

Volume 22
3
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In
This
Issue



Fall Meeting
Minutes
Page 2

Spring Field
Trips
Page 3

2001 Fall Field
Trip Reports
Page 4,5

Events
Page 5, 6

Pelton Notes
Page 6, 9

Orchids
Page 7

Ferns
Page 7, 8



Claytonia

Newsletter of the Arkansas Native Plant Society

Spring 2002 General Meeting

Russellville

April 12, 13 & 14th.

Registration will begin at 3 pm on Friday April 12th. Registration & meetings will be held at the Central Presbyterian Church located 400 West Main Street, Russellville, Arkansas.

Among our speakers will be Dr. Eric Sundell, speaking on pollination of *Asclepias* and Jay Justice, who will present to us - Edible and Poisonous Mushrooms of Arkansas. Lots of good field trips lined up.

There are a number of motels in Russellville. Super Eight has given us the best price (if we can get 20 rooms) of \$40.00 for 2 persons (plus tax) Please identify yourself as ANPS member. They do have a continental breakfast from 6 to 9 AM. Super Eight is located at Highway 7 & Interstate 40. Phone 479-968-8898. Other motels in the general area are: Best Western 479-967-1000 (rooms \$52.00 plus tax) Hampton Inn (479-858-7199) Fairfield Inn (800-228-2800) Holiday Inn 479-968-4300. All these motels located within about $\frac{1}{2}$ mile of each other.

There's lots of eating places - Cracker Barrel fronts I-40 near the motels, Dixie Café is close, Cagle's Mill is located in the Holiday Inn which is also in this area. Ruby Tuesday's is near by also. There's a great Chinese buffet about 2 - 3 blocks south on Hwy 7 (also known as Arkansas Avenue). Also on South Arkansas (hwy 7) is Madame Wu's - a nice place to dine. Of course, being a college town there are tons of fast food restaurants - mostly located on Arkansas Avenue.

MaryAnn King

FALL GENERAL MEETING MINUTES

October 20, 2001

Arkansas State University, Jonesboro, Arkansas

Following the annual auction, the business meeting of the Arkansas Native Plant Society was called to order at 7:30 p.m., 2nd Vice-President Mary Ann King presiding.

SECRETARY'S REPORT: Carl Amason moved that the minutes of the spring meeting which were published in the Claytonia be approved. Linda Gatti Clark seconded. The minutes were approved as published.

TREASURER'S REPORT: Al Hecht reported a balance of \$28,088.59, which includes the scholarship, flora and awards funds of \$20,864.42, leaving a balance of \$7,224.17 in the ANPS Operating Fund. Dr. Linda Gatti Clark moved that the Treasurer's Report be approved; Carl Amason seconded; the report was approved as submitted. Al announced that the auction made an estimated \$850.00.

OLD BUSINESS: Dr. Jim Peck reported on the Arkansas Flora Committee progress. Fall of 2002 is the target date to make the checklist available to everyone. If the checklist is ready by fall, the Atlas should be ready the following year. Over 100 people attended the plant identification workshops that were held in September.

In the absence of Phillip Moore, a botanist with the Arkansas Highway Department, Carl Hunter reported on the progress of wildflowers along the highways. Carl had available some of the 110,000 new brochures

put out by the Highway Department. The Arkansas Highway Department could lose federal enhancement money if designated routes on the brochure map are mowed. If someone believes that an area needs to be designated a wildflower area, they should call Phillip Moore.

Carl reported on the ANPS/Master Gardener progress. ANPS has worked with 300 Master Gardeners in Pulaski County. There are now six wildflower gardens at Pinnacle Mountain State Park and over 200 Master Gardeners usually attend the meeting there once a month. The Ouachita Chapter of ANPS has also done a lot of work on this project.

The Nominating Committee presented the slate of officers for the 2001-2002 year as follows:

Vice-President: Linda Gatti Clark
Secretary, Sue Clark;
Historian, Carl Amason;
Communications/Publicity, Thera Lou Adams;
Scholarships/Awards, George Johnson.
Don Crank moved that it be accepted; Carl Amason seconded; the 2001-2001 officers were elected unanimously. The Nominating Committee consisted of Sue Clark, Carl Slaughter and Oralee Price.

NEW BUSINESS: Mary Ann King announced that the Spring Meeting will be held in Russellville probably in the latter part of March, the date will be announced after the

determination of the date of the Arkansas Academy of Science. Barbara Little announced that Mary Alice Beer of Fairfield Bay has clipped and maintained a creek area and glade area near her home and would like to have visitors to the area. Barbara will send this report to Ron Doran. A change in the Sunday field trip was announced by Annette Holder. Theo Witsell will lead the trip to the Sunken Lands Area, a new

Pondberry site. The group will meet in the parking lot of ASU at 8:00 A.M.

The business meeting was adjourned at 8:00 p.m. and Theo Witsell with the Natural Heritage Commission presented a slide show.

Respectfully submitted,
Sue Clark, Secretary

Spring Field Trips

March 9, 2002 Early Spring Field trip - Calion

Carl Amason will be leading another of his wonderful plant exploration trips. Who knows exactly what will be blooming that day but you're guaranteed a delightful time. Early spring violets, houstonia & other spring ephemerals. Meet Carl at his place between 9 & 9:30 or so. Bring a sack lunch.

Directions: Those coming from the north follow US 167. When the concrete of the Ouachita River Bridge changes to blacktop, go 0.9 mile to the intersection of Calion's Main St. (It doesn't cross 167) turn left and then go 0.5 mile cross the old railroad ramp, turn right onto Hoover Street between two cyclone fences. Go one Block. Turn right on Ward St, which curves and crosses the end of Calion Lake. Go 0.5 mile where Ward becomes a county road. Carl's place will be .08 mile on the right. (there are no house on the left but three on the right) From El Dorado, go 2.5 miles past AR 335 to Calion's Main Street & proceed as above.

March 16, 2002

John Pelton will offer a field trip to Crooked Creek in Montgomery County. The trip will feature the OzarkTrillium. Contact John at 501/316-1057 for further information.

June 8, 2002 Late spring field trip - - Calion

Carl Amason will be leading another exploration - this time to see Cherokee bean in flower & *Alophia drummondii* in bloom. Meet Carl at his place between 9 & 9:30 or so. Bring sack lunch. Directions above.



2001 FALL MEETING FIELD TRIP REPORTS

Village Creek Park

At the beginning of the hike in Village Creek Park Larry Lowman briefly described the unique character of Crowley's Ridge, summarizing the environment to be explored as both a geological and botanical anomaly.

The hike in the park traversed a cross section of environments on the lower & middle slopes, and a peak (hogback) of the loessial hills typical of the middle section of Crowley's Ridge. A highlight was passage through a mature forest which had not seen timber harvest since WWII, with splendid cathedral-like specimens of Beech, Sugar Maple, and White Oak as predominant canopy.

The group viewed two trees that at one time were designated state champions for their species, a White Walnut (or Butternut) *Juglans cinerea* (one of the few hardwood trees to appear on the Arkansas endangered species list)and a spectacular tree-like specimen of Red Buckeye, *Aesculus pavia*.

Among the special plants viewed by the group:

--in an open area at the beginning of the hike, the group was impressed with the 6 to 8 foot plumes on the native Silvery Plume Grass (*Erianthus alopecuroides*)

--several fine mature specimens, and many juvenile Cucumber Magnolias (*Magnolia acuminata*)

--Lousewort (*Pedicularis canadensis*)

--abundant drifts of the unusual epiphyte Beechdrops (*Epifagus virginiana*); blooms not quite open yet

--Starry Champion (*Silene stellata*)

--a healthy bower of Climbing Magnolia Vine (*Schizandra glabra*) in its native haunts

--a diminutive St. Johnswort known as St. Andrew's Cross (*Hypericum hypericoides*)

--some spectacular specimens of Serviceberry (*Amelanchier arborea*) near the crest of a hogback ridge, some of which were in the 4 to 6 inch diameter range.

--Farkleberry (*Vaccinium arboreum*)

--a couple of species of False Foxglove (*Gerardia* sp.); just vegetative growth of a large yellow species, and flowers on several stalks of a very diminutive species with a pale lavender blossom.

By Larry Lowman



Fieldtrip Report - Bono Lake Site

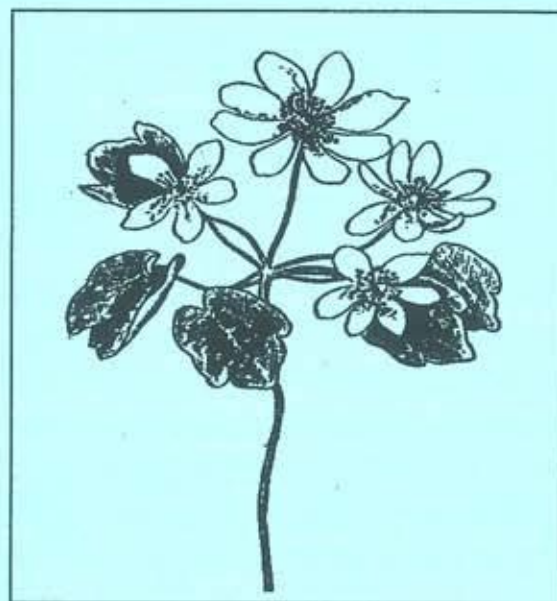
Saturday October 21, 2001

Two groups of our Fall meeting attendees were treated to one of the richest and diverse areas on Crowley's Ridge. This area unfortunately has been purchased by the Arkansas Game and Fish Commission and will be transformed into a lake for flood control and recreation. We usually find out our favorite areas have been damaged after the fact, in this case we know ahead of time it will be flooded.....I don't know which is more unpleasant.

A quick botanical survey of just a small area of this site revealed 136 species. This area is covered in large hardwood trees including very large Tulip Poplars, many species of under story trees and shrubs, and many plants. I was pleased that many in our society had the opportunity to view this site before it is destroyed, it will be a great botanical loss to NE Arkansas. Many expressed their frustration with this situation and we appreciate your concern.

The NE Chapter of the ANPS will begin a plant rescue next spring. We will try to keep you informed of our schedule and everyone is welcome to come help. My thanks to the Botanists in our society that came along, we really appreciated your knowledge and help with identification on our trips.

By Justin Holder

**Ouachita Chapter Events**

All other chapter and ANPS members are invited.

March 9 ---Jonquil Day - Guided tours - Wildwood 9:00-4:00

April 13 --- Azalea Day - Guided tours - Wildwood 9:00-4:00

May 4 --- Chapter Meeting - Pinnacle MT. ST. Park 10:00 -Pot luck and field trip to follow.

June 1 --- Wildflower Day - Guided tours - Wildwood 9:00-4:00

Carl Hunter Programs

ANPS members invited as Carl's special guests.

March 16, "Shrubs" -Garden Show, Malvern - Fair Grounds - 10:15

March 19, "Wildflowers" -- Rogers Library, 711 S. Dixieland Rd., 501-621-1152 -7:00PM

March 27, "Wildflowers" - Master Gardeners training - Arkadelphia - Fair Grounds - 1:00

April 5th, 6th, Slides , booth at Flower and Garden Show - Dewitt - 6:30 (5th)

April 8, "Woodies and Wildflowers" --Garvin Gardens—Hot Springs - 1:00

April 11, "Butterflies and Hummingbirds" Fletcher Library, Little Rock—7:00PM

May 18, Wildflower Walk - Ozark Natural Science Center, 1:00-4:00

Notes from John Pelton

*

Have you ever had a ten-year-old ask,
"Have you ever seen a flower open?"

One Sunday morning in January 2002, my great-nephew, Billy Paulus, who was seated next to where I was taking the offering during worship service, leaned over and whispered, "Have you ever seen a flower open?" I whispered "Yes" in reply, and smiled at Billy. I'll never forget that moment of question and answer. So this incident brings to mind a field trip to Mt. Magazine with Dr. Tucker and a group of ANPS members and friends. I had invited Bill Summers to come from St. Louis to go with us to Mt Magazine for the field trip. As many of you know, Bill was working on the Flora of Missouri project at that time. Well, on the way home from Mt. Magazine I suggested we go out to Owensville to see the Burk Road Glade. Bill and I left the van on the roadside and walked out to the glade about ten feet and Bill said, "Look here, John!" I answered, "What is it, Bill?" "*Nemastylis nuttallii*," Bill replied. "Oh, what is that, a blue-celestial lilly? Well, later

I checked with my mentors, Ed Hall and Bob Clearwater, to find the date and time to be back to see the flowers bloom.

They gave me the date and confirmed Bill's timing of the bloom opening. This story turned out great for we have seen the repeated opening now for several years. Ed, Bob and now Theo, and I have all photographed this opening ritual. While walking around waiting for them to bloom we also found approximately 50 more plants on the glade. So thanks to Billy Paulus for reminding Uncle John to keep an eye on Nature. You may see a flower open up in just a few minutes - about supertime.

Keep a watchful eye for Mourning Cloak butterflies. Frances and I saw one near Crooked Creek in Montgomery County, Jan. 25, while out photoing smooth Alder flowers and American Holly berries.

Keep the birdfeeders full and expect a new and exciting springtime.

Notes on Orchids

By Carl Slaughter

A Greek philosopher named Theophrastus gave us the name orchid for a group of flowers that we today place in a family named Orchidaceae by the international code of botanical nomenclature. The word orchid comes from *orchis*, which means testis. It was felt that the tuberoids (roots) of one genus of the orchid family resembled testis.

Luer, in 1975, stated that there were 30,000 species, in 800 genera, of orchids in the world. This is about 10 percent of all the flowering plants. Each author seems to have a different figure for the number of species and varieties that he feels are present. I am sure that these figures change on a daily basis. Each year a number of species disappear never to be seen again, and others are seen for the first time. Some orchids are assigned to a different genus or species. Others are promoted from a variety to a genus. Every year a number of hybrids are introduced. It is estimated that there are 105,000 hybrids. This number is still increasing. What makes it more difficult to know the exact number is that there are "splitters" and "lumpers". "Splitters" believe that differences deserve a different name designation, while "lumpers" believe that there are some differences that are not worthy of a separate designation. To make matters more confusing, there are various degrees for both the "lumpers" and "splitters". At the best the numbers are an approximate estimation. Hopefully, the Flora of North America will, at least for a while, slow down the numerous changes.

Orchids can be either terrestrial or epiphytic. Terrestrial orchids grow in the soil with a root structure that can vary from fibrous to tuber. Epiphytic orchids grow without the need for soil, in the air. This allows the plant to compete for sunlight in dense canopy areas where very little sunlight makes it to the ground below. They receive their nourishment through a root structure covered with a thick absorbent corky layer known as the velamen. Some orchids lack chlorophyll and are saprophytic. They rely on the organic material in the ground for their foodstuff. to be continued.



FERN NOTES

By Vernon Human

Verily, Ye Shall Rise Again!

Imagine yourself in my position. You're driving a typical Ozark dirt-gravel road through typical deciduous woodland, a road you've traversed several times during the last few weeks. You swing around a bend to see a room-sized road-crowding chunk of

rock capped with a solid stand of ferns. So what, you ask? Only that I hadn't seen a single fern on that rock during my previous passages! There's no way I could have overlook a forest of them. Naturally I investigated. As soon as I saw that the fern was a polypody, a light bulb flashed on: I had run into a colony of Resurrection Fern (*Polypodium polypodioides*.)

Its common & scientific names are interesting in their own right. The fern has two of the former, the other being Little Gray Polypody. But it's not appreciably smaller than our common Polypody & is even less gray. *Polypodium* means "many-footed" (I suppose in reference to its roots), and the suffix "oid" means "like" or "similar to", so we can loosely translate its botanic name as "the many-footed fern that looks like a many-footed fern!" There's not a lot of wish hidden behind the Latin of botanic names.

The polypody ferns produce feather-shaped fronds having slightly-offset, more or less simple frondlets on opposite sides of a petiolate central stalk. Resurrection fern isn't an exception. Its fronds grow to eight inches long, usually are more or less erect, and have many prominent reddish-brown & fuzzy fruitdots, or spore case, neatly aligned along the undersurface margins of every frondlet. When they are present, you can't confuse resurrection fern with any other species. Preferred habitat niches are tree trunks, limb surfaces & the upper surfaces of rocks.

Resurrection fern is famous for none of these reasons, but rather because it curls up & "dies back" in periods of drought, only to be miraculously revived when kissed by the rain. It can do this again & again if need be. Thus its other common named is explained, for it is "resurrected," brought back from the dead. Well... apparent death, actually, but the imagery is too picturesque to quibble over. And this also explains why I hadn't seen it during other drives along that road; two days earlier, substantial rainfall had ended a lengthy drought.

We have no such fern in California ... and wouldn't you know that the Ozarks have two? The other one also is sometimes called resurrection fern or resurrection plant, if only because it's inevitable that it would be. But we mustn't allow such careless duplication to run rampant, so let's use its other name, Woolly lipfern (*Cheilanthes tomentosa*). Its fronds are oblong in outline, slim, to eight inches in length, although most that I've seen were shorter. The smallest divisions are more or less marginally rounded, and the whole is densely short-woolly, which factors, combined, give the frond a handsome pebbled appearance.

But you can ignore all of that; woolly lipfern can be surely identified simply by noting where it occurs. For it has chosen the most unfernlike of habitats in which to dwell, namely high, vertical surfaces of cliffs, ledges, and great rocks. You can't expect a lot of ferny company up there. Such habitat is grossly exposed to desiccation by wind and sunshine, and is, moreover, a niche where water cannot soak in or accumulate. Such a fern figures to be highly evolved, relatively free of the fern clan's pathetic dependence on plentiful water -- right? Not woolly lipfern. No sirree! When its water is gone, it promptly turns brown, curls up, and "dies". For it too has mastered resurrection fern's method of survival in the face of always-needed but irregularly-forthcoming water. These ferns simply go into a state of estivation, reducing all water-using metabolic functions to near-zero. When rain comes, the desolate brown tufts unfurl into green and growing life once more. You can see woolly lipfern along the Buffalo River Trail between Ponca & Steel Creek Park.

Nothing prevents me from spending some months on Brazil's Amazon River. I would enjoy it too. But why wander so far afield when so many wonders like these, everyday miracles that I haven't seen before, are to be found just outside my front door?



End Notes

By John Pelton

February 6, 2002

Well, how about this snow from the southwest. 3/4 " on my picnic table this morning, so I'm reflecting on my trip to west Saline County to check out a somewhat strange (to me anyway) plant living in a spring fed ditch alongside Danville road, just as bright green as if mid-summer. After checking my books, still no clue, so I'm turning my research to another plant I photoed further north on the old Mt. Ida road in northwest Saline Co.

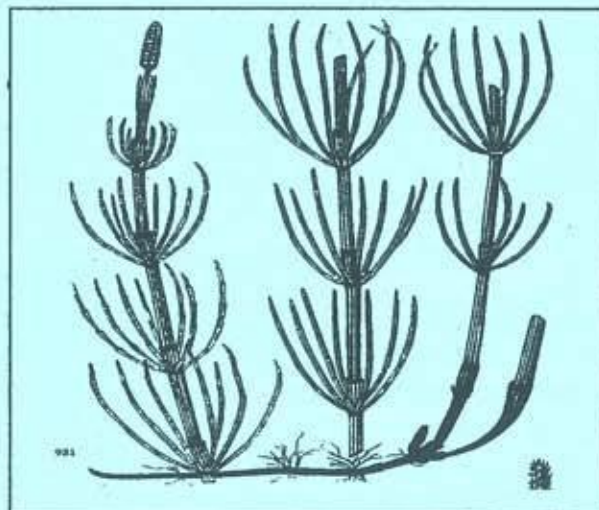
While driving downhill into the Alum Fork River area I noticed another spring-fed ditch with approx. 300 yds. of dark green foliage alongside the water and up the bank a yard or two. You guessed it - horsetails - winter scouring rush - *Equisetum hyemale*. (Where are their neighbors, the small dinosaurs? I see the small dragonflies all summer.) They remind us of the prehistoric era when they were up to fifty feet tall, in huge forests. Some say they helped to form coal deposits around the planet. These horsetails are smaller, but not much different from their ancestors in that they maintain the primitive reproductive system of having both sexual (egg producing) and asexual (spore producing) forms.

The egg producing form which grows from a germinating spore, is tiny and short-lived. It is the spore-producing generation that we see as horsetail plants. These primitive plants are classified somewhere between ferns and firs.

The domestic use of these plants has been recognized for centuries past for smoothing wood, such as bows and arrows, cleaning pots and shining metal objects. In our generation they are useful as biological monitors for water and soil contamination by zinc, cadmium, and lead. Extracts of some horsetails are also used for medicinal purposes.

In checking the Arkansas Atlas by Dr. Ed Smith, winter scouring rush is the common species in Arkansas. The plants on Old Mt. Ida road are the only ones I've seen in Saline County.

Be careful where you plant this genus for they can poison horses



Arkansas Native Plant Society Membership Application

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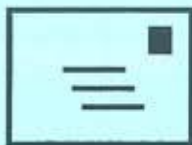
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You can also renew at the Spring Meeting.

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Check out our web site 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

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02