Vol. 46 No. 2 Fall 2026

CLAYTONIA

Newsletter of the Arkansas Native Plant Society

AR Native Seed
Pages 4-6

Grant Recipients
Page 6

Spring Meeting Recap
Pages 7-8

New Members
Page 8

Fall Meeting Details
Page 9

Lepidodendron
Pages 10-11

Members Passed
Page 11

Spring Meeting Minutes
Page 12-13

Spring 2027 Meeting
Page 13

Stowaway Seeds
Page 14-16

Corkwood
Page 17-21

New ANPS Brochure
Page 22-23

Treasurer's Report
Page 23

President's Message
Page 24

Membership App
Page 24

Rescuing Pondberry

By Ben Benton



Rescued Pondberry with its summer foliage in full display. This species shares a genus with another plant you may be more familiar with known as Spicebush (Lindera benzoin). Both species are well known for the pungent citrusy spice fragrance given off by their leaves and stems when crushed. Photo by Travis Marsico.

As botanists, you may be able to relate when I tell you that I savor the winter, a time when I can rest my mind, be free of the guilt that somewhere I might be missing a flower bloom and take a much-needed break from the Arkansas summer heat that sticks to you hours after returning to air-conditioned civilization. Ordinarily, I use my winters to relax. However, this last winter I found myself in a situation that left little time for rest.

On a late November afternoon, I was asked to hop on a call with some partners at the U.S. Fish and Wildlife Service. They explained to me that a population of a rare, endangered woody shrub called Pondberry (*Lindera melissifolia*) had been discovered within the footprint of a construction project in the northern portion of the Mississippi Delta. The project included a mitigation plan to salvage the patch of around 100 stems of Pondberry, and I was tasked with using my experience working with this endangered species to facilitate the removal process. For the construction project to be able to

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A flagged patch of Pondberry stems, surveyed in December 2025. Pondberry is a strongly rhizomatous species and spreads clonally creating large patches in the understory of bottomlands and seasonally flooded sand pond depressions. Photo by Ben Benton.

proceed by the end of February as originally planned, we had about three months to find these plants a new home.

Excited by the challenge and opportunity to save a plant in trouble, I first called Dr. Travis Marsico, Director of the Arkansas Bioscience Institute (ABI) at Arkansas State University, to ask if they had room in their greenhouse for some endangered shrubs. After hearing the details of the project, he enthusiastically agreed to help by providing their facilities and expertise. I thought that it would be likely that whatever crew we organized to remove the plants would not be experts on winter twig identification of Pondberry, so the first step in this rescue plan would be visiting the site to get the lay of the land and flag each stem with survey ribbon. With a group of volunteer surveyors assembled, we scheduled a visit just before the holidays in December.

After arriving at the site, we quickly realized that the scope of this project was much larger than originally anticipated. Walking through patch after patch of corky green stems, it became very apparent that the population was not around 100 stems as initially reported, but in fact, well over a thousand plants spread across several acres of the site's woodland understory. We set to work tying ribbon onto every bare stem of Pondberry we could find.

Occasionally, we came across a plant that could be identified as female, either because we could see the woody pedicels where the fruit had developed, or because it still had withered red drupes hanging from the stem. It has been documented in Arkansas Pondberry populations that sex ratios of these dioecious plants skew heavily to favor males, so these female plants were uniquely marked so that they could be treated with extra care while being rescued. When the last of the stems were flagged, we estimated the population to consist of approximately 1,600 stems, eight of which could be confirmed as female.

The increase in the order of magnitude of this project presented a few immediate problems that needed to be solved before the removal could begin:

Where were we going to find 1,600 pots, and would those all fit in the ABI greenhouse?

Where were we going to source appropriate soil to repot these plants in?

How were we going to get all these plants out of the woods, across the Mississippi delta, and repotted in the ABI greenhouse in Jonesboro?

With a little ingenuity, Kim Lee, the ABI Plant Propagation



Removal day. Plants were carefully excavated from the wild, before being transported to Arkansas State University in Jonesboro, nearly an hour away. Photos by Ben Benton.

Manager, devised a plan to use thick plastic sheets to convert the wire mesh greenhouse benches into standing raised garden beds, as we came to call them. This would allow us to replant the rescued Pondberry much more compactly than we could in individual pots, solving both issues of our first problem. Shortly thereafter, we arranged with the site's landowner to deliver a dump truck load of soil, taken just adjacent to the population of Pondberry, directly to the lawn of the greenhouse facility.

With preparations made for the rescue operation, we set to work to remove the endangered shrubs one warm morning in mid-February. With the help of around 20 individuals, assembled from state and federal agencies as well as non-governmental organizations, we began removing the plants one by one. Using shovels and hand tools, the plants were carefully uprooted. The plants came up easily because their roots were very shallow and their long runners were never deeper than a few inches underground. The soil surrounding the plants was like a rich clay, black with organic matter that clung to the roots in mats. We piled the plants tightly next to one another on a large tarp placed near the patch in the woods. When the tarps became full of Pondberry, it was hauled across the forest floor to the nearest road using an ATV. There the tarps, heavy with hundreds of endangered shrubs, were hoisted into the beds of pickup trucks and driven around an hour away to their new home.

At the ABI building, the plants were unloaded and, after a short elevator ride to the rooftop greenhouse, we began the process of untangling roots, separating the longer runners and replanting the plants in the raised garden beds. In total, this process of removing and replanting took a total of roughly thirty hours over the course of two days. Since then, under the dedicated expert care of Kim Lee, the plants have not only survived but flourished! A detailed count of what was rescued found that we had removed and transplanted a final total of 1,592 stems. The survival rate was high, and we estimated that 80-85% of the stems flowered this spring. As they bloomed, three additional female plants, producing pistillate flowers, were identified, bringing the population to a total of eleven female plants. Currently, the graceful arching stems of these plants are hidden beneath dense green summer foliage, and new shoots are poking out of the soil. I am hopeful that, through close collaboration between ANHC and faculty at Arkansas State University, new insights can be learned from researching these plants, insights that can help secure a more stable future for other populations of Pondberry still in the wild.



Team of volunteers sorting and replanting Pondberry into the 'raised beds' in the ABI greenhouse. The fully extended shade cloth on the roof above will make the plants feel like they are still in the sand pond woodland understory. Photo by Ben Benton.



Dr. Travis Marsico shows ANPS group the pondberry in the Arkansas Bioscience Institute's Greenhouse Bay 4 during the spring meeting. Photo by Virginia McDaniel.

In conservation, it can sometimes feel like you are constantly working against the clock, which can make it difficult to stay inspired while facing seemingly monumental challenges. I have found the most motivation when I look around and see that I am surrounded by people who have the desire to show up and help on a moment's notice. I am fortunate to be surrounded by such a great community of dedicated coworkers at the Arkansas Natural Heritage Commission, and colleagues with the Arkansas Forestry Division, U.S. Fish and Wildlife Service, Arkansas Natural Resources Conservation Service, The Nature Conservancy, Quail Forever, and Arkansas State University.

Ben Benton is a botanist with the Arkansas Natural Heritage Commission in Little Rock.

Challenges and Progress in Arkansas Native Seed-Based Restoration

by Andrew Ruegsegger

Many habitats throughout Arkansas need restoration if they are to support the biodiverse native plant and animal communities they once did. Of course, how you approach restoring any particular habitat will depend on your goals for restoration and whatever ecosystem type (prairie, woodland, savanna, etc.) we believe historically existed there. There is, however, a common theme represented in efforts to restore areas that have experienced long-term or high-intensity degradation: if these ecosystems are to return to their former biodiverse glory, we'll have to put some seed back into the system. And where that seed comes from matters! The genetic variation you find *within* plant species *across* their geographic range has implications for environmental and genetic compatibility within a species. For example, Tall Goldenrod (*Solidago altissima*) has a huge distribution across the United States from Maine to Florida across to eastern Texas and up to Canada north of Montana. It has two kinds of genetic differences across its range. One involves ecotype differences, which are variations in the genome of the species allowing adaptation to long-term climatic differences across its range. That means that, for example, if you try to grow seed from goldenrod adapted to southern Texas in Michigan, it will have a much harder time successfully growing than if you tried to grow seed from Michigan. This is an intuitive concept that I think many folks understand. Another difference, however, is less visible but can have equally dramatic implications for restoration success. Plant species can have different *chromosome counts* (also called *ploidy levels*) within a species. Variation in chromosome number is one of the reasons plants are so adaptable, why they are quite flexible to plant breeders, and why they are able to produce fertile hybrids. It is an important feature in plant evolution.

However, it is more common for things to go wrong when populations of different ploidy levels are crossed, especially when gene flow between populations is dramatic and sudden (i.e. bringing Tall Goldenrod from MI to TX). When this happens, it is common to see sterile offspring, increased mortality, and developmental defects. This is called outbreeding depression. Variation in chromosome counts is especially common in 'workhorse' species—species that have large distributions and occur abundantly where they grow, like Tall Goldenrod. And this variation can take place on relatively small geographic scales (Fig. 1). Unfortunately, these workhorse species are also the species most commonly used for restoration on account of seed being more readily available and being ecologically relevant in many places. Thus, facilitating locally based native seed industries is crucial for effective seed-based restoration.

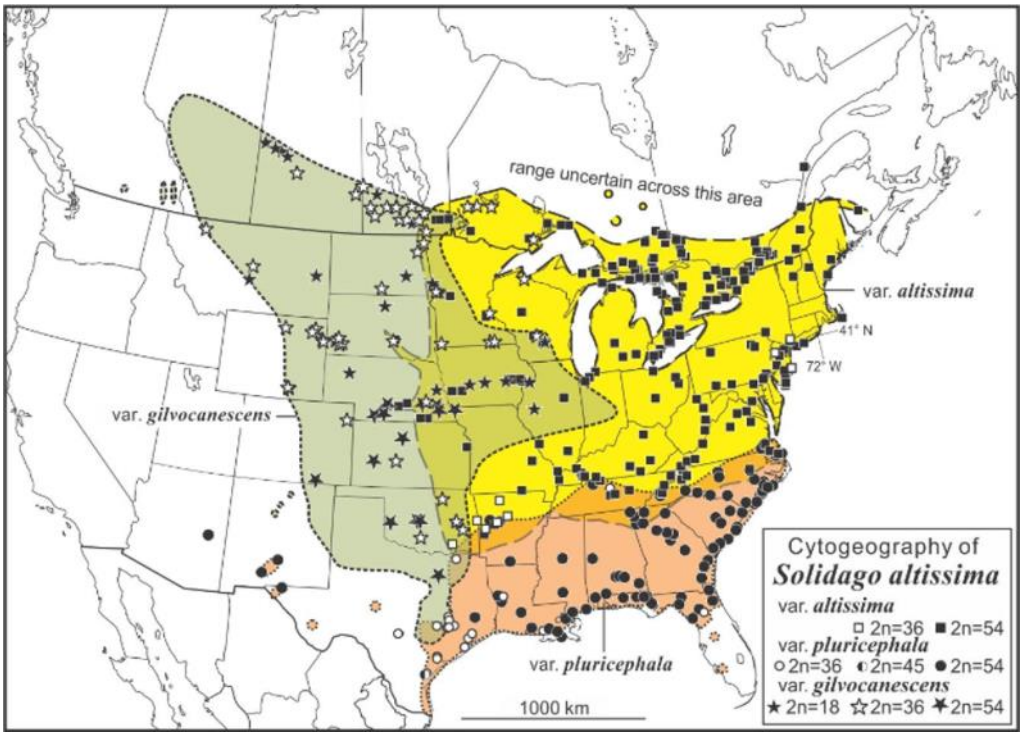


Figure 1. A map of chromosome counts for Solidago altissima across North America from Semple (2022). You can see that just within the Ozarks there are at least two different chromosome counts for var. altissima, illustrating that chromosome differences can occur even in nearby and somewhat similar regions.

Luckily, a native seed program has been established in Arkansas to initiate the long process of



Prairie Blazing-star with Rattlesnake-master in the background. Photo by Andrew Ruegsegger.

blending science, industry, and action to benefit large-scale restoration projects across the state by providing a centralized but locally adapted source of native seed. So far, program partners have developed six provisional seed transfer zones for the state (regions sharing climatic and environmental traits), assessed the demand for native seed, created a list of 85 target species, written a strategic plan, and began determining genetic research needs. And one of the program's partners, Audubon Delta, has worked with farmers to grow Arkansas-sourced seed for many years.

To support the seed program, Dr. Maribeth Latvis and Jennifer Ogle of the University of Arkansas, Fayetteville collaborated with Virginia McDaniel of the USDA Forest Service Southern Research Station to develop a novel project in the Ouachita and Ozark-St. Francis National Forests. The project involves identifying populations, gathering leaf material for genetic work, and collecting herbarium specimen vouchers of 20 of the seed program's target species (see list at end of this article) in grassland and upland oak-pine woodland habitats in both National Forests. The goal is to identify 10-20 populations of each species in each National Forest that contain at least 50 individuals in each population.

Jennifer, Virginia, Jack Looney and I have been the primary field workers on this grant, which began in 2024. over the past couple of years. We have collected from a total of 121 populations from 16 target species between the two National Forests thus far. That is out of 400 to 800 populations we hope to identify and collect from, so progress isn't bad!

It is an interesting and fulfilling but often tedious and hot job, like most field-based botanical positions. Working mostly in the Ouachita National Forest, I see a lot of Black-eyed Susan (*Rudbeckia hirta*), Hairy Woodland Sunflower (*Helianthus hirsutus*), Rattlesnake-master (*Eryngium yuccifolium*), Prairie Blazing-star (*Liatris pycnostachya* var. *pycnostachya*), and two of my favorites, Late Purple Aster (*Symphyotrichum patens*) and Oldfield Goldenrod (*Solidago nemoralis*). I really like the colors, textures, and vegetative architecture of Oldfield Goldenrod.

After we identify enough populations, Dr. Latvis will work on getting chromosome counts from the collected leaf material and will likely perform some analysis on the population genetics of several of these species. Overall, it will add to the growing body of knowledge we have on geographic chromosome and genome variation in workhorse plant species, which is more exciting than it may sound. But of course, the more salient findings will be on where we can use seed from what populations without worrying about causing harm to the gene pools of our wonderful native plant populations. And while that research is going on, another goal is to collect at least 5,000 seeds from each population, as funding and time allow. The scale of the project is ambitious, but it will have a huge payoff for seed-based restoration in Arkansas.



Woodland Sunflowers. Photo by Andrew Ruegsegger.

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Project Species List:

Green Milkweed (*Asclepias viridis*)
Cream Wild Indigo (*Baptisia bracteata* var. *leucophaea*)
New Jersey-tea (*Ceanothus americanus*)
Large-flower Tickseed (*Coreopsis grandiflora* var. *harveyana*)
Carolina Larkspur (*Delphinium carolinianum* ssp. *carolinianum*)
Pale Purple Coneflower (*Echinacea pallida*)
Rattlesnake-master (*Eryngium yuccifolium*)
Hairy Woodland Sunflower (*Helianthus hirsutus*)
Prairie Blazing-star (*Liatris pycnostachya* var. *pycnostachya*)
Beebalm (*Monarda fistulosa* var. *mollis*)
Sampson's-snakeroot (*Orbexilum pedunculatum* var. *pedunculatum*)
Foxglove Beardtongue (*Penstemon digitalis*)
Slender Mountain-mint (*Pycnanthemum tenuifolium*)
Black-eyed Susan (*Rudbeckia hirta*)
Compass-plant (*Silphium laciniatum*)
Oldfield Goldenrod (*Solidago nemoralis*)
Late Purple Aster (*Symphyotrichum patens*)
Goat's-rue (*Tephrosia virginiana*)
Ohio Spiderwort (*Tradescantia ohiensis*)
Baldwin's Ironweed (*Vernonia baldwinii*)



Oldfield Goldenrod. Photo by Andrew Ruegsegger.

Andrew Ruegsegger is a PhD student at the University of Arkansas, Fayetteville, and is ANPS President.

2026 Research Grant & Scholarship Recipients!







Aubrey Evans	**Jacob Nowlin**	**Yanlin Wang**
Arkansas Tech University	University of Central Arkansas	University of Arkansas, Fayetteville
Delzie Demaree Research Grant	Delzie Demaree Research Grant	Aileen McWilliam Scholarship
Award amount: $2,000	Award amount: $2,000	Award amount: $2,000

Looking Back at the ANPS 2026 Spring Meeting in Jonesboro

By Art Browning

Late last May, the Arkansas Biosciences Institute (ABI) at Arkansas State University hosted us for the long weekend, and we had a great time. Highlights included two excellent presentations during the two evenings we were there and several field trips through the morning and afternoon of Saturday and Sunday morning. The following pictures do more justice to our activities than the accompanying words.



WHO IS THIS? Jacob Nowlin, Sarah Geurtz, Deb O'Donnell, Susan Hubbard, and Larry Price investigate a vine in the Grape Family. Photo by Virginia McDaniel.

After our usual potluck dinner on Friday, our first guest speaker, Dr. Jonathan Kubesch, University of Arkansas Extension Forage Specialist spoke on the topic "What's the Deal with Native Clovers?" He concentrated on Buffalo clovers, which he has been studying for years. Jonathan's speech was recorded for posterity, and can be seen soon on the ANPS (Arkansas Native Plant Society) youtube channel.

We started our Saturday with two field trips in the morning. The one I consider to have been the highlight was at Kent and Cindy Owen's place NW of Jonesboro near Powhatan, AR. They invited us to share their joy in "Ozark Edge" where they live and are hard at work caring for Glades and doing Prairie Restoration. A few photos of our groups follow, and many more photos and descriptions of their native plants can be enjoyed on their website: ozarkedgewildflowers.com

The other morning field trip that day was to Bayou DeView, a Wildlife Management Area maintained by the Arkansas Game and Fish Commission (it is officially known as Earl Buss Bayou DeView WMA). Due to drought



Cindy Owen speaks to the group on her restored glade property called Ozark Edge. Photo by Virginia McDaniel.

in the area during the preceding winter, we were able to walk through the bottomland hardwood forest without wearing waders. Willa spoke of having done a cypress census a few years ago in hip-deep water! Among the many plants (and critters!) we saw were quite a few near -record size trees including Pumpkin Ash.



Jennifer Ogle and Travis Marsico standing in front of the very pumpkin ash that is pictured (which was taken by Travis!) in Trees, Shrubs, and Woody Vines of Arkansas. Photo by Virginia McDaniel.

After breaking for lunch, two more options were available for the afternoon field trips, including an indoor one, especially attractive for people tired of hot weather. (Ha! I write this during the mid-August heat wave.) Dr. Travis Marsico, Director of ABI, and members of his staff gave a very interesting tour of the state-of-the-art facility. For a glimpse of the many projects going on there, visit

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Ozark Edge glades and prairie restoration hike. Photo by Samantha Heller.

https://www.astate.edu/research/arkansas-biosciences-institute/index.html

Crowley's Ridge State Park's brochure touts it a being "one of the most beautiful and fascinating areas within the United States." Standing some 100-200 feet above the surrounding plains, the ridge is an erosional remnant, a paleo-island that stood between the ancestral Mississippi and Ohio rivers until the Ohio captured the Mississippi near the end of the most recent ice age. We walked up and down Dancing Rabbit Trail, seeing many kinds of trees and other plants.

During the evening back at the extra-special meeting venue, we finished off the remains of our potluck supper, then were entertained by Dr. Travis Marsico, who spoke about efforts at ABI to preserve and study threatened species of plants. He especially focused on "The Endangered Pondberry (*Lindera melissifolia*)". Travis's speech can be enjoyed soon on the ANPS (Arkansas Native Plant Society) youtube channel.

At the end of the meeting, the traditional Silent Auction closed, whose generous bids ($162) support our ANPS small grants program, student research grants, and student scholarships.

Sunday morning's field trips were repeats of the visits to Ozark Edge and Crowley's Ridge, with another option closer to town, the Forrest L. Wood AGFC Nature Center.

Art Browning is a happily retired geologist now living in North Little Rock, AR and current President-Elect of ANPS.



Group photo at Crowley's Ridge State Park, Dancing Rabbit Trail. Photo by Jennifer Ogle.

Welcome, New ANPS Members!

New Members to ANPS since the spring issue of *Claytonia* (between 08 March 2026 and 18 August 2026)

Rachel Borofsky (Bentonville, AR)
LaKay Dailey (Paris, AR)
Ben Davis (Fayetteville, AR)
Carol Davis (Bono, AR)
Mary Clare Flanagan (Fort Smith, AR)
Donald Hall (Bella Vista, AR)
Shelly Lamb (Jonesboro, AR)
Richard L. Lawrence (Little Rock, AR)
Travis Marsico (Jonesboro, AR)
Christy Payne (Fayetteville, AR)
Lily Shaw (North Little Rock, AR)
Vic Snyder (Little Rock, AR)
Tina Gray & Paul Teague (Jonesboro, AR)
Thomas Teoh (Jonesboro, AR)
Stacy Wilson (Little Rock, AR)
Donald & Beth Wilton (Hot Springs Village, AR)

New Lifetime Members

Richard E. Arrington (Maumelle, AR)
Deborah Jolly (Calico Rock, AR)
Sandy Moore (Little Rock, AR)
Dirk Philipp (Fayetteville, AR)
Brett J. Savary (Jonesboro, AR)

ANPS Fall Meeting

September 25 –27, 2026 in Mena, 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 25. The meeting events wrap up on Sunday, September 27 around noon.

People who attended the 2016 meeting in Mena will get to see how field trip locations may have changed over the course of a decade!

Meeting Location: Mena Street Event Center
918 Mena Street; Mena, AR 71953

Parking is all up and down Mena Street, and Saturday when several businesses are closed, behind the building. See the satellite image showing parking along the street and the photo of the storefront. The best description of the venue is on their Facebook page, for those of you who do that:

Lodging: Sun Country Inn
1309 N U.S. 71, Mena, AR 71953

We have a block of 25 rooms reserved at $110 per room, plus taxes. The block includes 15 double queen and 10 king bed rooms. This rate is good until Monday, August 31. To **make a reservation by phone**, call **479-394-7477** (or 877-394-7477) and ask for the Arkansas Native Plant Society room block. Individuals are responsible for their own room and taxes. A map can be found on their website. (Of course, if you are unable to (or wish not to) reserve a room at Sun Country Inn, there are other motels, inns, and B&Bs.)

Dining Options: We will have a potluck meal Friday and Saturday evenings. Bring a dish or just come, eat, and socialize! There are also quite a few dining options in Mena and nearby. (Cafes, diners, fast food, and some fancy-sounding places!)

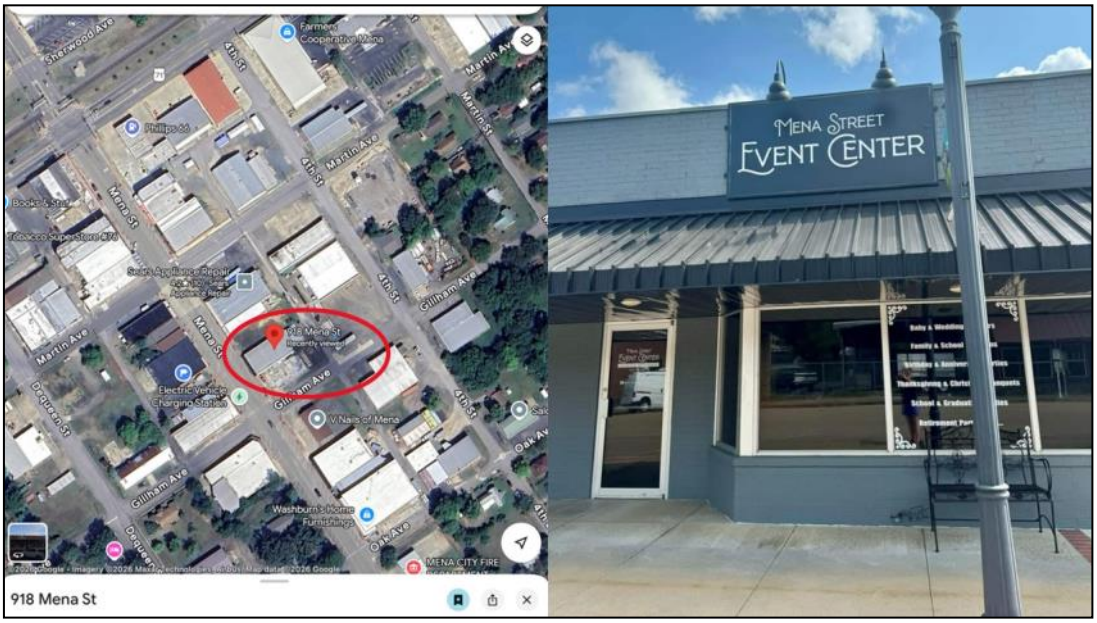
Auctions: We will have the exciting LIVE AUCTION on Friday evening at 7:00. The SILENT AUCTION will begin Friday at 6:00 PM and will close at the end of the program on Saturday evening. Proceeds support the ANPS small grants program, student research grants, and student scholarships!

Bring your native plants and any other native plant-related or adjacent donations you would like to include in either auction before 6:00 PM Friday. Auction sheets for the silent auction will be provided. If your item does not sell, you must take it back with you at the end of the meeting.

Saturday Evening Speaker: Dr. JD Wagner, Terrestrial Ecologist with The Nature Conservancy in Arkansas, will present on the topic *Fire Ecology: Flora and Fire*.

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. You must sign up for field trips on Friday evening to allow for adequate logistical planning. Our field trips will offer both easy and more vigorous walks. We'll be in western Arkansas in the fall, so as usual we advise bringing bug spray, water, and a good hat.

For complete and up-to-date details, go to the ANPS Fall Meeting page on the website or contact Art Browning at art.browning@gmail.com; (281) 728-6327.

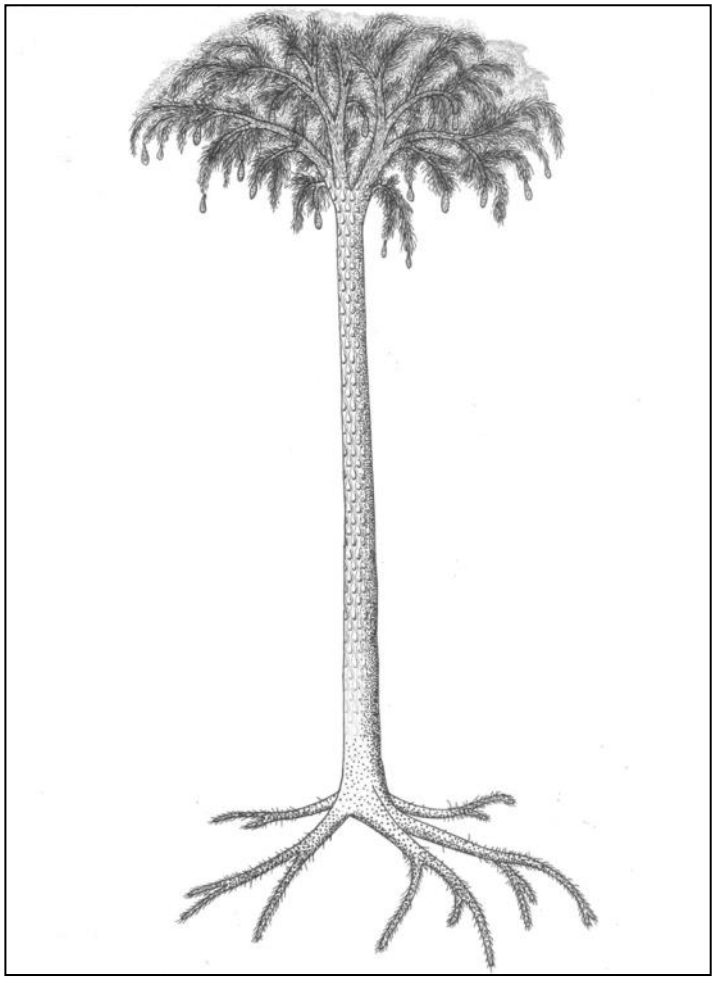


Red circle shows where the Mena Event Center is located.

Giants of a Lost Forest:

The *Lepidodendron* Fossils of Arkansas

By JD Wagner



Reconstruction of Lepidodendron plant from the known fossil remains. By Falconaumanni - Own work, CC BY-SA 3.0, https://commons.wikimedia.org/w/index.php?curid=46634958

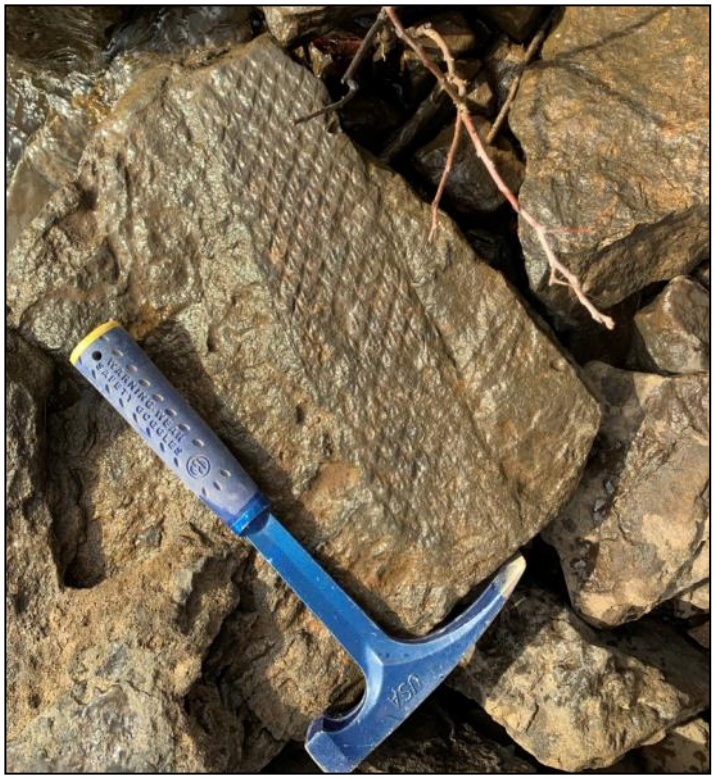
Many millions of years before flowering plants, grasses, and modern forests dominated the landscape, enormous lycopod trees formed dense, swampy forests across much of the world. One of the major players and most recognizable of these ancient plants was *Lepidodendron*, an extinct tree-sized relative to modern club mosses (see drawing above). Fossils of *Lepidodendron* can be found throughout Arkansas (see photos to the right and on the next page) and are particularly important because they provide a glimpse into the warm, humid environments that existed here during the Carboniferous period, more than 300 million years ago.

Lepidodendron lived primarily during the Mississippian (359-323 million years ago) and Pennsylvanian (323 to 299 million years ago) periods (subperiods of the Carboniferous), when much of the Earth's tropical land was covered by extensive wetlands. These forests contained giant lycophytes (including *Lepidodendron* and *Sigillaria*), horsetails like *Calamites*, and seed ferns. The remains of this vegetation accumulated in waterlogged environments where decomposition was limited due to the anoxic water, lending itself nicely to preservation and, ultimately, fossilization. Over millions of years, the buried plant remains were compressed and chemically altered, contributing to the formation of coal and other fossil bearing rock deposits. Arkansas's Carboniferous rocks preserve an important record of the vegetation that once occupied these ancient wetlands.

The most distinctive feature of *Lepidodendron* fossils is their bark. When the outer surface of the stem was preserved, it commonly produced a detailed pattern of diamond- or triangular- shaped leaf scars arranged in regular spirals. Fossils with this characteristic triangular bark pattern are referred to as *Lepidodendron*. These fossil fragments are especially abundant in the Pennsylvanian Hartshorne Sandstone and McAlester Shale of the Arkansas River Valley, and specimens have also been reported from the Imo interval, Wedington Sandstone, Cane Hill Member of the Hale Formation, and Atoka Formation in the southern Ozark Plateaus.



Lepidodendron fossil from Newton County, Arkansas. Photo by Virginia McDaniel.



Lepidodendron fossil found in Fairfield Bay, Arkansas, near Greers Ferry Lake. Photo credit JD Wagner.

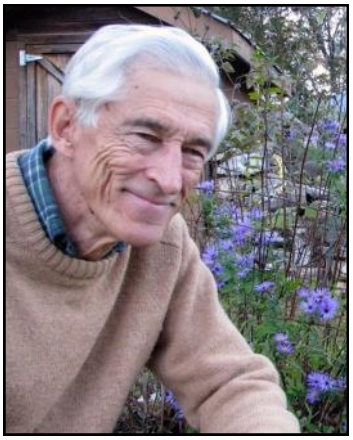
In Bates, Arkansas, *Lepidodendron* fragments have been documented alongside *Stigmaria*, the distinctive root system associated with these giant lycophytes. Other plant remains, including leaves and woody fragments, occur in the same fossil-bearing rocks. Together, these fossils help reconstruct the structure of ancient Carboniferous plant communities and ecosystems, rather than simply representing isolated pieces of individual trees.

Today, a *Lepidodendron* fossil may appear to be little more than a patterned impression in a piece of sandstone or shale, yet each fragment records a vanished ecosystem and a time when tree-sized lycopods formed some of Earth's most extensive forests. Arkansas's *Lepidodendron* fossils are more than attractive geological specimens – they are evidence of the ancient landscapes, climates, and plant communities that helped shape the state's geological history.

Dr. JD Wagner is a Terrestrial Ecologist with The Nature Conservancy in Arkansas in Little Rock.

Members Passed—A Place to Remember

John (Jack) Stewart, 82, of Jasper, died at North Arkansas Regional Medical Center in Harrison on Friday, July 17 with his wife at his side. The son of the late John Richard and Winona (Moon) Stewart, Jack was born at Fort Bragg, North Carolina on November 11, 1943. He was preceded in death by his parents and brother, Robert Stewart.



Jack Stewart

Interested in birds in his early teens he became a member of Morris County Audubon in NJ and continued as a National Audubon Society member all his life, including serving on the National Audubon Board and as president of Arkansas Audubon. Birds led Jack to an interest in nature and an appreciation of the interconnectedness of all life.

He and his wife spent 17 years teaching in international schools in the Dominican Republic (where their daughter was born), Iran, both Irian Jaya and Sumatra, Indonesia and Kuala Lumpur, Malaysia and enjoyed learning about life in deserts to tropical forests. He and his wife retired and built a solar electric home near the Buffalo River.

Jack enjoyed wandering in natural areas, classical music, reading, writing and advocating for many causes important to protecting the environment. He was good at making people feel comfortable with him, including his students and people of all walks of life. He particularly enjoyed conversations with his granddaughter Alicia.

He is survived by his wife, Pam, daughter and son-in-law, Kristina & Tom Minior and granddaughter, Alicia.

If you would like to make a donation in Jack's memory, some of the organizations he supported are National Audubon Society, Arkansas Audubon Society and the Newton County Library.

A Memorial/Celebration of Jack's life will be held September 27, 2026, at Ozark Campground pavilion, Buffalo National River, from 3 to 5 pm. The date was chosen in part because the latter half of September is known by bird watchers as peak season for autumn migrants to be over Arkansas on their flight southward. The area is close to where Jack and Pam chose to live in retirement to enjoy nature.

Spring 2026 Business Meeting Minutes

Arkansas Native Plant Society
May 16, 2026
Arkansas State University, Arkansas Biosciences Institute
Jonesboro, Arkansas 72401

The Arkansas Native Plant Society (ANPS) held its Spring 2026 Business Meeting at the Arkansas Biosciences Institute of Arkansas State University in Jonesboro, Arkansas. President Andrew Ruegsegger called the meeting to order at 7:08 p.m. He thanked all the members of the Board of Directors individually for their contributions to the Society. He also acknowledged Dr. Travis Marsico for his support of the meeting.

Field Trips. Andrew thanked everyone for coming to the meeting and invited everyone to attend one of the Sunday morning field trips, whether to Crowley's Ridge State Park or to OzarkEdge. He noted that the Saturday morning and afternoon field trips had been well received, thanking the field trip leaders for conducting the hikes and inviting them to describe highlights of those excursions.

The afternoon visit to Crowley's Ridge State Park (Dancing Rabbit Trail) was described as being focused on woody plants and other woodland denizens.

OzarkEdge Glades and Prairie Restoration, owned by ANPS members Cindy and Kent Owen, was characterized as being home to many glade, prairie, and woodland species, having been under active restoration and management for many years.

At Bayou DeView Wildlife Management Area, due to ongoing drought conditions, visitors were able to traverse areas often inundated or having saturated soils.

The afternoon tour of the Arkansas Biosciences Institute, led by its Executive Director Travis Marsico, featured various operational areas, including research laboratories, animal care facilities, and the rooftop greenhouse.

Andrew reported that the Sunday morning tours would include additional opportunities to visit Crowley's Ridge State Park or OzarkEdge Glades and Prairie Restoration.

Approval of Minutes. The minutes of the ANPS Business Meeting held September 20, 2025 had been published in the Spring 2026 edition of the *Claytonia* newsletter. Isaac Ogle moved to accept the minutes as presented; Joe Ledvina seconded; motion carried.

New Award. Andrew invited Virginia McDaniel, Editor of the *Claytonia* newsletter to step to the podium. She presented a whimsical new award: the "Claytonia's Failure to Procrastinate Award" to the first person to submit an article for the spring 2026 edition of the newsletter. Recipient Greg Rajsky noted that he was pleased to receive an award for his writing—even if it was only because he was punctual.

Native Plant Month Proclamation. Andrew showed the audience the governor's proclamation declaring May 2026 to be Native Plant Month in Arkansas, noting that Ralph Weber had been instrumental in that achievement. He announced that the document would go to the highest bidder at a live auction to be held later in the evening.

Ozark Chapter Report. Sue Hubbard, representing the ANPS Ozark Chapter, reported that an Arkansas River Valley Excursion would be held May 23. The field trip would include a visit to Sid and Jeanette Vogelpohl's "Know Your Natives Garden," named for the series of superb articles authored by Sid for the ANPS website over the past ten years. A second stop on that excursion would be a tour of Pine Ridge Gardens, owned by member Brent Baker and deemed to be one of the premier native plant nurseries in Arkansas. She noted that fliers were available on a table at the back of the room and encouraged everyone to visit the Ozark Chapter, Arkansas Native Plant Society (OCANPS) Facebook page for updates and announcements of future events.



Travis Marsico presents at the ANPS Fall Meeting. Photo by Virginia McDaniel.

Treasurer's Report. Samantha Heller presented the statement of financial position as of March 14, 2026, reflecting a fund balance of $29,6792.12.

Membership Directory. ANPS Publisher Joe Ledvina reported that the Board had decided to issue a paper edition of the 2026 membership directory, which would be sent to those members who request it in response to a forthcoming email invitation.

New ANPS Logo. Membership Officer Molly Robinson unveiled a fresh ANPS logo, which she had redrawn using the original color scheme and general design, with updated lettering and scalable to larger image size with less pixelization. The Board had enthusiastically approved the new logo at their spring meeting earlier that month.

2026 Fall Meeting Update. President Elect Art Browning gave a brief report of ongoing plans for the Fall Meeting, likely to be conducted at UA Rich Mountain in Mena, Arkansas, September 25 through 27, 2026.

Student Research Grants and Scholarship. Awards Officer Jennifer Ogle reported that the Awards Committee (members Ben Benton, Rick Noyes, and Jennifer Ogle) recommended funding the following grant and scholarship applications, which the Board approved in the amount of $2,000 each:

Aubrey Evans of Arkansas Tech University for a Delzie Demaree Research Grant to complete what would be the first comprehensive floristic checklist of vascular plants in Pope County.

Jacob Nowlin of the University of Central Arkansas for a Delzie Demaree Research Grant to complete his master's thesis on the subject of floodplain forests in the Mississippi Alluvial Plain of Arkansas.

Yanlin Wang, PhD student at the University of Arkansas, Fayetteville, for an Aileen McWilliam Scholarship to support the pursuit of her botanical studies.

Virginia McDaniel moved to approve these awards as recommended by the Board; seconded by Joe Ledvina; motion carried.

Grant Status Report. Andrew reported that ANPS had recently funded a grant request from the Samaritan Community Center in the amount of $500. In addition, he noted that the Board had recently approved a grant request from the Arkansas Natural Heritage Commission for their Summer Internship Program in the amount of $1,000.

Jennifer reported that the Board also approved a request for the planned Reciprocity, Restoration, and Relational Ozarks Convening (tentatively scheduled for April 2027) in the amount of $2,000 to support bringing author Robin Wall Kimmerer to deliver the keynote presentation.

Membership Brochure. Molly unveiled designs for a new membership brochure that she had developed. The design was enthusiastically received. Printed brochures would be available in due course.

Auction. Andrew conducted a live auction of the proclamation declaring May as Native Plant Month in Arkansas, signed by the governor. The winning bid came from sisters Susan Hardin and Nina Orsini, who planned to use the proclamation as a gift to their (other) sister.

Adjourn. There being no further business, Jennifer moved to adjourn the meeting; seconded by Joe. Andrew adjourned the meeting at 7:45 p.m.

Respectfully submitted,
Gregory T. Rajsky
Secretary

SAVE THE DATE!

SPRING 2027 MEETING

MAY 14-16

Eureka Springs, AR



Rue Anemone at Lake Leatherwood.

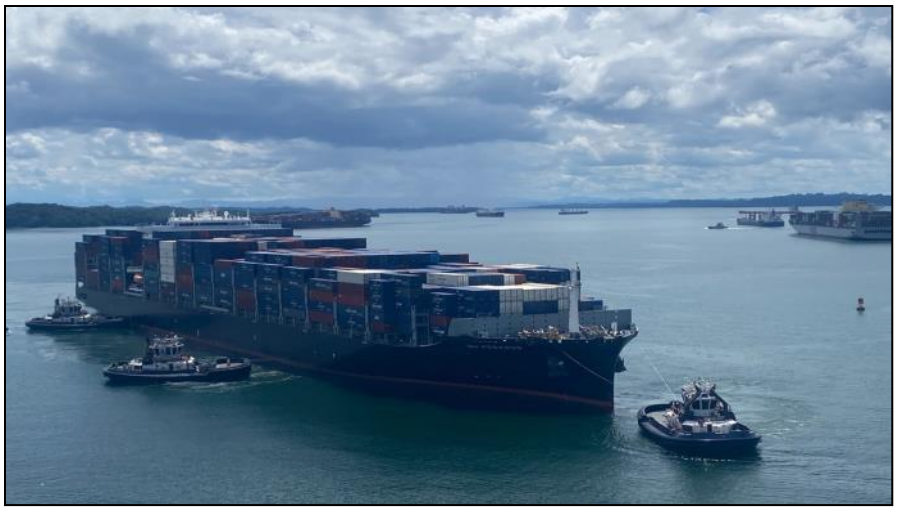
Photo by Eric Hunt

Stowaway Seeds

Wild Sugarcane and the Hidden Botanical Risks of Global Shipping

by Travis D. Marsico

A decade of research projects, beginning in 2015, has followed one question: What plants travel unnoticed on the outside of refrigerated cargo containers, and where might they establish next?



A container ship being escorted by the Panama Canal Authority into the Agua Clara Lock after its transit out of Lake Gatún. A container ship of this size can sometimes carry up to 5,000 containers at a time. Photo by Josh Poland.

A botanical blind spot

Most of us picture global shipping as a way of moving food, clothing, electronics, and other goods. Yet every refrigerated shipping container also has an exterior exposed to farms, roadsides, rail yards and railways, ship decks, and ports. Seeds can lodge in corners and crevices, especially in the air-intake grilles of the refrigerated containers. These tiny hitchhikers are easy to miss, but some remain alive even after long journeys.

Our team began sampling refrigerated containers at the Port of Savannah, Georgia, in August 2015. Using backpack vacuums fitted with fine fabric filters (i.e., stockings / pantyhose), we collected debris from individual air-intake grilles, then sorted the material under microscopes. Across the 2015–2016 and 2016–2017 shipping seasons from the Pacific through the Panama Canal region to the Southeast USA, we recovered more than 11,000 seeds from 628 containers. The collections represented at least 30 plant species. Many were light, wind-dispersed plants, exactly the kinds of seeds most likely to become airborne and adhere to machinery.

The fieldwork also extended beyond the containers themselves. Four seasonal surveys of small green spaces within the port documented 174 plant species. Sixty-one, or about 35 percent, were non-native to the southeastern United States. Compared with other regional plant inventories, the Garden City Terminal at the Port of Savannah had a much higher percentage of non-native species and many more non-native species per acre. We hypothesized that the port site was receiving seeds, and its frequently disturbed ground also provided potential landing places where new arrivals might grow.

Why wild sugarcane stands out

One seed type was especially abundant: wild sugarcane, *Saccharum spontaneum*. This is not the familiar cultivated sugarcane of southern farms. It is a tall perennial grass, often crowned by large, silky white flower clusters (see figures). It can reproduce by thousands of wind-dispersed seeds and by an extensive network of underground rhizomes. Those two strategies make it particularly difficult to contain once established.

Wild sugarcane is native to South and Southeast Asia and has long been useful in domestic sugarcane breeding



One of our researchers (Josh Poland) vacuuming a refrigerated shipping container for wild sugarcane seeds on one of the port sites in Panama. Photo by Maycol Madrid.

because it carries traits such as stress and disease resistance. Those traits helped move it around the world. Outside its native range, however, it has become invasive in several tropical and subtropical regions. Dense stands can crowd out other vegetation, alter fire behavior, slow forest regeneration, interfere with agriculture, and serve as a host for crop pests and diseases. In the United States it is regulated as a Federal Noxious Weed (FNW), the only species on the FNW list that is banned and actively used in crop improvement breeding programs.



Wild sugarcane in Panama. This species is known locally as "Paja Canalera" or "Canal Grass" because it is so prevalent in the country in the Panama Canal Watershed. Photo by Kristin Saltonstall.

Our germination tests confirmed that seeds arriving on containers were not merely botanical dust. Wild sugarcane had a 9 percent germination rate in controlled trials, and 47 percent of those seedlings survived beyond the transplant stage. Modeling based on the observed seed arrivals showed that even very low escape rates could create a meaningful chance of establishment. We estimated that more than 40,000 wild sugarcane seeds entered the Garden City Terminal on the sampled shipping pathway during the two study seasons.

Identification is harder than it looks

A seed is often missing the important botanical features that experts use for identification. For example, individual seeds, fruits, or clusters of fruits do not hitchhike with the leaves and flowers. We therefore tested genetic identification through DNA barcoding, a method that compares short pieces of DNA with reference databases. Directly extracting useful DNA from the tiny, weathered seeds was unreliable, so we germinated seeds and tested their leaf tissue. From 90 seedlings, we recovered 157 usable barcode sequences and 18 distinct genetic types. The work showed that DNA can reveal hidden diversity and help flag risky material, but the standard barcode regions did not consistently identify grasses to species. Some grasses were closely related enough that the barcode sequences for different species were the same, which limited the ability to discern those species. Current Arkansas State University Ph.D. student, Soraya Byrdsong (previous recipient of Aileen McWilliam Scholarship from ANPS), is working to improve genetic barcoding in two ways. She is exploring approaches to effectively extract DNA directly from seeds, and she is expanding the DNA barcode set to be able to discern all seeds to the species level. For now, molecular tools complement rather than replace careful botanical identification based on morphology.



Wild sugarcane (Saccharum spontaneum) just outside the Agua Clara Lock in Colón, Panama. This serves as the last stretch of passage out of the Panama Canal for many container ships before they begin their journey in the Caribbean Sea. Photo by Josh Poland

Following the seeds back to Panama

The Savannah results pointed repeatedly toward the Panama Canal region, where wild sugarcane is abundant and many containers pause or transfer between ships, trains, and trucks. Arkansas State University doctoral student Josh Poland (funded twice by ANPS) has now taken the work directly to ports on both sides of the isthmus. From October 2025 through March 2026, he and collaborators sampled 1,606 active refrigeration units. His still-

unpublished analyses indicate that most refrigerated containers sampled during the peak dispersal period (October and November) carried wild sugarcane seeds. He also found that containers transiting the Panama Canal carried significantly more seeds than non-transiting containers.

The newer work also suggests that transport mode matters. Containers accumulated more wild sugarcane seeds the longer they remained in port, Caribbean-side ports continued to add seeds after canal transit, and truck-transported containers carried fewer seeds than those moved by ships or trains. Shipping records showed that contaminated containers were headed to many countries. These findings shift our understanding from a single U.S. port to a global network: A major transportation hub can become a place where containers repeatedly collect and redistribute seeds.



Wild sugarcane in fruit along the road near Lake Okeechobee, Florida. Note the bright white panicles at the top of the plants. Photo by Travis Marsico.

Students extending the long-running study

This research has always depended on students. The original collections, greenhouse trials, herbarium vouchers, DNA work, and data analyses created a foundation that students continue to expand. ANPS support has been especially meaningful. Josh Poland's field research in Panama is tracing where seeds are acquired and where contaminated containers travel. ANPS-funded student Soraya Byrdsong has contributed to the continuing port dataset from Savannah, Georgia, as she is sorting and counting seeds collected randomly from refrigerated containers over a two-year period from February 2023-March 2025. So far, she has counted over 7,000 seeds, of which 62% are wild sugarcane. Other seeds are primarily from small achene composites (Asteraceae) and the genus *Typha* (cattails). The student contributions connect hands-on botanical research with questions that matter to conservation and international biosecurity.

What this means for native-plant conservation

The lesson is not that every transported seed initiates a biological invasion. The concern is repeated opportunity. When thousands of viable seeds arrive on a steady stream of containers, even a very small proportion escaping into suitable habitat can matter. Ports are highly disturbed, connected places, and cargo may move inland within a day or two. Prevention at the pathway is therefore much more realistic than trying to eradicate an aggressive grass after it becomes widespread.

Practical steps to reduce risk include targeted cleaning of container air-intake grilles during peak seed season, better surveillance at transshipment hubs and ports of entry, improved rapid identification methods, and routine botanical monitoring of industrial green spaces. Just as important are partnerships among scientists, shipping companies, port authorities, and regulatory agencies. The field collections begun in 2015 show the value of looking closely at places botanists do not traditionally visit. A paved industrial port may seem far removed from an Arkansas woodland or prairie, but protecting native plant communities sometimes begins by finding a few seeds hidden in a grille, before those seeds have the chance to grow.

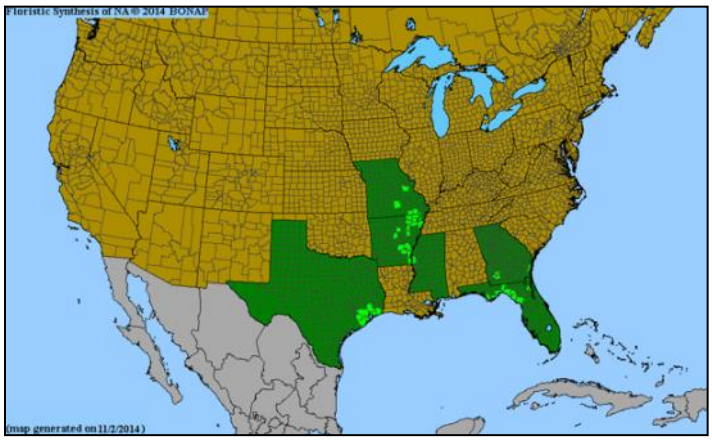
Acknowledgments. The author gratefully acknowledges the Arkansas Native Plant Society for supporting student researchers Josh Poland and Soraya Byrdsong, and the many university, agency, port, and industry partners who made this work possible, particularly Dr. Rima Lucardi of the USDA Forest Service, Southern Research Station, who brought this project to me and has led this work with me from the beginning. Findings from the 2023–2025 Port of Savannah and 2025–2026 Panama sampling are preliminary and unpublished.

Dr. Travis Marsico is Vice Provost for Research, Innovation, and Discovery and Executive Director of the Arkansas Biosciences Institute at Arkansas State University in Jonesboro.

Corkwood, Disjunct Species, Documenting, and Stories

by Andrew Ruegsegger

Late last May, I found myself walking down a gravel road near Waccasassa Bay State Preserve in Florida. My car was parked two or three miles behind me at a gate that let me know a timber company was leasing the couple thousand acres I was on to a private hunting group. Despite this, I had forged on, desperate to relocate a population of Corkwood (*Leitneria floridana*) an herbarium specimen label said was found here some 30 years ago. Two months earlier I had been near Galveston, Texas hunting for populations of the closely related Texas Corkwood (*Leitneria pilosa* subsp. *pilosa*), also using locations on herbarium specimen labels made decades ago.

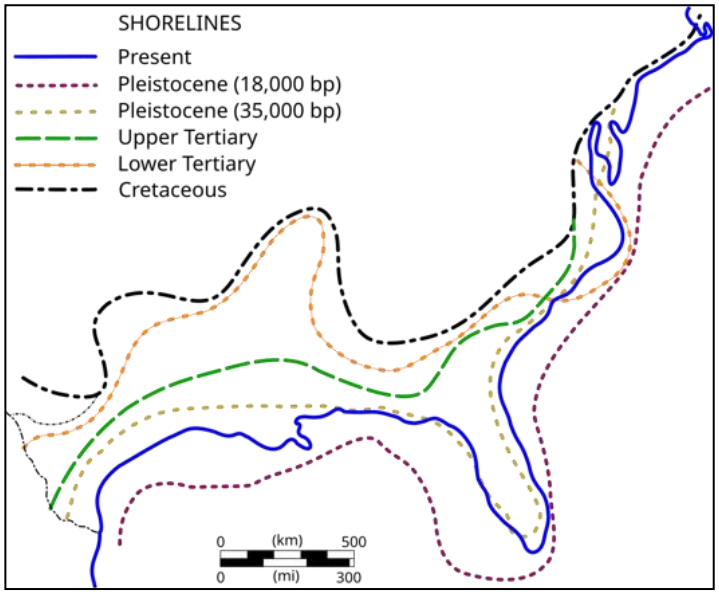


Distribution of the genus Leitneria, according to BONAP.

These two plant species I had searched for were once a single species: *L. floridana*. In fact, the Texas Corkwood (*L. pilosa* subsp. *pilosa*) was only one of two taxa split out of *L. floridana*. Also came our Ozark Corkwood (*L. pilosa* subsp. *ozarkana*), a member of the *Leitneria* genus thought to be more closely related to the Texas Corkwood than the one found in Florida and, historically, Georgia. Schrader and Graves (2011), the botanists who made the split, determined that these were all different enough to be called varieties based on morphology, genetics, and geographic distance. The differences in morphology include that the *L. pilosa* subspecies have smaller leaves with densely hairy leaf undersurfaces compared to *L. floridana*. Then, within *L. pilosa*, Ozark Corkwood has "larger, elliptic to slightly oblanceolate or obovate leaves with longer petioles" than the Texas Corkwood. The genetic differences don't matter all that much here, but the geographic distance is an interesting one (see BONAP map above).

The genus occurs only in southeastern Missouri and eastern Arkansas, southeastern Texas, and northwestern Florida and a little into Georgia and *nowhere in between*. Biogeographers call species with this kind of separate and distant distribution ***disjunct***. Disjunction can occur through several processes, but the more intuitive and common explanations involve either changes in climate or a process called ***vicariance***, where a physical barrier might split a population into two or more groups. Eastern North America has undergone several dramatic climatic and environmental shifts over the last many millions of years which has led to several complex and unclear patterns of disjunction in the eastern US (see Xiang & Soltis 2001 and Soltis et al 2006 for more).

Several explanations for *Leitneria*'s disjunction exist, but I think one involving changes in habitat availability is compelling. I've seen this genus now in three far-off places: northwestern Florida, southeastern Texas, and northeastern Arkansas. In every place I have seen it grow, the habitat is remarkably consistent. It likes having its feet wet: it can grow either in the water directly or in the floodplain adjacent to a waterbody, though it seems to do best directly in water. The intermittent flooding associated with these areas means that the plants are tolerant of a level of disturbance. I have found it several times in road ditches where the land is flat and wet. It



Shoreline of the Gulf Coast through different geologic periods. From http://www.csc.noaa.gov/beachnourishment/html/geo/. This website no longer exists.

loves swamps. You don't have to be in a swamp to find it, but it seems likely that that is where it is best adapted. Consider, then, how the Mississippi River (alongside the Ohio) over the years has meandered widely back and forth forming the alluvial deposits of what many call the Delta (but which is actually an alluvial plain) and that there are several Floridian species that, according to Trelease (1895), tend to accompany *Leitneria*'s presence in Missouri swamps. He posits that *Leitneria* and its associates represent:



A population of Leitneria pilosa subsp. pilosa used to grow here in Freeport, Texas. Photo by Andrew Ruegsegger.

the remnants of a warm temperate swamp flora which at one time extended continuously in the low lands, around the coast and up the river, from Florida to the upper limits of the present deep swamps; and that they are now likely to be found in such situations at any point between the extremes, where the original conditions have remained little or not at all changed by the general drainage which has been progressing at least for the last few centuries.



Colony of Leitneria floridana growing in standing water in Florida. Photo by Andrew Ruegsegger.

Trelease was only aware of one specimen from along the Brazos in Texas at that time, so this explanation doesn't account well for the Texas populations. Schrader & Graves (2011) build off of this basic explanation. They believe that separation between the east and west populations might have occurred as early as 56 million years ago (mya) when the shoreline of the present-day United States stretched much further inland – all the way to where the Mississippi and Ohio rivers intersect (see Lower Tertiary line of map on previous page). As the coastline receded, populations colonized southward but were kept further separated by "repeated inundations of the Southeastern Coastal Plain" during a period around 2.5 mya. As the landforms separating the eastern from the western populations became drier, they settled into their modern distributions. The separation of the Ozark and Texas Corkwood, they posit, occurred more recently (~1 mya), also due to the land between the two subspecies drying. So, separation occurred due to a mix of physical barriers including huge waterbodies and habitat loss over millions of years.

I like this example because it illustrates evolutionary processes rather elegantly. First, *Leitneria* was already adapted to swampy places. Then a physical barrier(s) arrived, which limited and continues to limit gene flow between populations. So, the populations became distinct as they adapted to their still-changing environments, and the subset of alleles of each group of isolated populations underwent selection. That is super neat to me. This story also illustrates how disjunct species in particular are useful for explaining and understanding these evolutionary processes.

And that is why I was in Florida and Texas last year hunting for these populations. I was collecting herbarium vouchers and leaf material for one of my advisors, Dr. Maribeth Latvis, to perform genetic analysis to answer questions about how genetic composition varies between and among populations and subspecies. Some of this work has already been done in describing the species complex, but population-level genetics haven't been done before and there is still more to know about the recency of and extent of genetic divergence between these taxa.

I ended up being able to locate or relocate about half a

dozen populations both in Texas and in Florida. In preparation for my travel, I scoured herbarium records for vouchered specimens in these areas and tried to geolocate the ones without GPS coordinates as best I could. In addition, I looked for iNaturalist records and did my best to map out a plan for visiting occurrence records for each day. I was largely successful in locating the populations but ran into two major obstacles: private property and habitat destruction (and sometimes a blend of the two). There were a couple spots where a population had clearly been destroyed between being recorded and my visit. One moment in particular sticks out to me as I rolled up to a gate in Freeport, Texas. It guarded a large, open site that appeared to be in preparation for construction of I assume some oil-related infrastructure: churned soil, unattended earth-moving equipment, and tufts of ruderal plant communities writing new histories on the killing fields of the plants prior. The occurrence record I was searching for was supposed to be near the edge of that site, though I couldn't imagine how it could still be there. I jumped the fence anyway and looked around in the wet spots for any signs of a population. There were none. The whole place had a chemical smell. The air was wet, far-off thunder made a vague threat, and the electricity pylons flanking the ditches full of water crackled. In the distance was a candle of methane.



Early spring leaves growing on a colony of Leitneria pilosa subsp. pilosa in Brazos Bend State Park. Photo by Andrew Ruegsegger.

I often had to deal with populations on the other side of private rights-of-way or on private property, especially in Florida where timber companies own a lot of land and lease often to hunting groups. To my credit, I tried to get ahead of potential issues by contacting landowners prior to heading to a site. I left my number on a fence or two when trespassing seemed too risky. But when there didn't seem to be a huge risk of getting caught or I thought getting caught wouldn't be a big deal, I went in anyway.

Returning to the beginning of this story, the gate guarding the road I was walking was not the first I had run into, so I was used to this by now. The occurrence record I was after was at the very end of the road, which was three miles past the gate. It was early in the morning. But it took me several hours to reach the end of the road as I scanned the ditches, explored side branches for additional populations, collected from one or two along the way, and stopped every couple minutes to listen and look for hogs, bears, or humans. The air was soon thick and hot and clouds of tiny flying insects and mosquitoes rose like a fog, circling my head and stabbing through the hood of my sunshirt I had cinched around my face. At one point in the distance, I saw four or five otters limp out of the road and disappear into the woods.

All members of *Leitneria* are clonal. They are woody plants that stick singularly out of the ground or water with tall, slender trunks about 1.0-1.5(-2.0) cm in diameter. I have found their leaves to be mostly distributed along only the very uppermost portion of the stem. These qualities, according to my wife, offer the impression of a group of leafy fairies in the swamp, especially when the leaves are young. This growth habit helps distinguish the plant from other species that often grow in proximity and also have elliptic to lanceolate leaves, which, to me, are some of the harder leaves to distinguish.

The world around me buzzed and dripped and hummed, but it was still so quiet. Once I reached the end of the road, I searched down a perpendicular muddy two-track and found the population that had been recorded 30 years ago (coincidentally, by the former University of Monticello botany professor Dr. J. Richard Abbott during his time as a student at the University of Florida). It was exciting to follow the trail of a plant collected three decades ago and to find what I was looking for. The population was rather depauperate. The thin stems were stunted, the leaves were small, and overall, the population was far less robust than even the others just up the road. As I looked around for individuals to pull leaf samples from, I noticed that the ground was pretty torn up and other plants were also looking unhealthy. Right away, I guessed that there might be hogs around and I should probably stay on my toes.

(Continued on next page)

(Continued from previous page)



Photo of a stunted Leitneria floridana taken shortly before I was run off by a group of hogs. Photo by Andrew Ruegsegger.

I don't know if I heard or saw them first, but only a moment later I turned my head and saw a dozen or so dark forms darting parallel to me toward the fence separating the property I was on and the adjacent one, which began at the end of the road. They might have been 60 feet away. I turned and ran back toward the road. Since I hadn't collected enough leaf samples, I stopped halfway back and shakily cut a voucher and shoved leaf samples into my pocket. Soon came a grunting behind me, and the pack of them emerged from the other side of the fence coming my direction about 15 or 20 feet behind me. I ran again and continued running once I got back to the main road, maybe for a quarter of a mile. My boots came untied, I lost my camera lens, but I did get the collection. It was a long and hot walk back.

This last spring I took Highway 412 on my way to our meeting in Jonesboro. I don't visit eastern Arkansas often and I had never seen *Leitneria* in Arkansas, so I had it vaguely on my mind. There is a stretch right between the towns of Black Rock/Portia and Hoxie/Walnut Ridge beginning quite literally *as soon as* you enter the Mississippi Alluvial Plain from the Ozark Highlands where 412 runs parallel to a railroad track. As I drove that stretch, I was reminded of a population of *Leitneria* I had collected from an access road in Beasley, Texas where the road also ran parallel to a railroad track. So, not really expecting anything, I kept my eyes open for signs of a population.

To my disbelief, I saw a group of top-heavy stems at the edge of the trees growing by the tracks. I tend to get ahead of myself when it comes to thinking I may have found an interesting plant, so I thought I might have just been mistaken. I made a U-turn and pulled off at the clump. I walked down the ditch and sure enough: those lenticellate, slender stems topped with hairy leaves could have been nothing else but Ozark Corkwood. Of course, for glory, I had hoped it was the first time it had been observed there, but the size of the large population made it seem unlikely. A scan of the herbarium databases revealed several populations have been collected from around the Walnut Ridge area, mostly from the late 60s and 70s by, notably, Delzie Demaree and company, and Mr. Demaree was notoriously poor at site descriptions, so some specimens are a little hard to place on a map. However, a record from 1976 by Larry Holben is from a population "1 mi. east of Portia along Highway 25," which seems to line up well with where I saw this group of individuals. While not as thrilling had it been a previously unknown population, I am glad that it seems to be holding on quite well 50 years later.



Leitneria pilosa subsp. ozarkana along Hwy 412. Photo by Andrew Ruegsegger.



Leitneria pilosa subsp. ozarkana along Hwy 412. Photo by Andrew Ruegsegger.

So, there is a lesson: documenting is important. It can guide us and tell us about the past and what has changed. For example, Trelease also writes that fishermen in southern Missouri used the stems of *Leitneria* as floats on their nets. He remarks on the amazing 'lightness' of the stems, has a colleague test its specific gravity, and remarks that it is lighter than the bark of cork oak, noting that it might be useful "in the arts" or as a substitute for cork in bottle stoppers. Today, *Leitneria* is an uncommon species to run into (*L. pilosa* is imperiled in TX, AR, and MO and *L. floridana* is vulnerable in FL). But how common was it at one point? Common enough for fishermen to recognize it and know it to be useful. I am glad Trelease documented that. I'm glad Larry Holben made a record, so I wasn't bathing in unfounded glory. I'm glad Dr. Abbott collected from his populations in Florida, even if it did lead me to potential swine demise.

And finally, the disjunction of Corkwood, Texas Corkwood, and Ozark Corkwood represents an incredible story between how Earth has changed over time and how the things living on it have responded to and continue to respond to those changes. Every other living thing on our planet tells a story, too, whether we think about those stories at the scale of the species, population, community, ecosystem, or landscape. Sadly, we are losing these stories all the time. Today, the world's biodiversity faces unprecedented risk: many biologists agree we are in the middle of a sixth mass extinction. Every day we lose several kinds of value that all of these organisms provide us: food, clean air, clean water, nutrient cycling, etc,. But we are also losing a less quantifiable, intrinsic value that derives from the millions and millions of years of evolution that have given rise to the mind-boggling number and variety of lifeforms on our planet. Studying and documenting those stories that have formed over millennia is one way we can realize this value. And thinking about this value through a framework of keeping these stories alive helps allow, at least myself, to continue knowing the importance of protecting and conserving Earth's living things.



Leitneria pilosa subsp. ozarkana along Hwy 412. Photo by Andrew Ruegsegger.

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Andrew Ruegsegger is a PhD student at the University of Arkansas, Fayetteville, and the ANPS President.



New ANPS Brochure – Hot Off the Press!

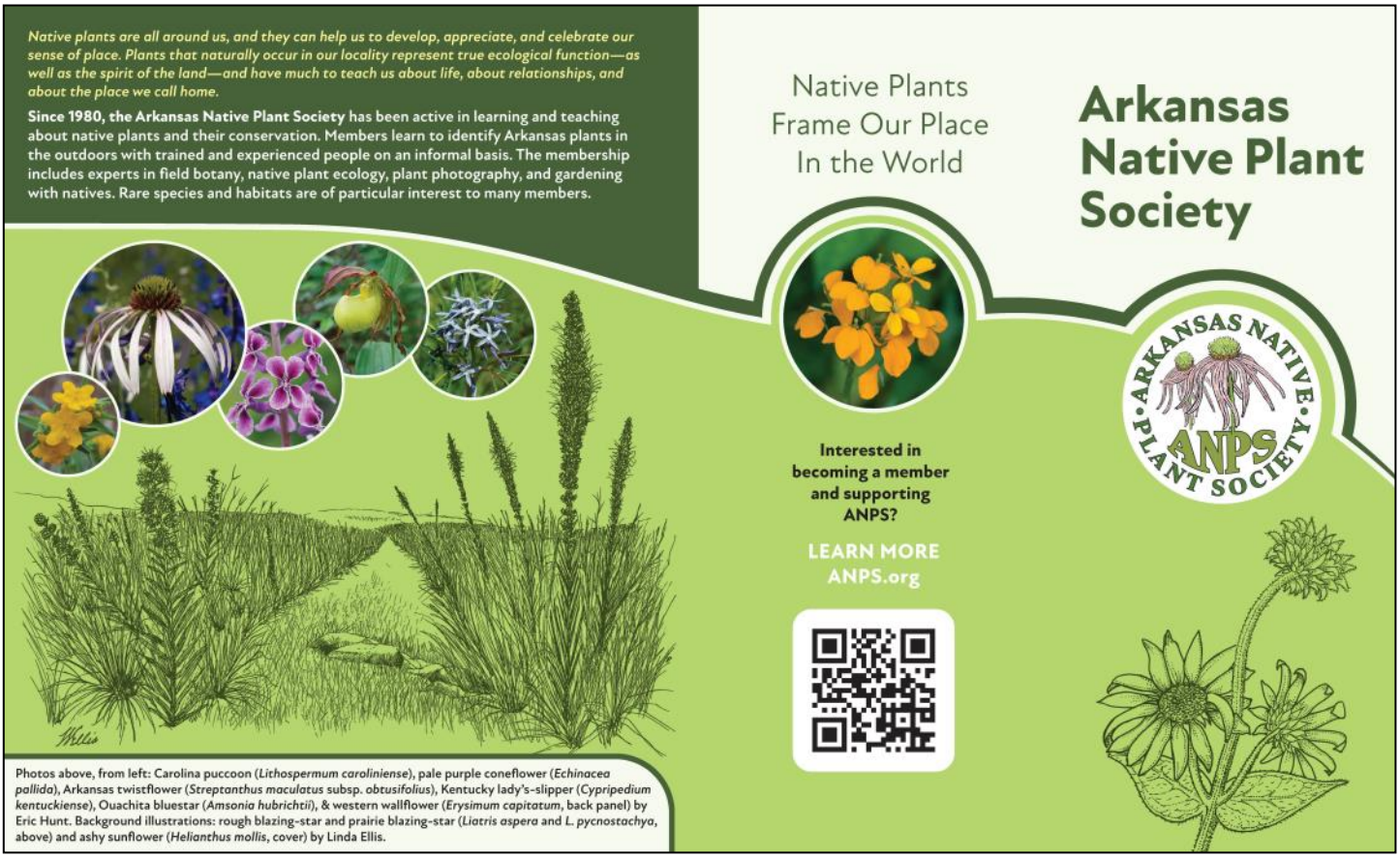
By Molly Robinson

The new ANPS brochure is the product of a collaborative effort from current board members, and the featured photographs and illustrations were generously contributed by talented members of our community. Work began in fall of 2025, after the need for tabling materials was discussed at a Board meeting. The brochure was finalized and subsequently printed in the spring and summer of 2026.

I've gained some graphic design skills through my hobbies and botany-related freelance work, so I contributed by designing the brochure using Adobe software. Board members Greg Rajsky (ANPS Secretary) and Jennifer Ogle (ANPS Memorial Awards Officer) were instrumental in preparing the brochure's text and reviewing dozens of options for photos, the color palette, and other design elements. Joe Ledvina (ANPS Publisher) also provided many valuable design and content suggestions, such as the inclusion of a scannable QR code that links to the ANPS website. Many other board members also provided extremely helpful feedback for a preliminary design I showed them in-person during the 2025 Fall Meeting in Harrison.

All the photos featuring plants and habitats are courtesy of Eric Hunt, an excellent photographer and long-time ANPS member who has taken thousands of photos of the native plants of Arkansas. The illustrations are by Linda Ellis, a highly accomplished and knowledgeable botanical illustrator and ANPS member, who bequeathed many illustrations to the ANPS prior to her passing in 2020. These talented members of our community have contributed to the ANPS in many ways, since long before I became a member in 2019. Eric Hunt's stunning photography and Linda Ellis's beautiful illustrations are critical components of the new brochure, and all of us members of the ANPS board are extremely grateful for the opportunity to feature their work.

We are also indebted to past board members and any other volunteers who created the 2010–2015 ANPS brochures. Many of the topics covered in those older brochures were a perfect fit for the new brochure, so we didn't need to fully reinvent the wheel. Greg Rajsky, Jennifer Ogle, and I incorporated and essentially rewrote several sections from the brochure from 2015. Specifically, these rewritten sections are the description



One side of the new Arkansas Native Plant Society 4-fold brochure, designed by Molly Robinson.

of the Arkansas Native Plant Society, the featured habitats, the list of activities, and the list of projects and services.

Jennifer, Greg, and I also loved the decision in the 2015 brochure to include a group photo, and we ultimately decided to use the same group photo in the new brochure because it features multiple people who have been prominent members of our community for decades. The photo was taken in 2001 by Jim Peck (former botanist at the University of Arkansas at Little Rock, now retired) during a field trip to St. Francis Sunken Lands in Poinsett County. The shrub in the foreground is the federally listed endangered Pondberry (*Lindera melissifolia*) in fruit! Pondberry is very rare, as you would expect from an endangered species, and the female plants (which produce fruits) are even rarer than the male ones.



Group photo featured in the new ANPS brochure, from a 2001 field trip to St. Francis Sunken Lands in Poinsett County, with Pondberry (Lindera melissifolia) in the foreground. Photo by Jim Peck.

Along with the rest of the board, I'm hoping this brochure design will be useful for several years. Adjustments can always be made when it's time to order a new batch. I think the group photo should be replaced with a new one someday, and I hope you or a good friend of yours will be in it.

Molly Robinson is an independent contractor who primarily works for the Arkansas Natural Heritage Commission and is the ANPS Membership Officer.

Treasurer's Report—Fall 2026

Treasurer's Report // Fall 2026

Cash, 1 January → *$29,471.49*

	2025 Actual (Fall)	2026 Actual (Fall)		Σ
Income				
Membership Dues	*$2,225.82*	$1,705.00		
Meeting Registration	*$470.00*	$520.00		
Silent Auction	*$785.00*	$162.00		
Merchandise Sales	*$189.00*	$171.00		
Contributions & Grants	*$6,412.29*	$131.13	→	**$2,689.13**
Expenditures				
ANPS.org	*$615.00*	$300.00		
Claytonia	*$369.60*	$407.64		
Directory	-	-		
Memorial Awards, Grants, and Scholarships	*$2,500.00*	$4,397.17		
Garden Grants	-	$498.70		
Meeting Expenses	-	$163.98		
Supplies (Postage, PayPal fees, etc.)	*$422.57*	$18.17	→	**-$5,785.66**

Cash, 31 July → *$26,374.96*

Submitted by Samantha Heller, ANPS Treasurer

President's Message



Andrew Ruegsegger, ANPS President.

Hi all. The fall meeting is very nearly upon us, and I hope you all are looking forward to it as much as I am! I left our spring meeting earlier this year feeling inspired about plants, people, and the ANPS. It is such a wonderful thing to have a group of dedicated, kind, and intelligent people so passionate about our state's biodiversity. Really, every time we get to meet in-person I'm reminded of how special it is to have a group like this. Our spring meeting was a huge success and I want to first thank our venue host, Dr. Travis Marsico, for being so helpful and making us feel so welcome at the Biosciences Institute in Jonesboro. Of course, none of it would have been possible without the work of our board members who are some of the most wonderful and dedicated people to work with. Art Browning, our president-elect, especially did a great job planning our field trips, speakers, venue, and itinerary. And now I am looking forward to our meeting in Mena, which is about a month away at the time I am writing this. I know Art has put a lot of work into planning this meeting, and I am sure it is going to be just as great as our spring meeting, drought be damned. Seriously, though, this heat and dryness has been so oppressive. But I am sure that exploring the plant diversity around Mena in the company of one another will do something to abate this heat, even if it means being able to forget the dripping sweat for just a little while. Bring water to this meeting, folks. Bring even more than you think you'll need, because good times and dehydration don't tend to mix.

If you are new to ANPS, welcome! Thank you for joining, and I hope you come to know the joy and value of this group! Things feel and look good for our group right now, and it is made possible by our small, but mighty membership. So, I also extend to our long-term members a thank you for sticking around and making ANPS great! Again, I look forward to seeing everyone soon in Mena. Stay cool!

Andrew Ruegsegger
ANPS President

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:

Samantha Heller, Treasurer
8461 Apple Glen
Rogers, Arkansas 72756

JOIN OR RENEW ONLINE INSTEAD! Details at anps.org/join.

Claytonia

Virginia McDaniel | Editor
virginiamcd31@yahoo.com

Please don't forget to renew your membership!
The calendar year is the membership year.

To renew your membership, fill out the application for membership on page 24 and mail it to the address on the form.
Or renew online at **anps.org/join**.

A BIG THANK YOU!

This space is at the whim of the Editor and in this volume I would like to give a GIGANTIC shout out to all of you who contribute to *Claytonia*. You make my job fun and easy. First, the names we see for those who contribute articles. Thanks for your expertise and taking the time to teach us something new or remind us of a nice field trip together. Then our board members who take care of so many little components: the President's Message (President Andrew), the member meeting notes (Secretary Greg), the financial report (Treasurer Samantha), the next meeting plan write-up (President-Elect Art), our website content (Internet and Social Media Officer Sarah), student grant and scholarship info (Memorial Awards Officer Jennifer), new members (Membership Officer Molly) and the person who gets *Claytonia* printed and sent to those who still receiving a paper copy (Publisher Joe).

Then there are the people behind the scenes who every 6 months take the time to edit different versions of *Claytonia* and make sure all the pictures are lined up just so and that I don't misspell a species name, or forget a comma, or neglect a run-on sentence. Jennifer Ogle and Molly Robinson have been doing this for many years and not been given recognition. Leslie Patrick and Sarah Geurtz have helped in the past. And probably others so please forgive me if I forget to mention you by name. So thank you thank you thank you! The rest of the volume would have as many mistakes as you see in this write-up if it weren't for the Editor's editors. :)



Woodland in the Ouachita National Forest. Photo by Virginia McDaniel.

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