Arkansas Native Plant Society
Fall Meeting
October 11th - 13th
Little Theater at North Arkansas College
South Campus
Harrison, Arkansas.

Schedule:
Friday
3:00-7:00 PM — Registration at the Little Theater
7:00 PM — Auction: Carl Amason — auctioneer “extraordinary”
Auction items often include native plants, seeds, and bulbs, along with homemade goodies such as wild fruit jams and jellies, books, art work, photography, craft items and what ever else you might want to donate. All funds raised go toward scholarships and the Flora of Arkansas project.

Saturday
8:30 AM All day field trip to Lost Valley hopefully led by Gary Tucker.
Meet at the Little Theater at 8:30 am or for those that so desire - just meet at the parking lot at Lost Valley @ approximately 9 AM.
Plan on bringing lunch & drinks as there aren’t any close eating places.
7:00 PM — Business meeting and program.

Sunday
8:30 meet at the Little Theater. Field trip to Baker Prairie led by Burnett Hinterthuer and Linda Ellis. See the Spring Field Trip report by Burnett on page 5 for some information about the prairie.

See the next page for information about accommodations in Harrison.

Directions: The South Campus of North Arkansas College is off of Hwy 123 which comes of off Hwy 65B (Main Street) near the Dairy Queen on the south side of Harrison. Be sure you take 65B.
Hotels & Motels in Harrison

Family Budget Inn
401 S. Main, (Hwy. 65B),
Phone: 870-743-1000
1 bed - 1 person - $36.78 including tax
1 bed - 2 person - $41.25 including tax
2 beds - 2-4 persons $44.59 including tax
Continental breakfast provided.

The above Inn is the closest motel to the meeting place most of the rest are from 3 to 5 miles away.

Comfort Inn
1210 Hwy. 62/65/412 N.
Phone: 870-741-7676. Complimentary deluxe continental breakfast, free local phone calls, free HBO, two-room suites, fax/modem hookups, in-house movie rentals, heated outdoor pool.

Country Cottage Motel
Phone: 870-741-9667.
Located 1/2 mile south of the Tourist Information Center and 1/2 mile north of Airport Rd. in Antique Hollow on Hwy. 65 N. in Harrison, AR 72601. Individual cottages offer privacy. Clean, nonsmoking rooms, cable TV, in-room coffee. No pets. Kitchenette available.

Cresthaven Inn
825 N. Main,
Phone: 870-741-9522
Remote-control Cable TV, pool, large and small kitchenettes available, refrigerators and microwaves in every room.

Days Inn of Harrison
1425 Hwy. 62-65 N.
Phone: 870-391-3297
Outdoor swimming pool and Jacuzzi open during season. All major credit cards accepted. Next to shopping center. Free cable TV with HBO. Free local calls. No pets.

Holiday Inn Express Hotel & Suites
117 Highway 43 E.
Phone: 870-741-3636 or 1-800-HOLIDAY
Complimentary breakfast bar, cable TV, game room, & sauna, indoor swimming pool, meeting room, and exercise facilities. Senior & AAA discounts available.

The Hotel Seville
302 N. Main,
Phone: 870-741-2321
Built in 1929—a classic.

Ozark Mountain Inn
1222 N. Main St.
Phone: 870-743-1949
Kings, doubles and waterbed, cable TV; game room, playground, tennis court, complimentary a.m. coffee, very reasonable Bed & Breakfast specials, restaurant on premises, heated outdoor pool with kiddie pool; children free.

Super 8 Motel
1330 Highway 62/65 North
Phone: 870-741-1741 or 1-800-800-8000
Kids 12 & under stay free. Includes kids game room, complimentary continental breakfast, cable TV, outdoor heated pool, bus parking, and free local calls. AAA, AARP, and V.I.P. discounts available.
SPRING GENERAL MEETING MINUTES
Saturday April 13, 2002
Russellville, Arkansas

The general meeting of the Arkansas Native Plant Society was called to order at 7:10 o'clock p.m., at the Central Presbyterian Church in Russellville, Arkansas, by the President, Lana Ewing.

SECRETARY'S REPORT: Carl Amason moved that the minutes of the fall meeting which were published in the Claytonia be approved. MaryAnn King seconded. The minutes were approved as published.

TREASURER'S REPORT:
Al Hecht reported a balance of $7594.27 in the Operating Fund as of April 13, 2002, and $22,208.67 in the scholarship, flora, and awards funds. Mary Ann King moved that the Treasurer’s Report be approved; Carl Amason seconded; the report was approved as submitted.

NEW BUSINESS:
President Ewing appointed the Nominating Committee to select nominees for the offices of Vice-President, Treasurer, and Editor for the year 2002-2003, as follows: Katherine Hepinstall, Chairman; Carl Slaughter, Jay Justice, and Jewel Moore.

OLD BUSINESS:
Carl Amason, the Historian, asked for any photographs and newspaper articles about ANPS to be sent to him to go in the files.

ANNOUNCEMENTS:
Eric Sundell announced that Georganne Sisco will be at the Old State House Museum, 300 West Markham, Little Rock, on Tuesday, May 14, 2002, at 7:00 p.m. as part of the Gurley Lecture series. She will be speaking on the use of herbal remedies, and the safety and efficacy of drug interaction. Call Gerry Soltz at 501-324-8647 to RSVP. There will be a reception following the talk.

Eric announced that there were four applicants this year for scholarships.

The fall meeting will be held at Harrison, Arkansas. MaryAnn King will check in mid-September or early October on trips to Lost Valley and Baker Prairie.

Lana turned the meeting over to MaryAnn King who introduced Jay Justice who gave the program.

Respectfully submitted,
Sue Clark, Secretary
Fall Events
September 21st, 10:30 a.m. Asteraceae Workshop at Rush, Arkansas, located south of Yellville, Arkansas, off Hwy. 14. Linda S. Ellis will present a workshop on the late summer/fall composites. She has helped illustrate the new edition of the Flora of Missouri and is very familiar with the different species of the sunflower family. I learned a lot from visiting her glade last fall. We have talked about doing this in the past and finally are able to get it together. It will be fun and afterwards, we won’t feel so frustrated by the dyes (doggone yellow comps). Coming from Yellville, you will pass the community of Caney: take County Road 6035 on the left side of the road. Rush is at the bottom of the hill (several miles). Take a right and park in the first parking lot on the left, the Morningstar Parking Lot. There will be a red ANPS balloon on a tree on Hwy. 14 and at the parking lot. We will meet at 10:30 a.m. and will proceed to the workshop site.

Rush is a former mining boomtown on the Buffalo River and if you have never visited, you are in for a treat. Rush Creek and Clabber Creek are major tributaries of the Buffalo and enter the Buffalo at Rush. There is a campground, if anyone would like to plan on camping out Saturday night and possibly floating from Buffalo Point to Rush on the next day. There are also motels in the area if anyone is interested in staying over in a motel. Call Burnett at 479-582-0467 if you are interested in attending this workshop or arranging a campout or float trip. Suzie Rogers has suggested that our Ozark Chapter might consider monitoring Rush through a whole year’s growth, visiting there in fall, spring, and summer. We can talk about this at the annual fall meeting of OCANPS in November.

Meet at the Riverside Restaurant at noon if you can and we will eat together; then, those who wish can take a hike along the Buffalo River Trail. The potluck will be held at 5:30 p.m., followed by a short business meeting and plant auction. Please think of possible field trips that we want to take next spring and volunteer to lead one of them. We need some new ideas and leaders for field trips. Even if you feel you do not know the plants that well, there will usually be someone along who will help out. For the auction, you may bring seed or living plants, crafts or other home-made goods such as jellies, pickled tubers of Dioscorea batatas (a favorite at the state auction), etc. This is always a lot of fun and we raise money for our chapter and its future adventures and projects. In the past, we have contributed toward the Arkansas Envirothon, an environmental competition between high school students that occurs in the spring. Bring plant or vacation slides, musical instruments, and games if you wish. If it is a nice starry night, we will do some star watching as well. The cabin sleeps 7 (possibly 9 if you bring sleeping bags) with three double beds and one single, but only has one bath. It is very attractive and comfortable, unlike the Red Barn some of you remember from two years ago. (Remember the Red Barn was cheap!) But there is also a campground available, if anyone had rather camp. On Sunday, those who wish may want to float, depending on the weather. Check-out time is 11 a.m. We hope to see you at the fall annual meeting; it is always a lot of fun and a great time to get together before the snow flies (perhaps I shouldn’t be so optimistic). Please call Burnett at 479-582-0467 by October 19th if you plan to stay at the cabin on the 2nd and/or if you want to canoe the next day.

November 2nd – 3rd OCANPS Annual Fall Meeting at Gilbert, Arkansas

Gilbert Cabin # 5 (check in at Gilbert Store) has been reserved for our use on November 2nd; check-in time is 3:00 p.m., but we may be able to get in earlier if the cabin has not been rented for Friday night.
Baker Prairie
by Burnetta Hinterthuer

Spring field trips were definitely affected by the abundant rainfall we received during those months. Some field trips had low attendance while others had record attendance, all due in most cases to the weather - whether rainy or sunny.

On May 18th, I led a hike on Baker Prairie that had record attendance. Certainly, the weather that day was perfect, sunny and warm. The Mountain Home Herbalist Group along with members of Arkansas Native Plant Society numbered about 25 and were interesting plant enthusiasts, sharing their knowledge of the medicinal uses of the plants with the group. The mid part of May is one of my favorite times to view the prairie. Many people were first time visitors to Baker Prairie and were not disappointed. To everyone's amazement - especially Don's- Don Mills accidentally stepped on two turtles, one an Eastern ornate box turtle and the other a three toed box turtle! Linda Ellis took a photo of the turtles (see end of newsletter). I had heard that the ornate box turtles had not been seen on the prairie in recent years, so we really were feeling lucky at this point. Then we walked into an even bigger attraction. The grass pink orchid, Calopogon oklahomensis, was simply thriving this year.

There must have been a hundred plus individuals in bloom. In the past, we have had to look for the orchids scattered in a small area. This year, one could spot the rich pink blooms at a distance. They were spreading out from the original site found in 1992 and were heading up the hill toward the highway. We kept moving from one plant to another exclaiming over its beauty surpassing the last. I don't know if I had a premonition or what, but I do remember mentioning that this was the school's property not the part owned by Arkansas Natural Heritage Commission. Later this summer, we found out that the school district is considering building a middle school, baseball field and parking lot on the acreage that includes or butts up to the grass pink orchids, royal catchflies, Eastern gama grass, Culver's root, and not to be outdone, the mole crickets that have evidently settled on this east side. Dr Doug James, ornithologist at the University of Arkansas, conducted a survey of the prairie last year and found six willow flycatchers during that time. This is a species that was thought to be extinct in Arkansas, following its disappearance from a prairie in Siloam Springs. This species was identified by Audubon at Arkansas Post, one of the few birds documented first in Arkansas. Will the proposed project affect species such as the grass pink orchid; willow flycatcher; the mole cricket that is food for the grasshopper sparrow; or the ornate box turtles that remain on the prairie?

Norma Ellis is a descendent of the Majors family that preserved this special piece of land by not plowing it decade after decade. We send a big thanks to Martha and Norma for keeping us advised this summer.

After visiting the prairie, we ate at the Neighbor's Mill and some of us decided to go on up to the Lead Hill glade. We were just beginning to have one of those rare botanical days!

A VISIT TO LEAD HILL GLADE
by Linda S. Ellis

Last May, the Ozark Chapter met for a field trip to Baker Prairie in Harrison and decided afterwards to visit a glade just north of Lead Hill while in the area. This glade is on private property, but the owner doesn't mind if folks visit to admire the native plants. And what a show greeted us. With the abundant rainfall we had this year, plants that usually just survive on glades were thriving.

I live on a glade on the Missouri/Arkansas border and it's always fun to see plants with which I am familiar, along with those new to me. I'm also a dedicated plant photographer and I'm always looking
for naturally occurring color combinations to use in paintings and in my own landscape. As we parked at the glade; it was obvious from the color everywhere that this was going to be a rare treat. The first plants that caught my eye were the prairie turnips (Psoralea esculenta) with their drooping clusters of lavender flowers and long silvery hairs. A few feet away there was a large colony of Leucanthemum vulgare, aka Chrysanthemum leucanthemum. By now my camera was getting a serious workout. As we worked our way across the glade, we began seeing stands of Penstemon cobaea var. purpurea with their showy red-violet flowers. These wonderful wine colored specimens were surrounded with abundant clumps of deep yellow Coreopsis grandiflora and made a spectacular sight. I've noticed that Nature can put colors together that you'd never wear together and they look great.

As we made our way further out into the site, I began to see quite a few plants that are found on Arkansas glades but are infrequent in Missouri. One of the species of blue star (Amsonia ilustris) was in bloom that day along with the large-flowered milkweed, Asclepias amplexicaulis, and a carrot family plant that was new to me, Spermolepis. Yellow coneflower (Echinacea paradoxa) was just starting to unfurl its petals amid clumps of purple Phlox pilosa, adding yet more vibrant color combinations to the glade. As we started back to the cars, we found a stand of bladder campion (Silene cucubalus) in bloom. Usually this plant is unremarkable but with the extra rain this year, it was fully flowered and got its picture taken.

We were astonished to find out that it was after five o'clock and we all had a distance to drive to get home. I couldn't resist just one more little adventure and took the Peal Ferry across Bull Shoals to Missouri. I hope we visit the Lead Hill glade again soon as it is the kind of place that will have a constantly changing progression of native plants. As soon as my camera cools down, I'll be heading back.

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**VINES AND TENDRILS**

*By Vernon Human*

Why should a plant want to vine? What's to be gained by it? Of all the questions posed by vines and vining, this one perhaps is the easiest to answer. Plants elect to vine when they cannot compete in traditional ways and lack any effective strategy for getting somewhere other than where they are. Vining is a response to the inability of plants to walk away when moving becomes necessary.

If you cannot by brute force carve out a place in the sun among the intermeshing canopies of competing shrubs or trees, you have to find another way to reach the sunlight that all plants must have for food production. Vining is the method favored by certain species. Gourds and melons are examples of plants that vine laterally, thus enabling their leaves to reach critical sunlight even when the plant is rooted in permanent shade. Other species, such as wild grapes and cucumbers, vine vertically, clinging to the coat tails of the very species which otherwise out-compete them. To put it in football terms, they force their hosts to run interference for them.

A vine has a choice of climbing and clinging methodologies. Poison ivy climbs by means of "sucker feet", numerous small attachments that erupt from the "margins" of the vine and attach to the bark of the host tree --or to sheer rock, if that is what is called for. Wild grapes favor tendrils, structures spaced along the vine that slowly write about in search of something to which to cling. If they find it, they wrap around it, thereby attaching the vine to the upward-growing host. Lateral vining plants produce tendrils too, for although they usually don't have to hold their vines aloft, they do need to keep them anchored so that they aren't blown willy-nilly by hard winds.

But there are other ways for a vine to climb and to hold on. The entire plant can twine about its host. Japanese honeysuckle is an all-too-common example. Still other plants don't attach to their hosts at all, but rather collapse upon them so that they are borne upward by the host plant's own growth. Western poison oak uses this system very effectively. Two of my favorite vining systems
are illustrated by a pair of closely related Schophulariaceae of the California chaparral. One has long, slender leaf petioles that, when they touch an object, take a few turns around it; thus they are both leaves and "tendrils". The other species, stranger still, has peduncles, or flower stalks, which themselves twist about an encountered object. The peduncles are so long and attenuated that the pretty little blossoms seem to float on air.

There is nothing new in the world of plants; all tendrils are modifications of already existing plant parts. But plants are wonderfully individual in the matter of which parts to use. The tendrils on our wild vetch spring from the distal tips of the pinnate, compound leaves. Note that the terminal leaflet is missing, for it has evolved into a tendril. The catbrier's tendrils are modified stipules. Wild grapes have the most wonderful adaptation of them all; their tendrils are modified blossom clusters! Look at enough grape tendrils in season and you might occasionally find a stunted, reliclual blossom on one of them.

Tendrils vary in the ways they operate because different plants have different needs. A succulent annual's tendrils need only take a few turns around an object, for its life is short and the likelihood of its destruction therefore is low. In our Ozark woods, wild grapes are at the opposite extreme. Their tendrils must have the stamina to be effective for decades, and the strength to hold firm against the fiercest windstorms and support the weight of a vine perhaps six inches in diameter. Theirs is a quietly astounding performance.

Many tendrils, including grape, not only attach the vine to an object, but also "take up the slack", drawing the vine tight to its support. Tendrils do this by twisting or coiling. But how? Tie a string between two points and turn it and you will get nowhere, for both ends turn in the same direction. Look closely at successful grape tendrils and you will see that they always have a kink somewhere near their centers. Look more closely still and you observe that the direction of coil reverses at the kink. This is the tendrils' big secret: the coil works because the two halves or parts turn in opposite directions. The slack is taken up, the vine tautly supported.

These are wonderful adaptations, everyday miracles in our own backyard. They need only for us to get out there and appreciate them.

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ORCHID NOTES — PART TWO
BY Carl Slaughter

Orchids are angiosperms. This means that they are members of the plant kingdom that have flowers. Orchids are also monocots. Monocots are plants that, as they germinate, have only a single leaf springing from the seed.Dicot seeds produce two leaves as they germinate. The leaves of monocots have a parallel vein structure, and its floral parts are in groups of threes. Dicots have a leaf structure with a central vein with other veins connecting to it. In other words, a non-parallel vein structure. Their floral parts are arranged in multiples of two or five.

SO ORCHIDS ARE ANGIOSPERMS AND MONOCOTS.

Orchids have certain characteristics that define what they are. Orchids have a large number (some people estimate over a million) of very small dust like seeds that can be carried great distances by the wind. These seeds, unlike other seeds, lack an endosperm. The endosperm is a substance that provides food for the embryo. Orchids must, therefore, depend on another way for providing sustenance not only for the seed, but also the growing plant. This other way is through a partnership with a group of fungi that collectively are known as mycorrhizal fungi. Some orchid species are more dependent than others on these fungi for survival. This explains why it is difficult for them to survive transplanting. An act that should be performed only to save the orchid from destruction.

ORCHIDS HAVE SMALL SEEDS

A number of flowers are symmetrical. The lily is one. Orchids are irregular and yet they are bilaterally symmetrical. If you took a knife and divided, starting at the midpoint of the lip, an orchid into two parts, one side would be the mirror image of the other.

AN ORCHID IS BILATERALY SYMMETRICAL
The ovary of an orchid is located beneath the floral parts of its flower. Beneath the beneath the petals and beneath the sepals.

AN ORCHID'S OVARY IS INFERIOR.
All orchids have three sepals and three petals. Sometimes by fusion they appear to have less. One of the three petals of an orchid is different from the other two. It is usually larger, longer, and more colorful than the others. This different looking petal is called a lip. The lip can be entire or can be lobed. It can be flat or it can be inflated.

ONE OF THE ORCHID'S PETALS IS DIFFERENT AND IS CALLED A LIP
Most flowers have separate male and female reproductive parts. The male reproductive part consists of a stalk known as a filament. At the apex of the filament is found the anther. Pollen grains are produced and stored in the anther. The female reproductive part is a body known as the pistil, which is composed of an ovary at its base, a stalk known as a style, and at the top of the style a stigma. The stigma accepts the pollen grains for the beginning of their journey, via the style to the ovary. Orchids do not have this type of reproductive system. Orchids have no separation of the male and female reproductive parts. Orchids have a unique mechanism in which there is a body produced by the fusion of the stamen (anther and filament) with the style and stigma. This fused body, containing all of the male and female parts necessary for fertilizing the ovary is called a column.

Final Notes

This is my last issue as editor. I am leaving on the 10th of September to spend the semester at Harding’s new branch campus in Viña del Mar, Chile. We have a group of 28 students who will be the guinea pigs for this new program. There is a major tropical garden just minutes away from where we are staying that I can’t wait to visit. We have scheduled trips to the Andes for a week of skiing, a trip to the Atacama Desert, a trip to the Lake District in the south as well as to the Torres de Paine and the Straits of Magellan areas that are supposed to be similar to parts of Alaska. I am hoping to do a lot of plant and scenic photography as well as teach environmental and earth science. It’s going to be a tough job but someone has to do it! If things go well I may be out of the country often in the next few years which is one of the reasons I asked not to be re-nominated as your editor.

It has been 15 years since I was first elected (drafted) to fill the position of editor for the ANPS. As a charter member I have seen the organization grow from a couple of dozen to near four hundred. We are a diverse bunch, from true “arkies” with “growing up on the farm” type of knowledge of plants to those with PhD’s in plant taxonomy. As a whole, we have in common an appreciation of the great diversity and beauty of the God’s natural world. We also have a desire to preserve and protect that which cannot be replaced once it is gone.
Unfortunately, some of those places where we use to take field trips have now been converted to housing developments and shopping centers and the ecosystems that supported the diversity are gone. Ah, progress!

Not that nature itself is benign. I am still in a never-ending battle with those foreign pesky invaders privat and Japanese honey-suckle to mention only two of the worse.

I am an optimistic-pessimist when it comes to what is happening in our state and others in reference to the environment. There are parts of our state and nation where the water and air is cleaner than it was 20 years ago but other once pristine places are now contaminated. We now have “protected” wilderness areas, put when push comes to shove, are we going to destroy some of those areas to get a little more oil when there are energy alternatives that could have been developed by now-- if we had truly learned anything from the oil embargoes of the 70’s. But I digress, The ANPS has developed into an organization that has been successful in meeting its primary objectives of preserving and conserving native plants and educating the public and members as to their value --- and having a lot of enjoyable times together as well. May it persevere in that task!

There are several people in particular that have helped make my job as editor easier. First of all thanks to Carl Amason --- what a gem--always encouraging and nearly always supplying articles. Other notable article suppliers have been the other Carls. Carl Hunter and Carl Slaughter. Then there are I and II John -- John Simpson and John Pelton. There have also been several secretaries that have always gotten the minutes to me in plenty of time, the most notable of which is Sue Clark --who has served in that capacity several times. Eric Sundell also deserves special thanks both for occasional articles but also for getting the mailing labels to me within a few days of my requesting them time, after time, after time. For this issue in particular thanks to Burnetta, MaryAnn Linda and Vernon. Thanks all !!!!!

By the way, the nominating committee is still in need of nominees to take over as editor. If you have any interest at all or know of someone please contact a member of the nominating committee mentioned on page 3 or any of the officers.

Ron Doran, September 3, 2002

Arkansas Native Plant Society Membership Application

Please check appropriate box below.

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Monticello, AR 71655
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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, e-mail address or telephone numbers to the address given on the form: [Not to the editor.]
You can also renew at the Fall Meeting.

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.

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