonomy and genome size estimations within the genus *Arisaema*) and for Jack Looney (disjunct Appalachian species within the Ozark National Forest). Awards Committee members included Eric Sundell, Ben Benton, and Jennifer Ogle; Virginia McDaniel sat in for Jennifer to avoid conflict of interest related to students/applicants known to her. Eric invited questions; there were none. John Simpson moved that ANPS fund the five applicants in the recommended amounts. Art Browning seconded the motion, which passed unanimously.

It was announced that the Fall ANPS meeting would be held in the vicinity of Mineral Springs.

There being no further business, it was moved by Joe Ledvina, seconded by Margaret Morrell to adjourn. The meeting adjourned at 6:50 p.m.

Respectfully submitted,

Greg Rajskey, Secretary

# Lincoln Lake Field Trip Report

by Samantha Heller

On any warm and humid mid-summer morning, the best possible type of hike is one that covers little distance yet wraps around several distinct types of habitat containing a multitude of unusual plant species; luckily, this was the exact circumstance of the June 15th OCNPS meeting at Lincoln Lake, led by Jennifer Ogle of the University of Arkansas Herbarium and Marson Nance of the NWA Land Trust.

Our path began on an edge of the lake shaded by sandstone bluffs, from under which netted chain fern (*Woodwardia areolata*) grew out of crevices at ground level, an unusual species for the northern part of Arkansas despite its commonality towards the central and southern sections of the state. One of our more conservative wild rye species, the silky wild rye (*Elymus villosus*) sprang out of the same substrate with fresh green inflorescences, as did the petite and charming blunt broom sedge (*Carex tribuloides*). Some uncommon variety of liverwort grew in large patches that crept upward along the stone next to the chain fern.



**Silky wild rye (*Elymus villosus*). Photo by Jennifer Ogle.**

As we walked further on the trail, we made a small elevation gain but quickly saw species in the sandstone that were adapted to drier conditions. As the chain fern disappeared, it was replaced by various tiny spleenworts

(*Asplenium* spp.). The prize of all the plants narrowly squeezing a living out of these hot, sunny sandstone crags was Arkansas Alumroot (*Heuchera arkansana*), an endemic species of the saxifrage family that very carefully stays within the border of Arkansas despite cutting quite close to the borders of several other states. Aside from its limited range, the foliage of this species turns into various shades of orange and deep brown that, as Sarah Nunn once said, put any store-bought Thanksgiving centerpiece to shame, and does so not long after

blooming with white candle-like flowers in the late summer or nearly autumn, when most other plants are far beyond flowering. By contrast, though, some boulder-like slabs of sandstone that were eroding downhill did have mesic species growing on them, often being covered in columbine (*Aquilegia canadensis*) and wild hydrangea (*Hydrangea arborescens*). Marson explained that the columbine, hydrangea, and alumroot are actual-



**Group photo at Lincoln Lake, with a tall sandstone bluff in the background. Photo by Marson Nance.**

ly close compatriots, part of a niche ecosystem that occurs in other bluffs throughout the Ozarks and is ranked as vulnerable (G3) by NatureServe.

The higher elevations of the trail had more typical open woodland species, such as a variety of goldenrods (*Solidago* spp.) and an even greater spread of native legumes, most notably several species of lespedeza. Whorled milkweed (*Asclepias verticillata*), one of our least common types of the host plant for Monarch butterflies, was also present. Flowers of black-eyed Susan (*Rudbeckia hirta*), fleabane (*Erigeron* sp.), and snoutbean (*Rhynchosia latifolia*) provided pops of cheery summer colors on the understory of a partially open woodland.

In addition to what was seen that day, Lincoln Lake is home to other points of botanical intrigue, such as Texas saxifrage (*Micranthes texana*) and Bradley's spleenwort (*Asplenium bradleyi*).

Jennifer and Marson led us across a small inlet of the lake after that, and thus we got to admire a broad assortment of plant communities across nearly the whole spectrum of sun, shade, and moisture levels within just under

# 2024 Grant Recipients

## DELZIE DEMAREE RESEARCH GRANT



L: Morgan Russell, M.S. student at the University of Arkansas, received \$2000. Morgan's research is on taxonomy and genome size estimations within the genus *Arisaema*. His advisor is Dr. Jeremy Beaulieu. R: Jack Looney, M.S. student at the University of Arkansas, received \$2000 to aid in his study of disjunct Appalachian species within the Ozark National Forest. His advisor is Dr. Maribeth Latvis.

## AILEEN MCWILLIAM SCHOLARSHIP



L-R: Josh Poland, Ph.D. student at Arkansas State University, received \$2000. Natalie Roell, undergraduate at the University of Arkansas, received \$1000. Andrew Ruegsegger, undergraduate at the University of Arkansas, received \$2000.

# Fall Webinar Series

Title: *“Untangling the Biotic and Abiotic Factors that Structure Prairie Pimple Mound Plant Communities”*

Speaker: **Ben Benton**

When: **Saturday, November 2<sup>nd</sup> at 10am**



**Description:** Prairie pimple mounds (relict nebkhas) provide an ideal system to study how below-ground bio-

tic and abiotic factors interact to affect plant communities, in part because they exhibit distinct environmental changes over small spatial scales. In this program you'll learn about research into the relative contribution of root-associated symbionts and soil nutrients as they relate to the regulation of plant communities on prairie pimple mounds.

**Speaker Bio:** Ben Benton is a botanist for the Arkansas Natural Heritage Commission (ANHC) and the curator of the ANHC Herbarium. Ben graduated from Hendrix College in 2020 with a degree in Biology, and is currently pursuing his Masters degree from Arkansas State University. Ben's research at ASU focuses on patterns and process regulating biodiversity.

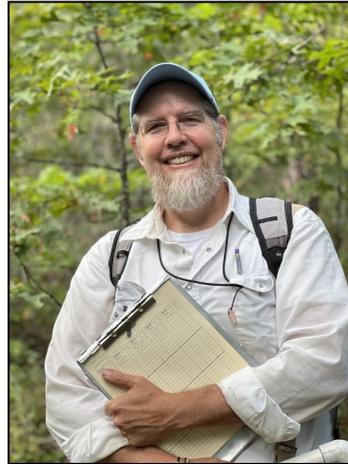


*Pimple mounds at Flanagan Prairie Natural Area. Photo by Jennifer Akin.*

Title: *“The Amazing World of Wild Plant-Soil Interactions”*

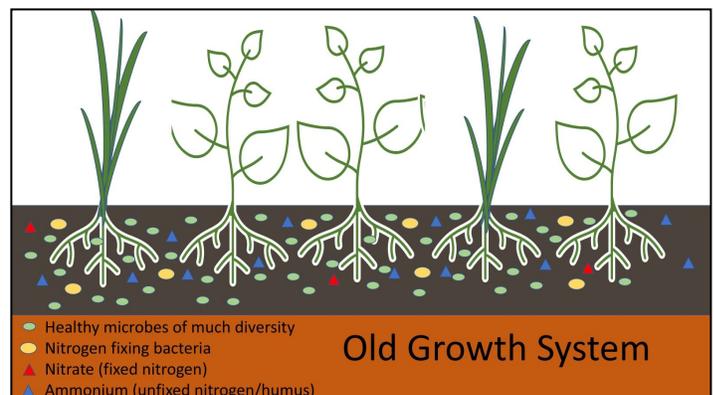
Speaker: **Justin Thomas**

When: **Saturday, November 16<sup>th</sup> at 5pm**



**Description:** Truly amazing mechanical processes are happening between wild plants and the soils they call home. One could easily say that plants are manifestations of soil health. What are these mechanisms and processes? How do they maintain the wild plants we love? And more importantly, to what degrees are the plants we love dependent on the protection of such interaction? This will be an easy to follow, eye-opening presentation that will also highlight better ways for us to steward the land.

**Speaker Bio:** For 26 years Justin has conducted taxonomic and ecological research and instructed plant ecology and ID workshops for the Institute of Botanical Training and NatureCITE (organizations founded by him and his spouse Dana). Justin is the co-author of the Ecological Checklist of the Missouri Flora and is a research associate with Missouri Botanical Garden. Justin promotes a holistic view of life as a system of study and inspiration.



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/UCEIIFuRaz0HbIlgXxwRIHvw](https://youtube.com/channel/UCEIIFuRaz0HbIlgXxwRIHvw).

# ANPS Fall Meeting

## October 4 - 6, 2024 in Hope, Arkansas

All are welcome to attend! Meeting registration is only \$10 with no pre-registration required. Registration will begin at 5:00 PM on Friday, October 4, 2024. The meeting events wrap up on October 6 around noon.

### Meeting Location:

#### Hempstead Hall

2500 S Main, Hope, AR 71801

Google maps link: <https://maps.app.goo.gl/DMs75EfMheSGdzzx8>

[DMs75EfMheSGdzzx8](#)

### Hotels (two options):

#### Holiday Inn Express ([click here for directions link](#))

##### Address:

2600 North Hervey St  
Hope, Arkansas 71801

Phone: 1-870-722-6262

##### Website

A discounted rate of \$119 + taxes are available for ANPS members. Rooms must be reserved over the phone to receive the discount (be sure to mention that you are with the Arkansas Native Plant Society when making your reservation in order to get the discounted room rate). There is no "block" of rooms reserved – it's a first-come, first-serve situation through the event's date. Breakfast is included. Cancellations must be made 24 hrs prior to arrival.

#### Hampton Inn & Suites ([click here for directions link](#))

##### Address:

2700 N. Hervey Street  
Hope, Arkansas, 71801

Phone: 1-870-777-4567

##### Website

20 rooms (mixture of bed sizes) have been reserved at \$125 a room before taxes. Rooms must be reserved over the phone to receive the discount (be sure to mention that you are with the Arkansas Native Plant Society when making your reservation). Our block of rooms will be held for ANPS only through September 20<sup>th</sup>. Breakfast is included. Cancellations must be made 24 hrs prior to arrival.

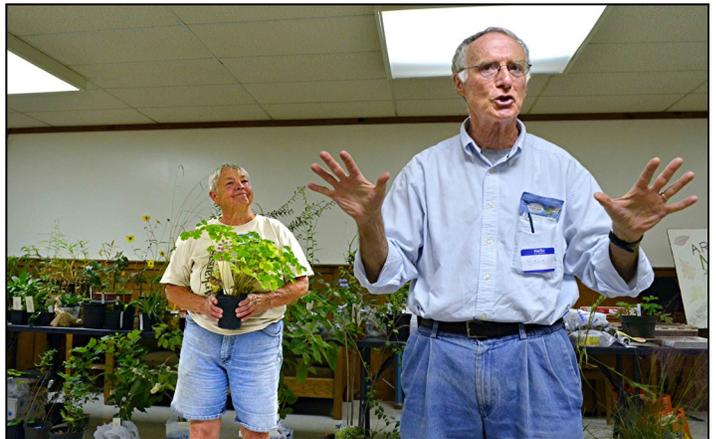


*Brent Baker leads a trip on top of Mt. Magazine during the spring 2013 meeting. Photo Bruno Hanke.*

**Potluck!** We will have a Potluck meal Friday and Saturday evenings. Bring a dish or just come, eat, socialize, and learn!

**Field trips:** 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 to enter into the live and silent auctions!



*Auctioneers MaryAnn King and Eric Sundell. Photo by ANPS member.*

Our hikes will offer something for everybody – slow and easy hikes and more vigorous hikes. You must sign up for field trips on Friday evening at the event to allow for adequate logistical planning.

For complete and up-to-date details, go to [www.anps.org](http://www.anps.org) or contact Sarah Geurtz at [sgeurtz.anps@gmail.com](mailto:sgeurtz.anps@gmail.com); (479) 381-2037.



*Brent Baker leads a trip to Cherokee Prairie during the spring 2013 meeting. Photo Bruno Hanke.*

# OCANPS News

by Sue Hubbard



**OCANPS members at The Nature Conservancy's Logan Springs Preserve. Photo by OCANPS member.**

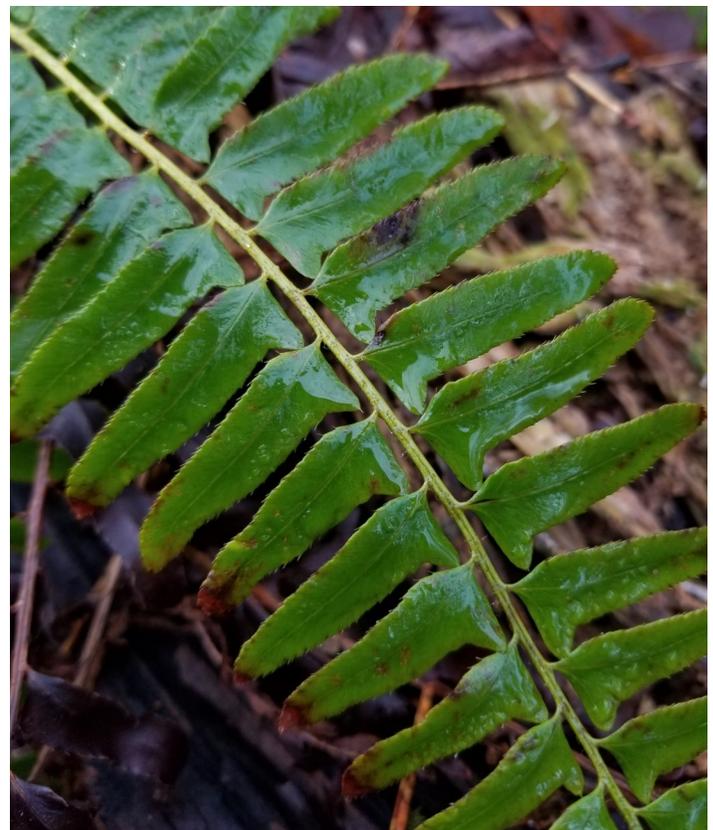
On Saturday April 27 OCANPS had a field trip at The Nature Conservancy's Logan Springs Preserve near Siloam Springs. The leaders were Laurie Scott from NorthWest Arkansas Community College and Chas McCoy from The Nature Conservancy. As they led us around the Preserve they focused the discussion on land management and the Conservancy's restoration of the preserve. Joe Woolbright was also on the trip and shared his knowledge of land management in NW Arkansas. Danny Barron shared his knowledge of plant identification. Interesting discussions occurred that kept the 12 participants engaged and appreciative of the opportunity to learn about this area.



**OCANPS members learn about the challenges of managing Logan Springs Preserve. Photo by OCANPS member.**



**Bloodroot (*Sanguinaria canadensis*). Photo by Eric Hunt**



**Christmas fern (*Polystichum acrostichoides*). Photo by Eric Hunt.**

# Spring Meeting Highlights



# Arkansas Botanical News

[New evidence](#) was recently presented for the splitting of *Rudbeckia grandiflora* var. *grandiflora* and *R. grandiflora* var. *alismifolia* into their own species. First, clear morphological distinctions include *R. grandiflora* having conspicuous spreading hairs (vs. inconspicuous, appressed hairs), 5 prominent veins on the leaves (vs. 3), and phyllaries that are hairy and planar (vs. glabrate and convolute). Additionally, *R. grandiflora* has a more northern distribution (Interior Highlands and Plains) while *R. alismifolia* is more southern in distribution, occurring mostly in the Coastal Plain.

**Kelley, JM. 2024. Evidence for treating two taxa of *Rudbeckia* (Asteraceae) as species. *Phytoneuron* 2024-28: 1–14. Published 8 May 2024.**

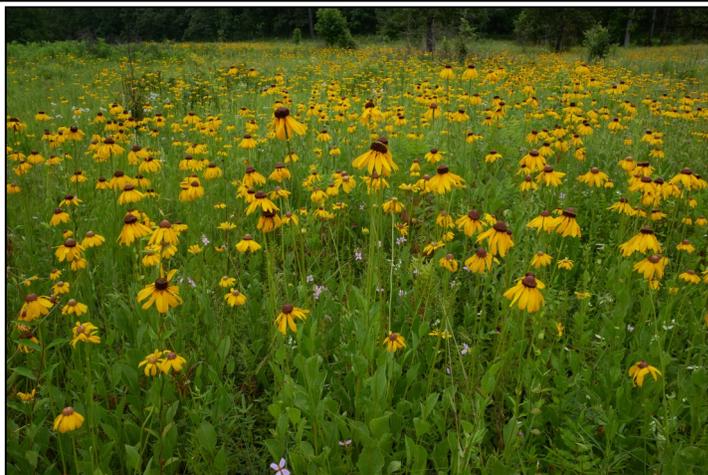
A [new species](#) of hawthorn has been named in honor of avid Arkansas botanist and plant collector Jim Keesling. Jim while a late bloomer who came to botany after he retired, has dedication and attention to detail that leaves most professional botanists in the dust. His work has yielded many state records, previously unknown populations of rare species, and other important finds. Jim made countless trips to photograph and collect specimens of the taxonomically tricky genus *Crataegus* (hawthorns) across the state, often visiting the same plants multiple times to capture leaves, flowers and fruits. He rediscovered populations of two Arkansas endemic hawthorns described in the 1920s and believed to be extinct: *Crataegus ouachitensis*, and *C. ouachitensis* var. *minor*. His specimens from these populations helped taxonomists prove that *C. ouachitensis* var. *minor* was in fact not closely related to *C. ouachitensis*. Those plants have now been reclassified at the species level and named *Crataegus keeslingii* in recognition of his time, effort, and contributions to Arkansas botany.



**Keesling's hawthorn (*Crataegus keeslingii*). Photo by Jim Keesling.**

**Witsell, T. and R. Lance. 2024. Clarification of the status of *Crataegus ouachitensis* (Rosaceae) and a re-evaluation of its var. *minor*. *Phytoneuron* 2024-55: 1–14. Published 18 July 2024.**

**Witsell, T. and R. Lance. 2024. Clarification of the status of *Crataegus ouachitensis* (Rosaceae) and a re-evaluation of its var. *minor*. *Phytoneuron* 2024-55: 1–14. Published 18 July 2024.**



**Rough coneflower (*Rudbeckia grandiflora*) at Camp Robinson Special Use Area. Photo by Eric Hunt.**

[Coefficients of conservatism](#) (c-values) have been developed for the state of Arkansas! C-values are values given to plant taxa to describe and rank their fidelity to habitat quality and/or stability within a given region. For a more in-depth explanation of what they are please see Andrew Ruegsegger's article on page 10-11 of this issue.

**Witsell, T., V.L. McDaniel, B.T. Baker, D.M. Zollner, G.L. De Jong, S.L. Hooks. 2024. Coefficients of conservatism for the vascular flora of Arkansas. *Phytoneuron* 2024-46: 1–99. Published 22 June 2024.**

Dumping non-native species, be they innocent plant bulbs or 15-foot Burmese pythons, is not a good idea. The [first naturalized population of copper-tips](#) (*Crocasmia x crocosmiiflora*) was recently found in Arkansas in Miller County. The origin was likely horticultural discards and the population size is now about 200 plants. We all know how well non-native species can grow in the absence of their natural predators.

**Serviss, B.E. and J.R. Kratz. 2024. First record of *Crocasmia x crocosmiiflora* (Iridaceae) in the naturalized Arkansas flora. *Phytoneuron* 2024-56: 1–6. Published 8 August 2024.**

Another new addition to the state of Arkansas through naturalization is [paperplant](#) (*Fatsia japonica*) which was found in highly disturbed urban woods within the city limits of Magnolia in Columbia County. Birds are the likely transporters.

**Serviss, B.E. and J.R. Kratz. 2024. First record of *Fatsia japonica* (Araliaceae) from the naturalized Arkansas flora. *Phytoneuron* 2024-57: 1–4. Published 8 August 2024.**

# “My Eye was Caught by a Bright Blue Delphinium”: Dwight M. Moore’s Discovery of *Delphinium newtonianum* by Susan Young

It doesn’t take long once you’re in the University of Arkansas Herbarium (UARK) to feel like you’re being watched. There, herbarium collections manager Jennifer Ogle has assembled a lovely tribute to UARK’s roots (ha!) that includes photos of the herbarium’s botanists from days gone by. And they’re all looking at me: Francis LeRoy Harvey, Delzie Demaree, Dwight M. Moore, John T. Buchholz, Jewel E. Moore, Hugh Iltis, Maxine Hite, and Edwin B. Smith. As a UARK volunteer I feel an obligation to do right by these scientists who tromped all over Arkansas and beyond to collect so many of the 130,000+ vascular plant specimens housed at UARK today. And while Jennifer also inspires a deep allegiance among all the UARK volunteers, her story is one for me to write another day. Today my mind is on Dwight Moore, professor of botany at the University of Arkansas (UA) from 1924 to 1957. During those years Dr. Moore collected thousands of specimens and helped expand UARK’s collection tremendously. He also became nationally known as an expert on Arkansas plants.



**Moore’s delphinium (*Delphinium newtonianum*) was discovered by Dr. Dwight Moore, botany professor at the University of Arkansas and curator of the UARK Herbarium, in 1935.**

A few months ago, Jennifer pointed out that 2024 would mark the centennial of Moore’s arrival in Arkansas. I have an unabashed geeky love for historical research, so I piped up and offered to write a brief history of Moore’s

life as a way to honor him. Welp, Jennifer gently broke the news to me that this had already been done. In 1985, Gary Tucker and Gwen Barber wrote a very fine chronicle of Moore’s life, “Dwight Munson Moore, 1891–1985” for the *Journal of the Arkansas Academy of Science*. (See a summary of this article on p. 1 in this issue of *Claytonia*.)

A tip from Jennifer then led me to Moore’s papers housed in Special Collections at the UA Libraries. I decided to peruse the collection in hopes of finding an interesting anecdote or two to bring some attention to Moore during this 100<sup>th</sup> anniversary year. Since I’m no botanist, it would be a human-interest story rather than a scientific paper.

And boy oh boy, I found a gold mine of humanity in the Dwight Moore Papers, and a lot of botany, too. So many letters from former students and botanists and scientists and garden club presidents and extension agents and everyday folks who just wanted to know about a plant they found in the woods or a pasture. More than enough material for a book, I became paralyzed with wanting to include everything, which led to me writing nothing.

Then in early June of this year, Jennifer turned to her Wednesday morning UARK crew (herbarium technician Brittney Booth and volunteers Donna Gwaltney and yours truly) and spoke these blessed words: “Let’s go on a field trip to see Moore’s delphinium.” A few days later we traveled to the approximate location south of Jasper in Newton County where in 1935, Moore first spied what would turn out to be a new species of delphinium, and one endemic to Arkansas to boot. Unbeknownst to me, that day trip would release me from the bonds of writer’s block and provide me with the gift of a story.

And that is how I came to write this, an account of Dwight Munson Moore’s 1935 discovery of *Delphinium newtonianum*.

\*\*\*\*\*

On July 4, 1935, Dr. Dwight Moore, UA zoology professor Dr. David Causey, and Ed Wheat of Lonoke, Arkansas, set out on a collecting expedition in Newton County, Arkansas. A week later, Moore described the trip in a letter to a former student, William Giles. Here’s an excerpt:

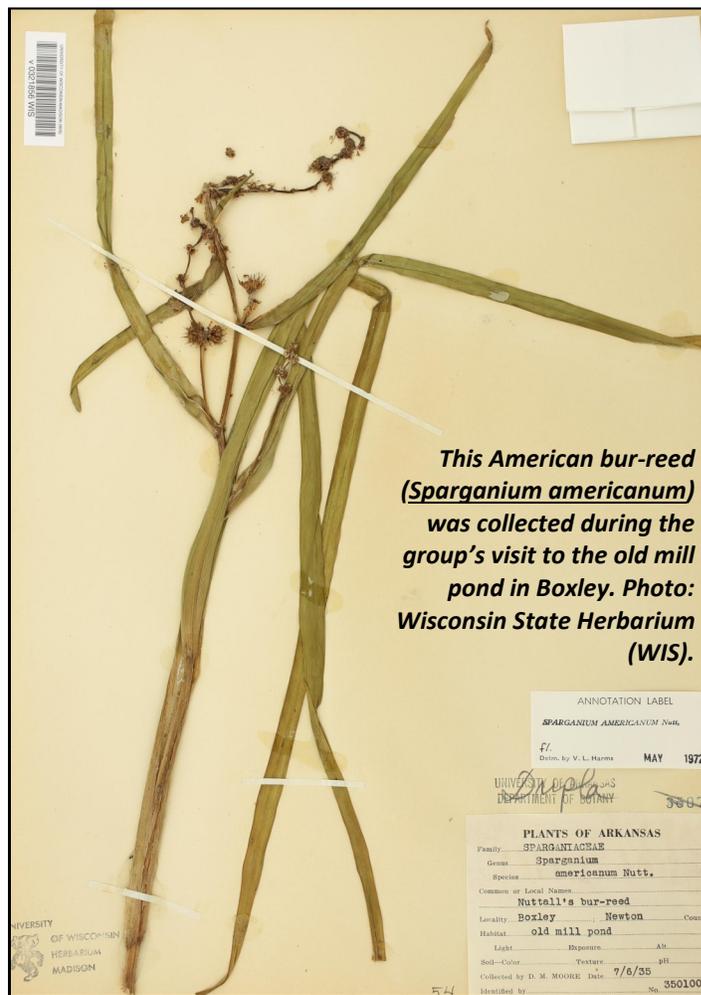
“You would have been very much interested in the trip I made into Newton County from July 3 to July 7. We left Wednesday afternoon... went direct to Jasper after

eating supper in Harrison, stopped at Marble City Falls and collected some nice specimens of *Selaginella rupestris* along with several mosses. After arriving in Jasper we went to the cave, talked with Mr. Pruitt the manager, and since Dr. Causey wanted to take a little net in to see if he could get any aquatic animals, I thought I could get them in for the special rate. What was my surprise when, after talking of the cave and its possibilities, need of good roads, etc. we were told to go on in, the guide would take us through, and there would be no charge. We found no animal life in the cave at all except one gnat about half way back. I did collect about four different kinds of fungi, fruiting on the planks and timbers.... Leaving Jasper the next morning, the fourth, after we drove up the long hill, my eye was caught by a bright blue delphinium in the edge of the wood. I stopped to look at it, and it seemed entirely different from anything we have. The only thing it would key out to in the manuals is *D. tricornis*, which according to our accepted belief, blooms in April and May on a thick stalk a foot or 18 inches high. This one was diffusely branched with slender divisions standing in many cases thirty inches tall. The three carpels were wide spread as in *tricornis*, and the roots were more or less tuberous, but the fruits were shorter and the leaves different from any specimens of *tricornis* we have in the herbarium. It looks to me like a new species. What shall we call it? Penetrating the woods a little farther, we found a dead log covered with mosses and about six different kinds of slime molds.... I put specimens of the different kinds into little tin boxes trying to get them in there in such a way that they would not break, but the roads were so rough that we did not succeed in getting more than one or two of them back safely....”

A few words of explanation regarding this excerpt from Moore’s letter; based on my research I believe this information to be accurate. 1) Ed Wheat was an educator and Lonoke County school supervisor. I have yet to discover how he and Moore knew each other. 2) The cave Moore mentions is Diamond Cave, a popular tourist attraction at the time. “Mr. Pruitt” is Jonah Pruitt, who bought the cave in 1922 and sold it a few years later to the Diamond Cave Corporation but stayed on as a major stockholder in the business.

Let’s also pause here to consider what traveling in this neck of the woods was like in July 1935. I found no mention in Moore’s papers of the vehicle they drove. But we can be sure the car wasn’t air conditioned, since that luxury wasn’t offered in automobiles until 1940. State Highway 7, the main road in Newton County used by Moore et al., was designated on a 1936 road map as a “bituminous

surfaced road,” which was created by laying down a mixture of liquid asphalt and crushed gravel. It’s a step above a dirt road, but a long way from a modern-day paved highway. And with Newton County’s abundant hills and hollers to traverse, there was no getting anywhere fast. Moore didn’t mention their overnight lodging in Jasper on this trip, but in correspondence a few years later, he wrote, “At Jasper the Commercial Hotel is the place I usually stay. They serve good meals, family style, and the beds are reasonably comfortable. The prices I believe are 75 cents for the room and 35 cents per meal. It is only semi-modern. They have a bath with tub or shower but you have to go outside for other purposes. However, it is as good as Jasper has to offer.”



**This American bur-reed (*Sparganium americanum*) was collected during the group’s visit to the old mill pond in Boxley. Photo: Wisconsin State Herbarium (WIS).**

Returning now to Moore’s letter: He described the rest of the trip, which included fern collecting at Freeman Springs (near the present-day Rotary Ann Overlook on Highway 7 in Pope County) and a return to Newton County for more fern collecting, an exploration of the mill pond at Boxley, and a hike to “the top of the hill above the zinc mines and nearby ledges” where the find of the day was “a mallow which seems to be a species of *Abutilon* which is not the one listed in Gray and is not described in any of the other manuals.”

Moore finished the letter by noting that “the delphinium was of sufficient interest to lead me to go back there with some color films and get some pictures of it.” He did just that in late July 1935 and found “the delphinium was all in fruit. No blossoms to be found. That gives further data as to its blooming season.” The blooming season of this delphinium was very uncharacteristic of the known Arkansas members of the genus, a big clue that Moore had indeed discovered a new species.

Moore’s papers are remarkably quiet about his discovery until an August 1938 letter from Merritt L. Fernald, respected botanist, director of Harvard’s Gray Herbarium, and editor of *Rhodora*, the journal of the New England Botanical Society (then the New England Botanical Club). In that letter, Fernald wrote, “Your article on the new delphinium has come and I have been over it with Mr. Weatherby [the associate editor of *Rhodora*]. The paper can be handled in *Rhodora* sometime during the next year. This current volume and the first several numbers of the next volume are already overcrowded so that I cannot guarantee when we can get to your publication.”

Seven months later, by March 1939, Moore’s article had yet to appear in *Rhodora*. He diplomatically inquired of Fernald, “Now that 1939 is well under way I am wondering just how the condition of *Rhodora* is progressing and when it will be possible to get to my paper on the new delphinium.... If it is still to be a month or two away I might supply a better photograph of the type material but I would prefer not to do this if it would delay in any way the appearance of this paper. I hope that it can be worked into the journal not later than the April or May numbers....” Moore’s paper, “*Delphinium newtonianum*, A New Species,” finally appeared in the May 1939 *Rhodora*.

I hope you’ll read Moore’s *Rhodora* paper for yourself. It’s available online at [archive.org/details/biostor-180081](https://archive.org/details/biostor-180081). But I want to take a minute here to point out a couple of items in the paper that I find delightful. Firstly, Moore proposed naming the new species *D. newtonianum* after Newton County, Arkansas, where he first found the delphinium, and also after his father, Newton Moore, who inspired Dwight Moore’s study of botany. Secondly, Moore recorded the flower color spectrum of *D. newtonianum* as a “reasonably constant, though variable” blue. Using Maerz and Paul’s *Dictionary of Color*, which assigns a unique alphanumeric identifier along with a descriptive name to each color in the spectrum, Moore studied 31 specimens of *D. newtonianum* and found 15 different shades of blue. He listed the blues by their alphanumeric names such as 34B6 or 43E12, which is important for scientists, but not very jazzy to the non-botanist. However, tracking down the descriptive color name that accompa-



**The flower color on this 1936 specimen of Moore’s delphinium is holding true nearly 90 years after the plant was collected.**

nies the alphanumeric identifier brings some fun to the Maerz and Paul numbering system. In the case of Moore’s survey of 31 *D. newtonianum* specimens, we find Directoire Blue (43A11), Cathedral Blue (43C10), Diva Blue (43B10), Blue Lavender (43B7), Periwinkle (43B8), Liberty (43C12), Regatta (43C12), Della Robbia (43C11), Hathor (43D12), and Luxor (43B11, the most common color in Moore’s 31 samples).

For my money, when I saw *D. newtonianum* in the wild with my own eyes that day in June, I was immediately transported back to the Crayola “Cornflower” blue crayon of my childhood, which was (still is) my favorite crayon color of all time. Sparking that memory is lovely enough all by itself. But even more so is the day spent with my herbarium pals, retracing Moore’s footsteps to a relatively remote location (still blissfully so, compared to the Northwest Arkansas I-49 corridor) where he discovered something new in these old Ozarks, and where it remains with us still today.

# 2024 Fall Treasurer's Report

2024 Fall Treasurer's Report					Proposed 2025 Budget
			January 1 - August 9, 2024		
			Cash Start 2024	Ⓢ	\$18,176.40
	2023 Actual	2024 Approved Budget	2024 Actual		
<b>INCOME</b>					
Membership Dues	\$4,253.30	\$6,500.00	\$4,075.00		\$4,500.00
Meeting Registration	\$1,630.11	\$1,600.00	\$610.00		\$1,500.00
Plant/Silent Auction	\$703.58	\$1,100.00	\$552.00		\$1,000.00
T-Shirt, Hat, Book Sales	\$1,912.19	\$1,800.00	\$310.00		\$1,000.00
Contributions/Grants	\$1,252.00	\$2,000.00	\$339.63		\$2,000.00
Income Total	\$9,751.18	\$13,000.00	\$5,886.63	Ⓢ	\$5,886.63
<b>EXPENDITURE</b>					
ANPS.Org (website domain/wordpress)	\$189.96	\$190.00	\$99.00		\$190.00
Claytonia (Print & Distribute 2 Issues)	\$2,334.06	\$2,000.00	\$1,175.92		\$2,400.00
Directory (Print and Distribute)	\$1,432.57	\$1,450.00	\$1,435.61		\$1,500.00
Memorial Awards/Scholarships	\$12,000.00	\$6,000.00	\$9,500.00		\$10,000.00
Grants/Support to Public Garden	\$0.00	\$1,000.00	\$1,020.00	(pending)*	\$1,000.00
Meeting expenses (venue, speakers, etc)	\$464.41	\$1,000.00	\$757.26		\$1,000.00
SWS: AR Eco Tour	\$250.00	\$0.00	\$0.00		\$0.00
Ecology Camp	\$0.00	\$0.00	\$0.00		\$0.00
Bulk Mail	\$290.00	\$290.00	\$320.00		\$320.00
PayPal/Square fees	\$35.43	\$100.00	\$75.35		\$100.00
Zoom (webinar series)	\$162.83	\$163.00	\$159.90	(pending, plus tax)	\$163.00
Supplies/postage/fees/misc	\$215.17	\$100.00	\$154.04		\$200.00
T-shirts/Hats/Books Purchases	\$1,139.25	\$800.00	\$0.00		\$500.00
Tabling (ASB, MG)	\$0.00	\$0.00	\$0.00		\$0.00
Expenditure Total	\$18,513.68	\$13,093.00	\$14,697.08	Ⓢ	\$14,697.08
		Cash Balance August 9, 2024	Ⓢ	\$9,365.95	-\$7,373.00
*Pending submission of receipts for native plants purchased for a garden at All Saints Lutheran School in Jonesboro; grant awarded Oct 2023.					
Submitted: Leslie Patrick, ANPS Treasurer					

# President's Message

What a summer! It's been incredibly dry this year, but fortunately some of our more drought-resistant species have been continuing to bloom. I know I've been enjoying the persistence of the ironweed and royal catchfly out at my place, even if most of everything else hasn't been flowering. And similar to those species who continue to give even when the well has run dry, I'd like to also acknowledge the persistence of a couple of longtime board members who recently passed the torch after many years of service to the Arkansas Native Plant Society.

First, after twelve years of loyal service to the ANPS as our Membership Officer and Publisher (doing both jobs for longer than he should have!), Mike Burns stepped down as Membership Officer at the end of 2018 and remained on the board as Publisher until the end of 2023. We are very grateful to Mike for the wonderful job he did keeping the membership file up-to-date and making sure that the membership directory and newsletter arrived in our mailboxes. We hope that you will join us in thanking him as



**Baldwin's ironweed (*Vernonia baldwinii*). Photo by Eric Hunt.**

well. Luckily, Joe Ledvina, who did an amazing job as our President in 2023, volunteered to fill Mike's shoes in the Publisher position.

Second, after six years as our Secretary, Margaret Lincourt also stepped down at the end of 2023. We want to acknowledge the wonderful job Margaret did recording our meeting minutes, revising our bylaws, and recording the bids at our live auctions. Please join us in thanking her as well. And thank you to Greg Rajskey for volunteering to pick up the torch Margaret has passed and serve as our new Secretary.

Once again, Sarah Geurtz has been working very hard to plan the fall meeting in the southwestern part of the state, and I for one am getting excited. This is turning out to be one for the record books, so mark your calendars and make your reservations now folks! We look forward to seeing you in October!

– Eric Fuselier, ANPS President and Program Officer

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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 in to receive 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

### Please check your mailing label!

The calendar year is the membership year. If your mailing label says "23" 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 20 and mail it to the address on the form.

Or renew online at [anps.org/join](https://anps.org/join).

# ATTENTION

ANPS Members! Please READ this!

Starting Spring 2025 we will be **switching to an all digital mailing of our newsletter *Claytonia***. If you would still prefer to get your *Claytonia* via snail mail please send a note to Molly Robinson at:

[anps.membership@gmail.com](mailto:anps.membership@gmail.com)

OR

2014 Scott St. Apt 3  
Little Rock, AR 72206

Reason: Over the years the number of grants and scholarships we have given out has increased due to increased attention to Native Plants in our society. This is wonderful! However, funds coming into ANPS has not kept up and hence we are looking for to trim expenditures. The mailing of the newsletter is one of our biggest expenses, so if we can reduce the number of mailings we can have money to support the botany students and native plant projects that need us!

*If you do not receive e-mails from ANPS and would like to, please send [anps.membership@gmail.com](mailto:anps.membership@gmail.com) an updated email address.*

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**Address Service Requested**

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