A New Orchid Hybrid for Arkansas

George P. Johnson, Arkansas Tech University

While examining Arkansas orchid specimens from the University of Missouri-Columbia (UMO) for the Vascular Flora of Arkansas Project, I was fascinated by a specimen of Cypripedium parviflorum, the Southern Yellow Lady's-Slipper (UMO 82436). It seems to be intermediate between the two varieties of that species that we have in the state, vars. parviflorum and pubescens. Normally, var. parviflorum (Small Yellow) has a labellum that is 2-3 cm long, sepals that are dark reddish-purple, and 4-6 well-developed leaves per stem, while var. pubescens (Large Yellow) has a labellum that is 3-4 cm long, sepals that are greenish-yellow with reddish-purple lines, and 3-4 well-developed leaves per stem. The specimen, collected by E.J. Palmer in Washington County in 1925, #26986, consisted of 2 stems and combined the characteristics of both varieties. These plants had a labellum that was 2 cm long, sepals that were greenish-yellow with reddish-purple lines, and 4 well-developed leaves per stem.

I consider this specimen to represent a hybrid and refer to it as the Hybrid Southern Yellow Lady's-Slipper. Interestingly, a quick search of the literature on North American orchids failed to find mention of any hybrid between these two varieties. At this time, I do not know how common this hybrid may be within Arkansas, nor its patterns of variation. Given that the flowering times and the distribution within the state of the two varieties overlap almost completely, it may be quite common and is just being overlooked, passing as one variety or the other. Any flowering plant of Cypripedium parviflorum, the Southern Yellow Lady's-Slipper, should be given a second look; its varietal identity may not be what it appears to be at first glance.
Pretty In Pink: The Calopogons

by Carl Slaughter M.D.

If you were to ask, what do you think is the prettiest family of our wildflowers? Most people would say the orchids. If you were to ask, which genus of our wild orchids would you say is the prettiest? Most people would say the Cypripedias (lady’s-slippers) or the Platantheras (fringed orchids). I would like to add a third genus for consideration in this beauty pageant, the Calopogons (grass-pinks).

There are five species of Calopogons recognized in North America with one of the five species (Calopogon tuberosus) having two varieties. All of the species have been found in the eastern half of North America. The extreme southeast (Florida and surrounding states) are home to the greatest number of these species. One species (C. tuberosus var. tuberosus) can be found growing from Florida to Newfoundland. Another species (C. oklahomensis) has been found only in the mid portion of our country, and is relatively new to our lexicon. Calopogons can be found blooming in March in southern Florida, in May and early June in Arkansas, to July in Newfoundland.

The common name grass-pink would indicate that the flowers have a variation of pink in their color. However, all species exhibit an occasional white form.

The grass-pink orchid is a non-resupinate orchid. Most of our other orchids, as they go from bud to bloom, will rotate 180 degrees. Their lips are in the superior position when they begin their rotation, and end up in the inferior position after the completion of the 180 degree turn. This is known as resupination. The grass-pink mothers either failed to instruct their offspring in the maneuver, or they forgot. In all of the grass-pinks the lip is found in the inferior, non-resupinate position. Everything in nature has its purpose and reason. If it were not for this species’ non-resupination, its chances of being fertilized would be greatly reduced. The grass-pink’s column containing the anther and stigma are at the inferior location of the flower. The thin, hinge-like lip, with its colorful beard is found just over the column in the dorsal position. When a heavy enough pollinator, attracted by the color, lands on the lip, the lip hinges downward placing the pollinator in contact with the pollen grains and the stigma. This is how the Calopogons are pollinated.

Arkansas is home to two of the five species of Calopogons, C. tuberosus var. tuberosus and C. oklahomensis.

The following is a list of the North American Calopogons and a way to tell them from one another.

Calopogon multiflorus
Elongated forked corn; fragrant; purple rachis; pandurate petals; lip as wide or wider than long.

Calopogon pallidus
Widely spaced flowers on long spike; 1-3 flowers, opening simultaneously; other than tuberosus, the last to bloom; longest blooming period; lateral sepals reflexed.

Calopogon barbatus
Not fragrant; closely spaced flowers, opening simultaneously; stem and leaves elongate over the growing season; 2nd to oklahomensis in earliest to flower; appressed narrow leaf.

Calopogon tuberosus var. tuberosus
Leaves only slightly curled transversely; grows in acidic wetlands; elongated lip with non-white, anvil-shaped, dilated distal end; blooms open in succession.

Calopogon tuberosus var. simpsonii
Grows in wet, marly soil; strongly transversely curled leaves; narrow and pale apex of middle lip lobe; lateral sepals sometimes reflexed.

Calopogon oklahomensis
Grows in remnant prairies; first to bloom; elongated forked corns; flowers open simultaneously 1 cm apart; lateral sepals reflexed; leaf length equal to inflorescence height; distant labellum disc same color as most of the flower; triangular region of short, pink hairs; fragrant.

Calopogon oklahomensis is suspected to be an ancient hybridization between C. barbatus and C. tuberosus, so let us go out and find C. barbatus in Arkansas.
Wild Edibles: Gooseberries
by Jan Phillips

Thanks to the negotiation skills of ANPS member and former president Don Crank, a new edible plant column will appear in the Claytonia written by Jan Phillips and excerpted from her book “Wild Edibles of Missouri”, published by the Missouri Department of Conservation. In each issue I will make an effort to include a species that will be available when the issue comes out, for those of you who would like to try out a recipe or two. When eating any wild plant though, be sure to correctly identify the species, as some have poisonous look-alikes. Use caution and common sense. Thanks to Jan and the MDC for the permission to include these reprints here.—ed.

GOOSEBERRY (Ribes missouriense)
FLOWERS: April - May
Saxifrage Family
HABITAT: Rocky or open dry woods, thickets
LOCATION: North Arkansas (Ozark Mountains)
COLLECTION: Leaves, March - May; Fruit, June - September
USES: Fruit, pie, cobbler, jelly, tea

Just mention gooseberries to me and the saliva begins to flow. This is due to the fact that I love the sour, tart berry and am enthusiastic about all of the products made from it. To enjoy a gooseberry while it is green, one must hold the berry in the mouth, slowly breaking it open and allowing adequate saliva to accumulate and dilute the sour flavor.

The puckery berry, for my taste, is best when picked still green. The gooseberry hangs on a stem which generally pulls off with the berry. A hairy beard or whiskers remains on the flowering end of the berry. Both stems and whiskers must be plucked off before using in pies or cobbler. One must truly work for his supper if gooseberry pie is on the menu. Although time consuming, the result is “par-excellence”! After stems and whiskers are removed, put washed berries in a pie shell. Add 1 & 1/4 cup sugar, 1/2 t salt, 1 1/2 T flour, 1 T oleo, and top with the upper crust. Bake at 400 degrees for 45 minutes to an hour, or until golden brown.

The ripe reddish or purple berry does not have the tangy tartness and is preferred by some in the pie. If ripe berries are used, add only 3/4 cup of sugar.

The delicate, pink colored jelly made from the green goosebery is ambrosial food on hot breads. Gooseberry jam is equally good. My mother kills two birds with one stone when making both jelly and jam. She covers the berries with water and cooks for ten minutes or so. Then she pours off most, but not all, of the juice liquid. This is made into jelly by returning it to the heat, adding a small amount of Sure-jell and a cup of sugar per cup of liquid. The remainder of the juice and berries was run through a colander to get as much of the pulp as possible. Again measure cup for cup with sugar, but add no Sure-jell in jam. When the liquid slithers off the spoon and begins to gel, pour into sterilized jars and seal.

Gooseberry leaves may be used raw in a tossed salad or slaw. The young dried leaves may be used for making tea. Pick the young leaves and allow three months to dry. A tea is made by adding 1 t crushed gooseberry leaves to one cup of hot water and allowing it to steep for several minutes. Another name for this fruit is feverberry, so called because it is said to help break a fever by crushing 1 t of the berries and adding that to a cup of hot water.

Whatever the name - feverberry, current, or gooseberry -- it's not great, it's FANTASTIC!!!!!

From “Wild Edibles of Missouri.” Copyright 1979 by the Conservation Commission of the State of Missouri. Used with permission.

“Wild Edibles of Missouri” can be purchased from Missouri Department of Conservation for $6.00 plus S & H by calling 1-877-321-8632 or go to www.mdcnatureshop.com

Ribes missouriense
(Missouri gooseberry)
ANPS Sends Kids to Ecology Camp

The Arkansas Audubon Ecology Camp Committee would like to thank the Arkansas Native Plant Society for their generous financial support in helping to send three budding young naturalists to the Arkansas Audubon Ecology Camps in June. The ANPS contributed $500 in full and partial scholarships to send Alan McCray of Little Rock, Jazlynn Wisener of Norman, and Cody Daniels of Malvern to the camp.

UARK Herbarium to Remain Open

The University of Arkansas has announced that the UARK Herbarium will remain open despite recent cutbacks in funding at the University of Arkansas Museum. Dr. Johnnie Gentry, former director of the University Museum, will be the full-time herbarium director and curator. The herbarium will remain at its current location in the Biomass Research Center at the U of A Farm in Fayetteville. This is great news for the Arkansas Flora Project, all botanical researchers, state and federal agencies, and all those interested in the flora of Arkansas. Thanks to the U of A for finding a way to continue funding despite ongoing budget cuts, and many thanks to the Arkansas Native Plant Society for their support of the Herbarium!

Memorials to Arkansas Vascular Flora Project

Since the last issue of the *Claytonia*, donations in memory of the following people were made to the Arkansas Vascular Flora Project by Don Crank:

B. Gregory Cook
Elsie Logan
Mary Macchietto

To make a memorial, please make checks payable to University of Arkansas Foundation, for Flora of Arkansas Project.

Send to Johnnie L. Gentry, Curator
University of Arkansas Herbarium,
Biomass Research Center 139,
Fayetteville, Arkansas 72701

New ANPS Members

The following new members have joined the Arkansas Native Plant Society since the last issue of *Claytonia*:

- Brent Baker (Dardanelle, AR)
- Margaret D. Beasley (Greenbrier, AR)
- Ellen & Tom Fennell (Little Rock, AR)
- Susan Heaney (Jerusalem, AR)
- Lynn Major (Little Rock, AR)
- National Park Service Heartland Network Inventory & Monitoring Program (Republic, MO)
- Lori Spencer (Paris, AR)
- Bill Worthen (Little Rock, AR)

We welcome these new members to the ANPS!

New Orchid Book for Arkansas

A new book on the native orchids of Arkansas is being written and publication by The University of Arkansas Press is expected in a few years. The authors are George P. Johnson Ph. D. of Arkansas Tech University, and Carl Slaughter M.D. of Morrilton. The book is intended to serve as a complete guide to the native and naturalized orchids of the Natural State and will be suitable for use by professionals and amateurs alike.

While there are both non-technical and technical resources available to assist individuals with orchid identification within Arkansas, there is a great need for a more comprehensive treatment of this plant family than now exists. Such resources are available for many other states, some nearby or adjacent to Arkansas. The new book on Arkansas orchids will include tools like keys for identification, written descriptions, photographs, drawings, distribution maps, a glossary, and a pronunciation guide. No matter where they are, anyone from a casual hiker to a professional botanist will be able to readily identify with confidence all of the orchids known to occur within the State.

The Orchidaceae, the orchid family, is the largest family of monocots and includes approximately 20,000 species. At this time, 42 different orchids are known to occur in Arkansas. Many of them are of conservation concern as their habitats come under increasing pressure from disturbance and development.

George P. Johnson, Arkansas Tech University
Meet the New Botanist!
Dr. Brett Serviss

Though he has been here for more than a year, many ANPS members may not have had a chance to meet Dr. Brett Serviss, the new Assistant Professor of Biology at Henderson State University in Arkadelphia. Dr. Serviss is a botanist and plant taxonomist and is following Dr. Dan Marsh, who retired from Henderson two years ago, as the resident botanist at that institution.

Dr. Serviss was born in Lawton, Oklahoma in 1971. He received a B.S. in biology with a chemistry minor from Cameron University, a M.S. in weed science from Mississippi State University, and a Ph.D. in general botany and plant taxonomy from Mississippi State University. He now lives in Arkadelphia with his wife Tricia and their two children: Annabelle (3) and Lydia (6 months).

His professional interests are primarily weedy and invasive species (including population biology, along with dynamics and factors affecting colonization, establishment, and spread of these species). Other research interests include Narcissus, Bignoniaceae, Araceae, and the Arkansas flora. He is also interested in herps and fishes, landscaping, family, and church. When I asked him why he came to Arkadelphia he said, “I accepted the job at Henderson because I wanted to teach at a small school where I could get to know students, teach a variety of biology courses, and pursue research interests. I enjoy community outreach endeavors that build relationships between the local community and the University.”

Though he didn’t mention it in the bio he sent for this piece, Dr. Serviss is a very talented botanical illustrator, and has had his technical illustrations published in scientific journals. He plans on helping to write and illustrate the upcoming Manual of the Vascular Flora of Arkansas. He will be giving a talk on Invasive Aquatic and Wetland Plants of Arkansas at the Rare and Invasive Plants of Arkansas Conference in October (see registration form this issue). The ANPS would like to welcome Dr. Serviss to Arkansas!

- Theo Witsell

Wildflower Poaching - A Persistent Problem

On May 10 I led a field trip to several remnants of the Grand Prairie near Hazen, Arkansas. One of the main attractions of this trip was the chance to see the rare bearded grass-pink orchid (Calopogon oklahomensis), which is restricted to these unplowed prairie remnants. We pulled up to one of the Natural Areas, where I knew the exact location of a small population of these orchids. I led the group over to the area and was dismayed to find a number of fresh holes scattered around the area where the orchids were. These weren’t groundhog or armadillo holes, mind you, but characteristic shovel imprints.

I don’t know if the poachers were digging orchids or if they were after one of the many other species of showy wildflowers. Either way, this digging can do irreparable harm to rare plant populations. Sadly, this isn’t the first time I’ve seen areas where poachers have ransacked protected Natural Areas. I was at White Cliffs Natural Area a couple of years ago and found holes all over the ground where there was formerly a nice stand of pale purple coneflowers. This happens on protected lands all over the state. Sometimes it is wildflower gardeners, sometimes it is commercial root diggers.

Almost all of our native wildflowers are easily grown from seed. Yes, it takes longer to grow them from seed, but we rob from the future when we dig plants from protected areas. If you must dig, get permission from landowners to dig from areas that are going to be destroyed by development. Otherwise, grow from seed! Digging plants without a permit on protected areas in Arkansas is illegal and is punishable by law. Please report illegal digging to the county Sheriff and the landowner or manager.

- Theo Witsell

Echinacea
purpurea

Echinacea
pallida

Two popular poaching victims in Arkansas...
ARKANSAS NATIVE PLANT SOCIETY
General Meeting
April 26, 2003

The general meeting of the Arkansas Native Plant Society was called to order at 8:05 p.m., in the Caddo Room at DeGray Lake Resort by the President, Mary Ann King.

SECRETARY’S REPORT: There was an omission in the minutes of the October 12, 2002, meeting under New Business. It should read, “The motion was made that ANPS accept the project (Jude Jardine’s) and fund it up to the amount of $1,000.” Linda Gatti Clark moved that the minutes be approved as amended; Lana Ewing seconded; the minutes were approved as amended.

TREASURER’S REPORT: Barbara Little distributed the Treasurer’s Report. Ed Schoenike moved that the report be approved; Carl Amason seconded the motion; the Treasurer’s Report was approved as presented.

OLD BUSINESS: Barbara Little reported on the progress of obtaining tax-exempt status for ANPS, which will allow donors to receive a tax deduction. The IRS made a recommendation to amend our Articles of Incorporation and Barbara read the wording the IRS suggested using in the amendments. Don Crank moved to accept the revisions and continue to work on getting this status. Jim Peck seconded. The motion passed. Barbara reported that the IRS had told her that donations will be 50 percent deductible.

Johnny Gentry explained the different accounts of the Arkansas Vascular Flora Project. There is the U of A Foundation, the U of A straight account for donations, and U of A funds for workshop registration. Donations for the Flora Project should be send directly to Johnny Gentry, University Herbarium, Biomass Research Center 141, University of Arkansas, Fayetteville as printed in the Winter, 2003, Claytonia. The check should be made to the U of A Foundation for the Arkansas Flora Project. The Checklist of the Plants of Arkansas being compiled by the Arkansas Flora Committee is due into Jim Peck by September 1; the project should be available by October 23-24, 2003.

The editor of the newsletter, Theo Witsell, asks for comments, suggestions, compliments, or complaints to the Claytonia. These can be sent by e-mail to anpsclaytonia@yahoo.com.

Jude Jardine had a sample of her final format on invasive plants. Her biggest problem is images. She passed around a list of species which need images and asked that any contributions be sent on her e-mail or a disc. She needs two or three persons to volunteer to edit the work. She plans to be finished by the fall, and hopefully it will be ready to be passed out at the fall meeting.

NEW BUSINESS: The fall meeting is tentatively set for the last weekend in September in Paris, Arkansas/Mt. Magazine. Confirmation will be in Claytonia.

President King appointed a nominating committee for the offices of vice-president, secretary and historian. The committee consists of Lana Ewing, chairman, Don Crank and Jude Jardine.

ANNOUNCEMENTS: Johnny Gentry announced a workshop on trees, vines and woody plants to be held at UCA, Jonesboro, Monticello and Fayetteville on May 17 from 9:00 a.m. to 2:00 p.m.. The registration deadline is May 5.

There is a $15.00 fee to attend, $10.00 for additional members of a family group, and $10.00 for ANPS members.

Eric Sundell passed out brochures for the Audubon Camp for 11 and 12 year olds. There are two sessions, June 15 and June 22. $500 was approved in the fall for this summer. There will be a vote again in the fall of next year on financial aid for the next summer.

Barbara Little reported her visit to Garvan Gardens today and their plans for a future bird garden.

The field trip on Sunday will be led by Bill Shepherd on the Terre Noire Blackland Prairie Natural Area. Those interested will meet at 9:00 a.m. at the Best Western parking lot in Arkadelphia on I-30. There is a breakfast buffet that opens at 6:00 at Bowen’s Restaurant which is associated with the Best Western.

The meeting was adjourned at 8:45 p.m.

Respectfully Submitted,
Sue Clark, Secretary
ANPS Fall 2003 Meeting

DATE & LOCATION

September 26-28, 2003
Paris, Arkansas (near Mt. Magazine)

SCHEDULE

Friday 26 September
6:00 to 7:00 pm - Registration in the St. Joseph Parish Hall
7:00 pm - Auction

Saturday 27 September
8:00 am – field trips to Mt. Magazine and other places
7:00 pm – business meeting

Sunday 28 September
8:00 am – field trips

DIRECTIONS

The auction on Friday evening and the business meeting on Saturday evening will be at St. Joseph's Parish Hall, which is located on the west side of Paris on Highway 22 (a.k.a. Walnut Street), 1 block from the town square, across the street from the Chamber of Commerce.

accommodations

Paris: Paris Inn 479-963-2400
Double - $42.36 (room + tax- total price/night)
single - $39.11 (room + tax - total price/night)

The Paris Inn is on the east end of town on Highway 22 about 2 blocks from WalMart, next door to the police station.

Call by 31 August to confirm room; We have 25 rooms here - 3 have kitchenettes.

Other accommodations (as we will probably run out of room in Paris):

Camping - contact Mt. Magazine State Park 479-963-8502

Ozark: Oxford Inn 479-667-1131
All rooms $39 + tax (have 10 downstairs rooms for us – contact by 31 August)

Other motels in Ozark:

Ozark Motel - 479-667-1500
Hillbilly Inn - 479-667-2995

You’ve laughed at his jokes at the meetings! You’ve seen his gardens on TV! You’ve been amazed by his knowledge on field trips! You’ve been entertained by him during the annual auction! Now, the Arkansas Native Plant Society is pleased to announce the 2003

STUMP CARL AMASON CHALLENGE!

That’s right! Bring your obscure plants—natives, ornamentals, house plants, weeds, you name it, to the fall meeting! If you don’t know what it is, Carl probably does! (and if not, he’ll make up something funny all the same)... Challenge one of the most knowledgeable plant people in the state and learn some plants at the same time! Prizes for anyone who can stump Carl!

Pleopeltis polypodioideae
(resurrection fern)
I received two accounts of the field trip to the seep on the Ross Foundation land from the Spring meeting—one from Mary Ann King and one from Carl Amason. They were different enough to include both, so here they are—ed.

**Ross Foundation Seep I**

By Mary Ann King

Don Crank certainly gets the award for securing the best spring meeting field trip. About half-way between DeGray & Hot Springs, the seep was intriguing with so much to look at that we could have easily spent all day instead of the few short hours.

Wild blueberries (Vaccinium spp.) of several species were in bloom. Some of the photographers in the crowd got some good shots of these. ‘Hey, look at this!’ rang out repeatedly. Mountain azalea (Rhododendron prinophyllum) was still in bloom, its spicy fragrance delighting all. Umbrella magnolias (Magnolia tripetala) were in full bloom, defying Carl Amason’s pronouncement that they all smell bad... A real treat was large-leaved storax (Styrax grandifolia) in full bloom—on one another after another.

Royal fern (Osmunda regalis), cinnamon fern (Osmunda cinnamomea) & sensitive fern (Onclea sensibilis) were in all their glory, with cinnamon & royal fern showing their rust colored fertile fronds. Christmas fern (Polystichum acrostichoides) abounded & resurrection fern (Pleopeltis polypodioideae) was spotted here & there.

Other great plants seen but not in bloom were Solomon’s seal (Polygonatum biflorum), wild black cherry (Prunus serotina), bellwort (Uvularia sp.), dogwoods (Cornus florida), crested iris (Iris cristata), dogbane, vernal witch hazel (Hamamelis vernalis), parsley haw (Crataegus marshallii), & pasture haw (Crataegus spathulata) & rusty blackhaw (Viburnum rufidulum).

Talking about common names some of us wondered how the name Solomon’s Seal came about. If anyone knows, please share this info with the rest of us. *

Dr. Sundell taught us that the tender tips of greenbrier (Smilax spp.) are delicious!

* Editor’s note: The way I’ve heard it told, Solomon’s seal gets its name from a series of flat, round scars on the rhizome. These can be seen by carefully excavating the dirt from the base of a mature plant (without actually digging it up). These white, round depressions, or “seals”, are about the size of a dime and appear to have been pressed into the root (as with old-fashioned sealing wax, which was used to seal letters in the old days) — ed.

**Ross Foundation Seep II**

By Carl Amason

Don Crank, one of the fern experts in the Arkansas Native Plant Society, led a trip in the afternoon to a site owned by the Ross Foundation. Upon arriving to the site, near Dead Man’s Curve (a sharp curve through a mountain pass that was eliminated by recent highway construction) between Lake DeGray and Hot Springs, the first thing to catch our eyes on the rocky, sunny embankment were the plants of the bicolored bird’s foot violet (Viola pedata) and there were several in the beginning dry woods on the sides of an old settlement road. There were many plants of winged elm (Ulmus alata), red maple (Acer rubrum), hop hornbeam (Ostrya virginiana), white oak (Quercus alba), and northern red oak (Quercus rubra) on both sides of the roadbed. A presumed wild turkey nest was shown to us next to a small tree in the leaves, but the hen had just flown away.

Shortly, we came to an intersection of another settlement road and it soon paralleled a flowing, bubbling brook that we followed for the rest of the trip. The road gradually dipped into moist woodlands and we didn’t cross the brook but stayed near it and found so many plants in mid-spring bloom. There were several Carolina silverbells (Halesia tetraptera) and bigleaf snowbells (Styrax grandiflora). Then flowering rose-shell azalea (Rhododendron prinophyllum) with deep pink to rosy flowers scattered on the side toward the brook. Several Vaccinium were on the dry side of the road and one was lowbush blueberry (Vaccinium pallidum), an extremely stoloniferous low bush type. Another was deerberry (Vaccinium stamineum) which has more open-lobed white flowers with extended stamens that are usually described as resembling a ballerina’s tutu with her dancing feet extended.

Growing close to the water’s edge were noble plants, fully four feet tall, of royal fern (Osmunda regalis) with bipinnately compound leaves and cinnamon fern (Osmunda cinnamomea), both with showy sporangia. All along the creek bottom were umbrella magnolias (Magnolia tripetala). They were common and in the peak of perfection. A bit further we turned around and there was a seepy area populated with New York fern (Thelypteris noveboracensis). Just about any place there were garden worthy plants. No trilliums or orchids were noticed but they were probably present. The whole area was a vast rock garden, complete with a clear mountain stream and plenty of rocks.

The afternoon trip was shortened because so many member of the ANPS board were in the group and they had a meeting to get to. This is one place the writer would like to return to and see it at any season, especially the spring.
Terre Noire Natural Area near Arkadelphia in Clark County is part of a blackland prairie that occurs in southwestern Arkansas. At one time it was considered prime cotton land but this part of the prairie is now owned by the Arkansas Natural Heritage Commission. It is a distinct one, with French spelling, but the local pronunciation of the name is “Turn War”. At one time Native Americans kept the land burned to maintain a good pasture for bison, but now the Natural Heritage Commission uses prescribed fire to keep the eastern redcedars, pines, and sweetgum trees from encroaching on the prairie.

The trip was led by Bill Shepherd and Dr. Eric Sundell, both knowledgeable plant people. The first flowering plant seen was Penstemon laxiflorus, but the flowering head wasn’t as loose or lax as the ones growing in Union County’s acid soils. Next was a single plant, identified as a “sandwort”. It resembled an alpine or rock garden plant. In the open prairie, there were hundreds of fossilized snail shells, which kept very well in the black calcium rich soil. There were hundreds of old stalks and seed heads of the pale purple coneflower (Echinacea pallida), but no leaves emerging yet. The Arkansas Natural Heritage Commission has been successful so far in the prescribed burning and is keeping out eastern redcedars, pines, and other unwanted woody vegetation.

In the middle of the Natural Area remains a small grove of trees including some calciphyles such as nutmeg hickory (Carya myristiciformis), American elm (Ulmus americana), and slippery or red elm (Ulmus rubra). We made a loop through the area, continuing through a woodland along a right-of-way where flowering plants of rose verbena (Glandularia or Verbena canadensis). We also found some plants of the Hercules club or toothache tree (Zanthoxylum clava-herculis) and some field trippers chewed enough of the bark to get a tingling sensation. Next came a sampling of chewing the bark of the slippery elm and a woman from Dardanelle who didn’t try a toothache twig, did chew after being assured that no trick was involved, and the mucilage would probably help her hoarseness. She chewed and in a short time she could speak well enough to assert herself.

Soon we were back at our cars and it was time to say farewell to Terre Noire Natural Area. About six of us stayed around for a while, after becoming engrossed in watching a dung beetle rolling a ball of dung across the highway. They had never seen such activity before except for one Union County farm boy that learned them as tumble-bugs and knew what was going on. She got to the edge of the pavement, stopped for a moment, leaving the dung ball behind and disappeared under the pine straw by the edge of the road. Soon the pine straw looked as if she was doing push-ups and she soon reappeared, got the ball of dung, and disappeared under the leaves to bury it. The experience of watching the dung beetle was well worth the time. In ancient Egypt, dung beetles were sacred; a symbol of life after death, or resurrection. In the classical literature they were known as scarabs. Gemstones were and are still carved in their likeness. So, wildflower people are adaptable, they have so many interests, and life for them is never boring!

Terre Noire Natural Area has recently been expanded from 76 acres to 244 acres. For a map and directions to Terre Noire Natural Area, contact the Arkansas Natural Heritage Commission at 501.324.9619 or visit their web site at http://www.naturalheritage.org.

Towering Pine Trail
DeGray Lake State Park
By Carl Amason

A delegation of the ANPS left the parking lot and drove to the trailhead near the amphitheater where parking was ample. The ANPS members were not alone as another birdwatching group was gathering, but we never heard or saw anything of the group again as we all went in separate ways. Movement was slow and deliberate as the crowd investigated all the plants, as everything was so interesting. The leader was Dr. Eric Sundell, followed by Dr. Jewel Moore.

The trail sloped down to a footbridge that crossed a small flowing stream. Below the bridge was a scrambling vine of coral or trumpet honeysuckle (Lonicera sempervirens) in bloom. The trail then arose up to dry shrubland pine (Pinus echinata) and other woodland trees and large shrubs bordering the trailside. Parsley-leaved hawthorns (Crataegus marshallii) were just beginning to bloom. Along the way was some herbaceous Dutchman’s pipe (Aristolochia reticulata), not in bloom yet but flowering stens, well-budded, came off the erect plants, one to the plant, growing at ground level 90 degrees from the leafy stem, often hiding in the leaf litter. There were some beautiful flowering examples of the fringe tree or grancy graybeard (Chionanthus virginicus) that were scattered about the woods, especially in the more open, sunny areas. Common also along the trail were the winter leaves of the crane-fly orchid (Tipularia discolor) and they were the only sign of any orchid noted. There were also plants of ebony spleenwort (Asplenium platyneuron) along most of the dry uplands.
The trail turned back toward the DeGray Lake side and followed an intermittent stream, which became more of a permanent weak flow of water before the lakeside was reached. Partidgeberry (Mitchella repens) carpeted the ground but only had well-developed buds. Other ferns were noted - Christmas fern (Polystichum acrostichoides) which were soon supplanted by lady fern (Athyrium filix-femina) in more moist soil. In a part of the rocky streambed where water trickled, American alumroot (Heuchera americana) was in its full, insignificant bloom. There were several yaupon hollies (Ilex vomitoria) in bloom along the trail and the open flowers made easy the distinguishing between male and female flowers, always on separate shrubs of this American holly, the only North American holly that contains caffeine.

On the lakeshore, shrubs of buttonbush (Cephalanthus occidentalis) were just beginning to show green in their foliage buds. And when the lakeshore was reached, there was a scramble by the botanists in the group to gather herbarium specimens of water pygmy weed (Tillaea aquatica) and then Dr. Jewel Moore found growing in the mud of the water's edge one of the rarest fern allies in North America, pillwort (Pilularia americana), complete with spore "pills" on the roots. It takes good eyesight and some imagination to see the plant, let alone discover it. It is rarely seen. Both the Tillaea and the Pilularia are considered new records for Hot Spring County. Some of the bystanders were perhaps disappointed by the finds but happiness and excitement prevailed due to the discoveries.

Dr. Sundell found a black rose fungus and demonstrated how they release their spores when disturbed. All along the way were scattered plants of the hairy spiderwort (Tradescantia hirsutaera) in shades of bluish and purplish, and one colony of Ohio spiderwort (T. ohiensis) were found that had bluish, purplish, and pinkish flowers all close together. Back at the parking lot was the foliage of some Amarillus family plant without buds, that resembled any species in the family.

The field trip ended with a feeling of accomplishment, good feelings and fellowship of kindred souls. People were ready to go again.

Upper Saline River
By John Pelton, Ouachita Chapter President

We had ten people show up for the Saline River field trip in April. We were able to stay out for two hours before we were rained out. We first went to the Narrows, then on to the county line rock garden (a rocky sandstone ridge in the Ouachita National Forest on the Saline/Perry County line). We were going to check out the lady's-slipper site near Danville Rd., but were rained out. Those attending were Tanya Miller, Theo Witsell, Penny Robbins, A. J. Higginbottom, Doug Wilson, Beckie Moran, George and Lilly Sinclair, Yvonne Becker and myself.

There turned out to be two rock gardens in the National Forest. The first was at the peak of a sandstone outcrop along the Saline and Perry County line within view of the Winona Scenic Drive (Forest Rd. 132), which runs between Hwy. 9 on the east end and Hwy 7 on the west end. Here our fieldtrip observed large clumps of rose verbena (Verbena canadensis) mixed with Ohio spiderwort (Tradescantia ohiensis) and scaly blazingstar (Liatris squarrosa). When the Liatris began blooming, it turned into a butterfly garden. All I needed was a shaded rock I could sit on while waiting for those beauties to come to the flowers I had focused my camera on. I heard several clicks of the camera as they flew in to have their pictures taken.

The other rock garden is on Forest Rd. 179, which I take on the way out to Forest Rd. 132. It seems that the Forest Service's prescribed burn program has released approximately 1 1/2 acres of the white-flowered Texas azalea (Rhododendron viscosum), very fragrant and beautiful along the north facing slope. The plants are all youngsters but were simply full of flowers. I only observed about six old plants. Some were pretty old, approximately five feet in height, so a historic site from years back is being restored.

I was able to confirm that we have a fairly stable population of Kentucky lady's-slipper orchids (Cypripedium kentuckiense) along some small feeder streams on the upper Saline River, and one small clump on the north bank of the Alum Fork River. I also heard from our local upper Saline gun, Bill Chaney, that a local turkey hunter had seen approx. sixty yellow lady's-slipppers in April, which would be the southern yellow lady's-slipper (C. parviflorum var. pubescens) species. What this could mean is that late blooming C. parviflorum var. pubescens could hybridize with early blooming C. kentuckiense, which would give proof that they do cross-pollinate (see article elsewhere in this issue about hybrid yellow lady's-slipper orchids — ed).

Theo and I located the Brown's waterleaf (Hydrophyllum browni) site on the upper Saline, a real nice population near Steel Bridge on the North Fork. Also, our trip to the Ouachita National Forest west of Mt. Ida added some taxonomic questions to the Ouachita populations of spiderworts (Tradescantia spp.).

On the rare butterfly front, The male Diana Fritillaries were approximately one week early this year. I have seen several along the forest roads, and we had six in our yard June 4. They seem to know when the monarda, purple coneflowers and butterfly weed are starting to bloom.
The Arkansas Vascular Flora Project presents a

**RARE AND INVASIVE PLANTS OF ARKANSAS CONFERENCE**

**October 23 & 24, 2003**

**Fayetteville, Arkansas**

With events at:

**U of A Continuing Education Center**
**UARK Herbarium**
**& Clarion Inn—Fayetteville**

**Co-sponsors:**

- Arkansas Natural Heritage Commission
- U of A Herbarium
- US Fish and Wildlife Service
- Ouachita National Forest
- Arkansas Field Office of The Nature Conservancy
- Arkansas Vascular Flora Committee
- FTN Associates, Ltd.


This conference will coincide with the release of the new *Checklist of the Vascular Plants of Arkansas*, compiled by the Arkansas Vascular Flora Committee. Copies of the Checklist will be available for sale at a discounted price.
Rare and Invasive Plants of Arkansas Conference
Schedule & Directions

Thursday October 23

1:00 PM — Depart for field trip to Chesney Prairie Natural Area, Cave Springs Cave Natural Area, and Stump Prairie (meet at U of A Herbarium). Note: We will carpool to the field trip sites from the Herbarium.

4:30 PM — Return from field trip

5:00—6:00 PM — Conference check-in at Clarion Inn

5:30—6:30 PM — Social at Clarion Inn

6:30—7:30 PM — Dinner at Clarion Inn (provided)

7:30—8:30 PM — Evening Program at Clarion

Friday October 24

All of today’s activities will take place at the U of A Continuing Education Center in downtown Fayetteville.

7:30—8:30 — Conference Check-in

8:00 AM — 12:00 PM — Presentations

12:00 PM — 1:00 PM — Lunch (provided)

1:00 PM — 4:30 PM — Presentations

Directions to Conference Events

UARK Herbarium (meet for field trip on Thursday, October 23)

The UARK Herbarium is located in the Biomass Research Center, which is on the U of A Farm in Fayetteville not far from I-540. From I-540, take the State Hwy 112/Garland Avenue Exit (Exit #66) and proceed south on Hwy 112/Garland Ave. for approx. 1 mile to Knapp St. (you will see a sign that says “Pauline Whitaker Animal Science Center”. Turn right onto Knapp and go one block to Hatch Ave. Turn right onto Hatch. Park in the Biomass Research Center parking lot. The Biomass Research Center is the one story dark brown building immediately on the left.

Clarion Inn (Dinner and Program on Thursday evening, October 23)

The Clarion Inn is located at 1255 S. Shiloh Drive, at the intersection of I-540 and US Hwy 62 in the southwest part of Fayetteville. Take Exit #62 on I-540. The hotel is south of Hwy 62 and west of I-540.

The U of A Continuing Education Center (all day on Friday, October 24)

The U of A Continuing Education Center is located in “the square” in downtown Fayetteville, which is most easily accessed from Hwy 71B (a.k.a. College Ave.). The Center for Continuing Education is on the northeast corner at the intersection of Center Street and East Avenue. It is next door to the Radisson Hotel (prominent in the Fayetteville skyline). See attached map for more directions.

Info packet upon receipt of registration will include info on parking options near the Fayetteville Square.

Lodging

A block of rooms has been reserved for Thursday night, October 23 at the Clarion Inn at the government rate of $55 per night. Phone = 479.521.1166. There are several other hotels in the area (see below) as well, but rooms were only reserved at the Clarion.

Red Roof Inn
1000 S. Futrall Dr.
479.442.3041

Quality Inn
523 S. Shiloh Dr.
479.444.9800

Holiday Inn Express
1251 N. Shiloh Dr.
479.444.6006

Super 8
1075 S. Shiloh Dr.
479.521.8866

Hampton Inn
735 S. Shiloh Dr.
479.587.8300

Radisson Hotel (adjacent to U of A Cont. Ed. Center)
70 N. East Ave.
479.442.5555
List of Topics & Speakers:

Thursday October 23

Field trip to Chesney Prairie Natural Area, Cave Springs Cave Natural Area, & Stump Prairie (focusing on restoration efforts and invasive species problems there) Led by Joe Woolbright (Contract Land Steward, Arkansas Natural Heritage Commission)

Presentation: Arkansas' rare and threatened ecosystems and rarest & most invasive plants (slide show) Theo Witsell (Botanist/Field Ecologist, Arkansas Natural Heritage Commission)

Friday October 24

Presentation: Restoring ecosystems and managing invasives on a landscape scale in Arkansas Scott Simon (Director of Conservation, Arkansas Field Office of The Nature Conservancy)

Presentation: Restoration and management of the federally listed Missouri Bladderpod in the Ozarks Paul McKenzie, Ph.D. (Endangered Species Coordinator; U.S. Fish and Wildlife Service, Columbia, MO)

Presentation: Threats posed by invasive species to rare endemic species in the Southeast United States Kim McCue, Ph.D. (Conservation Biologist, Missouri Botanical Garden)

Presentation: Relocation and monitoring of Geocarpon minimum on sandstone glades in Missouri Tim Smith (Botanist, Missouri Department of Conservation)

Presentation: Dolomite Glade Restoration in the Missouri Ozarks Dan Drees (Natural Resource Steward, Missouri Department of Natural Resources)

Presentation: Competitive advantages of Japanese honeysuckle over native honeysuckles Katherine Larson, Ph.D. (Associate Professor of Biology, University of Central Arkansas)

Presentation: Rare and invasive species management on the Ouachita National Forest Susan Hooks (Botanist, Ouachita National Forest)

Presentation: Alien Plant Invaders of Arkansas: A Floristic Perspective Johnnie Gentry, Ph.D. (Director and Curator, University of Arkansas Herbarium)

Presentation: Genetic research on Moore's Delphinium, an Interior Highlands endemic Edith Hardcastle, Ph.D. (Assistant Professor of Biology, University of Southern Indiana)

Presentation: Status of Maple Leaf Oak, an Arkansas endemic David Williams Ph.D. (Assistant Professor of Biology, Okaloosa-Walton Community College)

Presentation: Invasive Prickly Nightshades and Cogongrass Charles T. Bryson Ph.D. (Research Botanist, USDA-ARS, Southern Weed Science Research Unit)

Presentation: Aquatic and Wetland Weeds of Arkansas and the Southeastern United States Brett Serviss Ph.D. (Assistant Professor of Biology, Henderson State University)

Presentation: Ongoing Invasive Species Survey and Eradication Projects Paul Shell (Plant Inspection and Quarantine Manager, Arkansas State Plant Board)
Rare and Invasive Plants of Arkansas Conference

REGISTRATION FORM

Name: ____________________________
Organization/Affiliation: ________________
Mailing Address: ____________________________
Daytime Phone Number: ____________________
Fax Number: ____________________________
Email Address: ____________________________

Dinner on the 23rd (check one): ______ chicken ______ fish ______ vegetarian
Lunch on the 24th (check one): ______ turkey ______ beef ______ vegetarian

Cost is $35.00/person (includes dinner and lunch), due by October 15th, 2003. Registration fees will not be refunded after October 17, 2003. Substitutions are welcome anytime.

Payment Method:

____ Check (payable to University of Arkansas)
____ Credit Card (if paying by credit card, please complete the box below)

______ VISA ______ Mastercard ______ Discover Card

Card Number ____________________________ Expiration Date: ______
Name as it appears on card: ____________________________
Signature: ____________________________

Register by phone at 479.575.3604 or 800.952.1165, fax completed registration form to 479.575.7232, or mail completed form and payment to:

UA Division of Continuing Education
2 E. Center St.
Fayetteville, AR 72701
Attn: Claudia Cochrane

NOTE: Inquiries about the conference itself should be directed to Dr. Johnnie Gentry at the U of A Herbarium, NOT to the UA Division of Continuing Education. Call 479.575.4372 or email gentry@uark.edu.
Notes from the Editor
by Theo Witsell

Not much space this time. Mainly I wanted to thank a few people for all their work and helpful advice regarding this issue, especially Don Crank, Mary Ann King, Linda Gatti-Clark, Jim Peck, Carl Amason, John Pelton, George Johnson, Eric Sundell, Brett Serviss, Johnnie Gentry, Carl Slaughter, and my wife Tanya. I’d also like to thank the Arkansas Native Plant Society for giving me a generous computer budget. I have purchased a new ANPS machine, complete with scanner, printer, and graphics software. Unfortunately, I didn’t have time to explore the new software for this issue, but the Fall issue should be a little more snazzy.

I am also looking into posting the entire Claytonia on the web and distributing it electronically to those members who would prefer it. Paper copies would still be available as well.

One last thing… an update on the search for the missing narrow-leaved milkweed (Asclepias subphylla) [see article last issue]. Dr. Eric Sundell and I visited the general area where Dwight Moore made his 1953 Carroll County collection and found a large, gated residential development (Holiday Island). Lots of former glades, but no A. subphylla. Much potential habitat remains to be searched, but it is still missing despite our modest two day effort. Keep your eyes peeled if you are in that area!

Upcoming Events

Not much to report this time around. I know there must be more going on than this! Send in upcoming field trips, workshops, conferences, etc.

September 26-28, 2003: ANPS Fall Meeting, Paris, Arkansas — Annual Plant Auction, field trips to Mt. Magazine, Stump Carl Amason, etc. See info this issue!

October 4, 2003: Slide Show “Fall Wildflowers of the Ouachitas” - Theo Witsell & John Pelton, Wildwood Park, Little Rock, Arkansas-- Theo will give the talk using John’s magnificent slides. Part of the Wildwood speaker series. Starts at 10:00.

October 23-24, 2003: Rare and Invasive Plants of Arkansas Conference, Fayetteville, Arkansas -- Includes presentations from regional speakers, specimens of rare and invasive plants, field trip, and more. See info this issue!

PLEASE SEND SUBMISSIONS/SUGGESTIONS TO:

219 Beechwood St.
Little Rock, AR 72205

anpsclaytonia@yahoo.com

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

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Please check your mailing label! If your mailing label has an 02 or earlier it is time to renew!

Life members will 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 given on the form: [Not to the editor]. Thank you.

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President: Mary Ann King..................479.293.4359
President Elect: Linda Gatti Clark........501.796.4104
Vice President: Burnettta Hinterthuer...479.582.0467
Editor: Theo Witsell.....................501.614.8465
                             anpsclaytonia@yahoo.com
Historian: Carl Amason..................870.748.2362
Secretary: Sue Clark....................501.666.5149
Treasurer: Barbara Little...............870.935.6905
Membership: Eric Sundell.................870.367.2652
Ark. Coalition: Carl Hunter.............501.455.1538
Awards/Scholarships: George Johnson  
                             george.johnson@mail.atu.edu

Check out our website at www.anps.org

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
Theo Witsell, Editor
219 Beechwood St.
Little Rock, AR 72205

anpsclaytonia@yahoo.com

ROBBINS, Penny
43 Valencia Way
Hot Springs Village, AR 71909