

CLAYTONIA

Newsletter of the Arkansas Native Plant Society

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Fall 2017

Special
Feature

University of Arkansas at Monticello
Sundell Herbarium Update!

103
UAM SUNDELL
HERBARIUM

2017 Spring
Meeting Minutes
Page 21

2017 Fall
Treasurer's Report
Page 22

New Members
and Life Members
Page 23

2017 Fall
Meeting Details
Page 24

Membership
Application
Page 26

President's
Message
Page 27

The UAM Sundell Herbarium is complete! Drs. Karen and Marvin Fawley have moved into the office/lab and the herbarium cases were moved in July. The ANPS library/conference room is organized with a lovely wooden bowl collection from the Natural History Museum on display. The bowls were turned by Karen's late cousin, E.M. Willey of Clarksville. Almost all of the bowls are made from trees that are native to Arkansas. The wood flooring in the office and library, donated by Maxwell Flooring of Monticello, looks amazing as do the nice built-in book shelves.

The Botanical Research and Herbarium Building opening/dedication will be Saturday, September 23rd at 11am. All ANPS members are invited! Refreshments will be served at the Turner Neal Natural History Museum following the ribbon cutting

and dedication. Dr. Eric Sundell will lead a walk around the UAM Arboretum which is adjacent to the museum. For more information, contact Karen Fawley at fawley@uamont.edu.



Gillam Park, Little Rock

Article and photo by Burnetta Hinterthuer

Encompassing over 400 acres of diverse habitat, the park includes bottomland hardwood forests, upland hardwood forests, nepheline syenite glades, wetlands and about three-miles of developed trails. Historically, Gillam Park was the first land set aside for African Americans in the Little Rock area in the 1940s. At one point, there was a large recreational complex including a swimming pool; the community center closed years ago, and today Gillam Park is a well-known hotspot for birders and native plant enthusiasts and is managed by Audubon Arkansas as wildlife habitat for Little Rock.

Saturday morning of the April spring meeting, Eric Hunt and I led a hike at Gillam Park. Earlier in the week, Eric had scouted and mapped out the route we would take. First we visited the nepheline syenite* glades which took us through a wooded area in which we saw the understory tree *Styrax americanus*, American snowbell, along with *Passiflora lutea*, maypops, and *Penstemon arkansanus*, Arkansas beardtongue. A spectacular array of *polypody* or resurrection fern was located on the north side of a tree that caught the eye of many admirers. In the glade, two different species, *Crataegus spathulata*, pasture hawthorn and the other possibly *C. crus-gallii*, cockspur hawthorn were found with the purple of Ohio spiderwort, *Tradescantia ohiensis*, sprinkled throughout the lichen- and moss-covered glade. We then reversed course downhill, heading to the floodplain. One of the most striking wildflower blooms was found just off the old road at the edge of the swamp, *Clematis crispa*, swamp leatherflower. We took a while to photograph and admire this plant.

Taxodium distichum, bald cypress and *Nyssa aquatica*, tupelo gum were dominant species in the swamp. *Baccharis halimifolia*, salt bush or sea-myrtle and white false wild indigo, *Baptisia alba* were growing along the trail. Eric was on the lookout for a species of *Lathyrus* and found it toward the end of the swamp trail. Our biggest find was one of the smallest flowers-*Lathyrus*

pusillus, tiny pea.

The lively group included ANPS members from Central and Northwest Arkansas as well as North Louisiana Native Plant Society members. Many people enjoyed photographing the plants and we ended with just enough time for lunch before the afternoon trips.

*According to The University of Ontario web site Earth Science Museum: "*Nepheline is an important feldspathoid mineral. It is white, grey or yellow in color with a vitreous lustre and a poor cleavage. The name Nepheline comes from the Greek word nephele, which means "cloud," because it becomes strongly clouded when put in strong acid.*

Nepheline only forms in silica-poor rocks. It is almost never associated with quartz. It may be found in some contact metamorphosed rocks; otherwise it occurs in alkaline complexes in igneous rocks. Nepheline is mostly found in the rock Nepheline Syenite in nature.

Its resistance to scratching and breaking and its improved thermal endurance makes it valuable to use in making glass (used as a flux to lower the melting temperature, gives increased curability), ceramics (used as a flux to lower the melting temperature), roofing granules, rock-wool insulation, building stone and in making toilet bowls and sinks."



Pleopeltis polypodioides, resurrection fern, can survive long periods of drought by curling up its fronds and appearing desiccated, grey-brown and dead.

April, 2017
Gillam Park
Field Trip



Top Left: Eric Hunt in teacher mode
Above: Cypress-tupelo swamp in Gillam Park
Left: Swamp leatherflower, *Clematis crispa*

Rock Creek Natural Area

Article and photos by Michael Weatherford

On April 15, a perfect spring morning, nine ANPS members got together to check out the native plants in the Rock Creek Natural Area in Sharp County. Rock Creek flows through the natural area and the surrounding Harold E. Alexander Wildlife Management Area, eventually merging with the Spring River. The creek was a beautiful sight on that spring morning. As we began our hike, we observed a brilliant scarlet tanager on the bank, drinking from the pure clear stream.

First thing in the morning, we walked a trail beginning at a bridge and along the creek. Later in the day we explored an upland area that had recently been treated to restore it to a natural glade condition by removing red cedar and prescribed burning.

Along the creek we found Indian paintbrush (*Castilleja coccinea*), fire pink (*Silene virginica*),



wild strawberry (*Fragaria virginiana*), wild hyacinth (*Camassia scilloides*), Bradbury's beebalm (*Monarda bradburiana*), and western wallflower (*Erysimum capitatum*) just to name a few. As we walked the trail we observed celestial lilies with blooms closed; coming back down the same section of trail about an hour later the blooms were open in full splendor—beautiful plant!

In the recently restored upland area we found some interesting glade-loving plants already starting to become established. Notable among them was shaggy dwarf morning glory (*Evolvulus nuttallianus*) and plentiful fringed bluestar (*Amsonia ciliata*) in full bloom.

Most of the folks attending the walk had not visited this natural area before. We all agreed that it's a wonderful place to view beautiful and rare native plants. Highly recommended!

Top left: Celestial Lily (*Nemastylis geminiflora*)

Bottom left: Western Wallflower (*Erysimum capitatum*)

Top right: Bradbury's Beebalm, (*Monarda bradburiana*)

Hike and Haiku - May 21, 2017

Devil's Den State Park

Written by Ginny Masullo, Photos by Deb Bartholomew

OCANPS members Ginny Masullo, Deb Bartholomew, Laurie Scott and Burnetta Hinterthuer led hikes for the International Association of Management, Spirituality and Religion (IAMSR) Conference sponsored by the University of Arkansas Walton School of Business.

Attendees signed up for outdoor activities that would bring them in contact with the natural environment of the Ozarks. Attendees made donations to OCANPS and the state ANPS organizations.

One of the offerings for participants of the International Association of Management, Spirituality and Religion (IAMSR) Conference included two hikes for interested parties. Four IAMSR folks showed up at the Devil's Den location. They were from as close as Little Rock and from as far away as South America.

The hike had been billed as Hike and Haiku; but, as leaders, Deb Bartholomew and I were unsure exactly how the hike had been portrayed. When three of the four had checked in, I asked the hikers what they expected. They all said "We just want to experience the Ozarks."

The Devil's Den trail, complete with its oak-hickory hardwood forest, flowing rivulets, Lee Creek, waterfalls, caves, the largest crevice area in the United States, plus the May wildflowers, provided a quintessential Ozark experience.

Once in the trail's natural amphitheater, the late-coming participant said, "I thought this hike was going to include haiku." So, I explained the rudiments of Hike and Haiku, a program I have done for children and families at Devil's Den. Basically, the poetic form of haiku is a fun and satisfying way to slow down

and experience nature. Like any poetic form there are varying degrees of skill and nuances.

For the sake of Hike and Haiku Arkansas, however, only the basics are embraced. The main convention to be followed is that the nature poem must be three lines with 17 syllables with lines of 5, 7 and 5 syllables.

It turned out this same hiker who asked about haiku was a haiku expert with a couple of haiku books under his belt. While he wrote over 15 haikus on the hike, everyone else also contributed at least one haiku.

Here's an example:

*Jack in the Pulpit,
This preacher-less preacher
Tells us, "be here now."*

Devil's Den State Park includes caves and crevices associated with a unique sandstone crevice area that is the



Hikers at crevice area of Devil's Den State Park.

largest such area in the United States. The longest of these is Devil's Den Cave (550 feet). The presence of both sandstone and limestone caves at one park is quite rare. Since 2010, the Devil's Den Cave and Ice Box Cave have been closed. These closures are necessary as "a prevention to protect these caves and two others in the park as well as the bat species that inhabit them from the possibility of contamination from White-nose Syndrome. White-nose syndrome is a fungus that has killed millions of hibernating bats in the eastern half of the United States and several Canadian provinces." Despite the cave closures, the geology of Devil's Den trail is spectacular.

The following wildflowers were observed: *Monarda fistulosa*, Bergamot; *Sanguinaria canadensis*, Bloodroot; *Phlox pilosa*, phlox; *Cardamine concatenata*, Toothwort; *Asarum canadense*,

Wild Ginger; *Trillium recurvatum*, Purple Trillium and *Arisaema triphyllum*, Jack-in-the-Pulpit (with not much Jack) hence, the preacher-less preacher in the haiku example above.

ARKANSAS RIVER WALKS

ANPS spring meeting, April 22, 2017

Written by Eric Sundell, photos by Sandy Davies

Walks along the north bank of the Arkansas River went out morning and afternoon with two groups of bright-eyed and bushy-tailed naturalists who were as willin' to get wet as Barkus was to marry Peggotty: the weather was not pleasant—the morning walk left in drizzle and the afternoon walk returned in drizzle (despite a forecast for clearing skies). Eric Sundell and John Simpson were the trip leaders, and they will admit that they chose the site as much for its scenic beauty as for its wonderful plants: beside us to the south, one of America's great rivers was passing through, flowing out of Colorado and heading to the Gulf of Mexico, while to our north, sheer reddish sandstone cliffs rose several hundred feet to the ledges of a shortleaf pine forest at the top. With good weather, these would have been walks to remember!

The trip leaders also have to admit that native and exotic plants were probably represented in the sandy soil of the river terrace in about equal numbers. The river bank was wooded, but much of the terrace was open and, even on a cloudy day, colorful with a few irrepresible weeds. Among the natives were cut-leaf evening-primrose (*Oenothera biennis*), corn salad (*Valerianella radiata*—our only native *Valerianella* that is not showy), yellow wood-sorrel (*Oxalis dillenii*—and yes, Virginia, it is a native!), toadflax (*Nuttallanthus texanus*, with delicate, curved nectar spurs), and common along the wood borders, southern dewberry, with reddish, delicately bristly new stems and developing fruit, ripening from red to black and ready to eat.

Foreign wildflowers may have had the natives outnumbered. Two interesting clovers grew in large patches: rabbit's foot clover (*Trifolium arvense*) more reddish and Persian clover (*Trifolium resupinatum*) more pinkish, both agreeably enriching the poor soil with usable nitrogen, and the latter species especially interesting because the pedicels twist 180 degrees so that the flowers bloom upside-down (with the banner petal, the hallmark of the legume corolla, on the bottom) and the calyx in fruit becomes inflated into a small, spiky balloon (wind dispersal?). Two herbaceous reps of the coffee family were all over: purple field madder (*Sherardia arvensis*) and white-flowering cleavers (*Galium aparine*), an early species of native bedstraw. Both species have

whorled leaves, an uncommon arrangement (leaves opposite is standard for the family), with the extra leaves said to be derived from enlarged stipules. You have to admire cleavers for their effective, double-barreled seed dispersal mechanism: the fruits are covered with hooked hairs, but if the animals don't accidentally remove them and carry them away as they ripen, they get a second chance when the stems, also covered with hooked hairs, cleave to passing animals for a free ride.

A small grotto against the cliffs offered a very different habitat from the river terrace. On the shaded ledges, alumroot (*Heuchera americana*) and spiderwort (*Tradescantia*—species undetermined) were in bloom. The shade, I'm sorry to say, was provided by empress tree (*Paulownia tomentosa*) and tree-of-heaven (*Ailanthus altissima*—aka stink tree), two Asiatic interlopers. And other exotic woody plant species were not hard to find on the river terrace: mimosa, Chinaberry, and

Eric Sundell points out the intriguing "crane's bill" structure of the fruit of the native wild geranium, *Geranium carolinianum*.



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white mulberry were common, although white mulberry's trespass was overlooked when we discovered that the females were in fruit and ripe.

Native trees along the river were the usual riparian suspects—several of them can be found following the Mississippi and its feeders west to Colorado, Montana, and the Dakotas: cottonwood, American elm, green ash, silver maple, boxelder, sycamore, persimmon, and rough-leaf dogwood. And there were a few sassafras near the grotto and a dense thicket of Chickasaw plum with the plums starting to blush. And poison-ivy, trumpet vine, Virginia creeper, and rattan all competing for the same cottonwood. And a fine population of money plant (*Lunaria annua*) in purple flower and early, almost silver dollar-sized, still-green fruit—such a bizarre and interesting mustard! (We wished they were natives so we could enjoy them guilt-free.) And many more! Barbara Baker's list from the morning walk tallied 66 species, and several more were discovered in the afternoon. Altogether a fine couple of walks!

Celebrate Arkansas Native Plant Month

April 2017



Plant natives!



Horsemint

Native plants are uniquely adapted to live in our soils and climate



Spiderwort



Lanceleaf Coreopsis



Fire pink

Native plants support the many varieties of wildlife that contribute to making Arkansas "The Natural State"

Thanks to Ralph Weber for poster honoring Arkansas's April 2017 designation as Arkansas Native Plant Month.



Myrmecochory

Article and photo by Sid Vogelpohl

This photo captures ants moving the smooth seeds of green trillium (*Trillium viridescens*) from a mature seed capsule by gripping an external elaiosome. Ants carry the seeds into their colony where this nutritious appendage is consumed and the seed is discarded in the ants' waste site. Along with the plant's seed being dispersed, if disposal is underground, seeds acquire some protection from predation. Myrmecochory, which occurs worldwide, is a symbiotic relationship referred to as "facultative mutualism," meaning that the relationship is helpful for both species' survival, but not required. When small ant species consume elaiosomes in-situ, this symbiotic relationship does not exist.

Support Pollinators, Save Seeds!

Article by Gretchen Bailey

Pollinator conservation has risen to the forefront of environmental concerns as current research shows pollinator populations in decline and evaluates the potential negative impacts of this trend on human well-being. Most of the plants we depend on for food, fuel, and other essential services would cease to exist without the full-time work of many insects and some birds and mammals. These animals, who have co-evolved with

on plants.

There are many root causes of pollinator decline that must be addressed, such as habitat loss, industrial agriculture, and climate change. However, one easy way to support pollinators is to propagate the plants that they depend on. While some pollinators have generalist diets, feeding on multiple species that may include non-natives, many rely on specific native plants that they have co-evolved with. As an intern with the Chicago Botanic Garden working with the Forest Service in Hot Springs, Arkansas, the main focus of my internship has been pollinator conservation through native seed sav-

a) Butterflies like this Eastern Tiger Swallowtail (*Papilio glaucus*) choose bright, clustered flowers like buttonbush (*Cephalanthus occidentalis*). b) Bumblebees prefer yellow and blue hues, like this one pollinating a leather-flower (*Clematis* sp.). c) Hummingbirds feed on nectar from tubular flowers like this larkspur (*Delphinium* sp.).



Why are pollinators important?

Over the course of millions of years, many insects and some birds and mammals have formed a special relationship with specific plants. These animals, known as pollinators, brush up against pollen while eating nutritious nectar (and sometimes the pollen itself) from flowers. The pollen sticks to their bodies and is carried to other flowers of the same species, allowing plants to develop fruits that feed wildlife, and seeds that will grow into new plants. Many plants, including those we eat every day, would cease to exist without these animals enabling them to reproduce. While some pollinators feed on a variety of species, many feed only on specific native plants like the ones growing here.

Funding for this sign and pollinator gardens was provided by ANPS.



d) A ladybug pollinates goldenrod (*Solidago* sp.). e) An ant pollinates an aster. f) This bumblebee, with a full pollen basket, will deliver its nutritious harvest to larvae in the hive. Photo credits: Michael Weatherford – a, b, & d; Dr. David W. Inouye – c; www.fs.fed.us – e; Beatriz Moisset via Wikimedia – f.

Informational sign that will be displayed near the pollinator gardens at First Step, designed by Gretchen Bailey.

flowering plants over millions of years, facilitate plant reproduction by transferring pollen between plants of the same species while they are feeding, usually on nectar, but sometimes on the pollen itself. This process of cross-pollination generates genetic diversity within plant populations, allowing species to adapt over time to changing conditions. Declining pollinator population means less plant reproduction and less genetic diversity, which does not bode well for any of us who depend

ing. Saving native seeds and planting them locally preserves unique genetic adaptations that allow plants to thrive in the region's climate, soil chemistry, and other environmental factors. Another benefit of seed saving is a cultural one: it gives us a reason to interact with non-human living organisms in "the wild," which is a rare event for some of us.

When I arrived in Hot Springs in late May, my mentor, Susan Hooks, gave me a list of plants to look for and flag

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while they were in flower in the Ouachita Seed Orchard near Mt. Ida. While the Seed Orchard's main purpose is to produce short-leaf pine seed for forest restoration projects, the management practice of annual burning has also maintained diverse understory plant communities. These open woodlands are filled with sun-loving plants, many of which produce beautiful flowers and support pollinators. My plant list included purple coneflower (*Echinacea purpurea*), pale purple coneflower (*Echinacea pallida*), black-eyed susan (*Rudbeckia hirta*), rough coneflower (*Rudbeckia grandiflora*), bee balm (*Monarda* spp.), and butterfly weed (*Asclepias tuberosa*). Once flagged, the plants were identifiable even without their distinctive flowers.

The species I searched for at the seed orchard were those that Susan knew or suspected were important to pollinators, especially monarch butterflies, whose populations are in decline. In addition to providing nectar for pollinators, milkweeds (*Asclepias* spp.) are the sole host for monarch butterfly larvae. By eating milkweed, monarch caterpillars consume toxic cardiac glycosides present in the plant and integrate them into their bodies, rendering them toxic to birds and other predators. Susan and her colleagues have been marking and collecting seed from milkweeds on Forest Service land for several years. Last year, seeds collected from four different species (*A. variegata*, *A. tuberosa*, *A. viridis*, and *A. viridiflora*) were sent to Monarch Watch and grown out for transplanting. Approximately 200 of these plants were planted in a production field in the seed orchard so there can be future seed harvest. Tending to these plants is another of my intern responsibilities.

Weeks later, I went back to the seed orchard and found the plants I had flagged earlier in the summer. Once their seed heads were brown and dry, I snipped the heads off of every fifth plant into collection bags, which theoretically leaves the wild populations with more than enough propagules to re-seed themselves. I also opportunistically collected seeds from other plants, like Illinois bundleflower (*Desmanthus illinoensis*), a member of the bean family that keeps its seeds in tiny pods. Using Susan's GPS data for milkweed plants along roads, I have been collecting ripe *Asclepias variegata* seed pods. Back at the office (in a place now referred to as the "seed cubicle"), I spread the seed heads or pods out on newspaper and left them to dry for a week or two. Once they seemed dry enough, I put them in paper bags or open plastic bags to get them as dry as possible until I was ready to process them.

I tried threshing the tough *Echinacea* and *Rudbeckia* seed heads, the largest part of my collection, by banging the bags against the wall and jumping on them, but this had little effect and caused some disruption in the office environment. I have since resorted to twisting a knife in



Gretchen Bailey tends to rows of milkweed plants growing at the Ouachita Seed Orchard. Photo by Virginia McDaniel.

each seed head until the seeds pop off. Using a variety of screens to winnow the seeds was also unsuccessful, so I have left most of the chaff mixed in with the seeds. When processing milkweed seeds, I am sometimes able to pull the seeds off while keeping most of the fluffy chaff in check, but there are occasions when it escapes and floats over the cubicle wall to meander through the office. You may be thinking that I am a haphazard seed saver. You may be right. There are surely resources available for more thorough and systematic methods of processing seed—however, as long as the seeds are available and viable, then I have achieved my goal.

The first of my seeds were planted last week, when we worked on reclaiming a pollinator garden at the Jessieville Ranger District office. Young milkweed plantings there were hidden by invasive *sericea lespedeza*. We weeded around the plants, then hoed out a circle and sprinkled on a mix of collected seeds. With luck, they will outcompete the invasives and grow to fill in the garden, providing food and habitat for pollinators and other wildlife. I hope that my story inspires you to save seeds, which is a cheap, easy and fun way to provide an ecosystem service and support pollinators. Once you have saved your seeds, make sure to plant them out. On behalf of the plants, the pollinators, and everyone that needs plants (which is everyone), thank you!

Spring 2017 Meeting Fun

Brent Baker selling plants.

Katherine Lincourt/Mike Burns collecting money.

ANPS Members enjoying field trips.

President, Virginia McDaniel studies plant.



A few words from Vice President Donna Hanke

Photos by Bruno Hanke

A number of years ago I turned down requests to serve on the Arkansas Native Plant Society leadership. At that time I was busy with two jobs, but must admit that I might have been a bit shy of tackling the job.

After I retired, I said “Yes!” when asked again -- with a little bit of trepidation.

My responsibilities as vice president soon to be president-elect include organizing the spring and fall meetings, arranging field trips, as well as securing lodging and meeting venues. Any fears I had about manning this job are fading away. There is lots of help from people who have already occupied the same learning space.

My husband has reminded me that I have done a lot of trip-planning over the years. This brings to mind the Garvan Woodland Gardens tour that we had signed up for many, many years ago -- Gardens of Southern England. Not enough people signed up for the trip and it was cancelled. It had been a long time since I had been “across the pond” and the tour had been an ideal way to calm my fears. We went anyway and I was the one who planned our very own tour. It included visits to Sissinghurst Castle, Brighton, Exbury Estate, Stonehenge, the Royal *Ceanothus* collection at Eccleston Square and the Chelsea Flower Show -- not to mention exploring the town where my English ancestors had lived and visiting my long-time pen pal. This, to boot, was all accomplished while driving our rental car on the “wrong” side of the road!

Recently Bruno and I scoped out a couple possibilities for field trips in the Russellville area. We found so many plants in bloom, in August, that we rationalized there would probably be enough in the spring to satisfy our desires. There were a couple that I wasn't sure of the names. I'm also reminded that not all of us know both the common and Latin names of the plants we observe, but there is always someone in the group to answer the question, “What's this?” What a fun way to learn!

See you in October!

Donna Hanke



Maypops (*Passiflora incarnate*)



Fog Fruit (*Phyla lanceolata*)

2017 ANPS Scholarship Recipients

(Awards are a result of the generosity of ANPS member contributions.)

Delzie Demaree Research Grant

This research grant award honors the late Delzie Demaree, a nationally recognized Arkansas botanist who dedicated his life to teaching botany and studying the Arkansas flora. The grants are awarded competitively to undergraduate or graduate students in amounts of up to **\$2000** for appropriate Arkansas botany- or plant ecology-related research projects.

Aileen McWilliam Scholarship

This scholarship award honors the late Aileen McWilliam, named Arkansas' Outstanding Biology Teacher in 1965, a former member of the Arkansas Natural Heritage Commission, a noted author, and a knowledgeable and ardent Arkansas naturalist. This scholarship, in remembrance of her devotion to the study of the Arkansas flora, is given annually to promising undergraduate or graduate students with a strong interest in botany. Individual awards will be given in amounts of up to **\$2000**.



Brigette Williams

Delzie Demaree Research Grant

\$1,000

PhD Student

Saint Louis University, Missouri

Studying conservation genetics of rare spp. of *Leavenworthia* as well as the more common *L. uniflora*. How do locally adapted plants respond to environmental change, especially rare natives with low genetic diversity?

Brittney Booth

Delzie Demaree Research Grant

\$450

Graduate Student

University of Arkansas-Fayetteville

Studying vegetation of limestone and dolomite glades in north Arkansas.

Jeffrey Chavis

Aileen McWilliam Scholarship

\$1,000

Undergraduate

University of Arkansas-Fayetteville

Studying biological engineering, also works as an intern with a watershed conservation group and is interested in a career in riparian restoration using native plants.

2017 ANPS Scholarship Recipients

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Katie Matthews

Delzie Demaree Research Grant
\$1,000
Freshman
University of Arkansas-Little Rock

Studying population genetics of big bluestem; comparison of plants following prairie sod transplant.



Logan Estes

Delzie Demaree Research Grant
\$1,000
Undergraduate
University of Arkansas-Fayetteville

Studying ecological and taxonomic assessment of Arkansas chinkapin.



Jordan Slater

Delzie Demaree Research Grant
\$250
Undergraduate
University of Arkansas-Fayetteville

Study of 3 wild ginseng populations (soil and light) to improve horticultural ginseng production, especially at Compton Gardens.



Shelby Clark

Delzie Demaree Research Grant
\$1,000
Graduate Student
University of Central Arkansas

Studying bryophyte floristics of Cove Creek as well as population genetics of one liverwort species.

**ANPS supports
students of**

Arkansas botany!



Wednesdays on the Greenway

Article and photos by Bob Morgan, Springdale

The Razorback Greenway extends from Bella Vista south through Bentonville, Rogers, Lowell, Springdale, and Fayetteville. The Greenway provides for recreation and transportation to over 400,000 residents of the second largest metropolitan area in Arkansas. Many tourists come to the area just to bicycle on this 37-mile-long

trail. The trail provides a strip of nature through the massive urban area of Northwest Arkansas. In fact, in places along the trail it is possible to forget that you are walking or riding

within a few hundred yards of thousands of homes, businesses or factories. And, Northwest Arkansas is not finished. All of the cities in the region are aggressively pursuing plans to extend auxiliary trails connecting the Greenway to all parts of the region. Someday, the trail may even connect to the River Valley. Imagine being able to ride a bicycle, protected from traffic, from Bella Vista to Van Buren. Even more audacious, suppose the Arkansas River Trail being developed in Central Arkansas were to extend all the way from Arkansas Post to Van Buren.

But this article is not about extending trails across Arkansas. It is about the potential that the trail system provides for educating the public about native plants and, unfortunately, the impact of invasive species. Last May, we started a series of "Urban Hikes". Wednesday evenings, whoever was available would meet at a pre-

selected location on the Greenway, spend an hour or so exploring a quarter to half mile of trail, then retreat to a nearby restaurant to discuss.

Our first Wednesday hike was April 12. Six native plant enthusiasts met at Walker Park on the south side of Fayetteville. The Greenway starts just 0.2 miles south of Walker Park and runs along the riparian zone of Spout Spring Branch. We walked south toward the start of the trail. We were pleasantly surprised to see that the city

was actively planting native plants along the riparian zone of Spout Spring Branch. However, when we crossed 15th Street, the extent of dominance that invasive species exerted over the land-



scape emerged. The dominant species was Johnson grass. In the book, *Surely You're Joking Mr. Feynman*, Nobel laureate Richard Feynman uses a lot of ink describing the difference between knowing a fact, and understanding an issue. Many of his students could regurgitate facts, but when he twisted the question around, they didn't show true understanding of the physics. I guess I have had an intellectual idea of the fact that invasive plants were harmful. But until this trip, I didn't have a true understanding of the impact. Even though this area had not been managed as pasture for years, Johnson Grass so dominated the landscape that few other species could compete. While the reach of trail was essentially attractive, it was not a healthy ecosystem. Nevertheless, Burnetta Hinterthuer was able to show us a few species of interest and describe in detail the particulars of this or that plant. She explained that Johnson grass was introduced

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into the United States by a South Carolina governor named Johnson who thought it would be good for preventing soil erosion.

Our second Wednesday was to start at the Johnson Trailhead. However, after a quick inspection of available plants, we moved up to the NW Arkansas Mall Trailhead instead. There were five of us on this trip. We were pleasantly surprised once again. This was a woodland hillside too steep to be developed. Within a few feet of the trailhead, we started seeing trilliums and then Jack-in-the-Pulpit. This was also the first trip where we saw Japanese stiltgrass, an invasive species imported as packing material in shipments from East Asia.

Our next two hikes were in the Lake Fayetteville area. First going north from the Botanical Garden of the Ozarks, then going east from Veterans Park. We started picking up people. Nine joined us at the Botanical Garden including some of Burnetta's former students and some interns at the Watershed Resource Conservation Center. At Veterans Park, we had approximately 15. There was very lively discussion at the local brew pub afterwards. At the end of May, we suspended our hikes until fall because of the increasing heat and complicated travel schedules.

Urban hiking may not provide all of the excitement of a trip to the Ozarks or Ouachitas. But opportunities for public education abound. We were able to reach out to people who either didn't have a full day to devote to a nature hike, or didn't know about our existence. And we did little publicity except for the OCANPS newsletter and ANPS *Claytonia*. I look forward to renewing our Wednesdays soon.



First Step Pollinator Gardens

Articles and photo by Aerah Hardin



The pollinator gardens at First Step have taken off! After only one season the Joe-pye weed (*Eupatorium* sp.), gray-headed coneflower (*Ratibida pinnata*) and butterfly weed (*Asclepias tuberosa*) are in full bloom awaiting an array of pollinators. Students and teachers have kept the weeds at bay and the beds watered. They enjoy the bright flowers outside their playgrounds and watching the butterflies and bees at work. In September we will install an interpretive sign about pollinators designed by Gretchen Bailey, an intern with the Chicago Botanic Gardens working for the Forest Service this summer. We are very thankful for the ANPS grant that made these gardens possible!



“Gardening is a way to show that you believe in tomorrow.”

Douglas Tallamy

Stability: Nature's Forgotten Variable

Article and photo by Justin Thomas

Stability is something we all seek in life. In a matter of seconds large unexpected changes in our health, employment, family dynamics or government systems can rob us of the futures we have counted on and directed our lives toward. Our hopes for ourselves and our children are synonymous with our faith in stability. The forces of stability are also vital for every plant, animal and natural community in our back yard and across the globe. The ancient processes that have shaped every organism on earth have done so because they contain some element of stability. If a fen is robbed of its water, the rare wetland plants that have occurred in its cold wet discharge for thousands of years will vanish and the place will forever cease to be a fen. As agricultural runoff and anthropogenic pollutants accumulate in clear Ozark streams, they not only become murky and fetid with algae, but the organisms that have evolved in their crystalline water are literally choked out; countless highly evolved species replaced with a handful of functionless, disparate weeds. When a system loses its stability it loses its complexity. When a system loses its complexity it loses its identity.

This is not to say that nature itself is unchanging. In fact, change is constant in nature. However, most change is relatively gradual, cumulative, and episodic rather than sudden, spontaneous, and permanent. In order for any organism to persist in a particular habitat or geographical location, it must have a degree of tolerance to any number of variations that Mother Nature throws its way. These tolerances come in the form of adaptations to temporary or episodic events such as

floods, droughts, fire, or spikes in predation. They may also come through the processes of relocation via feet, wing or seed. Ecologists call events that induce these evolved responses "stress". And while stress may have temporarily negative effects on a population at any given place at any given time, over long periods of time, species are able to endure or relocate. In a fascinating twist of fate, it is from the very processes of stress, that any given natural system stabilizes, accumulates a wealth of species, and ultimately resonates with ecological complexity. A typical Ozark fen, for example, simultaneously harbors species remnants from the last glacial maximum, coastal plain species that were relocated during

warm trends (like the Hypsithermal, roughly 8000 years ago) as well as standard-issue contemporary Midwestern flora. In an ecological sense stability is relative, is measured by what is normal for a given species or community over its evolutionary life, and ultimately leads to ecological complexity. This is the underlying nature of the nature we struggle to protect. It has given Arkansas elaborate pine woodlands, expansive prairies buzzing with colorful life, forested wetlands towered and trunked with ancient trees, each rich with wildflowers and wildlife that delight our imagination and inspire us to art and awe.

Aldo Leopold wrote, "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is

wrong when it tends otherwise." It is increasingly critical that people grasp the concept of stability and find ways to protect it at the site level, or support those that do. Today the biggest contributors to destabilized natural processes include altered hydrology, land conversion, overgrazing, eutrophication, the misapplication of fire, and general soil disturbance; the diagnosis of each requiring a site-specific awareness of ecological relationships. We disrupt the natural processes of stability at our peril. If we hope for stability in our lives and in the lives of our children, we must first offer it to the world.



Oenothera macrocarpa (Missouri Evening Primrose) is a species that indicates ecological complexity and intact stability on calcareous glade communities.

The Nature Conservancy's Ranch North Woods Preserve Field Trip Report, April 23, 2017

Article and photos by Theo Witsell

The Nature Conservancy recently protected 234 acres along the lower end of the Little Maumelle River, just downstream from Pinnacle Mountain State Park. I had heard good things but hadn't visited, so when I was asked where I wanted to lead a trip for the spring ANPS meeting, it was the first place that came to mind.

This preserve, called Ranch North Woods, is located at the northwest edge of Little Rock and is accessed from the dead end of Ranch Boulevard in "The Ranch" subdivision. There is ample parking and a clearly marked trailhead from which a gravel road/trail leads across some train tracks and crosses a large, open field. This former pasture and hayfield is now in the early stages of conversion from non-native tall fescue grass to pollinator-friendly native wildflowers and grasses. After the road crosses the field it becomes a more narrow mulched trail at the edge of the woods.

The wooded portion of the site is dominated by a mature hardwood flatwoods community. As the name implies, these natural communities are pretty flat, but are often characterized by subtle micro-topography with lots of little wet depressions interlaced with slightly elevated hummocks, giving the site a diversity of moisture conditions. Most of these flatwoods occur on older, higher stream terraces that rarely if ever flood from the stream. That means their primary source of water is from precipitation, so they are very wet in the rainy season (winter and spring) and dry during the summer and early fall. This wet-dry hydrologic cycle is also influenced by a tight clay layer, or "hardpan" which helps hold water at the surface.

The lower 7 miles or so of the Little Maumelle River (including the stretch at Ranch North Woods) was permanently flooded to an elevation of 249 feet above sea level in the 1960s when the Murray Lock and Dam was built downstream on the Arkansas River. This altered that portion of

the Little Maumelle (from Pinnacle Mountain to the mouth) from a free-flowing stream to more of a backwater cypress lake habitat, complete with many species more at home in that environment. Looking from the shore we could see floating mats of both fragrant water lily (*Nymphaea odorata*) and yellow pond lily (*Nuphar advena*), thick stands of floating pennywort (*Hydrocotyle ranunculoides*) and smartweed (*Persicaria* spp.), and emergent stands of softstem bulrush (*Schoenoplectus tabernaemontani*), cattail (*Typha* spp.), and American lotus (*Nelumbo lutea*). In the distance we could even spy a few scattered clumps of the rare cypress-knee sedge (*Carex decomposita*), which doesn't root in the soil but instead grows as an epiphyte on cypress knees and trunks right at the high water level.

Perhaps the most impressive thing about the site is its diversity of trees. The particular flatwoods community located there may actually be an undescribed type. I would describe it as a nutmeg hickory-mixed oak community and I've only seen it at a few places in central Arkansas, on larger streams that flow into the Arkansas River. This same community is also found in Burns Park, along White Oak Bayou near Maumelle, and along Fourche Creek south of Little Rock. It is often dominated by nutmeg hickory (*Carya myristiciformis*) but is also characterized by a good diversity of oaks. There are the common flatwoods species like willow oak (*Quercus phellos*), water oak (*Q. nigra*), and, in the wettest areas, over-



The Ranch North Woods Preserve on the Little Maumelle River boasts high quality hardwood flatwoods and cypress swamp forest.



A stand of blue flags (*Iris virginica*) along the edge of the Little Maumelle River.

cup oak (*Q. lyrata*) but there are also some uncommon species like bur oak (*Q. macrocarpa*), pin oak (*Q. palustris*), and, in slightly elevated areas, cherrybark oak (*Q. pagoda*). Nutmeg hickory is uncommon in Arkansas but is locally common in these flatwoods. The reigning state champion (largest) nutmeg hickory is found along a trail in Burns Park near the covered bridge, but we saw two on our walk through Ranch North Woods that I bet are larger than that one. Other hickories are abundant there as well, with shagbark (*Carya ovata*), pecan (*C. illinoensis*), and mockernut (*Carya alba*). In the wettest depressions we even saw a few water hickories (*C. aquatica*).

Four elm species are known from the site: American (*Ulmus americana*), winged (*U. alata*), September (*U. serotina*), and cedar elms (*U. crassifolia*). The latter two both bloom in the fall and Ranch North Woods is also home to “Arkansas elm” (*Ulmus* × *arkansana*), the rare hybrid between them, which was collected by Eric Sundell in the fall of 2016. Other trees of note include both white ash (*Fraxinus americana*) and green ash (*F. pennsylvanica*) and the uncommon soapberry (*Sapindus drummondii*) which is also locally common.

Though the tree diversity is spectacular, the ground flora is even more rich. Of particular note are three species of iris. In the flatwoods proper are many patches of an iris that we did not see blooming on the trip, but that Brent Baker later discovered was zigzag iris (*Iris brevicaulis*), an uncommon species usually found in wet flatwoods. Along the shoreline of the marsh/river were several big stands of the native blue flag (*Iris virginica*) and the invasive European yellow flag (*Iris*

pseudacorus) growing among the bald-cypress (*Taxodium distichum*) trees that line the riverbank.

We also saw three species of state conservation concern (rare species tracked by the Arkansas Natural Heritage Commission), all growing together at the marshy transition between the open field and the flatwoods. These were low vetchling (*Lathyrus pusillus*), Arkansas sedge (*Carex arkansana*) and Wolf’s spikerush (*Eleocharis wolfii*), all sun-loving species found primarily in prairies, savannas, and open woodlands. The presence of these rarities attests to the grassland influence of our flatwoods communities, which burned historically in the dry season and were once significantly more open than they are today.

Other species worth noting were swamp leather-flower (*Clematis crispa*), and summer spider-lily (*Hymenocallis occidentalis*), which was visible only as leaves when we were there. There were mixed patches of two superficially similar annual wildflowers, buttercup scorpionweed (*Phacelia ranunculacea*) and small-flower baby-blue-eyes (*Nemophila aphylla*). We had to look closely to tell them apart. We also saw lots of swamp buttercup (*Ranunculus hispidus* var. *nitidus*), green dragon (*Arisaema dracontium*), smooth wild petunia (*Ruellia strepens*), finger dogshade (*Cynoscadium digitatum*), bluestar (*Amsonia tabernaemontana*), and the tiny dwarf skullcap (*Scutellaria parvula* var. *australis*)

As in most of our flatwoods communities, the understory is rich with sedges. Standouts on our trip included Cherokee sedge (*Carex cherokeensis*), shoreline sedge (*C. hyalinolepis*), blue sedge (*C. flaccosperma*), kidney-fruit sedge (*C. reniformis*), cattail sedge (*C. typhina*), squarrose sedge (*C. squarrosa*), and many others.

The wetter parts of the preserve are worth exploring in a canoe or kayak, with several access points within a few miles of the site. The Nature Conservancy has even installed a floating camping platform near their western boundary. For more information on Ranch North Woods, visit <https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/arkansas/placesweprotect/ranch-north-woods-preserve-in-arkansas.xml>.

Theo Witsell is Senior Botanist and Ecologist with the Arkansas Natural Heritage Commission, an agency of the Department of Arkansas Heritage.

ANPS 2017 Fall/Winter Events, Welcome All!

Winslow Tree Tour

September 9, 2017, 9:00-10:30 am

Join Jennifer Ogle for a Winslow Tree Tour that will focus on the trees native to our area that provide beneficial food and habitat to birds, insects, and other wildlife. We will meet at the Winslow Ball Field Pavilion and walk to the wooded areas of the ball park, including the approximately 1/4-mile trail that runs by many kinds of trees on the far slope of the park, above the east side of Two Gun Road. It is a gentle, non-strenuous hike. Wear comfortable hiking or running shoes and bring sunblock, water, tick spray, notebook and pencil. This event is sponsored by the Winslow Tree Board and the City of Winslow.

Directions from Fayetteville: Travel south on US 71-S approximately 25 miles to Winslow, then turn left onto Ball Park Rd. (an unmarked, gravel road located just north of the gas station on the east side of the highway - <https://goo.gl/maps/5rnfWnSBxX32>) and park in the gravel lot near the intersection of Ball Park Road and Hwy 71. Walk to the pavilion via the pedestrian bridge that spans the West Fork-White River. Contact Jennifer at ranunculus73@gmail.com or 479-957-6859 with questions.

Help AR Natural Heritage Commission and Audubon AR collect Native Seeds!

Wednesday, September 13: Terre Noire Natural Area and/or adjacent prairies (near Arkadelphia, Clark Co.)

Monday, September 18: Camp Robinson Special Use Area (near Mayflower, Faulkner Co.)

Saturday, October 7: Cherokee Prairie and H.E. Flanagan Prairie Natural Areas (near Charleston, Franklin Co.) and Parkway Prairie in Russellville

Wednesday, October 18: Wed. afternoon seed collection at Chesney Prairie Natural Area and nearby Stump Prairie (both in Benton County)

Thursday, October 19: Thursday morning seed collection at Baker Prairie Natural Area (Boone Co.)

Friday, November 17: location(s) TBD

Saturday, November 18: location(s) TBD

ANPS members can look to ANHC's website for details of each as they are posted. Of course these will be posted to Audubon's website, in ANHC's newsletters, and emailed to our followers.

North Little Rock, Arkansas River Bank October 14, 10:00 am

Join Eric Sundell and John Simpson for a glorious trip along the north bank of the Arkansas River in North Little Rock. The stars of the show will be cottonwood, green ash, persimmon, etc.

From I-30 in North Little Rock turn East onto E. Broadway, continue through roundabout onto Rockwater Blvd then onto River Road. Park in parking lot by locked gate.

Meet at trail head at 10 am, call Eric Sundell at 870-723-1089 for exact directions.

Terre Noire Natural Area October 21, 9:30 am

Join Eric Hunt at the Terre Noire Natural Area which is one of the highest-quality blackland prairies and woodland complexes remaining in the state. The site is a mosaic of native herbaceous and woody vegetation that includes high-quality prairie as well as prairie in various stages of restoration. It also includes wooded areas that illustrate the forest and woodland matrix within which the prairie openings existed in southwestern Arkansas. The site is home to a number of rare plant and animal species. The Nature Conservancy shares ownership on portions of the area. More information at <http://www.naturalheritage.com/natural-area/terre-noire/>.

Take I-30 exit 73. Go west on AR 8/51/Pine Street and turn left (south) onto AR 26/51/Hollywood Road. Drive down Hollywood Road for approximately 4.5 miles. Turn left onto AR 51 South and go about half a mile. Turn left onto Shiloh Road and we will park along the side of the road. GPS Coordinates for the parking area are 34.085123, -93.172451

Bring water, lunch/snacks and bug spray. Wear sturdy hiking shoes. The terrain is gently rolling and some bushwacking may occur as there are limited trails.

OZARKS CHAPTER ARKANSAS NATIVE PLANT SOCIETY

Thanks to all who agreed to lead a hike. We welcome everyone to attend hikes!

Fall/Winter Schedule:

West Fork of White River, Brentwood, AR September 10, 2017, 10:00 am

Meet at the Brentwood Cemetery parking lot just off Hwy. 71 south of West Fork. We will meet Sandi Formica, Executive Director at Watershed Conservation Resource Center, who will lead us to one of their streambank restoration projects on the West Fork of the White River. Come meet Sandi and her helpers who are working to protect the streambanks and waterways of the Ozarks. Bring a water bottle, insect spray, and a hat. We will be in the sun. Long pants are also recommended. Contact Burnetta at 479-430-0260 if you have questions.

Clabber Creek Trail

September 13, 2017, 6:30 pm

Bob Morgan will continue the Wednesday night hikes along the Clabber Creek Trail. Meet at Holt Middle School Parking Lot, 2365 N Ruppel Rd, Fayetteville, AR 72704.

1st Annual Eureka Springs Native Plant Garden Project—Native Plant Fair September 30, 2017, 9:00– 2:00 pm

Eureka Springs Community Center

The Eureka Springs Native Plant Garden Project is presenting a Native Plant Fair on September 30, 2017 at the new Eureka Springs Community Center, located in the old high school just off Hwy. 62 across from Myrtle Mae's Restaurant in the Best Western Motel. It starts at 9:00 a.m. and runs until 2:00 p.m. Steven Foster, author of the Peterson Medicinal Plant Guide will introduce Theo Witsell, botanist with the Arkansas Natural Heritage Commission, and Scott Woodbury of the Shaw Nature Preserve who will talk about the use of native plants in landscaping. In addition to the speakers, there will also be a large native plant sale. Everyone is invited. Members of the Ozarks Chapter of ANPS will have a ta-

ble with information about the Arkansas Native Plant Society and brochures, tee shirts with Arkansas native species depicted, and a signup sheet for people who would like to join the Ozarks Chapter for hikes planned for next year.

OCANPS Annual Fall Meeting

Harmony Mountain

November 3-5, 2017

Friday night, we will have the potluck dinner and the plant auction. Bring plants, seeds, plant books or other botanical crafts to help raise money for our OCANPS Chapter. We use the money for donations to the Ozark Natural Science Center and the Audubon Halberg Ecology Camp at Camp Clearfork. On Saturday, we will take a hike in the area which will be announced on Friday night. Please call Burnetta if you plan to attend or for further information. This is always a time to get together, enjoy each other's company and cooking and make plans for the coming year.

For further information, please call Burnetta HINTERTHUER at 479-430-0260.

ANPS members, along with Theo Witsell, examine one of many sedges found in the hardwood flatwoods at the Ranch North Woods Preserve. Photo by Millie Phillips.



Spring 2017 Meeting Minutes

ANPS SPRING 2017 Membership Minutes

The Arkansas Native Plant Society general meeting was held on April 22, 2017 at the Audubon Arkansas Center in Little Rock, AR. President Virginia McDaniel called the meeting to order at 6:10 pm and welcomed our attendees. She also reminded us that April has now been proclaimed "Wildflower Month" in Arkansas by gubernatorial proclamation, and thanked the Saturday tour leaders who planned and led tour groups. Virginia also thanked Audubon Arkansas for the use of their facility and all their help preparing for the meeting.

After reminding attendees that hats and t-shirts are still available for purchase, Virginia introduced new board members:

President-Elect: Susan Hooks

Vice President: Donna Hanke

Virginia also acknowledged the rest of the board:

Secretary: Molly Jones

Treasurer: Kate Lincourt

Claytonia Editor: Betty Owen

Memorial Awards Officer: Jennifer Ogle

Membership Officer and Publisher: Mike Burns

Internet and Social Media Officer: Eric Hunt

Nominating Committee Chair: Mike Weatherford

Fall Meeting: Susan Hooks reported plans for the fall meeting which will be at Heber Springs, telling us that "big stuff is planned" and promised more information as it becomes available.

Treasurer's Report: Treasurer, Kate Lincourt, reported a balance of \$22,573.38 as of 21 April 2017. She also reported that early figures show that we have taken in approximately \$400 in registration fees, \$800 in silent auction sales, and \$350 in membership dues since the meeting began. She noted that final figures are to come. Mike Burns moved and Bette Kauffman seconded that we approve the treasurer's report. The motion passed unanimously.

Minutes: Mike Weatherford moved and Jennifer Ogle seconded that the general business meeting minutes of the Fall 2016 Meeting be approved as posted in the *Claytonia*. The motion passed.

Old Business: Karen Fawley updated us on progress of construction on the Eric Sundell Herbarium at Monticello. The herbarium will have room for nearly 60,000 specimens and will include an ANPS library and conference room. Karen also reported Tommy Maxwell of Maxwell Hardwood Flooring, Monticello, AR- <http://www.maxwellhardwoodflooring.com/> donated the flooring for the office, ANPS library/conference room and hallway. A formal opening is scheduled for September of 2017.

Grants and Scholarships: Jennifer Ogle reported that her committee, which includes Brent Baker and Eric Sundell, reviewed 8 applications and approved 7, noting that the 8th application, although worthwhile, simply did not conform to our native plant study emphasis.

New Business: President Virginia McDaniel asked for a discussion about raising our meeting registration fee from \$5 to \$10. The registration fee has not been increased in over a decade (if not more) and the cost of the meetings are beginning to exceed the revenue from the registration. After a brief discussion Maury Baker moved and Isaac Ogle seconded that the membership dues be raised to \$10. The motion passed unanimously.

Eric Sundell made a brief promotional pitch for the annual Audubon camp for 11 and 12 year olds.

There being no further business, President McDaniel adjourned the meeting.

Respectfully Submitted,

Molly Jones, Secretary

Remember to check out the full-color version of the Claytonia by going to the ANPS website, <http://anps.org/newsletters/>.

Select the edition you are interested in and enjoy!

2017 Fall Treasurers Report

			1 Jan - 7 August 2017		Proposed 2018 Budget
	2016 Actual	2017 Budget	Start 2017 →	\$23,419.80	
			2017 Actual as of Aug 7		
<u>INCOME</u>					
Membership Dues	\$3,630.00	\$4,000	\$2,980.00		\$3,800.00
Meeting Registration	\$735.00	\$500	\$450.00		\$600.00
Plant/Silent Auction	\$2,678.00	\$3,000	\$905.00		\$3,000.00
T-Shirt, Hat, Book Sales	\$949.00	\$500	\$1,307.00		\$500.00
Contributions	\$545.00	\$0	\$394.00		\$0.00
TOTAL	\$8,537.00	\$8,000	\$6,036.00	→	\$7,900.00
<u>EXPENDITURES</u>					
ANPS.Org (website expenses)	-\$43.00	-\$50	\$0.00		-\$50.00
AR Flower & Garden	\$0.00		-\$1,041.86 *		\$0.00
Claytonia (Print & Distribute 2 Issues)	-\$1,723.45	-\$1,500	-\$853.15		-\$1,500.00
Directory (Print and Distribute)	-\$847.76	-\$800	\$0.00		-\$800.00
Memorial Awards (Awards/Scholarships)	-\$3,032.00	-\$2,000	-\$5,700.00		-\$2,000.00
Grants/Support to Public Gardens	-\$2,615.34	-\$1,000	-\$298.78		-\$1,000.00
Meeting expenses (space, copies, speaker,etc.)	-\$872.62	-\$1,000	-\$577.81		-\$1,000.00
Ecology Camp	-\$500.00	-\$500	-\$500.00		-\$500.00
Bulk Mail	-\$225.00	-\$240	-\$215.00		-\$225.00
Supplies/postage/miscellaneous (Brochures)	-\$1,375.79	-\$300	-\$71.28		-\$300.00
T-shirts/Hats	-\$1,837.62	\$0	\$0.00		\$0.00
TOTAL	-\$13,072.58	-\$7,390	-\$9,257.88	→	-\$7,375.00
			Total as of 7 Aug 2017	→	\$20,197.92

Respectfully submitted by Kate Lincourt, Treasurer

Note: The Arkansas Flower & Garden Show was not a budget item for 2017; it was an approved project



The Woolsey Wet Prairie Sanctuary was established by the City of Fayetteville as a part of wetland compensatory mitigation requirements under Section 404 Permit 14207 issued by the U.S. Army Corps of Engineers Little Rock District. The 46-acre mitigation site was constructed to offset the permanent alteration of 9.88 acres of wetlands from construction of the City's Wastewater Systems Improvement Project.

(Taken from ecoarkansas.com)

Photo by Burnetta Hinterthuer.

New Members *(Through August 31, 2017)*

Elizabeth Allen (Lockesburg, AR)

Pete Bartlett (Leslie, AR)

Stanley A. Brown (Clarksville, AR)

Diana and Dustan Clark (Goshen, AR)

Mary Conner (Sherwood, AR)

Charlotte DeRoche (North Little Rock, AR)

Marcie Finney (North Little Rock, AR)

Martha Fitzgerald (Little Rock, AR)

Laura Frankenstein (Little Rock, AR)

Debora Goodwin (Conway, AR)

Brent and Erica Humphreys (West Plains, MO)

Tom and Peggy Krohn (Yellville, AR)

Tony Licausi (Bella Vista, AR)

Marty and Wayne Lynch (Hot Springs, AR)

Jake Marquess, Ruth Rowe, Aiden and Caleb (North Little Rock, AR)

Deborah Miller (Redfield, AR)

Buffy Talynn McCorkle (Trumann, AR)

Hannelore and Robert McCumber (Little Rock, AR)

Anne Meszko (Bentonville, AR)

Lisa Morrison (Kingston, AR)

Barbara Paddack (Little Rock, AR)

Brant Portner (Monticello, AR)

Ken E. Petre (Hope, AR)

Jeff Pittman (Mena, AR)

Stephanie Purifoy (Little Rock, AR)

William Rainey (Mena, AR)

Margaret Regnier (Benton, AR)

Star Riparetti (Hot Springs, AR)

Jeanette Sanderlin (North Little Rock, AR)

Bill and Kay Sanders (Roland, AR)

Becky Thurman (Cammack Village, AR)

Jay Tonsfeldt (St. Paul, MN)

Stephen Tucker (Little Rock, AR)

Nate Weston (Fayetteville, AR)

Ron and Jane Wiewora (Searcy, AR)

Lawrence and Heidi Whitman (Little Rock, AR)

Melissa Woods (Little Rock, AR)

Margie Worlow (North Little Rock, AR)

New Lifetime Members

Tamara Walkingstick (Perryville, AR)

Theo Witsell (Little Rock, AR)

**ANPS Fall Meeting
6-8 October 2017
Heber Springs, 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, October 6th at the Quality Inn Conference Center.

Meeting Location:

Quality Inn & Conference Center, Heber Springs, AR

Hotel:

Quality Inn & Conference Center

3450 Highway 25B North,

Heber Springs, AR 72543

(501) 362-1000 or (501) 362-0253

Reservations must be received by September 24, 2017. Any rooms not reserved by that date will be returned to their inventory. There are 16 Doubles for \$85/night and 19 Kings for \$75/night reserved. Amenities include, free Wi-Fi and free hot breakfast. Be sure to mention that you are with the Arkansas Native Plant Society when making your reservation. Individuals are responsible for their own room and tax. All cancellations must be made by 4:00 pm of day of arrival to prevent cancellation penalties. **Reservations can be made at the link above (hotel name is link).**

Dining Options: We will have a Potluck meal Friday and Saturday evenings. Bring a dish or just come and eat! There are also dining options in the Heber Springs areas near the hotel.

Field trips: Several field trips to local areas of top botanical interest will be scheduled for Saturday 8:30 AM-5:00 pm and Sunday 8:30-12:00 PM. We will offer something for everybody, whether you want to take it slow and easy or something more vigorous. You must sign up for field trips on Friday evening to allow for adequate logistical planning.

Programs:

Friday—7:00 to 9:30 pm – Annual LIVE Auction (bring native plants, books, homemade jelly or plant art for auction)!

Saturday-- 7:00 pm –Allison Fowler, the wildlife diversity program coordinator for the Arkansas Game and Fish Commission will give a presentation “**Monarch Conservation Efforts in Arkansas**”.

For up-to-date details, go to www.anps.org or contact Susan Hooks, shooks@fs.fed.us, (501) 282-5365.



**Save the Date! ANPS 2018 Spring Meeting:
Russellville, AR April 13-15**

Letters to the Editor

Dear Editor,

Good News! The Northwest Arkansas Land Trust has completed a conservation easement on all the remaining Johnson Pear Farm parcels (east side of Kessler Mountain south of Fayetteville) which have my name attached. The "farm" will not ever be developed, the plants not ever bothered by any construction.

Sincerely, **Anne Prichard** 5/13/17

Dear Editor,

Sad news about native plant enthusiast Dave Westendorf.

David H. Westendorf, age 76, of Fayetteville passed away Monday May 22, 2017. He was born July 7, 1940 in Cincinnati, Ohio to Herbert and Helen Winters Westendorf. He was an Air Force veteran. He received his M.A. and Ph.D. Degrees from Vanderbilt University. David joined the faculty of the University of Arkansas in 1974 and taught there as a psychology professor until his retirement in 2005.

He is survived by his wife, Anita Zisner; four siblings, Dick Westendorf and his wife Jean of Cincinnati, Ohio, Sue Simon Westendorf of Athens, Ohio, Sally Pitstick and her husband Earl of Cincinnati, Ohio, Mary Ann Westendorf and her husband Gary Goosman of Amesville, Ohio; two grandchildren, Jacob and Elayna Davis of Spring, Texas.

A memorial was June 4, 2017 at the West Mountain Brewery in Fayetteville. Memorial contributions may be made to

Arkansas Native Plant Society, 4017 Blue Bird Lane, Little Rock, Arkansas 72210 or Southern Poverty Law Center, 400 Washington Ave., Montgomery, Alabama 36104.

Regards, **Burnetta Hinterthuer**

Dear Editor,

On May 9, 2017, Vernon Human died in California after he and Virginia had recently moved from the Gaither Community near Harrison to California in order to be closer to family. He and his wife Virginia Harrington accompanied us on many field trips and events and we always enjoyed having them. On field trips he regaled us with his knowledge of ecology and his great sense of humor. For several years he contributed to the OCANPS Newsletter with articles on native plants and life in the country. In 2004, his book A Naturalist at Play was published by the Lompoc Valley Botanic and Horticultural Society with assistance of King Enterprises. From his essay "A Christmas Salad" he wrote, "The truth is as ancient as time – the real joys in life, the deep happiness and abiding satisfactions, derive from simple things that we ourselves do. Some persons are affronted when I describe myself as the luckiest and happiest man in the world. They are so convinced that happiness is possible only to the wealthiest one percent that it has ceased to be an option in their planning. Naturally they are indignant that I should pretend to it, for none believes that I have found it, as if it had ever been lost." Our sincerest condolences to his family. I am so glad that I got to go on those hikes with him.

Regards, **Burnetta Hinterthuer**

Dear Editor,

I am excited to announce that we have a new Notes from Nature Expedition that is live for label data transcription. Thanks to everyone who participated in the previous effort for species of the Ouachita Mountains.

As most of you know, Notes from Nature is a citizen science platform to help us make "legacy data" from herbarium specimen labels useful in our research. I'm thrilled that the current expedition will directly assist in three active research projects here at Arkansas State University. Moreover, this current expedition covers the Mississippi Alluvial Plain (the Delta region) that has been described as a botanical "avoidance" zone. Our research is filling these gaps so we have an accurate representation of the species and natural habitats that remain in order to help preserve and protect these natural resources and natural heritage.

Spread the word widely, please, to the network of Master Gardeners, Master Naturalists, and Arkansas Native Plant Society that this expedition is live and we need your help. It is pouring rain here in Jonesboro right now, so it may be a great time to get started...you know, sipping coffee in front of the computer, but still looking at plants! See link:

<https://www.notesfromnature.org/active-expeditions/Herbarium>

Thanks to all of you for your enthusiasm for our statewide and southeastern region-wide digitization effort. We couldn't do it without your help.

All the best,

Travis D. Marsico, Ph.D.

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Claytonia

Fall 2017
Newsletter

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President's Message

Virginia McDaniel

This spring Dr. Doug Tallamy spoke at Little Rock Flower and Garden Show thanks to sponsors like ANPS (Thanks Mike W!). Dr. Tallamy brilliantly distills the message of why we should plant native plants. I know we know it, but let me reiterate: The sun is the source of most of the life giving energy on the planet. Plants use it to make their own food and insects do a wonderful job of transferring that energy to other animals. But it is not an easy or simple process. You can't place any insect on any green leaf and expect it to eat, because plants create many nasty chemicals to deter such munching. So most insects specialize on a group of plants to eat because it takes a long time to develop the physiological ability to digest or deal with those chemicals. For example, plants in Juglandaceae (like black walnut) produce a defensive chemical called juglone. The walnut caterpillar moth (*Datana integerrima*) larvae have enzymes that can digest juglone. Monarchs have the ability to store toxins in their exoskeleton. It's kind of like in *The Princess Bride* when the Dread Pirate Roberts outwits the criminal mastermind Vizzini in the poison scene; he put the poisonous iocane powder in both glasses but was able to survive because he spent the last few months developing a tolerance to it. I digress. Basically, insects won't eat exotic landscaping plants from China and Europe. They can't digest them and in spite of their greenness, they won't recognize them as food. Native plants are important because they are contributing members of an ecosystem. Sure, everyone has their favorite exotic plant. I like gardenias. But realize that they are like statues. How many statues do you want in your yard?

But when it comes to native plants, I must admit I am biased. Though I work for the Forest Service, I always want to plant herbaceous plants. Which is good, but really trees provide an incredible food source for caterpillars and other insects (i.e. bird food). Do you know it takes 340 to 570 caterpillars/day for over 2 weeks to raise a brood of chickadees? That's about a caterpillar every 3 minutes from 6 am to 8 pm for 16 to 18 days! I'm tired thinking about working that hard. But we can make it easy for them by planting native trees in our yards so the food source is close. I am always excited when I find loads of caterpillar poop on our trampoline that sits under a large willow oak in our backyard. My daughter thinks it's pretty cool too. A five-year-old appreciates any excuse to talk about poop! Yay for bird food!

The message I'm trying to get across is I really appreciate the cooperation between us ANPS plant people and Audubon Arkansas bird people. The spring meeting and associated native plant sale was a major success for all involved and may become a yearly event. But for now I look forward to our native plant auction and meeting in Heber Springs! See you all there!

Virginia McDaniel

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