

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

Cut & Mail Page 7



Volume 7 Number 4 Winter 1992

### Gaillardia

The Oklahoma Native Plant Society Newsletter

#### February and May events require reservations now

The ONPS Indoor Outing on Feb. 6 on the OSU campus in Stillwater, and the May 28-31 Black Mesa area trip have been arranged, and both require mail-in coupons on pg. 7 this issue.

Don't miss these two outstanding native plant events in 1993 by forgetting to respond. Dr. Ron Tyrl and Dr. Connie Taylor, two of the state's best botanists and field guides, have made the plans and offer the opportunities. The Black Mesa reservation is a pre-registration fee, which is needed to ascertain final cost. (More on that below.)

Ciose Encounters of the Botanical Kind: Strategies for Life Indoor Outing Sat., Feb. 6, 1993 Dept. of Botany OSU - Stillwater by Ronald J. Tyrl

The faculty of OSU's Dept. of Botany and the Stillwater ONPS members invite you to investigate, via a series of laboratory exercises and lecture presentations, the myriad of adaptations that flowering plants have evolved to grow, to reproduce, and to disperse their progeny throughout the world.

This outing is an opportunity to conduct some of those lab experiments that you did in introductory biology or botany years ago that didn't seem especially relevant at the time.

You also will hear several talk about their research activities or extra-curricular botanical endeavors. Topics include: using Oklahoma native plants for the cutflower industry, native plants of eastern Europe, hybridizing plants to explore relationships, acid rain effects on native plants, and a botanist's passion for gourds.

Our schedule of activities includes: 9:00 - 10:00, Registration and exhibits; 10:00 - 12:00, Experiments & Presentations; 12:00 - 1:30, Lunch on your own; 1:30 - 3:30, Experiments & Presentations. Please see pg. 7 for motels, mail-in registration, etc.

Oklahoma Rockies in the Spring
Memorial Day Weekend
Spring Outing
May 28, 29, 30 & 31, 1993
Black Mesa State Park
Cimarron County
by Connie Taylor

ROCKIES? IN OKLAHOMA? You bet. A skirt flounce of the Rocky Mountains containing an amazing number of western plants and animals is found in the very northwestern portion of Oklahoma. The black volcanic cap of the Mesa de Maya (known as Black Mesa to us Okies) crests just below 5,000 feet, high enough to give the mountain climate necessary for the Pinon Pine-Juniper Grassland vegetation type. There are even a few scattered Western Yellow Pine (Pinus ponderosa) and numerous One-seeded Juniper and Rocky Mountain Juniper. These provide habitat for Magpies, the Kit fox and over a hundred plants unique to Oklahoma.

ONPS has reserved the Youth Camp adjacent to Lake Carl Etling at Black Mesa State Park, about 15 miles NW of Boise City. The camp will be open at 12 noon on Friday, with the first meal served on Friday evening. Checkout is by noon on Monday. Oklahoma State Park Youth Camps contain cabins with bathroom facilities in an adjacent building. Bring your own sleeping bag or bedding and towels. Campgrounds and RV parking are near the youth camp, motels are in Boise City.

Saturday field trips will be in the state park with trips to study the aquatic vegeta(Cont. on pg. 7)

#### Vegetation in a tropical rain forest by Clark Ovrebo

A co-chair of the photography committee should probably deal with some technical aspect of photography related to Oklahoma wildflowers as the theme of this column. While I take a lot of photographs, I cannot claim to be an expert, so I will decline to give advice. I will stray from Oklahoma plants to write briefly about botany in the tropical rain forest.

As conservators of Oklahoma native plants, we need also to appreciate and be concerned about plants in other areas of the world. One area of particular interest that is increasingly threatened is the tropical rain forest. My visits to the tropics, primarily Costa Rica, have been prompted by my research on tropical fungi.

While most visitors probably foray to the tropics to birdwatch or see the brilliantly colored Blue Morpho butterflies as they enter the rain forest, it is the vegetation that they first encounter.

The structure of the forest is dramatically different from an Oklahoma forest. The steamy wet climate allows for an abundance of epiphytic plants and vines. Twenty-five percent of the plant species in the rain forest are epiphytes (plants that live on other plants but are not parasites). Examples include small plants such as mosses, liverworts and lichens, but also common are ferns, orchids, bromeliads (pineapple family), aroids (e.g. Philodendron) and even cacti.

Vines (lianas) stretch from the forest floor to the canopy in search of light, their rope-like stems incapable of self-support. Ninety percent of the world's vines are found in the rain forests.

Rain forest vegetation is extremely diverse as compared to temperate forests. The 3700 acre reserve that I visit in Costa Rica has over 460 tree species, more than are found in the United States. Costa Rica, which is less than one-third of the area of Oklahoma, has over 12,000 species of plants, compared to about 2,500 for Oklahoma. The high diversity of trees means that there are few individuals of any given species is an area of forest, pretty much the

reverse of an eastern Oklahoma forest where there might be a half dozen dominant trees with many individuals of these few species.

Few and scattered individuals of a tree species presents a potential pollination problem to the tree. Instead of relying on the wind for pollination, which randomly carries the pollen and is effective when there are many individuals of the same species, rain forest trees rely on insects or birds for pollination. Rain forest trees thus have showy flowers. Since the flowers are high up in the canopy, you see them mainly when they fall to the forest floor.

The dense canopy created by the forest trees means that only .1% of the sunlight reaches the floor. Many trees spend years in the seedling stage "waiting" for a gap of sunlight to spur their growth, such a gap brought about when a large tree topples over.

Other plants thrive in the subdued light. Familiar houseplants requiring little light such as *Philodendron* and *Dieffenbachia*, as well as many species of dwarf palms occur as understory vegetation.

The first-time visitor to the rain forest may be overwhelmed by unfamiliar plants, yet you might see familiar genera. I regularly see a species of *Phytolacca*, the genus of our common Pokeweed, and a brilliantly red species of *Passiflora* with its unmistakable flower. Before I knew what it was, I thought the leaves and fruits of a tree belonging to the genus *Trema* looked very familiar. The leaves very much resembled those of hackberry with their inequaliteral bases and the fruit was a drupe. Sure enough, *Trema* is in the Ulmaceae, the family to which hackberry belongs.

if you are thinking of traveling to some place different and exotic, try a tropical rain forest. Its beauty and complexity can only be appreciated by visiting in person. Be prepared for the heat and humidity, but also be prepared to see a wonderland of plant and animal life.

The writer is ONPS photography committee co-chair and on the faculty of OCU, biology dept., in Edmond.

#### TREE TIPS guide recommended

At the annual meeting in Alva, Joanne Orr introduced the membership to an outstanding publication titled TREE TIPS: A Planning Guide. Published by the Public Service Company of Oklahoma, the booklet is an excellent source of information concerning the selection, planting and care of woody plants for Oklahoma landscaping.

If you are considering planting trees on your land this winter, then you must review this publication, It provides detailed information for 53 species appropriate for use in Oklahoma. It answers such questions as size at maturity, rate of growth, requirements for sun, soil and water, and the particular ornamental value of the plant for each season.

TREE TIPS can be obtained from your nearest PSO forester by simply requesting a copy. Phone numbers are: Bartlesville (918) 337-1224; Lawton (405) 581-4282; McAlester (918) 423-8400; and Tulsa (918) 250-7780.

One reason PSO has invested so much in this valuable publication is to help educate us regarding the appropriate trees to plant and where they should be placed. We are reminded that trees growing up into power lines cause shortages and must be cleared by hand, an expensive and sometimes dangerous operation. Also, large limbs near lines are frequently broken during storms by wind or ice resulting in disruption of service. Our Oklahoma storms can be stressful enough without losing electrical power. For our benefit, as well as that of PSO, let us all think ahead when planting trees. •

by Paul Buck



#### Sandhills and Salt Plains by Paul Nighswonger

The fall meeting of ONPS for 1992 was October 3rd and 4th at Alva. This meeting place was somewhat unique in that it could be said to represent the northwest half of Oklahoma, excluding the Panhandle. There are many choice meeting places in the southeast part of the state, an area where rains come more regularly and frost comes later in the year. Alva is perhaps a bit northwest of the center of the northwest half.

The field trip Saturday afternoon took us south from Alva down into the sandhills of the Cimarron. Much of the southern part of Woods County is sandy soil blown out of the river in ages past. Our trip included visits to both stabilized dunes and active dunes that are still moving north away from the river.

The low places between dunes support woody plants such as cotton-wood, elm, eastern redcedar, chittamwood, and even redbud. This may be the northwest limit for the state tree in a native setting.

Up on the active dunes were Heliotropium convolvulaceum, Indigofera miniata (scarlet pea), and Euphorbia carunculata. The latter was described and named by Dr. U.T. Waterfall of O.S.U. Sometimes you find one of these plants all alone with sand moving around it.

Some parts of the sandhills we visited support members of the tallgrass prairie. Big and little bluestem, Indiangrass, and switchgrass were there, as well as sideoats grama, purpletop, the tall dropseed, and others of the grass family. Some of the forbs expected in the tallgrass prairie were still in bloom such as Euthamia, Solidago, Palafoxia, ironweed, a couple of sunflowers and others. The dry weather of August and September reduced the abundance of flowers, but examples of most of the expected species could still be found. The interesting Stillingia, although not in flower or fruit, was there as was the smelly croton.

Seeing the roadrunner was a treat for many. It was too late in the season for the Mississippi kite, and no wild turkeys showed themselves.

For this trip we were able to lease a bus and driver. If we had used cars for the 44 of us it would have been an almost unmanageable caravan. We were accompanied on the trip by Dr. Bill Weber, Professor & Curator Emeritus of the Univ. of Colorado Herbarium, and our evening speaker. A grand addition to any field trip, he has indicated he had at least as good a time as we did.

On the last day of the two-day meeting much of the morning, which

lapped over into afternoon, was spent on the new Harold Miller Drive through the Salt Plains Refuge. The entrance to the drive is near refuge headquarters, then about two miles of gypsumsurfaced road through fields and woods, over sandhills, and along side ponds, leading one to the exit at highway #11.

Not flowering, but evident in a couple of ponds, was the big American water lotus. The Maximillian sunflower was there, although past its best flowering stage. This species is not common this far northwest, and is found only in favored places.

Following two dry months, many of the flowers that might be expected were not easily seen. On the other hand, the abundant early summer rains went into the sandy soil and produced a good season for the deeprooted grasses and the woody plants. Patches of tallgrass prairie contained most of the species we can expect to find there. Many native and naturalized trees are near the drive. Eastern cottonwood, American elm, two species of hackberry, chittamwood, smooth sumac, false indigo, baccharis, roughleafed dogwood, tamarisk, eastern redcedar, black willow, osage orange, soapberry, sand plum, and sand sagebrush were easily seen at one place or another along the drive. 🏚

#### Getting to the Roof of the matter by Rahmona Thompson

I decided to enlarge my flower bed; this decision was made in one moment and in the next I was pulling up Digitaria sanguinalis (crabgrass), Taraxacum officinale (dandelion), Sherardia arvensis (field madder), and Veronica arvensis (com speedwell). My approach to gardening involves sitting in the dirt with a trowel. Anything else requires too much time to organize and too little time to contemplate the plants. Since I was removing unwanted plants my thoughts quickly turned to root systems.

Dandelion, field madder and corn speedwell are dictyledonous plants which typically have taproot systems. This type of root system is typified by having a pronounced central root (or taproot) that matured from the radical (the root that first emerges from the seed). Dandelions have a distinctive taproot. With my trowel, I carefully slip the blade straight downward into the ground and dig up a core of soil. Quickly, I knock the soil away from the plant to ascertain whether I dug up enough of the taproot to prevent the plant

from re-emerging. As I pull up the com speedwell, it is easy to discern that this plant has a smaller taproot system. If I grab all the leaves of small plants and pull, the primary root system slides out of damp soil. Field madder is a prostrate plant whose root system also separates easily from the soil if I make sure I grip the plant exactly at the point it enters the soil.

Crabgrass is an entirely different matter; it is a monocot and therefore has a fibrous root system. Such a system lacks a central root as the primary root gave way to numerous branch (or secondary) roots. In order to remove crabgrass from my garden, my trowel and I become mole-like, tunneling in search of roots. It is a real challenge to see whether the grass gives up its hold on the soil before I give up my hold on the grass. Usually the grass wins.

Slowly I rid my garden of unwanted plants just in time to plant bulbs for next spring. But I cannot talk about underground stems in an article about roots.

## Native plants gain more space in Gilcrease addition by Leigh V. Standingbear

museum. This property has been named Harold and Joan Gilcrease Museum has added another treasure to its enjoy a view of it from the museum's fantastic Vista Room. collection of western history and art: 140 acres of woods, nated over \$200,000 toward the purchase and developpastures and ponds immediately below and west of the Stuart Park. In the past two years the Stuarts have doment of this land. Visitors can either hike in the park or

experience by offering visitors this "vision" of the West as it and distant hills of the Osage. On the western frontier, vast and uninterrupted landscapes like this one were the source nearby galleries. Moran and Bierstadt preserved the vision From the Vista Room visitors look out over the park and several hundred additional acres of woods, pastures Thomas Moran and Albert Bierstadt, whose works hang of the American west on canvas; the view from the Vista of inspiration for the great western landscape painters, Room serves as an extension of the western museum once appeared to the pioneers.

landscape architect, Jim Crosby, is design consultant to the water. During an ONPS field trip in November, we stopped minimize the difficulty on steep slopes and massive lichenand a rustic wooden gazebo will be constructed at water's covered sandstone boulders retain steep embankments. to admire the seed heads of quake grass Uniola latifolia, wooden boardwalk crosses the narrow end of one pond Immediately below the north museum parking lot, park development has begun. Planning Design Group buckgrass, Symphoricarpus orbiculata, berries and the Tulsa Park and Recreation Department on this project. existing ponds. Hand-cut native sandstone stairsteps edge with wooden decking which cantilevers over the Since last March a trail system has been constructed through almost four acres of woods surrounding two

moscheutos along the trail which has been made handicap empty seed capsules of marsh hibiscus Hibiscus accessible. Plans are to reestablish much of the native understony which was damaged during trail construction. This area will grasses. Wildflower plantings will begin this next spring. ferns to donate to this project, or if you wish to volunteer particularly desirable landscape characteristics such as: plantings include native wildflowers, ferns, aquatics and you have a surplus of native shade-loving wildflowers or vatica; and fragrant sumac, Rhus aromatica. Future winged sumac, Rhus coppalina; deciduous holly, Ilex decidua; dogwood, Cornus florida; blackgum, Nyssa further landscaped with native plants which have your time in this park, give me a call! 9 Syl

undeveloped acres of woods and pasture to explore. An interesting sandstone bluff borders the park to the south Ideas for additional development include a trail system throughout the park and converting the bermuda and To the west of these ponds there are 136 more fescue pastures into native range plants.

reflect the periods of history represented in the collection of been constructed; a Pioneer and pre-Columbian garden wil years you're in for a few surprises. The museum itself has expanded and the master plan for grounds development is complete the plan. Thanks to Harold and Joan Stuart, we have a view and a park which reflects the vision of the To date, a Colonial, Victorian and rock garden have If you haven't been to the museum in the past few museum in the country to have developed gardens that near completion. Gilcrease Museum may be the only unexplored western frontier. ari.

the Park and Recreation Department, Tulsa Standingbear is a horticulturist with

## Barclay and Long Awards presented to Joanne Orr John Smith and

iudged at East Central University by work accomplished by the students. These young people are the best in to scholarships in recognition of the Harriet G. Barclay Botany Award, ranging from books, plaques, cash The ONPS is proud to support the Oklahoma, the cream of the crop. a large group of state scientists. research projects carried out by Each spring several hundred state high school students are Numerous awards are made

Species." Our congratulations to John outstanding contributions to the stated ONPS established the Anne W. Long Award in recognition of one of our co-Smith; the entire Society wishes him founders and a pioneer in the estab-Mistletoe on Different Host Trees to the best in his continued education. Determine the Number of Different wildflower planting program. The At its 1987 annual meeting, the lishment of the state's roadside (Mistletoe): A Statistical \*\*\*\* award is given in recog purposes of ONPS. The 1992 winner is John Smith given for the best botany paper. of McLoud High School, whose

The 1992 recipient is Joanne Orr, a Highway" program, and the "Don't Lay ONPS congratulates Joanne, and is has given generously of both her time evidence of her influence on the state -- she is responsible for the "Adopt a State Wildflower Workshop since the and energy on many ONPS commither professional role in public affairs that Trash on Oklahoma" campaign. charter member of the Society who tees, as Board member and also in Joanne has been involved with the with the Dept. of Transportation. first one in 1975. Daily we see Analysis of

# Parable of the Kindled Spirit by Dale Goodner

Once upon a time a large bear named Herald (a relative of Smokey) was walking through the woods. He wore a tattered broad-brimmed hat and carried a shovel. His goal was to protect the forest.

phoenix. This was the mythical bird which periodically consumed itself in It happened one day that he came upon a wonderful bird known as the flames and then arose renewed from the ashes.

however, at its beauty and colors. You can imagine his shock when this object of Herald knew nothing of the natural history of this incredible bird. He marvelled, had really warmed up. In this way he saved its life, removed any hope of regenerahis attention began to smolder. He rushed up and "put the phoenix out" before it tion, and thereby condemned it to extinction all at the same time.

not too late! There was still a spark of life in the deteriorating bird. One hope remained ... gered phoentx and all agreed that alas it was aging and would soon be dead. But it was Herald, being a fairly intuitive bear, saw the misery he had inadvertently caused and study. Ornithologists from throughout the land were called in to examine the endanrealized immediately that something was very wrong here. He decided to conduct a if the magical fire could be re-kindled! It would not be easy. It would require many people from all over the countryside to come to the aid of the dying phoenix. Only through love and care and great effort could this magical mythical and colorful bird hope to once again arise renewed from the ashes. Volunteers from all walks of life responded, including Herald.

about birds than any "know-it-all:" ornithologists (a bird in the teeth is worth two in the heath, etc.) Faust called for still more studies, and offered himself as an authority in place of the scientists. He dealth, not life, that comes from fire. Besides, if the phoenix is meant to die, so be it ... that's what But there was a venerable old cat, Faust, who demurred. He thought that he, as a cat, knew more didn't believe that anything could arise from a bunch of ashes, even from magical flames. It is birds are supposed to do; it's natural, it's evolution!

The cat spoke loudly decrying what he called the 'self interests' of the volunteers. He insisted that Herald's original actions were "natural." Also, it would, in fact, by "unnatural" to help the phoenix The volunteers, based upon what they saw, and what the scientists had told them, knew action must be taken quickly if their mythical bird was to be saved. In the end they left Faust meowing in the distance and went about the business of re-setting the magical

consume itself in flames, and with breathtaking beauty arose renewed from the ashes. A sense of well-being returned to the land. Herald was deeply grateful to all who had given of their time and efforts to make the renewal possible. In fact everyone, with the possible exception of the cat, were indebted to the phoentx for giving them the opportunity to experience life, death, and a sense of belonging. If the truth were Slowly, little by little, bit by bit, the beleaguered phoenix was able to once again known, even old Faust was moved by the mythical bird ... but he'd never admit

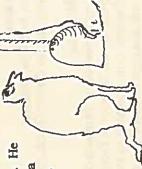
Herald is back out, protecting the forest; but now there is a connection. He has participated in the natural processes and found new meaning and a feeling of unity. He knows now that he is both protector and protected.

From "Oak Friends," the newsletter of the network. The author is chief naturalist for Peoria Wilds Project, affiliated with the Illinois Nature Conservancy volunteer the Peoria Park District.

deeply appreciative of her efforts. \$\pi\$

nition of

project title is "Phorodendron



#### Annual Meeting highlights by Pat Folley

ONPS members met on the Northwestern Oklahoma State University campus on Oct. 3, first event being Dr. Paul Nighswonger -- host for the event -- conducting a walking tour of the Cimmaron River dunes. After that invigorating excursion, some 50 of us convened in our fieldtrip jeans at the University for the business meeting.

#### **ONPS** qualifies as tax-exempt

President Ruth Boyd kept the pace as we applauded Rebecca Ovrebo's treasurer's report, including the fact that ONPS has achieved certification as a tax-exempt organization after the five-year probationary period.

Another business item, a change in the By-laws to correct some confusion about terms for board members and to simplify the wording, was passed without objection. A proposed ONPS guideline for collection of native plants drew lively discussion, but was passed.

Committee reports from Field Trips, Conservation, Publicity, Membership, Indoor Outing and Wildflower Workshop followed. After the Nominating Committee read its recommendation (printed in the last *Gaillardia*) that the current officers, all in their first year, be re-elected, that slate was approved unanimously.

Both the Northeast and Central chapters reported busy schedules, many field trips, and plans for future events. ONPS members who have not attended one of these local meetings are encouraged to get involved; they are closer to home, informal, and offer lots of fun and friendship.

Joanne announced a new "Don't Lay that Trash" contest, and Betty Kemm displayed a new supply of wildflower notecards just received from Dr. Laughlin.

President Boyd then adjourned the meeting so we could dress for dinner.

#### **Evening activities**

Assembled in the East Ranger Room at NWOSU at 7 p.m., we were served delicious fare, followed by the presentation of the Anne Long Award to Joanne Orr for her outstanding support of the Oklahoma Department of Transportation's wildflower planting program and the many extra hours spent in educating highway workers, politicians, civic groups, schools and garden clubs about the benefits of native and natural plantings. As part of her acceptance speech, Joanne displayed a pillow embroidered with wildflowers which she had inherited from Anne Long.

The evening speaker, **Dr. Bill Weber**, was introduced by **Dr. George Goodman**, Curator Emeritus of the Bebb Herbarium at the University of Oklahoma. Goodman had been professor and adviser to both **Paul Nighswonger** and Bill Weber. Dr. Weber's talk, "The Compleat Amateur Botanist," was a delightful recounting of the people and events influencing his choice of botany as a life-work. His childhood, with much time spent in New York City area parks, was enriched by generous professionals who shared with him their knowledge and joy in birds and plants.

Weber calls himself an "amateur" because he so enjoys the work, and says that the academic world demands tedious books, but that he writes "user-friendly" ones because, as an amateur, it is the enthusiasm he is most interested in imparting. Bill Weber's books include floras of Colorado's eastern and western slope environments and are widely used in schools, but also enjoy popularity with local citizens and tourists. He closed an inspiring talk with a Gilbert & Sullivan number.

#### Letters to the editor

Dear Friends:

I was disturbed by the reference to playing Screech Owl tapes to attract birds during the Clayton and Sardis Lakes field trip. While this is an effective method to call in birds, as they react strongly to the suspected presence of this predator in their area, it is one that should be used with extreme caution. Conscientious birders should never play such tapes during the breeding season and/or nesting seasons...(The comment in the article) "While we had lots of fun...the avian residents were nervous wrecks" is probably true and unfortunate. We don't go stomping through wildflower patches; let's be as considerate of other critters out there.

Sincerely,
Bob Jennings, Director
Oxley Nature Center (Tulsa, Oklahoma)

Response:

In the above letter, members of the ONPS are firmly taken to task by the Director of Oxley and Redbud Valley Nature Centers, both operated by the City of Tulsa. I have known Bob Jennings for many years and will testify to his being an outstanding naturalist, one of those people with a

greater understanding of nature than any six of us lumped together.

Bob, you know we were certainly not intentionally out of order. The actions were admittedly thoughtless and careless. Thank you for your letter. We stand censured and much wiser for your comments. The time and effort you took to write was not wasted -- you have helped educate a group of plant lovers regarding some of the intricacies of nature and we do appreciate it. Thank you.

Paul Buck Vice President, ONPS

#### The Gaillardia

Published quarterly by Oklahoma Native Plant Society 2435 S. Peoria • Tulsa, OK 74114 • (918) 496-2218

President: Ruth Boyd
Vice President: Paul Buck
Secretary: Pat Folley
Treasurer: Rebecca Ovrebo
Historian: Marjorie Franklin

Editing by Marilyn Bell, WriteAngle, Tulsa

#### Summary of Executive Board meeting Dec. 5

The ONPS executive board met Sat., Dec. 5, 1992, on the Midwest City campus of Rose State College at 10 a.m. during a near blizzard. Bob Lindsey of Sapulpa was welcomed as new co-chair of the Photo Committee to replace John Miller who has moved out-of-state. Minutes of last board meeting (Oct. 5, 1992) were approved as was the Treasurer's report showing a checking account balance of \$3,407.61 as of Nov. 30, 1992. A tentative schedule for 1993 activities was set. Details on the Black Mesa field trip for Memorial Weekend '93 were presented. The only unknowns are actual cost per member for food and lodging as this depends on number of participants. Publicity Committee is seeking a chair. Volunteers, please call the president. Changes in rules for annual Photo Contest were approved with \$2 entry fee per individual to help cover

expenses beginning with '93 contest. Deadline for photo submissions is April 15, but subsequent years will be Feb. 1 to allow judging and poster-making before annual Wildflower Workshop.

The group toured Rose State at lunch break.

A new regular feature in Gaillardia, beginning spring 1993 edition, will be "Botany Corner," written by professional botanists to include a detailed discussion of a different Oklahoma native plant in each issue. Within the next few months the membership brochure will be updated to include the life membership category. An update was presented on the annual Wildflower Workshop scheduled for May 21-22 in Enid. The board voted to require pre-registration for all

(Cont. on back pg.)

#### Indoor Outing (from pg. 1)

Information you may need when you come to Stillwater for the Indoor Outing on Saturday, Feb. 6:

#### MOTELS:

Best Western • 600 E. McElroy Rd. • 377-7010
Executive Inn • 5010 W. 6th St. • 743-2570
Holiday Inn • 2515 W. 6th St. • 372-0800
Motel 6 • 5122 W. 6th St. • 624-0433
Student Union Hotel • Student Union Bidg. • 744-6835
RESTAURANTS:

Bobo's Mexican Restaurante & Cantina • 5020 W. 6th • 372-9353

Eskimo Joe's • 501 W. Elm • 372-8896
Hideaway Pizza • 230 S. Knoblock • 372-4777
Hunan Chinese Restaurant • 720 E. 6th • 377-7121
Leo's Peking Palace • 1004 Hall of Fame • 377--376
Mexico Joe's • 1123 W. Scott • 372-1169
New York Bagel Shop • 521 W. Elm • 372-2435
Sirloin Stockade • 208 N. Perkins • 624-1681
Stillwater Bay • 7th & Husband • 743-2780

Also, all the major fast food chains can be found. For more information, please contact Dr. Mike Palmer (405) 744-7717 or Dr. Ron Tyrl (405) 744-9558.

#### Black Mesa (from pg. 1)

tion near the lake, a stroll up the canyon near the headquarters, and an amble through the short grass plains.

The Sunday field trip will be an all-day trip to the top of Black Mesa. We will drive out to the north side, and will be led into the Nature Conservancy area on a trip with Dr. Jim McPherson. The full trip to the top and back is 6 miles and will require some stamina and plenty of fluids.

John Shackford and Jimmy Norman will lead birding trips. Other possibilities are a self-guided geology tour, and side trips to New Mexico to see the Fulsom Museum, the old Santa Fe Trail, and Mt. Capulin National Monument, an extinct volcano.

As we must have some idea of the number planning to attend this affair, we are instituting a preregistration of \$15 which will be applied to your total cost of registration, lodging, and meals (3 dinners on F, S & S, 3 breakfasts on S, S, & M and 2 box lunches for Saturday and Sunday.) Cost of the youth camp is \$175 per day for the first 50 participants, and \$3 per day over that number. Every attempt will be made to make this an exact cost field trip.

Indoor Outing Feb. 6 registration Please make checks payable to ONPS and mail to: ONPS, 2435 South Peoria, Tulsa, OK 74114.		
NAME(S)		
ADDRESS		
CITY/ZIP		
PHONE		
number of students @ \$1.00 each = \$ number of adults @ \$2.00 each =		
TOTAL Enclosed: \$		
Must be received by February 1.		

Black Mesa Memo	rial Weekend	pre-registration
-----------------	--------------	------------------

Please fill out and return as soon as possible to:

Connie Taylor, Rt. 1, Box 157, Durant, OK 74701. Phone: (405) 924-5163. Send a \$15 check payable to the ONPS.

ADDRESS\_\_\_\_\_\_CITY/ZIP

Nights lodging at youth camp: 1 2 or 3

Meals: all 8 (or list meals you desire):

Exact costs will depend on the total number attending as there is a set price for use of the youth camp and the catering price will depend on the number eating.

#### Dec. 5 board meeting from pg. 7

future field trips to prevent the possibility of leaderless or leadeeless trips. There will be no fee except for special trips such as the upcoming Black Mesa one. It was voted to investigate a patch program for ONPS similar to the one sponsored by the Kansas Wildflower group. A committee was appointed to prepare a proposal to the board.

Meeting was adjourned just prior to 4 p.m. and was immediately followed by an Executive Committee meeting. Following adjournment, several minutes were required to scrape accumulated snow and ice from vehicles before the cold journey home.

Ruth Boyd, president

#### Contributions to Memorial Funds

October and November contributors to the Anne Long Fund:

M.T. Bell Ruth Boyd Raymond Kays Anonymous

During the same period, contributors to the Harriet Barclay Fund:

Ruth Boyd
Raymond Kays
Marcialyn Robinowitz

#### First call for nominations

The ONPS recognizes outstanding contributions to the Society via the Anne W. Long Award. This is the first call for nominations for the 1993 award.

Individuals, groups, scout troops, church groups, science or environmental organizations, businesses, etc. who have made outstanding contributions to the purposes of ONPS shall be eligible. Please submit nominees directly to the chair of the Awards Committee: Paul Buck, Biology Dept., Univ. of Tulsa, Tulsa, OK 74104.

#### Notice on forming a chapter

ONPS members interested in forming new, local-area chapters can write to ONPS secretary, Patricia Folley, to get a list of names and addresses to contact. Please supply the zip codes for the area you wish to cover. Pat's address is: 15100 Etowah Road, Noble, OK 73068.

#### Audubon chapter has trail food recipes

The Tulsa Chapter of the National Audubon Society has published a 150-pg. book of cook-and-carry recipes spiced with fascinating trivia about birds. ONPS member Marcie Goad says the 7 x 8 1/2" book was produced to benefit an Audubon chapter school project. The Birdwatcher's Tailgate Recipe Book costs \$10 plus \$1 postage. Write to Morningbird Books • Box 701671 • Tulsa, OK 74136.

Oklahoma Native Plant Society c/o Tulsa Garden Center 2435 South Peoria Tulsa, Oklahoma 74114

Non-Profit U.S. Postage Paid Tulsa, Oklahoma Permit No. 789

Join ONPS