

Gaillardia

The Oklahoma Native Plant Society Newsletter



The purpose of the ONPS is to encourage the study, protection, propagation, appreciation and use of Oklahoma native plants.

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**COPY AND ART DEADLINE
FOR NEXT ISSUE IS
15 November 1995**

CALENDAR

Ed. note: to make the calendar a better reference, I have put either the page number for a more detailed explanation, or the name of the person to contact for more information. The phone numbers for persons named are in bold type below.

- 11 September** Monday evening NE Chapter meeting at 7:30, Tulsa Garden Center. (page 9)
- 23 September:** Saturday Field trip for NE Chapter, 9 a.m. (See page 9)
- 7 October** Central Chapter, walking tour of OU campus trees with Dr. Forrest Johnson of the Oklahoma Biological Survey (no football traffic on this Saturday) see page 10
- 13-15 October**, Native Plant Society of Texas, Annual Meeting at Waco. Contact Connie Taylor* for details.
- 21-22 October:** 1995 Annual Meeting at Quartz Mountain State Park. Some meetings and hotel accommodations in Altus. Ann Randle: see the insert with maps and full instructions for registration.
- 30 October:** Evening meeting of Central Chapter in the Horticulture Center, 4th & Portland, OKC, 7:30 p.m. Program by Darlene Michael. (page 10)
- 27 November** Central Chapter meets, 7:30, Horticulture Center (page 10)
- 1 December:** Photo contest deadline. See Photo contest insert.
Note new, earlier deadline date.
- 4 December:** Monday evening meeting for NE Chapter, Tulsa Garden Center. (page 10)
- 3 February 1996:** Indoor Outing at Tulsa Junior College (Betty Kemm*)

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Help! If you are moving, remember to notify the ONPS: our bulk-mailing practice, while economical, does not provide forwarding services

GARDENING ON THE WILD SIDE

by Ann Randle

Gayfeather, Sometimes Called Button Snakeroot, Occasionally Referred To As Blazing Star, Long Known As Starwort Or Defiance Plum, And Often Further Named With Nearly Interchangeable Descriptives Such As Dotted, Spotted, Grass-Leafed, Narrow-Leafed, Spike, Rough, Cattail, Dense & Kansas.

Now that it is clear which plant we are discussing, we can proceed. In actuality there are many native *Liatris* species useful in the garden and a few great selections in the horticultural trade. Interestingly, this genus was 'discovered' in the U.S. by the Europeans a few years ago, different species such as *L. spicata* selected out, grown as a crop and exported back to us as a 'Dutch' flower. Today there is hardly a mixed bouquet from a flower shop without a few spikes. It is annoying that most of the arrangers don't know that they are using a plant native to a large part of the United States. However, the universities have noticed. At least three years ago OSU extension horticulturists began a research project concerned with possible cut-flower crops that could be grown in Oklahoma. *Liatris* was included.

Nearly all the native *Liatris* species in Oklahoma would qualify as a good cut flower as they share the architectural spike form and a similar color range — cool blue lavenders to rose purple. (There are white *L. punctata* in the wild. I have collected the seed for the Johnson Foundation. I do not use them myself in the garden because I consider their color "muddy".) *Liatris punctata* in particular, I recommend for its characteristic stiff, narrow-leaved, unbranched stems that are packed densely for more than half their length with rayless flower heads. Its late summer bloom period makes it particularly attractive to perennial gardeners as in Oklahoma this is a spectacularly inhospitable time of year for the standard English-type perennials we have been taught to revere. Everything else in the sunny border often looks either wilted and faded in late August (am I projecting?) or doesn't begin to bloom until the shorter days of autumn. Its typical habit of flower heads blooming successively from the top down makes this species interesting botanically although I find this its main drawback in the garden. Once the few

flowers at the top of the flower spike begin to die and turn brown the entire spike becomes much less attractive either in the flower bed or in the house in an arrangement.

I have *Liatris* plants that I grew from seed twelve years ago. Much older specimens are reported in the literature. *L. punctata* has a woody crown from which the numerous stems emerge — the older the plant the bigger the crown and the greater the number of flowering stems. The *Kansas Wildflower Society Handbook* reports that this crown has rings that can be counted to determine the age of the plant. Although the spikes only reach a height of about 18 inches, the root system of a mature plant descends to at least six feet, often much further. This root system insures this species as one of the most drought tolerant in the genus. I found this information predictable because of the many times I have noted this plant on the apex of rocky, sandy hills in western Oklahoma and Kansas.

The literature available to me variously described the uses of *Liatris* species by native Americans. Qualities attributed to different species all seem to derive from the corm-producing types as opposed to *L. punctata*. However, the handbook previously mentioned reports of *L. punctata*'s roots as edible if boiled. Other sources suggest they taste so bad that surely they were only eaten when there were no other alternatives. The Kansas handbook also mentions plains tribes' use of this species to improve the speed of horses. Janet Bare, in *Wildflowers and Weeds of Kansas* states this was done by chewing the root and then blowing it into the nostrils. Of the horse, presumably, not the rider. Some of you may be aware that my husband, Bill,



occasionally serves as an official state track veterinarian. His experiences lead me to believe that if this last-mentioned use of *Liatris* were common knowledge the genus would wind up on endangered plant lists. For those of us who don't race horses and aren't hungry, *Liatris* is still useful. If picked at full bloom and then hung to dry it will hold its color well for dried arrangements. Cut fresh it lasts about one week in a bouquet. It is useful in rock gardens, butterfly and/or bee gardens, the previously mentioned perennial borders and cutting gardens and one source even suggested using it as a short hedge.

Liatris can be propagated with root or stem cuttings but I prefer growing from seed because it is so easy. Locate your wild source plants when they are in bloom and you can select the most robust specimens. Mark them by tying a red

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CONSERVATION CORNER

TISHOMINGO NATIONAL WILDLIFE REFUGE

by Connie Taylor

In 1946 a refuge was established on the upper Washita arm of Lake Texoma for the benefit of migratory waterfowl in the central flyway. It is part of the mitigation for destruction of bottomland habitats covered by Lake Texoma. It currently encompasses 16,464 acres. Over 250 species of birds have been recorded for this area and 50 to 90 endangered bald eagles may be present each winter. It also has a lot of really interesting plants growing in Dick's Pond which is adjacent to the nature trail on the refuge. In fact, the world's smallest flowering plant, watermeal, is abundant as well as an aquatic fern.

Representative Bill Brewster has introduced a bill into Congress that would hand over the management of the Tishomingo NWF to the Oklahoma Department of Wildlife Conservation. AND, of course, the feds would give the state only 50% of the funds currently being used to run the refuge. Since Oklahoma is not rolling in money, its' easy to see that the refuge is headed for hard times. The national wildlife system as a coordinated whole has been very successful in enhancing and maintaining wildlife populations. Why has Representative Brewster thrown a monkey wrench into such successful works? Local interests are to blame. **Every refuge has a local population that seems to resent wildlife, not people, having top priority.**

At Tishomingo several groups are unhappy about some proposed and implemented changes.

1. Trotlines are being left in the water unattended. When the water level drops, the long lines of hooks can become suspended in trees. Eagles and herons become caught in the hooks and die or are seriously injured. Needless to say, those setting the lines are upset about new rules excluding them. Also the use of empty plastic containers that held oil or other chemicals is being eliminated.
2. Goose hunters appear to be upset because geese are not swarming all over the refuge during the winter as they did in former years. It appears that short stopping elsewhere is probably a major cause. Agricultural activity outside of refuges also appears to be more important than the actual crops grown on-site and greatly influences geese hanging around a specific area. Unfortunately, Lake Texoma covered up the best agricultural bottom-lands in Johnston County and cattle ranching on the adjacent grasslands is more common than farming. Rep. Brewster and Rep. Young of Arkansas have introduced a second bill, H. R. 1675, which would amend the

National Wildlife Refuge Administration Act to say that hunting, fishing, and public recreation should be part of the primary mission of the National Wildlife Refuge system. At Tishomingo NWR, hunting, fishing and wildlife recreation are already part of the refuge's uses!!!

Rep. Brewster's first bill is sort of an UNDERFUNDED MANDATE. He reasons this will help to balance the federal budget. But breaking up the National Wildlife Refuge System will only lead to a decline in wildlife populations, particularly if local citizens divert these lands from the protection, enhancement and maintenance of wildlife. We have invested a lot in these populations, and they should not be allowed to decline. As for recreation, it costs lots of money. The second bill constitutes an UNFUNDED MANDATE. There is not enough money for the current purposes and adding other recreational facilities such as boat docks, swimming beaches and winterized campsites will interfere with maintenance at the refuge.

Representative Bill Brewster's address is The U.S. House of Representatives, Suite 1727, Longworth Office Bldg., Washington, D.C. 20515. or phone at (405)436-1920. Senator Inhoff is apparently introducing a similar bill into the Senate. To express your opinion to Senator Inhofe, write him at 453 Russell Senate Office Building, Washington, D.C. 20510 or phone at (202) 224 2921. ☺

CAPETOWN SERVED BY NATIVE PLANTS

Where did that King protea you ordered from your local florist originate? From the *fynbos*, a magical botanical area in South Africa's Cape Province. The fynbos hosts more than 8,500 plant species, two-thirds of which grown only there.

But natives are being choked out by taller invaders such as pines and acacias. A long-standing control program to uproot the upstarts has been cut by the government, which budgets people's needs first. Now the Jonkershoek Forestry Research Centre has found links between native plants, the aliens, and Cape Town's scarce water. The city depends on mountain runoff that flows from the fynbos. The invaders absorb rainfall greedily, diverting runoff from waterways. If control measures are not restored, Cape Town could lose 30 percent of its water supply. Next year parliament may reconsider the program that protects native plants and brings water to people.

from *Earth Almanac*, in *National Geographic*, August 1995

Botany Bay

SEX, POLITICS AND THE APICAL MERISTEM

by T. H. Milby

Have you noticed what people talk about when they go to coffee? It is usually sex, politics or religion. I realize these are interesting topics, but why don't they ever talk about the apical meristem? Yes, I said the apical meristem. The apical meristem is at least as interesting as politics and religion. (I'll leave it up to the reader to decide about that other topic!)

Apical meristems are really interesting but most people hardly know they exist. So before I go any farther, let me explain what an apical meristem is. A meristem is a region of embryonic tissue in a vascular plant. A meristem is what makes a plant grow. And an *apical* meristem is at the tip of a plant stem and is what makes the stem elongate and grow taller. There is a similar meristem at the tip of the root which makes the root grow longer, too; but that is another story. So you see, an apical meristem is not only interesting, but it is also very important. The apical meristem not only makes the plant stem grow taller, but it also is responsible for the production of all the parts and appendages that the plant develops throughout its lifetime. The apical meristem produces the cells in the plant stem that later differentiate into leaves, buds and bracts, and if it is the apical meristem of a flowering plant, then it also produces the sepals, petals, stamens and pistil parts that make up the flower. The same meristem can do all of these things. It is really a remarkable little group of cells. And it does all of these things in a very orderly and systematic way. It does not make a leaf today and a bract tomorrow and a petal the next day and then another leaf. It goes about its business consistently and by what appears to be a very well-regulated set of controls. In many kinds of flowering plants, during the early part of the season the apical meristem produces cells which differentiate only into new leaves and new stem tissue. Later when the interval of light and darkness changes with the changing of the season, the mechanisms within the cells of the meristem are altered so that new cells produced by the meristem become flower parts and flowers instead of leaves as before. And once this conversion has occurred meristem cells do not ordinarily revert to the production of leaves again. Only flower parts are produced thereafter for the remainder of the season.

This is very important for us all, because most of what

the human race eats is the product of a flower. All of the grains that are the fruits of grasses only follow when the grass has flowered. Grains produced by grasses such as rice, wheat, oats and corn are the principal food source for a large part of the human race. Think also of all of the kinds of fruits we eat and recall that every one of them is preceded on the plant by a flower. Beans and berries, apples, bananas, nuts and cantaloupes all are on the grocer's shelf because an apical meristem produced a flower.

But there is more. Not only does the apical meristem produce all of the tissues, structures and appendages of the plant, but it continues to do so throughout the lifetime of the plant. Because of the apical meristem, a plant continues to grow as long as the plant lives, whether the plant lives for one year as an annual sunflower or for a thousand years as does a redwood tree.

This phenomenon is called indeterminate growth. What this means is that there is no predetermined limit to the size of a plant or to the number of its parts. Think of your own development. By the time you were a very small embryo not more than a few weeks old you had already developed the entire set of limbs or appendages that you would ever have throughout your lifetime. No matter how long you live you will never develop more than two arms and two legs (at least, if you are lucky!) You continue to grow and increase in size after you are born until you are about 20 years old and then you stop growing altogether. If you should live for one hundred years you will not grow taller than you were as a twenty-year-old. Your growth was predetermined from your beginning both as to the size you would achieve and the number of appendages you would have.

Not so in a plant with an apical meristem. A plant with an apical meristem continues to increase in length and in its number of appendages for as long as it lives as a result of the activity of its apical meristem. An annual sunflower continues to produce new leaves and flowers until frost puts an end to its life at the end of the growing season. On the other hand, the apical meristems of an oak tree or of a bristlecone pine become dormant at the end of the season. Then with the return of spring new stems, leaves and other appendages are produced again when the cells of the apical meristems renew their activity following the period of dormancy. There is no predetermined limit to the number of appendages an oak or a pine tree will produce during its lifetime. The tree will continue to increase in size



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NOMINATING COMMITTEE REPORT

The nominating committee, consisting of Judy Jordan, Chair; T. H. Milby and Paul Buck, has submitted its slate of officers to be voted upon during the ONPS Annual Meeting to be held at Quartz Mountain State Park on October 21 and 22.

Please give the following your careful attention, and be prepared to vote informed when the time comes.

For President	Frank Carl, Okeene
For Vice-president	Ann Randle, Duncan
For Secretary	Darlene Michael, Okla. City
For Treasurer	Judy Jordan, Norman
For Historian	Karen Haworth, Tulsa
For Directors at Large:	

Anais Starr (replacing Ann Randle, 1996)

Sheila Strawn (new, 1998)

Betty Kemm (Incumbent standing for new term, 1998)

Incumbent directors still serving their terms and not requiring reelection this year are: T. H. Milby (1996), Mike Palmer (1997), and Richard Bradley (1997).

Everyone recommended by the nominating committee has agreed to serve if elected. Please assure that any persons whom you may wish to nominate from the floor are also able to serve if elected.

BOARD MEETING

Summary of the minutes of the business meeting held on July 8, 1995, provided by Darlene Michael.

The ONPS Board met at St. Stevens United Methodist Church in Norman, Oklahoma at 10:00 a.m. on 8 July 1995.

Three financial reports presented by Treasurer Judy Jordan were approved without changes: "Balance Sheet — June 30 1995", "Statement of Income and Expenses, November 1, 1994 - June 30 1995", and "Operating Budget for FY 1995 - November 1, 1994".

Jim Norman will replace **Photography Committee** chairman Clark Ovrebo, who has resigned. Suggestions for contest rule revisions were referred to the Photo Committee. Winning photos will be displayed at Oxley Nature Center, Tulsa, [and other locations statewide, as requested]. The revised photo submission deadline of December 1 will be announced in the Gaillardia. Action approved by vote.

T. H. Milby agreed to plan a field trip for next year to the Forestry Regeneration Center at Goldsby, highlighting species collection and propagation, and the winter packing and harvesting.

Betty Kemm is inquiring about the possibility of setting up an alternate address for the ONPS on the Internet.

Ruth Boyd distributed copies of ONPS's pamphlet entitled **Guidelines for Collection of Native Plants for Use in Horticulture, Restoration, Medicinal Preparations and Scientific Research**. [This is a reprint of the Collector's Guide adopted by the ONPS several years ago. Contact Pat Folley for copies as needed.]

An application for a **Speakers Bureau** is being considered. It will be distributed to county extension offices and public libraries.

Joann Orr reported that 128 people attended the '95 **Wildflower Workshop** at Boise City; 35 hearty individuals actually climbed Black Mesa. A donation will be made to the Cimmaron Heritage Center because it charged no rental fee for use of its buildings. The '96 Wildflower Workshop is being planned for the second week of May at McAlester; the '97 Workshop is tentatively planned for Duncan.

Joanne Orr advised that ODOT will receive \$25,000 this year to plan and inventory a **national wildflower prairie trail corridor**. Suggested routes include Rts. 66, 69, 77, 99 and I-35. DOTs of adjacent states plan to focus on gaps between natural plantings. Pres. Taylor suggested the inventory be conducted this fall as a component of a graduate student's work.

Paul Buck agreed to replace Jeff Black on the **Anne Long Award Committee**. President Taylor agreed to serve on the **Harriet Barclay Award committee** because she is a judge for the Oklahoma Academy of Science.

Northeast Chapter representative Betty Kemm mentioned that 13 people attended the June 24th field trip led by Paul Buck to private prairie north of Owasso. Their next field trip is scheduled for September 23d at Loretta Bowers' Clear Creek Farm & Gardens nursery.

Ruth Boyd reported for the **Central Chapter** in lieu of Vaughn Smith, who is not able to continue as liason. She reported two field trips: (1) June trip to a native prairie near Cushing, and (2) visit to the *Oklahoma Gardening* set in Stillwater, which also visited the OSU veterinary school's toxic range demonstration garden and ended with lunch at Eskimo Joe's. October plans include a walking tour of the trees on OU's main campus and an indoor program by Darlene Michael on designing with native plants.

Plans for the '96 **Indoor Outing** were announced by Betty Kemm. It is scheduled for Saturday, February 3, 1996 at Tulsa Junior College (TJC)'s northeast campus. The program will feature uses of native plants and possibly a tour

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Board Meeting

of TJC's state-of-the-art greenhouse by Tina Lynn.

Authorization was granted to print T-shirts for resale. Betty was also authorized \$25.00 for purchase of envelopes and stamps. Jeff Burkhart and Paul Nighswonger are planning the '97 Indoor Outing, possibly at Enid College and featuring Johnston Seed Company, a large producer of wildflower seeds for highway and other commercial plantings.

A maximum of \$400 to purchase long-sleeve chambray work-shirts to be silk-screened with the ONPS logo was voted for Pat Folley, who will do the artwork. The shirts will be available for the annual meeting at \$20. [Ed. note: I got a real steal on Arizona Jean Co. shirts – they are great!]

Ruth Boyd suggested publishing in the *Gaillardia* a list of available plant lists (for specific sites), allowing members to purchase them by mail. These to follow field trips to various state sites.

Discussion was held regarding Bylaws revision to clarify stipulation that only the President's length of office is limited to two years.

The Annual Fall Meeting and election of officers is planned for October 21-22, 1995, at Altus. [see insert].

***Liatris punctata* article continued**

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rag scrap on a stem and return in late October or November to collect the seed. Soon after collection, in late autumn find an out of the way place in a well-drained shrub bed or garden. A sunny spot works best. I use the front edge of one of my raised holding beds. Scratch a tiny trench about one half inch deep in the soil and sow the seeds (they resemble other composite seeds like marigolds or *Gaillardia*) about an inch apart. Cover, water, and wait until late spring. By then the new plants will have a few true leaves and can be moved to their ultimate location if you like. Unlike some deep-rooted perennials *Liatris* does not have to be permanently sited while still very young. I usually wait to move *Liatris* until fall when the plants are a little bigger and easier to handle. Small bloom spikes are often produced the first year. Supposedly seed at least one year old germinates at a higher rate. Perhaps if you are a commercial grower this is important. Fresh seed has always produced more plants than I needed. If you are going to plant in spring the seed will take about three weeks to germinate. The higher the temperature (up to about 80°F), the faster the germination. I have grown five different species of *Liatris* in my garden and have only had

***Liatris aspera* self-sow.**

A word of cultural caution: *Liatris* stems will twist, elongate and fall over if the soil is too rich, too acid or too moist. Obviously it needs a garden with the limey, sandy or rocky, dry, well-drained soil of its preferred native terrain. *L. punctata* is certainly prone to this problem so do not mulch it with your hard-earned compost, or with anything else for that matter. If you have a sprinkler system, use one of the *L. spicata* cultivars in the horticulture trade. They are better adapted to conditions that result from intensive gardening.

Once in a while I find a spittle bug on *Liatris*, and snails will eat it if starving. I ignore the former and directly attack the latter with my boot – both traditional organic gardening methods. ☺

A blessed event!

Drs. Leslie and George Jackson of Edmond Oklahoma and Central Chapter, have become the parents of a new baby boy, named Phillip.

This good idea appeared in the Oregon Native Plant Society's newsletter. I think we should take the suggestion to heart:

DUCKWEEDS WANTED

"....We have fewer than 5 specimens for 10 of the 13 species of duckweeds (*Lemna*, *Spirodella*, *Wolffia*) that have been found in the state. These are among the smallest flowering plants in the world and are poorly collected.....Please send specimens...For specimens sent in, I will provide an identification and you will be helping the Oregon Flora Project"

Specimens can be most easily made by dipping the floating plants with a screen (swimming pool skimmer is great) and flipping them onto a paper towel. Then sandwich into a folded newspaper, press under several books, dry thoroughly, and label with date and place of collection, your name and address. Oklahoma specimens should be sent to The Bebb Herbarium, 770 Van Vleet Oval, Rm. 203, University of Oklahoma, Norman, OK 73019-0245.

Yes, Oklahoma species are as undercollected as are Oregon's. ☺

NEED A FEW EXTRA COPIES? JUST ASK!

Many of us belong to other organizations with similar interests. If you know you will need some extra copies of the *Gaillardia* for distribution as promotion of the ONPS, just write Patricia Folley or Ruth Boyd by the regular cutoff date, so we can order enough.

OUR MEMBERS REPORT

Susan Chambers sends these recipes, gleaned from the good ladies who fed us so well at the Wildflower Workshop:

SCOOPER BEEF, by Jody Risley

Brown 1 lb. ground beef, season for tacos. Set aside.
Mix 8 oz. cream cheese and 8 oz sour cream. Spread 1/2 of mixture in bottom of 9X12" pan (I like to use glass). Spread the ground beef mixture over the cream cheese mix. Then spread the remaining cream cheese mixture over the beef. **Sprinkle** with shredded lettuce, tomatoes, onion, peppers, carrots, etc. (I sprinkle chopped broccoli, cauliflower and black olives on mine.) Sprinkle shredded mozzarella and cheddar cheese over all. Cover and refrigerate or serve at once.
Serve with tortilla chips & piquante sauce. This is used like a dip. I take it to lots of pot-luck dinners and always take home an empty pan.

STRAWBERRY SALAD, by Jody Risley

Sugar-and-cholesterol free (after that beef dip, it needs to be)
 2 3-oz. pkgs. sugar-free jello 1 cup hot water
 2 8-oz pkgs. frozen strawberries (or 1, 16-oz pkg.)
 1 large bananas, mashed
 1, 15-oz can crushed and drained pineapple
 1, 16-oz carton sour cream.??Ed. note: this is loaded with cholesterol! Do you suppose she used fat-free instead?

Dissolve jello in water. Add thawed strawberries, bananas, pineapple. Put one-half of mixture in 8x11" pan or pretty glass serving dish. When set, spread sour cream over the top, then put the other half of the strawberry mixture over sour cream. Chill until ready to serve. This is very good.

FROG-EYE SALAD

(no cook named)
 1 sm. box orange jello
 1 sm. box vanilla pudding (not the instant type: cook & serve)
 1 sm. box tapioca pudding
 3 cups water
 1 sm. can Mandarin oranges, drained
 1 small carton Cool Whip.
Cook the jello, puddings and water until thickened, set aside to cool.
Add oranges and Cool Whip. Chill for 30 min. or more before serving.

CORNBREAD SALAD

(no cook named)
 1 recipe cooked cornbread 2 T. mustard
 1 small onion or fresh green onions, chopped
 1 bell pepper, chopped 1/2 t. salt; 1/2 t. pepper
 1 fresh tomato, chopped 1 t. sugar
 1/2 cup mayonnaise or salad dressing
Crumble cornbread in a bowl with onion, bell pepper, and tomato. **Mix** together mayonnaise, mustard, and seasonings. **Pour** over cornbread mixture and stir gently; chill.
 This recipe is even better the second day.

Touring the Chambers' Home Grounds

by Wayne Chambers, as told to Susan:

One thing that attracted me to ONPS was the field trips; going to unusual and exciting parts of the state really appealed to me. It's just that getting there was sometimes a problem -- trying to schedule a day off. Finding the location and then getting there on time was often difficult.

The perfect solution, however, was found: have a field trip to our place. I can find it without a map, it's doubtful I'll be late, I know where the rest-room is, and it's one of my favorite places to be. I had a great time and didn't even have to drive home. We had 34 people, a lot more than we first expected -- especially considering the temperature. I'm not exactly sure what folks saw or even what I saw, for that matter. I only know I talked for about 3 hours straight, and that's a lot, even for me.

Here's a few facts I should have given first:

- 1] Our place is located in the area known as *The Cross-timbers*, characterized by rolling hills, sandy soil and post oak/blackjack oaks predominating.
- 2] We've lived on the place for nearly 11 years and have been planting as long as we've been here.
- 3] The existing trees were one cottonwood, 2 white mulberries, 2 redbuds, 10 black jack / post oaks and several red cedars. Some of these were large trees to which we have done little or nothing, including the large cottonwood, about 80 feet tall, and hundreds of orange daylilies. We have many trees that had existed only as root systems that we have allowed to grow back. Once the brush-hogging maintenance by the previous owners had stopped, blackjack, post and chinquapin oaks grew up.

The next category of plants is the volunteers. These included many pleasant surprises in the area of native plants. These are Chittamwood, tree plum (*Prunus mexicana*), rough-leaf dogwood, smooth and winged sumac, and *Juniperus*

virginicus.

A third category is the plants we've added. Some of these are *Viburnum prunifolium* (black haw), American holly, deciduous holly, numerous green ash trees and several species and hybrids of oaks.

The tour started in an easterly direction past the brush pile (approx. 40' by 60' and growing). The soil is basically just subsoil (red clay) with buffalo grass, yellow coneflower, snow-on-the-mountain, giant ragweed and velvet-leaf making their appearance in late July. [Ed. note: the Chambers' property runs uphill, east from the street at the west end.]

Then we come upon a small grove of blackjack, post and dwarf chinquapin oaks. Further east is another open area that usually has our best wildflower display. It contains purple coneflower, lemon monarda, penstemon, gaillardia, sideoats grama and sandplum, among others. Continuing east, we enter an area with more oak thicket. Sprinkled in are chittamwood, tree plum, sumac, partridge pea and goat's rue. Also in here are rough-leaf dogwood, red cedars and little bluestem.

Back at the house are most of the larger trees — mostly blackjacks. Also there are several green ash, none older than 11 years. Two bur-oaks have grown surprisingly fast, having only been planted less than ten years ago. At the foot of the hill is the big cottonwood.

On the east side of the house is a garden pool at the base of a triple-trunk green ash that houses several fish, a few frogs and many toad tadpoles in season. West of the house is a small garden pool in a woodland garden of mostly natives. Farther west is a stagnant pool covered by duckweed, much beloved of frogs and box turtles.

Our focus has changed over the years. We seldom buy plant material solely for its eye appeal any more. We now consider its value for wildlife, as well as its drought tolerance. The plant must have sustainability (requiring no fertilizer or pesticides). And, of course, the plant must fit into its landscape. Ultimately, we seem to be heading toward making the landscape as native as possible for two folk who like all sorts of plants. We seem to be straying more from gardening and closer to restoration — at least for the major position of the place.

If I had to choose a list of favorite plants on our place, here's the short one (due to the brevity of this newsletter):

Quercus prinoides — dwarf chinquapin oak. I personally think this could be used more in landscaping. Stoloniferous shrub, attractive foliage and acorns.

Verbesina encelioides — cowpen daisy — excellent monarch

butterfly plant [and the longest bloom period of any native composite].

Phytolacca americana — pokeweed — tough perennial, great bluebird / mockingbird plant. The berries are poisonous to humans.

Ilex decidua — deciduous holly — picked clean each winter by cedar waxwings.

Ribes odoratum — clove currant — first native to flower each spring; stoloniferous shrub; clove fragrance; great berries for birds if Susan doesn't get them first!

Quercus marilandica and *Q. stellata* — blackjack and post oaks. Although my neighbors may look strangely at me, I actually like these trees. I like the bark, the shape, I even like the low-hanging limbs. They shade out the grass, meaning I don't have to mow under them.

Populus deltoides — cottonwood. Best silhouette at sunset of any plant on the place.

☞ ONPS readers are welcome to recycle our articles to other newsletters if desired. Some are just too good to use only once! We'd appreciate our authors getting credit for their work, though!

Know any good stuff like 

 ? How about letting the *Gaillardia* tell 'em all about it?

CONTRIBUTIONS WELCOME

ONPS members and friends are encouraged to contribute to the *Gaillardia*, published quarterly. Many of our articles are written by professionals, and may be submitted on disks (without columns or tabs, please).

As editor, I welcome all sorts of input, from the high-tech to the scratch pad. You may send clear black-and-white drawings to illustrate your material, or describe the illustration you wish and I will insert one for you.

Of course, as a non-profit organization trying to keep our membership rates as low as possible, we cannot pay in real money. You will have to work for love -- every author who contributed to this and all other of our newsletters does the same.*Patricia Folley*

Please send contributions directly to my home address: 15100 Etowah Rd., Noble OK 73068. (saves time)

ORCHID TOUR RECALLED

Patricia Folley

We assembled as directed, at Raymond Gary St. Park, 9 a.m., August 5. It was as hot as -- well, as hot as Oklahoma in August. Didn't seem to worry an enthusiastic crowd of about 20 (I typically didn't count, and Jim Norman has been on vacation ever since). For those who patiently lined up for a group photo, I must apologize: I dropped the camera with that film in it, into the waterfall at Roman Nose a few days later. If anyone else took a picture at that time, I'd like to hear about it.

We first visited Schooler Lake, near Hugo on SH 147. Walking around a little backwater of the lake, we found alder, partridge-berry, sweet-spire, wild ginger, many ferns -- and the orange-fringed orchids, like light-bulbs in the dim woods! Too soon, off to Battiest. It's a bit far off the main route, but what a treasure; we added at least three more little orchids, including the delicate crane-fly and the three-birds. The pink-flowering St. John's wort, one of the rarest flowers in Oklahoma, wasn't in bloom, but many more were, and too soon, it was time for the dash to Idabel and lunch.

We were 14 at lunch, and our fearless leader entertained us all while enjoying the catfish dinners. Many of the group left after lunch -- it was after 3 p.m. -- but a few die-hards went on to Bokhoma National Forest Recreation Site, one of the loveliest sights in a beautiful area. The small lake there held American water-shield, tiny prostrate Eryngo, like little blue eyes in the water's edge, and many more.

On to Tom, and south to the "rice fields" to see the only palm native to Oklahoma: a dwarf palmetto. By this time it was growing late, and I was exhausted, but Jim Norman and three friends went on to do some birding in the Red River bottoms. What a guy! What a day!

p.s.: the Gaillardia hasn't room to print every species seen, but it is usually possible to provide one. So....this new offer anyone who wants one: send Pat Folley a self-addressed, stamped envelope (long), and a copy will be sent as soon as possible.

Just mention the date and location of the field trip, and understand that you'll be getting "field identifications", subject to correction when any specimens taken are compared with herbarium copies. Many thanks to Sydney Carpenter for her prompt support with field lists for the Orchid Tour. ☺

Note: the tour of Blue River Hunting and Fishing Area near Tishomingo will take place the day after this newsletter goes to the printer. Watch for a report next time. If you are distressed by reading all these reports of field trips you didn't make well, make some! You're always welcome, and it's always fun!

>NOTICE

> Preregistration is now required for all field trips.

>Field trip announcements will contain the name, address, and telephone number of the leader. If you have doubts about terrain, difficulty, etc., ask.

>Field trips take place rain or shine. Proper dress and shoes, hat, etc., are essential. Bring water and lunch. Sunscreen and insect repellent are always in demand.

>Participation is at your own risk

>All ONPS field trips are open to the public at no charge, unless charges per member are specified in the announcement. Visitors and newcomers are always welcome.

>Chapter-initiated field trips are also open to all ONPS members who may be able to attend. Please register.

> Next state-wide event will be the Annual Meeting at Quartz Mountain and Altus on aOctober 21-22. See the yellow insert for details.

>To register for other events, notify the person listed on the notice. Names, address and phone are listed. It is never too late or too early for planning.

NORTHEAST NEWS

by Betty Kemm

Plans: A regular chapter meeting on Monday, 11 September. 7:30 p.m. at the Tulsa Garden Center. Dale and Sue Amstutz will bring a program on the National Wildflower Research Center. I hope you get your *Gaillardia* in time!

Then, a field trip planned for Saturday, September 23: Several stops along Spring Creek, led by Kirk & Loretta Bowers, owners of Clear Creek Nursery.

We'll meet at 9:00 a.m. at Bob's Mini-Mart and Sinclair Station, Peggs OK. Peggs is on Highway 82, 9 miles south of Locust Grove.

Next evening meeting will be on Monday, December 4. Details to be announced. The regular time is 7:30 p.m. at the Tulsa Garden Center.

Notes on the June 24th field trip didn't arrive in time for this issue. Betty

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says they saw leaf-cutter bees rolling *Sabatia* petals and stuffing them into yarrow heads. Wish I'd been there! Hope you were.....

CENTRAL CHAPTER REPORTS

by Ruth Boyd

On Saturday, June 24, 1995, approximately 25 members and guests met on the OSU campus in Stillwater for a tour of the studio gardens of the Oklahoma Gardening award-winning public television program. ONPS members Olen and Teresa Thomas of Stillwater, who are also volunteers at the garden, were our hosts. Following the tour we drove a short distance to view the toxic range plants demonstration plot at the Veterinary school. Central Chapter member Leslie Cole-Jackson, a graduate of the Veterinary school, gave us additional information about the symptoms of illnesses in range animals from foraging on plants at various stages. Several of the group continued on to Eskimo Joe's for lunch.

~~~~~  
On Saturday morning, July 25, 1995, 34 members and guests met at the east Midwest-city acreage of members Wayne and Susan Chambers for a tour of their 2 1/2 acre animal and plant sanctuary. Wayne and Susan conduct their business, Rose Rock Landscapes, from this location. Having a deep love and knowledge of all plants, especially natives, they have created several different habitats. In fact, except for a fairly open wildflower and native grass meadow, they would be hardpressed to find room for another tree or shrub. They have utilized the existing vegetation and are experimenting with several plants, both native and non-native, for Sunshine Nursery in Clinton to determine their success in central Oklahoma. A lovely water feature they have constructed with simple materials was a magnet on that typically hot and humid July day. Large quantities of iced tea, lemonade and cold water were consumed with appreciation. Hats off to people like the Chambers who work hard to preserve pockets of sanity in the blight of urban sprawl.

**CENTRAL CHAPTER PLANS**

Kicking off the fall season, we ran into a strong offensive from the OU football program, which is monopolizing the campus for the entire month of September! So, our Sept. meeting will take place on the OU campus on 7 October, instead. Parking is available in the lot between Asp Avenue and the infamous

stadium, reached by access from Lindsay Street. In fact, we'll meet our guide for the day, Forrest Johnson, in the parking lot, at 10 a.m. The plan is to make a walking tour of the campus, which has an immense variety of trees both native and exotic.



Forrest is a botanist who works with the Oklahoma Biological Survey, and is especially interested in the woody plants. He is also an ONPS member. The walk will be leisurely, on absolutely flat terrain, and will no doubt be followed by a lunch at one of the interesting restaurants on Campus Corner.

*Then*, our regular evening meetings at the OSU Horticulture center, 4th and Portland in Oklahoma City, will begin on Monday, the 30th of October at 7:30. (I put the wrong time in last issue of Gaillardia, so please fix your personal calendar.) Darlene Michael will repeat the program she had begun at the Indoor Outing, and which was cut abruptly short by lack of time. If you were there and wanted to hear the rest, now is your chance. If you missed the I.O., you get another chance. There is just so much talent running around in this organization, it's hard to go wrong.

*Remember that members with seeds or plants to share are encouraged to bring them to any indoor meeting. Either the October or November meetings will work well.*

More! The November meeting, again at 7:30 in the Horticulture building, will be the new multi-media program on Urban Forestry provided by Keep Oklahoma Beautiful. We're talking landscape trees, here, and how they improve the health of the city environment while they please the eye and the soul.

~~~~~  
"We were poured into one of those humanity gutters officially called Interstate Highways..." May T. Watts
.....

A shower like a little song
Overtook him, going home;
Wet his shoulders,
And went on.

by Wendell Barry

continued from page 4

each growing season because of the activity of its apical meristems (and also because of the activity of another kind of meristem called the vascular cambium, but that is also another story for another time). That, then, is what is meant by indeterminate growth which occurs in flowering plants because of the existence of embryonic cells called meristems.

Next time you are at coffee with your friends and the talk begins to lag, tell your friends about the apical meristem. It is sure to be the start of a lively conversation (at least as lively as if the topic were politics or religion!) Try it and see.

OMNIPLEX PRODUCING HORTICULTURE GUIDE

In the Greater Oklahoma City Metropolitan Area, there is no central location or source for all Horticulture services and organizations. This has been a dream of Gene Steiger, Assistant Director of Education at Omniplex Science Museum, and Central Oklahoma Green Group. Lorelei Ransom undertook this as a 'Special Technical Project' this summer as part of her college credit work at the John E. Kirkpatrick Horticulture Center at OSU-OKC.

In gathering the information on all these organizations and services, she contacted some by phone, others by letter or personal interview, and found that people in this field are very friendly and all were extremely helpful. To date on this project she has spent 90 hours. This will be an on-going project and it is our hope that as each organization changes

officers and/or programs, they will notify Omniplex so our computers can be updated.

This project will be made available to anyone interested for just the cost of printing. If you need additional information or would like to update this project, contact Gene Steiger at Omniplex (405)424-5545 or Lorelei Ransom at (405)341-3801.

When I checked with Gene Steiger about the document, he said that it is not yet printed (read that: printing costs are not in their budget.) It will run about 153 pages and a single copy would cost about \$15 to print at a copy shop. The Omniplex will, however, use the database to answer specific questions. Yes, the ONPS is listed under several headings.

Speaking of OSU, the extension centers have a new (to me) fact-sheet called "Landscaping to Attract Butterflies, Moths, and Skippers" that will be of interest to many of our members. It's 12 pages, nicely printed, and contains some useful tables. Unfortunately, many of the plants listed are not suitable to Oklahoma gardens, and some Oklahoma sources are not listed. Maybe next time, an ONPS member will be asked to contribute!

BECOME AN OKLAHOMA NATIVE PLANT SOCIETY MEMBER

Please enroll me as a Member of the Oklahoma Native Plant Society. My dues payment is enclosed for the category checked. Make checks payable to *Oklahoma Native Plant Society*, and mail to:
Oklahoma Native Plant Society / 2435 South Peoria / Tulsa, OK 74114

\$15.00 Family \$10.00 Individual Gift from _____
 \$5.00 Student \$200.00 Lifetime Individual
 \$300.00 Lifetime Family Renewal New Membership
 \$ _____ contribution for _____ (All contributions are tax deductible)

NAME _____ HOME PHONE _____

AFFILIATION _____

ADDRESS _____ BUSINESS PH. _____

CITY _____ STATE _____ ZIP _____

ONPS WELCOMES THESE NEW MEMBERS

- Cynthia Goddard, Tishomingo
- Rebecca Larsen, Oklahoma City
- Lezlie Oxenreider, Norman
- L. Dean Simmons, Norman
- Carolyn Crittenden, Madill
- Ulrike Stradtman, Lawton
- Kathy Anderson, Norman
- Bonnie Ashing, Tahlequah
- Carolyn Clink, Stillwater
- John & Elsie Johnson, Lawton
- Hanson McCollum, Tahlequah
- Mary Lou Plunkett, Tulsa
- Mary Thompson, Stigler
- Debbie F. Tucker, Tulsa
- Joseph Witt, Tulsa
- Maggie Wolf, Stillwater
- Brad & Regina Norbury, Arnett

Know any of these good folks? Why not give them a call, welcome them to the organization, invite them to go along on a field trip; get acquainted. We are glad to have them!



The Gaillardia

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RENEWAL TIME!

Please look down at your mailing label  If the top line has a date entry of 12-94 or before in the third "word" position, your renewal for 1995 is due. (The first "word" is your membership group: IM for individuals, FM for families, SM for students. The second "word" indicates the time you joined ONPS.). 

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**OKLAHOMA NATIVE PLANT SOCIETY ANNOUNCES ANNUAL MEETING
ALTUS, OK. AND QUARTZ MOUNTAIN STATE PARK
OCTOBER 21 & 22**

Organizer Ann Randle, 2300 Fairway Drive, Duncan, OK 73533 (405)255-7438

REGISTRATION Saturday, October 21, 10:00 to 12:00 at amphitheater on far side of former lodge site. Parking available in area. Registration cost is \$2 in advance, \$3 on-site.

Please note that no arrangements have been made on this date for lunch. There is a temporary restaurant on the park's former tennis courts and a small grocery in the park. A few concessions outside the park sell food. Otherwise, you will need to bring your lunch or eat on the way. The nearest town with food services is Altus.

SATURDAY FIELD TRIP October 21, 12:30 p.m.; leave from amphitheater. Leaders to be Park Naturalist Carla Greison and ONPS members. Advance registration is required for planning purposes.

ANNUAL MEETING Saturday, October 21, 5:45 p.m. in the designated meeting room, Best Western Hotel, 2804 N. Main in Altus. Easist access is from US 283 on the north end of town.

BANQUET BUFFET AND PROGRAM Saturday, October 21, 6:45 p.m. in the Altus Best Western. Reservations must be in Ann Randle's hands before October 18, so consider the delivery time and mail by 15 October. Cost of banquet and gratuity \$12.00.

Special treat: our evening speaker will be Steve Bieberich of the Sunshine Nursery in Clinton.

LODGING Since the lodge at Quartz Mountain St. Park burned this year, there no hotel accomodations or meeting rooms available at the park. The Best Western Hotel, where the meetings are held, has reserved a block of rooms for that Friday and Saturday at a special rate of \$42.50 plus tax. Reservations for those rooms must be made to the hotel by 13 October. Phone (405)482-9300, tell them you are an ONPS member, and ask for one of the blocked rooms to take advantage of this rate. After 13 October, lodging will be on a first-come, first-serve basis.

Alternative lodging:

Quartz Mountain Motel, (405)563-2562, is just outside the park, across the road from the golf course; rooms with two double beds for \$40/night. This is the nearest lodging to the park.

Ramada Inn, Altus: (405)477-3000; eastern edge of town on US 62; has restaurant.

Super 10, Altus: (405)482-4656: also east of town on US 62. Regular rooms and two "fairly nice" rooms that will sleep 6 for \$50 – a bargain for a group.

Day's Inn, Altus: (405)477-2300, north of town on US 283, next-door to Western Sizzlin' restaurant.

Friendship Inn: (405)477-7300, north of town on US 283, has own restaurant.

Falcon Inn: (405)482-4726, north of town on US 283, has own restaurant.

CAMPING In Quartz Mountain St. Park: hookups \$14 with sewer connection, \$11 without. Tent camping with picnic tables, \$6 per night. Water faucets located throughout camping areas. Fees are collected each evening by uniformed rangers. While crowding is not a problem in October, you may make reservations at (405)563-2238.

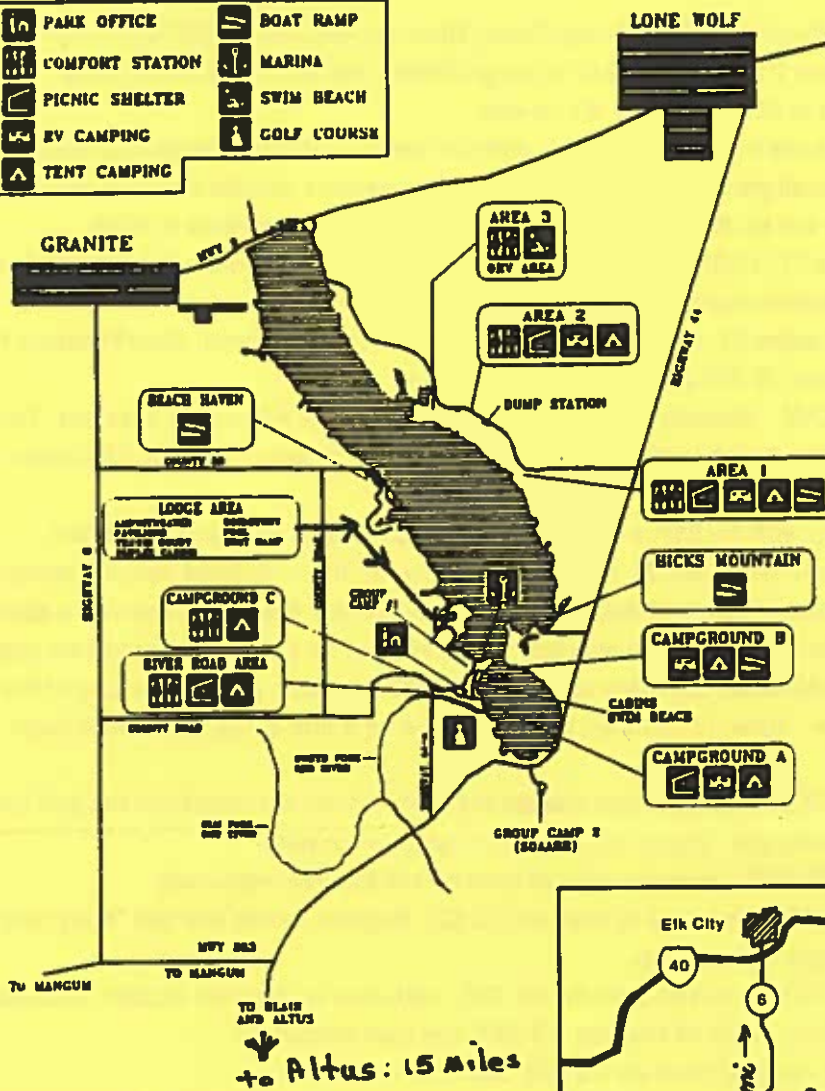
BREAKFAST BUFFET AND BOARD MEETING Sunday morning, October 22, 7:30 a.m.; Best Western Meeting Room. Reservations due at the same time as for the banquet. Cost of breakfast with tax and gratuity \$6.00.

SUNDAY FIELD TRIP...October 22, 9:30 a.m.; leaves from amphitheater unless otherwise announced at breakfast. Remember to register so we will know whether to expect you if you are not going to be at breakfast.

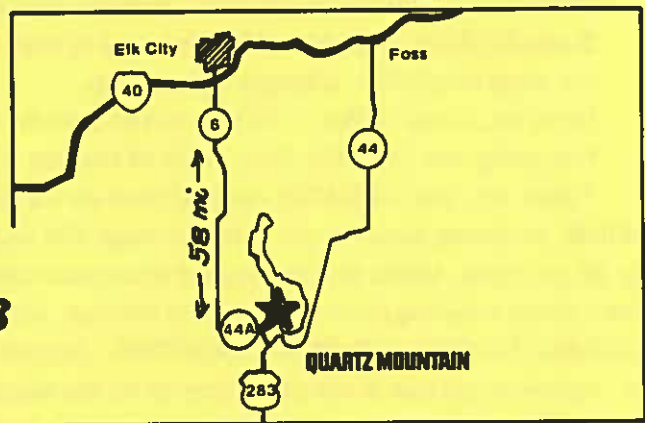
Please detach and return this slip with payment by October 15 to: Ann Randle, 2300 Fairway, Duncan OK 73533-3212

Name (s) _____		Phone _____
		COST TOTALS
REGISTRATION		\$ 2.00 _____
MEALS:	Saturday Night Banquet	12.00 _____
	Sunday breakfast	6.00 _____
I / we will attend the Saturday field trip Yes___ No___		Sunday field trip Yes___ No___
		Total enclosed \$ _____

KEY TO SYMBOLS			
	PARK OFFICE		BOAT RAMP
	COMFORT STATION		MARINA
	PICNIC SHELTER		SWIM BEACH
	RV CAMPING		GOLF COURSE
	TENT CAMPING		



Quartz Mountain State Park
Park Manager 405/563-2238
Route 1, Box 40
Lone Wolf, Oklahoma 73655



Board members will receive a copy of the current ONPS directory complete with names and addresses. Other members may order a copy with this registration by adding \$2.50 to cover cost of printing to their check and marking this box.