

CLAYTONIA

Newsletter of the Arkansas Native Plant Society

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Spring/Summer 2010

In this issue:

ANPS Supports Warren Prairie
Natural Area Expansion
Page 1

New Species of Leatherwood
from Arkansas
Page 2

Fall 2009 Minutes
Page 6

Demaree Grant Awarded
Page 6

ANPS Goes to the Arkansas
Flower and Garden Show
Page 8

New Herbarium Gets Official
Page 8

Spring Meeting Info
Page 9

Notes from the Editor
Page 11

New, Announcements, Field
Trips & Events
Page 12

ANPS Donates \$5,000 to Expand Warren Prairie Natural Area



Warren Prairie Natural Area is one of the most botanically diverse and unique sites in Arkansas's System of Natural Areas. Rich with plant species, the site is a mosaic of pine flatwoods and savanna, saline soil barrens, grasslands, marshes, oak forests and woodlands, and bottomland sloughs. Photo courtesy of The Nature Conservancy.

At the Fall Meeting the ANPS membership voted to donate \$5,000 of the Society's funds to the Arkansas Field Office of The Nature Conservancy (TNC) to help expand Warren Prairie Natural Area. This expansion opportunity, which will more than double the Natural Area's current size of 2,129 acres, came about after more than two years of negotiations between TNC, the Arkansas Natural Heritage Commission (ANHC), and the landowner (Plum Creek Timber Company). Warren Prairie is one of Arkansas's most unique natural areas, with a mosaic of pine flatwoods and savanna, saline soil barrens, grasslands, marshes, oak forests and woodlands, and bottomland sloughs. More than 440 plant species are known to occur on the area, including 16 species of conservation concern. Rare animals including Henslow's Sparrow, Gulf Crayfish Snake, and Northern Crawfish Frog also depend on the habitats there.

This new acquisition will protect a number of habitats of conservation concern, but focuses on loblolly pine flatwoods, a habitat type that is declining rapidly throughout its range as remaining natural sites are clearcut, plowed into tall rows (bedded), sprayed with herbicide, and converted to intensively-managed pine plantations. These flatwoods are among the highest priority conservation targets for both TNC and the ANHC and are identified as a priority in the Arkansas Wildlife Action Plan administered by the Arkansas Game and Fish Commission. This area around the existing Warren Prairie Natural Area provides one of the best remaining opportunities in Arkansas to protect a large intact block of the Pine Flatwoods Ecosystem.

The core of Warren Prairie Natural Area was a 304 acre tract purchased by TNC and the ANHC in 1983. Since then, the ANHC and TNC have purchased fee title or conservation easements on more than 1,825 additional acres, in ten separate purchases. Most of these purchases were funded by money from the Natural and Cultural Resources Council but also from the State General Improvement Fund, 1/8 Cent Conservation Tax, and grants from the U.S. Fish and Wildlife Service and National Park Service. This new purchase, at 2,427 acres, is the largest single purchase ever at Warren Prairie, and will more than double the size of the natural area. Since our Fall Meeting, this land has been purchased by TNC for a total of \$3,356,200. To date, ANHC has secured enough funding from State funds and Federal Forest Legacy Program funds to purchase 2,107 of these acres from TNC, which leaves approximately \$450,000 that TNC must raise to pay back money it borrowed to complete the purchase. A total of \$100,000 of this amount has been raised so far by TNC, including the \$5,000 from the ANPS.

In addition to the decision to donate \$5,000 the membership agreed to a fundraising initiative to give members the opportunity to contribute individually. A mailing with detailed information will follow this issue of *The Claytonia*. In the mean time, take a trip down to Warren Prairie this year and enjoy an area that the ANPS helped to protect! A map and driving directions are available on the ANHC's website at www.naturalheritage.org.

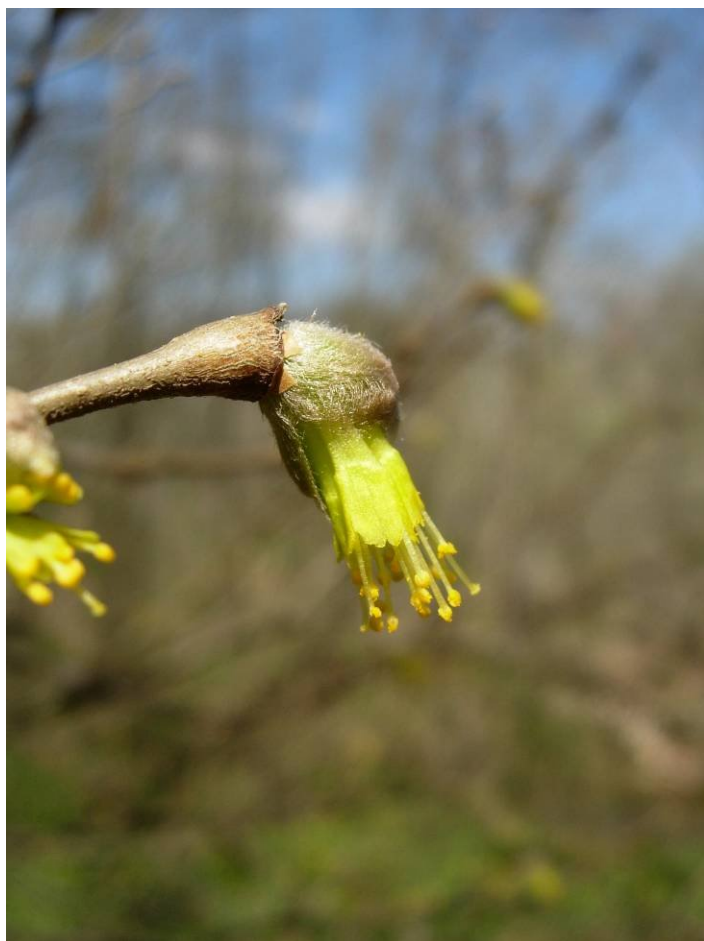


Pine Flatwoods are home to many rare plant species that depend on an open, savanna-like structure (which allows sunlight to reach the ground), periodic fire, and soils that are wet half the year. Photo courtesy of The Nature Conservancy.

New Species of Leatherwood Found in Arkansas

By Theo Witsell

Last Spring's issue of *The Claytonia* featured a newly described species of mint from the Ouachitas and Ozarks (Ozark hedge-nettle or *Stachys iltisii*). This issue continues that trend with ANOTHER "brand new" species from the Ozarks, this one a shrub! What an exciting place to live where, despite nearly 200 years of botanical exploration, Arkansas continues to turn up plant species that have never even been described! This most recent species made its debut in a paper published by Aaron Floden, Mark Mayfield, and Carolyn Ferguson in the latest issue of the *Journal of the Botanical Research Institute of Texas*.



Ozark leatherwood (Dirca decipiens) in flower in the early spring. This newly described shrub is known for certain only from one population in Kansas and two in Carroll County, Arkansas. It likely also occurs southern Missouri and other sites in the Arkansas Ozarks, including one in Independence County, but the specimens from these sites lack the reproductive features necessary for proper identification. Photo courtesy of Aaron Floden.

PLANT OF THE ISSUE: Ozark Leatherwood (*Dirca decipiens*)

So what is this overlooked gem? It's new species of leatherwood known only from a few sites in Kansas, Arkansas, and most likely Missouri! This new species, named *Dirca decipiens*, was discovered on a bluff in a wild section of the Overland Park Arboretum (Johnson County, Kansas) by Aaron Floden in the late 1990s. It differs from Arkansas's common (and only other) species of leatherwood (*Dirca palustris*) in several respects. These include 1) its sessile (stalkless) fruits that do not project out beyond the bracts beneath the fruits (vs. fruits stalked from 7 to 20 mm in *D. palustris*), 2) its white to light tan bracts (vs. dark brown in *D. palustris*), 3) its lobed calyx (vs. unlobed in *D. palustris*), 4) its uniformly hairy leaves and stem (vs. usually smooth in *D. palustris*), and 5) the presence of trichomes (hairs) on the tips of the fruits (vs. hairless in *D. palustris*).



Leaves of Ozark leatherwood. Photo courtesy of Aaron Floden.

The following, more technical key is modified from one presented in the paper by Floden, Mayfield, & Ferguson:

1. Inflorescences on elongating peduncles, projecting out of the involucre bracts; adaxial surface of involucre bracts with dark brown, rarely light brown tomentum; calyx unlobed, the margin crenate, undulate, or erose; leaves usually glabrous, rarely somewhat uniformly pubescent; fruit with trichomes absent on the apex..... *D. palustris*

1. Inflorescences remaining essentially sessile, glomerulate within the involucre bracts; adaxial surface of involucre bracts with white to light tan tomentum; calyx mostly 4-lobed, the margins entire to crenate; leaves and stems always uniformly pubescent to tomentulose; fruit with trichomes present on the apex..... *D. decipiens*

In addition, *D. decipiens* begins blooming about a week after adjacent populations of *D. palustris* and occurs in drier sites. Both confirmed sites for *D. decipiens* in Arkansas occur around dry northeast-facing limestone bluffs above streams.

It should be noted that Floden's realization that *D. decipiens* was distinctly different than *D. palustris* came about in part from careful field observation, but in part from growing plants from various localities in a common garden. This, while seemingly an obvious technique for plant taxonomists to employ, is



Lower leaf surface (background) showing dense hairs and tip of fruit (foreground) showing hairs. Photo courtesy of Aaron Floden.

perhaps not used enough by modern botanists. Molecular genetic (DNA) studies conducted by Floden et al. suggest that *D. decipiens* is most closely related not to *D. palustris*, which is its closest geographic neighbor in the genus, but to *D. mexicana*, a rare species known from one site in Tamaulipas, Mexico.

So how did a plant as large as Ozark leatherwood escape notice all this time? Floden offers three likely contributing factors: 1) its extreme rarity, 2) the availability of relatively few herbarium specimens (due to limited collecting of early spring flora), and 3) a lack of careful observation, particularly of living material, by previous workers in the genus. In fact, he says, "the specific epithet *decipiens*, deceiving, was chosen because of the long-standing misinterpretation of the morphology that defines this species as unique from its geographically close neighbor." He goes on to make the point that "this discovery underscores the importance of continued biological collecting and study of museum collections, even in relatively well-studied regions, so that we may be able to better appreciate biodiversity."

Well said!

A NEW WOODY SPECIES!—IN MY BACKYARD!

By Larry Lowman

Even though we Arkansans live in a relatively "well explored" region, botanically speaking, the occasional discovery of a new species within Arkansas flora continues to occur, as the pages of this publication have attested on a regular basis. However, most of the "newbies" are grasses, sedges, or herbaceous plants; discoveries of new woody species of shrubs or trees are extremely infrequent. So it was with great interest and intrigue that I became aware early in the spring of 2009 of a new woody species supposedly found in my home county.

Many of you are aware that major changes have occurred recently for me, including the sale/closure of my former nursery/landscaping business in eastern Arkansas on Crowley's Ridge, and my relocating a year and a half ago to northwest Arkansas, on a tract of very secluded beautiful land in Carroll County. Early last spring I began exploring my land and areas nearby to discover in more detail my botanical surroundings. I was delighted to discover much of my land was home to hundreds of Ozark trillium (*Trillium ozarkanum*), and I hoped other scarce or rare things would be present, and perhaps along the way I could voucher a few new species for Carroll County in the Arkansas Natural Heritage Commission Herbarium. Carroll County was already among the 10 most collected counties in the state, so I wasn't anticipating a lot of new discoveries.

In early April, an old nurseryman friend of mine emailed me from Kansas, to enquire about my new existence. When he found out I was in Carroll County, he communicated again, explaining that he worked as a volunteer now at the Overland Park Arboretum in Kansas, and he had recently become aware of a "new" species of leatherwood (*Dirca* sp.). He was privy to the proposed name of the new species; he communicated that to me, along with the knowledge that at present, the new species was known only from a natural population within the Overland Park Arboretum (far eastern Kansas), and two sites in Carroll County, Arkansas. He was not able to give me much to go on as far as morphological differences between the "new" species and the typical native leatherwood (*Dirca palustris*). Since I had recently located a healthy and abundant population of leatherwood on a neighbor's land within a few hundred feet of my boundary, I was excited. And, as it happened, the leatherwoods were just this moment coming into flower (April 12th).

So I immediately emailed botanist Theo Witsell at ANHC, to see what he knew about the "new" species. He confirmed that my friend was indeed giving me accurate information. The new species name had not yet been published, but was scheduled to be published in the fall of 2009, so it was sort of "unofficial" to

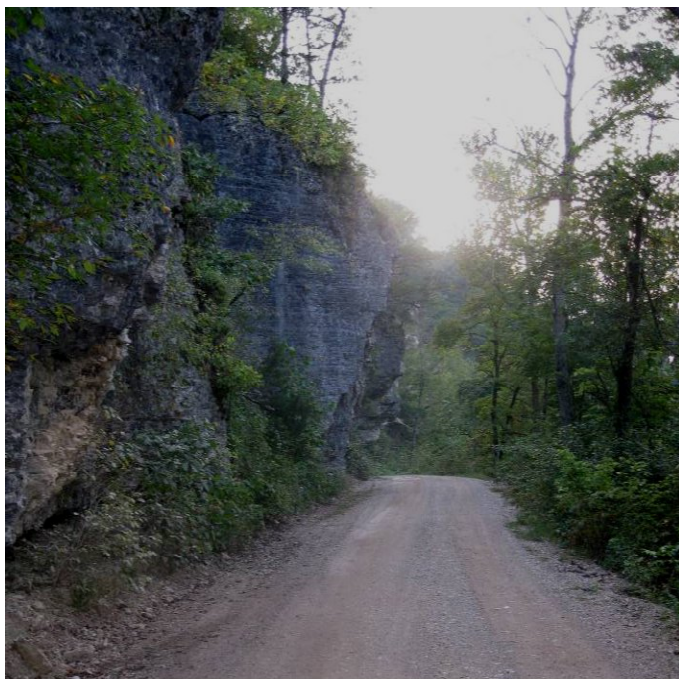


Larry with a large plant of Ozark leatherwood (*Dirca decipiens*) on a steep slope at the base of a bluff in Carroll County. September 2009. Photo by Theo Witsell.

discuss it by name. But since I was already informed of most details, and was seeking to identify local leatherwood populations at a critical time for proper I.D. (flowering time), Theo provided enough info for me to morphologically distinguish the new species. After further inquiry and my further solicitations, he was able to find and share the collection location of the two sites in my county for the new species. The first one was a well known location for a leatherwood population on the opposite side of the county from me, scarcely a couple miles from the Missouri border. But the second site . . . to my astonishment, the site location data might just as well have been the directions to my new homestead!

Armed with the new knowledge, I eagerly visited the leatherwood site I had discovered. Initially, I had estimated maybe a couple of dozen plants of varying ages. Now, looking

more closely at the site, and penetrating further into the area, I discovered there were easily a couple hundred of them, some very young and healthy seedlings, as well as handsome mature specimens six to eight feet high. A leatherwood of this size is a lovely creature, a refined miniature of a graceful tree. Steyermark (author of the original *Flora of Missouri*) indicates a leatherwood of this size could easily be a century or more in age. My amateur examination of the flowers and stems made me suspect that the trees here (I was beginning to call it "the leatherwood grove"), were not fitting the morphology of the new species. So I collected some samples and shipped them off to Theo. After a few days, I decided to investigate other areas nearby that seemed like similar habitat to the "leatherwood grove." I located another site with just a few leatherwoods about a half mile further east. The two individual specimens I examined up close did not bear blossoms. I visited the leatherwoods again regularly, noting the developing fruit. Everything in "the grove" was uniformly similar. But, when I revisited the small population a half mile away, and searched out an older specimen with fruit, I immediately noted a pronounced morphological difference! The fruits were virtually sessile (a trait I was alerted to and watching for), and the fruits all had a slight constriction at the end, providing a nipple-like appearance. This had to be it! So I collected and sent specimens to Theo. The massive population I first located turned out to be regular *Dirca palustris*, and the few isolated specimens (less than 2 doz) that I found at the second site turned out to be the new species, *Dirca decipiens*.



Habitat for Ozark leatherwood, at the base of this limestone bluff (on both sides of the road). Carroll County, Arkansas. Photo by Theo Witsell.

It was utterly delightful for me, at the very first, simply to find leatherwood growing wild nearby. It did not occur in the woodlands near where I grew up in north central Arkansas, or

where I lived on Crowley's Ridge for the last 35 years. At my former nursery I had grown a couple of young specimens which I'd gotten from Mary Ann King, but they were too young to blossom. So even without the excitement of the new species, seeing the leatherwoods blossom in native habitat last spring would have been a special pleasure. But I never dreamed, on first discovering leatherwood nearby, it would develop into such a memorable event!

My repeated visits to check up on the leatherwoods had another consequence: nearly every time I tromped into the sites another very exciting plant revealed itself. One visit I became aware that several of the canopy trees were basswood (*Tilia americana*), a tree species not often encountered in Arkansas woodlands. Another time I delighted in finding a huge colony of Ozark spiderwort (*Tradescantia ozarkana*) tucked in a secluded cove (and made certain to revisit when they were in flower!). The spring ephemerals in the vicinity were awesome: abundant bloodroot (*Sanguinaria canadensis*), wild ginger (*Asarum canadense*), both yellow and white troutlilies (*Erythronium rostratum* and *E. albidum* respectively), columbine (*Aquilegia canadensis*), green violets (*Hybanthus concolor*), and Dutchman's breeches (*Dicentra cucullaria*) especially impressed me. As the season progressed and foliage unfurled, two more very scarce species revealed themselves—blue cohosh (*Caulophyllum thalictroides*) and running strawberrybush (*Euonymus obovatus*). The latter two turned out to be county records for Carroll County, and both are known from only a handful of other counties in Arkansas.

So what do I think about my new environment? I think I'm gonna like it here! And hopefully, soon enough things can be arranged for me to lead a field trip for ANPS members to share a few of my neighborhood's special treasures.

PHOTO OF THE ISSUE!



Expert field trip leader Eric Sundell gets passionate about invasive alligatorweed (*Alternanthera philoxeroides*) on a recent ANPS field trip to Murray Park, along the Arkansas River in Little Rock. Photo by Susie Teague.

FALL 2009 ANPS GENERAL MEETING MINUTES

**Petit Jean Mountain, Arkansas
Winthrop Rockefeller Institute
October 17, 2009**

Jean Ann Moles called meeting to order at 8:55 pm.

Minutes: Mary Ann King made motion to accept the Spring Meeting Minutes and Brent Baker seconded, all were in favor.

Treasurers Report: Jerry McGary passed out the latest financial report. He explained all new transactions and reported the purchase of a digital projector and speakers. There were no scholarships awarded. Jerry reported \$1,447.00 made from the Plant Auction. New T-shirt expenses will be on next quarter's report. Mary Ann King made motion to accept the Treasurer's Report, Ray Erickson seconded and all were in favor.

Membership Report: Maury Baker gave a current report on ANPS Memberships. He reported 396 Household Memberships, 85 are Family Members which gives us a total of 481 members and of that 121 are life members.

T-shirts: Brent Baker reported the sale of 14 T-shirts with proceeds of \$210.00. Theo Witsell suggested selling T-shirts online and opened a discussion for selling other items with the ANPS logo. Theo will investigate marketing T-shirts and hats on ANPS website.

Scholarship Report: Brent Baker read the Thank You card from Kelley Freeman-Nelson for the Grant she received. The Scholarship/Award Committee recommended a Grant in the amount of \$750.00 to be awarded to Dulcinea Groff. Susie Teague made motion to accept recommendation, Meredith York seconded and all approved. Brent reported sending out Scholarship/Award Application Packets and Scholarship/Award Application is now on ANPS website now and asks everyone to check out the ANPS website. The deadline for application is February 15, 2010.

Newsletter: Theo Witsell requested more field trips and reports for newsletter.

New Officers: Staria Vanderpool announced nominations for Vice President as Sandy Davies and Secretary/Historian as Susie Teague. Brent Baker made motion to accept, Eric Sundell seconded and all were in favor. Staria gave thanks to President Elect Jean Ann Moles and turns the meeting over to Jean Ann as new President.

Old Business: Jean Ann Moles reported our presence during the Garland County Fair and thanked Maury and Barbara Baker for help with the booth. Jean Ann announced to everyone about our booth at the Arkansas Flower and Garden Show coming up

in February 2010. This will be a manned show and volunteers are needed.

New Business: Eric Sundell opened with discussion for donation to the Nature Conservancy for the Warren Prairie Conservation Area. This was a very lengthy discussion with many stipulations to the donation. Bill Shepherd made motion to donate a gift of \$5,000.00, Carolyn Minson seconded and all were in favor.

Martha Wyre made motion to adjourn at 9:58 pm., Theo Witsell seconded and all were in favor.

- Susie Teague

Delzie Demaree Research Grant Awarded

By Brent Baker,
Awards & Scholarship Chair

At the Fall Meeting of the Arkansas Native Plant Society, the membership voted to award a \$ 750.00 Delzie Demaree Research Grant to Dulcinea Groff, a graduate student at the University of Central Arkansas. Groff is working on her Master's degree under the direction of Dr. Richard Noyes. For her thesis research, she has been studying the evolutionary relationship between two native species of fleabane, *Erigeron strigosus* and *Erigeron tenuis*, members of the composite, or sunflower, family (Asteraceae) with small, daisy-like flowers, and both widespread in Arkansas. Recent molecular work by Dr. Noyes has shown that these two species may be more closely related within their genus than previously thought or indicated by their morphologies (forms and structures). Groff is continuing the research by studying the DNA sequences of local populations of these species. Specifically, she is interested in a special subset of *E. tenuis* populations that reproduces asexually by unfertilized, yet viable seeds which germinate to produce clones of the mother plant. She hopes to elucidate the relationship of these plants to the more typical, sexually reproducing members of both species, testing a hypothesis that these atypical plants are actually derived from past hybridization between them.



Delzie Demaree with Bill Shepherd in a Miller County canebrake. 1974. Photo by Bill Shepherd (taken with time delay).

Letter from Scholarship Recipient

Since the most recent issue of the Claytonia, we received the following letter from Kellie Freeman Nelson, a student at Arkansas State University who received an Aileen McWilliam Scholarship from ANPS.

Dear Arkansas Native Plant Society,

I would like to take this opportunity to express my deep appreciation for your generous gift in the form of the Aileen McWilliam Scholarship that you presented to me.

As an older student who had the responsibility of the care of the home, kids, and working a job part time, this gift enabled me to finish my final semester of my undergraduate program. However, this gift did much more than simply help me pay for my classes. Please let me explain:

This scholarship represented much more than the financial support; it became clear to me that I was supported in my academic endeavors to reach my goals and dreams. I realized that there were people who wanted me to succeed! Having this “vote of confidence” from people that are outside of my immediate family was very strengthening to my own confidence in myself.

I thought long and hard on what I would use the scholarship money for. I wanted to be able to use it in the wisest possible way and I really wanted to be able to take the benefits with me as I pursued my Master’s degree. So I used part of the money to enroll in the class called “Medical Mycology,” which I thoroughly enjoyed! And I used the remainder to purchase a small net book with I could use for my classes as a graduate student. This is a very small laptop computer (but less expensive) and not only am I using this for taking notes in my classes, but I also use it to keep track of all my responsibilities as a teaching assistant for Botany lab and Plant Taxonomy lab! This makes helping the students so much easier. If there is a question of some type of plant ID and we cannot seem to quite definitively confirm an identity of a plant, we can go online on my net book and look it up in the USDA plant ID base or another website. I also can keep track of all the assignments and grades of the students and be able to quickly access them if needed. I love this little computer! And I think of how truly blessed I am each time I use it.

So thank you so very much not only for your generous gift, but even more so for the “vote of confidence” you have given me. Someday I WILL have my Ph.D. and my love for botany will plan an important part in those studies.

Respectfully and Sincerely,

Kellie Freeman Nelson
Arkansas State University

NEW MEMBERS

The following new members have joined the ANPS since the last issue of Claytonia, from September 2009 to February 2010:

New Members

Randall Adams (Magnolia, AR)
Cindy Barry (Mount Ida, AR)
Bob Brewer & Jonna Hussey (Fayetteville, AR)
Sue Crane (Hot Springs Village, AR)
Bland Currie (Wilmot, AR)
Patricia M. Cromwell (Mountain Home, AR)
Richard Emmel (Little Rock, AR)
Marge Ericson (Hot Springs Village, AR)
Ben Fluharty (North Little Rock, AR)
Judith Griffith (Berryville, AR)
Cindy & Dewayne Hancock (Little Rock, AR)
Susan Frey (Prairie Grove, AR)
Debby Haines (Little Rock, AR)
Marsha Heien (Stuttgart, AR)
Dawn Jackson (Conway, AR)
Dr. Douglas Jeffries (Clarksville, AR)
Dr. Dunn Jones (Conway, AR)
Pat & Joan L. Kenady (Hot Springs Village, AR)
Erin Leone (New Blaine, AR)
David Lyon (Little Rock, AR)
Kay Motsinger (Roland, AR)
George Oleson (Winslow, AR)
Autumn Olsen (Fayetteville, AR)
Robert Pekel (Rogers, AR)
Lynn Phillips (Siloam Springs, AR)
Daryl Revelle & Suzanne Bennett (Springdale, AR)
Kathie Riedel (Hot Springs Village, AR)
Bill & Emily Robertson (Bella Vista, AR)
Rob & Jackie Robinette (Conway, AR)
Gale Booth Stewart (Little Rock, AR)
Melissa Terry & Flint Richter (Fayetteville, AR)
Beverly Vlassek (Hot Springs Village, AR)
Layne Wagoner (Hot Springs Village, AR)

New Life Members

Ann Gordon (Chester, AR)
Don Higgins (Morrilton, AR)
George Oleson (Winslow, AR)
Lynn Phillips (Siloam Springs, AR)
Kathleen Redd (Mandeville, LA)

We welcome these new members to the ANPS and hope to see them at the Spring Meeting!

ANPS at the Arkansas Flower and Garden Show

By Jean Ann Moles

The Arkansas Native Plant Society had a booth for the first time this year at the Arkansas Flower and Garden Show. The show is always the last weekend in February. The 2010 show was held February 26-28, 2010 at the Statehouse Convention Center in Little Rock. The ANPS booth was in a high traffic area which is what every exhibitor hopes for.

I talked myself hoarse each of the three days. The honey smoothies that the Arkansas Beekeepers always sell at their booth fixed me each evening.

A thank you goes to Mary Ann King, Eric and Milanne Sundell, Karen Seale, Sandy Davies and Lois Wilson. They also did a turn staffing the ANPS booth. Mary Ann provided photos as did Lois Wilson. Mary Ann also contributed a \$100 gift certificate to the Arkansas Flower and Garden Show Silent Auction in the name of ANPS.



Our Fearless Leader, ANPS President Jean Ann Moles, braves the crowds at the 2010 Arkansas Flower and Garden Show at the Statehouse Convention Center in Little Rock.

Arkansas's Newest Herbarium Becomes Official

By Theo Witsell

The Arkansas Natural Heritage Commission is pleased to announce the official recognition of its herbarium by Index Herbariorum, the database of worldwide herbaria that is maintained by the New York Botanical Garden. Herbaria (the singular is *herbarium*) are collections of scientific plant specimens used for identification and research purposes. Each herbarium specimen is pressed, dried, mounted on archival acid-free paper, and has an accompanying label with detailed information on the location, habitat, and date of the collection. As part of the official listing, each herbarium is assigned an identifying acronym (ours is ANHC). This acronym is basically a shorthand way to refer to the collection. When a specimen is cited in a scientific publication, it is followed by the acronym of the herbarium (or herbaria) in which that specimen is deposited. For example, when the type specimen (i.e. *the* specimen on which a new species description is based) of the new leatherwood, *Dirca decipiens*, was cited in the paper by Floden et al., it appeared as:



Herbarium specimen of downy gentian (Gentiana puberulenta) from the ANHC Herbarium. One purpose of this collection is to voucher, or document, rare plant occurrences in the Natural Heritage Commission's database of species of state conservation concern. Photo by Jonelle Doughty/ANHC.

Dirca decipiens A. Floden, sp. nov. TYPE: U.S.A. Kansas. Johnson Co.: Overland Park Arboretum, S side of Wolf Creek on buff, under *Quercus* sp., *Cercis canadensis*, *Carya ovata*, with *Staphylea*, *Asimina*, *Corylus*, *Erythronium albidum*,

Maianthemum, Polygonatum, Arisaema, Aquilegia, 2 Apr 2007, A. J. Floden, L. Nevling & M. Mayfield 162 (holotype: KSC; isotypes: BRIT, KANU, MO, NEB, NY, OKL, TENN, TEX, UARK, US).

The acronyms listed after the types represent the herbaria where they were distributed. If another researcher wants to examine these specimens, they can look up the acronyms on the Index Herbariorum website and get the full names of each herbarium, as well as contact information and a staff directory for each. Though the ANHC Herbarium has been gathering specimens since 2003, it only recently collected more than 5,000 specimens, the minimum number required for listing in Index Herbariorum.

The Herbarium of the Arkansas Natural Heritage Commission consists primarily of specimens collected in the course of statewide ecological and biological inventory work conducted by the Arkansas Natural Heritage Program. Many of the specimens represent species that are rare in the state or were collected from rare or unusual habitats. The goals of the collection are 1) to provide a reference collection for work performed by Natural Heritage Commission staff and their conservation partners, 2) to house voucher specimens for rare plant records in the database of the Arkansas Natural Heritage Program, and 3) to voucher plants of ecologically sensitive or otherwise significant lands, including those contained within the State's System of Natural Areas. While most specimens are from Arkansas, special care is being made to assemble a collection of plants from surrounding states that are not presently known in Arkansas but are likely to be found here.



Specimens are stored in metal cabinets to keep out insects and moisture and are arranged according to families and species. Photo by Jonelle Doughty/ANHC.

The full Index Herbariorum listing for the ANHC Herbarium can be viewed at <http://sweetgum.nybg.org/ih/herbarium.php?irn=159338>.

ARKANSAS NATIVE PLANT SOCIETY

SPRING 2010 MEETING

APRIL 16-18, 2010

DAYS INN
17701 INTERSTATE 30
BENTON, ARKANSAS

REGISTRATION

Registration costs \$5.00 and occurs on-site Friday from 5:00 p.m. to 7:00 p.m. at the Days Inn. At the registration table we will have sign-up sheets and trip information for various field trips. Registration will also be available Saturday evening.

During the registration period refreshments will be provided (potluck style). We always appreciate members who bring items to share.

AGENDA

Friday, April 16th

5:00-7:00 p.m. Registration at Days Inn

Dinner is on your own

7:00 p.m. Evening Program: "THE FLORA OF SALINE COUNTY"

Theo Witsell & John Pelton will give a detailed and heavily illustrated report on the more than five years of field work they conducted to document the plants and habitats of Saline County. Saline County includes portions of both the Gulf Coastal Plain and the Ouachita Mountains and is among the most botanically diverse counties in Arkansas, with more than 1500 species! Hear about (and see) rare habitats like igneous glades, shale barrens, floatant marshes, and channel scar depression wetlands. And see photos of the 25 species of native orchids known from the county as well as rare plants like Pelton's rose-gentian, which is known only from Saline County, Arkansas and nowhere else on Earth!

This will be followed by a brief slide show highlighting the field trip destinations for Saturday and Sunday.

Saturday April 17th

8:30 a.m. Field trips depart from the Days Inn

1:30 p.m. Field trips depart from the Days Inn

Dinner is on your own.

7:00 p.m. Evening program

The ANPS is fortunate to have a number of skilled photographers among the membership and Saturday's program will present an opportunity for photographers in the Society to show their work documenting the native flora of the state. Time will be limited to two hours, so please contact Theo Witsell (501.831.7473) IN ADVANCE OF THE MEETING if you would like to show some photos. We will have both a digital projector and a slide projector available for use.

The Society's business meeting will follow the program.

Sunday, April 18th

8:30 a.m. Field trips depart from the Days Inn

ACCOMODATIONS

A special rate has been arranged at Days Inn (501.776.3200). The rooms being held for ANPS are under "Plant Society". Room rates are \$59 plus tax. Pets can stay for an extra \$5. Free breakfast hot bar for those staying at the motel. Easy access to the interstate. Lots of eating places within a two block area

Additional motel lodgings in Bryant at Exit 123. No special rates have been arranged:

Holiday Inn Express (501) 847-0900

Hometown Hotel .com (501) 653-0123

Comfort Inn and Suites (501) 653-4000

LaQuinta Inn and Suites (501) 847-9494

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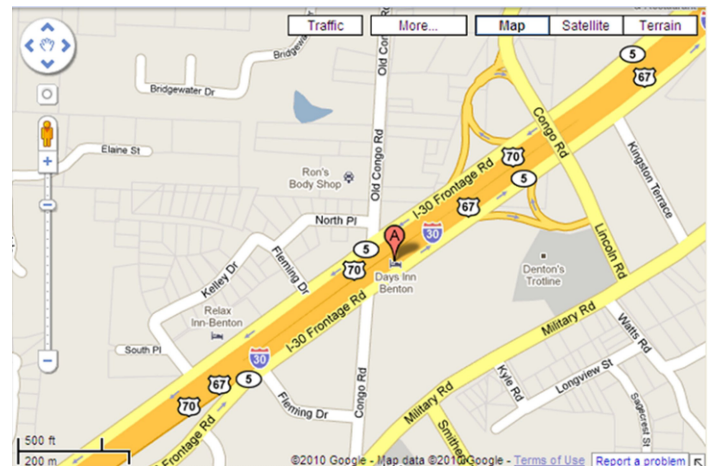
DRIVING DIRECTIONS

(FROM THE EAST)

Coming from the east side on the state on Interstate 30, take exit 118, go past Brown's Country Restaurant, go under the overpass, circle right, at the traffic light turn right. At the second traffic light once you are over the overpass, turn right (you will see Lincoln Square on your right and TLC service station in front of you). When you turn right you will be on Military Road. At Burger King turn left (you will still be on Military Road) at Taco Bell turn right. At the bottom of the hill you will see IHOP on your right and Colton's Steak House on your left. Turn into Colton's parking lot and you will see Day's Inn.

(FROM THE WEST)

Coming from the west side of the state on Interstate 30, take exit 117 and stay on the service road, go past Wal-Mart. If you miss the Days Inn sign, go to Colton's Steak House, turn right in the Colton's parking lot and you will be a short distance from the Days Inn parking lot.



Jointweed (Polygonella americana), Louisiana goldenrod (Solidago ludoviciana) and elegant blazing-star (Liatris elegans) at Poison Springs Natural Area. Photo by Meredith York.

Notes from the Editor

Why Warren Prairie is Worth the Investment

The first time I walked out into Warren Prairie I couldn't believe that I was in Arkansas. Dense stands of dwarf palmetto and prairie grasses transitioned into open pine savannas, patchy grasslands, Carolina ash swamps, and cypress and overcup oak sloughs. Marshes full of arrowhead, spider lilies, sedges, and rushes alternated with dry prairies, glade-like outcrops of saline subsoil, and loblolly pine and post oak savannas. Dry shortleaf pine and blackjack oak woodlands sat on windblown mounds that formed during desert-like conditions several thousand years gone. I thought I was in Florida. To the botanist and plant enthusiast, or to any nature lover for that matter, the landscape is impressively diverse, changing almost impossibly from one acre to the next. Where else in Arkansas can you see prickly pear cactus growing within feet of spider lilies?



Pineywoods dropseed (Sporobolus junceus), a rare grass known in Arkansas from just two sites, one of which is Warren Prairie Natural Area. This species grows in open pine savannas that burn occasionally to keep them open. Photo by Scott Simon.

Certainly not all places are created equal. Some remnants of our natural landscape are exceptional and jump out immediately when we ask ourselves "which places must be preserved?" Warren Prairie is such a place. For me it will always be a place of discovery. I've been there scores of times over the last 15 years but always find something new and surprising with each return visit. It was here that botanists from the past like Delzie Demaree and Dwight Moore made surprising discoveries like Texas sunnybells (*Schoenolirion wrightii*), barrens silky-aster (*Symphyotrichum pratense*), geocarpon (*Geocarpon minimum*), white-top sedge (*Rhynchospora colorata*), and Louisiana log fern (*Dryopteris ludoviciana*). And it is here where globally r

rare plants like barbed rattlesnake root (*Prenanthes barbata*) were found new to the site only recently, despite steady visits by botanists going back at least 80 years.

The Pine Flatwoods Ecosystem of southern Arkansas, of which Warren Prairie is a part, contains a treasure trove of biological diversity but this richness is being lost or degraded on an alarming scale and at an alarming rate. This loss is, as the famous ecologist Edward O. Wilson often says, "not reversible". Once a site is degraded past a certain point, it will not be the same again.

There are few places in southern Arkansas where there are still sizable, landscape-scale pieces of the pine flatwoods ecosystem left to protect. And these are going fast as changes in the timber industry put increasing pressure on them to be converted from natural pine flatwoods with impressive variations in microtopography, hydrology, and soils, to intensively managed plantations. If we want to preserve decent-sized pieces of intact pine flatwoods with the full complement of species they support, it is literally now or never.

This is why, when my wife and I were deciding where we would invest in conservation this year, we chose the Nature Conservancy's Warren Prairie expansion campaign. I hope that you'll consider making a donation, in whatever amount you can afford, to help permanently protect this most unique landscape.



Open grasslands within the pine flatwoods are a hallmark of the saline barrens of the Gulf Coastal Plain and are the primary habitat for several rare plant species. Warren Prairie has the largest examples of this rare habitat in Arkansas. Photo courtesy of The Nature Conservancy.

News and Announcements

FIELD TRIPS NEEDED! We always need people willing to lead field trips, so please contact the editor about any trips you might want to lead in your area. Remember you don't have to be an expert in the local flora to lead a good trip!

WE NEED YOUR CURRENT EMAIL ADDRESS!!! Please check your email address in the directory and let us know if yours is not current. There have been a lot of requests for electronic copies of the Claytonia (as a full-color pdf file, usually from 1-2 MB in size), but it seems that many of the emails we try to send come back to us.

PLEASE PAY YOUR MEMBERSHIP RENEWAL DUES!!! If your mailing label says "09" then you are about to stop getting the newsletter. Please renew your membership. We'd hate to lose you.

ANPS DONATIONS ARE TAX DEDUCTIBLE!!! It is tax season and we'd like to take this opportunity to remind everyone that ANPS is now a 501 c3 non-profit organization and would be happy to take your tax deductible donations all year long.

ARKANSAS AUDUBON SOCIETY'S HALBERG ECOLOGY CAMP. Is there is an 11 or 12 year old in your life who might enjoy hands-on, outdoor study of mammals, snakes, birds, bugs, botany and geology? If so, please remember that every summer AAS offers two one-week sleepover ecology camps at Camp Clearfork in the *Ouachita Mountains west of Hot Springs*. This year's dates are **June 13-18 and 20-25**. Read all about it at www.arbirds.org or contact Liz Fulton at efulton114@sbcglobal.net or 501-663-9380.

ARKANSAS AUDUBON SOCIETY'S ADULT NATURAL HISTORY WORKSHOPS. It's never too early to sign up for a weekend workshop at beautiful Ferncliff Camp in Ferndale, just west of Little Rock. All three of the '09 workshops will be back by popular demand: *Basic Birding with Dan Scheiman, Edible Trees & Plants with Tamara Walkingstick, and Native Tree Identification with Eric Sundell*. In addition, a fourth workshop is in the works. So save the weekend of **October 2-3!** For more information go to www.arbirds.org or contact Eric Sundell at esundell42@gmail.com or 870-723-1089. To register, contact Barry Haas at bhaas@sbcglobal.net.

Upcoming Field Trips and Events

FRIDAY APRIL 16th to SUNDAY APRIL 18th. ANPS SPRING MEETING. BENTON, ARKANSAS. SEE DETAILS THIS ISSUE!

SATURDAY APRIL 17th, 9:30 A.M. LOST VALLEY (BUFFALO NATIONAL RIVER, NEWTON COUNTY). Meet Burnetta Hinterthuer and her students in the parking lot at Lost Valley. We will hike the trail, stopping often to observe the wide assemblage of spring ephemerals. Bring a sack lunch. If you arrive after 9:30 a.m., you will easily be able to catch up with us as we are going to be taking photographs and walking at our usual pace. Please contact Burnetta at 479-582-317 for more information.

SATURDAY, MAY 1st. ARKANSAS VALLEY PHYSIOGRAPHIC REGION—PARIS, ARKANSAS (LOGAN COUNTY). Join ANPS's Expert Botanist Eric Sundell and ANPS Members Sid & Jeanette Vogelpohl for a Spring version of last fall's field trip on the Vogelpohl's 50-acres home-site. The 50 acres includes Hartshorne Sandstone outcrops that cause a 200-foot change in elevation. Plant beds around the house incorporate native plants with family favorites; in a woodland setting. Walk throughout the 50 acres along crisscrossing paths that include an 80-foot bridge over Short Mountain Creek. A superb view of Mt. Magazine. 70+ different trees. Meet at the house (2480 South Highway 309) at 9:45 AM; bring a lunch. For more detailed directions or more information, please contact Sid Vogelpohl at 479-963-1528 or email svogel1@centurytel.net.

SATURDAY MAY 1st. POSSUM TROT REVISITED, AGAIN (OZARK NATIONAL FOREST, NEWTON COUNTY). If anyone is interested in going to Possum Trot, please contact Burnetta Hinterthuer at 479-582-0317 for more information. The hike is strenuous and even more so with all the large limbs and trees that were knocked down during the ice storm. Bring water, lunch, and wear sturdy shoes. We will meet at the Nail church parking lot at 10 a.m., just off Hwy. 16, between Deer and Fallsville. The hike will take a minimum of four to five hours.

SATURDAY MAY 22nd, 10 A.M. COLE FORK (OZARK NATIONAL FOREST, SYLAMORE RANGER DISTRICT, STONE COUNTY). Meet at the intersection of Hwy 14 and Hwy 341 (south end of Push Mountain Road) just a few miles east of Big Flat if coming from the west ; if coming from the east (Allison and Mountain View) the intersection will be west of Fifty-Six. Bring lunch, but there will be options for supper in Big Flat or Mountain View. Call Jackie Leatherman 424-5101 for information. When Burnetta went on this trip about eight years ago, she saw seven species that she had never seen before. Right now, at least three of these are only known from Stone County. Due to the sensitive ecology of this area, this trip will be limited to a certain size, so call early and reserve a spot.

SATURDAY MAY 22nd. TWO RIVERS PARK (WEST LITTLE ROCK, PULASKI COUNTY). 1 P.M. Meet at the first parking area across from the first trailhead. The park is a bit tricky to find: you turn north off Ark 10 on Pinnacle Valley Road toward Maumelle Park but continue east on County Farm Road past the county farms to Two Rivers Park. Eric will be standing in the middle of the road to flag people down. Call him at 870-723-1089 if you need directions—he'll have that cell phone with him at the park. We should see Mississippi kites by the dozen swooping low over the marshes hunting dragon flies. And a few

plants, too. We'll be looking out especially for the pipevine in bloom with its intriguing fly-trap flowers.

SATURDAY JUNE 12th. ARRINGTON CREEK (BUFFALO NATIONAL RIVER, NEWTON COUNTY).

Join Arkansas Natural Heritage Commission Botanist Brent Baker for a hike into the magnificent "Arrington Creek Canyon" on the Buffalo National River near Boxley. We'll meet at 9:30 am at the Boxley Trailhead parking area of the Buffalo River Trail on the west side of Highway 21 at the south end of Boxley Valley (approx. 2 ¼ miles south of the intersection of Highways 21 and 43 at Boxley). We will then carpool to the small 'pull-out' parking area trailhead on County Road 25. We will hike on a small section of the Buffalo River Trail, down a steep north-facing slope into a narrow, beech dominated valley along a rocky stream (Arrington Creek). This secluded little valley is gorgeous! We'll have lunch on the terrace of the creek and then hike up the south-facing slope to see some nice limestone glades/bluffs. This hike will be about 3 miles long and is rather strenuous, so please keep this in mind and wear sturdy shoes. Pack a lunch and plenty of water. Plan for at least 4 hours on the trail. **NOTE:** Please sign up for this hike by calling Brent at 479.970.9143 or emailing him at btb2001@hotmail.com. This is to ensure that you will be expected at the first meeting area and are not accidentally left behind!

SATURDAY AUGUST 28th. ROADSIDE BOTANY AND KING'S RIVER SANCTUARY.

Meet at 10 a.m. at the McDonald's parking lot in Berryville, Arkansas. We will drive the county roads checking out the flora of the ditches and by-ways. Last summer, we were amazed at the diversity of the plants inhabiting these areas. In addition, we will check on the spread of the pincushion flower (*Scabiosa atropurpurea*) and

sweet everlasting (*Pseudognaphalium obtusifolium*) populations and their spread in Carroll County. We will eat lunch in Berryville, check on the earleaf gerardia (*Agalinis auriculata*) population at Saunders Heights and then visit the Sanctuary at King's River. Steve Smith has been monitoring the glades of the Sanctuary and we will be conducting an inventory of the plants. That night we will have a picnic and bonfire if the weather cooperates. Please contact Burnetta if you are planning to attend one or both parts of this field trip day to Carroll County and we can coordinate car-pooling and other activities of the day.



ANPS members head off to explore the rich flora of Cedar Creek Canyon on Petit Jean Mountain at the Fall 2009 Meeting. Photo by Susie Teague.

Arkansas Native Plant Society Membership Application

Please check the appropriate box below.

Membership Categories:

- \$10..... Student
- \$15..... Regular
- \$20..... Supporting
- \$25..... Family Membership
- \$30..... Contributing
- \$150... Lifetime Membership (55 and over)
- \$300... Lifetime Membership (under 55)

- New Member
- Renewal
- Address Change

Please make checks payable to "Arkansas Native Plant Society".

NAME(S) _____

ADDRESS:

Street or Box _____

City _____

State _____ Zip Code _____

Telephone _____ - _____ - _____

Email address _____

Please cut and send this form along with any dues to:

**Maury Baker, Membership ANPS
29 Pandilla Way
Hot Springs Village, AR 71909-7121**



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Please check your mailing label! The calendar year is the membership year. If your mailing label says 09 or earlier it is time to renew! (Life members have an LF.)

Please fill in the information form on the opposite side of this page and send it with your renewals, applications for membership, changes of name, address, email, or telephone numbers to the address on the form: **[Not to the editor]**. Thank you.

PLEASE SEND SUBMISSIONS/SUGGESTIONS TO:
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The purpose of the Arkansas Native Plant Society is to promote the preservation, conservation, and study of the wild plants and vegetation of Arkansas, the education of the public to the value of the native flora and its habitat, and the publication of related information.

CLAYTONIA

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