



The purpose of the Oklahoma Native Plant Society is to encourage the study, protection, propagation, appreciation and use of Oklahoma's native plants.

Volume 19, Number 2
Summer 2004

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**COPY AND ART DEADLINE
FOR NEXT ISSUE IS
15 August 2004**

Gaillardia

The Oklahoma Native Plant Society Newsletter

CALENDAR

Note: the events dated below are followed by either a page number for further descriptions or the contact person.

June 5: Board Meeting at Tulsa Garden Center at 10 AM.
Contact Jim Elder.

June 18: & July 16, August 20 NE Chapter Happy Hour at
Panera, 41st and Hudson, 5:30 p.m. Page 10

June 19: Central Chapter field trip to Tallgrass Prairie
Preserve. Page 9

July 3: NE Chapter field trip to Lake Eufaula. Page 10

July 17: Central Chapter field trip to Betty Kaelin's
property. Page 9

Sept 18: Central Chapter field trip to Bonnie Winchester's
farm. Page 9

October 8-10: Annual Meeting. Page 7

Note: all members are invited to all meetings, including board
meetings, and are encouraged to bring guests.

ONPS THANKS THESE DONORS

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Color Oklahoma Fund

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Mary Carol & Charles Gilbert

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The Anne And Henry Zarrow Foundation

FOURTEENTH ANNUAL BESS SNODGRASS MEMORIAL HONOREES

SUSAN AND WAYNE CHAMBERS

Page 6

PRESIDENT'S PARAGRAPH

We celebrated Mother's Day with a flower communion service at our church. Each member brought a flower to add to an enormous bouquet and then picked up a different flower after the service.

I cannot think of a better symbol for our mothers than a flower. It symbolizes beauty, creation of life, and nurturing all of which are established characteristics of motherhood and nature in general. I often tell my biology students that motherhood is one of the most powerful forces in nature, possibly exceeded only by a small nuclear warhead.

This is a great time of year to enjoy these characteristics in nature. Hopefully, many of you are signing up for many of our field trips this spring. I have missed a couple recently, but I did manage to go with several members last month to Clear Creek Farm and Gardens near Peggs, Oklahoma. Kirk and Loretta do a great job in supplying native plants for our gardens. The ONPS calendar has several field trips scheduled throughout the state as well as the annual Wildflower Workshop in Elk City.

Speaking of field trips, our liability insurance has more than tripled over the last few years to \$750 a year. This will be one of the major subjects we will cover at our next board meeting. Please contact any of our board members if you have any suggestions or ideas where we might find a better rate. We have been lucky over the years and have not had any major accidents or injuries.

The Color Oklahoma committee is continuing with their hard work on our roadside wildflower program; scheduling TV spots, working on legislation, plantings, and a new website. I encourage all our members to assist them as they try to change state mowing and planting policies.

Hope to see you soon. Happy trails.
Jim Elder

IMPORTANT GENERAL NOTICES

Dr. Ron Tyrl was awarded the Medal for Excellence in College/University Teaching by the Oklahoma Foundation for Excellence for his many educational endeavors and overseeing the OSU herbarium.

ONPS Awards: Once again it is time for ONPS members to consider nominations for the Annual Service Award which is presented during activities associated with our Annual State Meeting in October. The Service Award, to be presented in 2004 for the fifth time, recognizes a member of the Society who has demonstrated service to ONPS above and beyond that normally associated with expected levels of activity. Previous awardees have included Ruth Boyd (2000), Paul Buck (2001), Betty Kemm (2002), and Patricia Folley (2003).

The nominee for 2004 must have been a member of ONPS a minimum of five years and must be in good financial standing with current dues obligations having been met.

Nominations in writing with documentation demonstrating the nominee's service to the Society being an integral part of the letter of recommendation are due on or before August 31, 2004. Send nominations to: Sue Amstutz, Chair Service Awards Committee, 4190 E. 46th Place, Tulsa OK 74135

Nominations are also needed for the Anne Long Award with the same deadline. Please submit these to Pat Folley, Chair for the award, 15100 Etowah Road, Noble, OK 73068 or pfolley7@juno.com. See spring issue for additional information.



Kirk, Clare and Connie at Clear Creek

BOTANY BAY

ALLELOPATHY

Paul Buck

An ONPS member sent an interesting article from the New York Post dealing with allelopathy (I've received several copies since). This Botany Bay is dedicated to that person, still active Charter Member Marcy Robinowitz. Marcy, thank you for thinking of me.

The Post article dealt with spotted knapweed (*Centaurea maculosa*), an invasive exotic introduced from Caucasia. The author reports, "...it is thought to have been introduced in North America as a contaminant in crop seed or in dirt used as ship's ballast and then dumped." The species is a recognized problem over much of the contiguous United States. Many western Colorado highways are virtually lined with pure stands.

In 1920 but one county in western Montana reported the presence of this species. In 1940 five western counties and by 1982 it was reported in all counties, having spread across the entire state. I recall the concerted effort my son and I made to eradicate the plant from a small abandoned horse pasture in the western part of the state. The following year scattered patches appeared on the site but a few years later spotted knapweed was once again abundant.

Although spotted knapweed has not been reported in Oklahoma it is a widely scattered pest of the great plains. We must be alert for it in the state, it seems to have the ecological potential to invade our western grasslands.

However, there is another noxious, caucasian weed of that genus which should concern us. Russian knapweed (*Centraurea repens*), is reported over much of Oklahoma. This species was introduced to North America in 1898 and has become established as a pernicious weed throughout the country.

Close your eyes for a moment and consider the following question: 'Why do so many exotic species successfully overwhelm native species?' Many readers probably suggested success is due to leaving predators and pathogens behind by moving. It is possible an earlier aggressive herbivore kept the population under control or a pathogen or perhaps in the new habitat the species is able to out-compete others for light, water, minerals or soil nutrients. Recent research

reported in the New York Post article suggests another factor. Researchers now attribute success in numerous cases to allelopathy.

For many the term allelopathy is new. An excellent definition is the one given by the University of Oklahoma's late Dr. Elroy Rice in his book *Allelopathy*. He defined it as, "...any direct or indirect harmful effect by one plant (including microorganisms) on another through the production of chemical compounds that escape into the environment."

Consider that definition for a moment. It opens a whole new can of worms in our world of botany. Notice it does not involve the over utilization of an essential environmental factor such as water, sunlight or nutrients. That would be competition. Dr. Rice suggests the term interference might be used to encompass both allelopathy and competition.

To many the forgoing may appear complex but then most are already familiar with a classic case of allelopathy, one reported in botanical literature in the 19th Century. No doubt vegetable gardeners were aware of it much earlier. The example is that garden crops will not survive under or near a black walnut (*Juglans nigra*) tree. Early workers suggested the trees were able to exhaust the soil of vital nutrients. It was subsequently discovered the trees were producing a chemical compound which, when released into the soil is toxic to other green plants, even black walnut seedlings. Biochemists have since identified that compound and named it juglone, a takeoff on the black walnut genus *Juglans*. If you are a skeptic plant some seedlings under a black walnut and observe them. The survival value of the allelopathic phenomenon is evident. Eliminate competition! Even parent walnut trees do not compete with nearby offspring. It has been known for years that walnut trees will injure and sometimes kill adjacent apple trees.

The Post article reports spotted knapweed's ability to overwhelm native species and establish itself in pure stands as allelopathic. Workers found the knapweed in question synthesizes a poison, which when released through the roots will eliminate competing neighbors. Researchers at Colorado State University report the toxin acts so quickly it will initiate a sequence of chemical reactions resulting in the death of root cells within ten seconds of contact. They also reported, "In one

hour the roots die." and "The whole plant dies in a matter of days." Currently there are no known native species resistant to the toxins secreted by spotted knapweed.

On the other hand, allelopathic toxins need not be lethal. Rice reported that in some cases they serve to inhibit populations of nitrogen fixing microorganisms in the soil, resulting in the lowering of available nitrogen below that required by native species. An invasive species may hold competing species at bay by simply maintaining a less favorable environment.

Rice also reported that in the early 1900s apple trees were observed to be injured by surrounding grass. Initially it was thought the harm was due to competition for minerals or utilization of soil oxygen by grass thus suffocating tree roots. Laboratory tests were carried out in which apple trees were provided abundant oxygen but subjected to chemicals secreted by the grass. The results supported the hypothesis allelopathy is responsible.

Experiments have also shown a number of crop plants, including cultivated wheat, exude an inhibitory substance that functions on seedlings of the same species. That presents another aspect to the question of mineral exhaustion and crop rotation. Perhaps it is not mineral depletion but an accumulation of toxic compounds secreted by the plants.

The Post report brings to mind a short article that appeared in the "Readers Digest" many years ago. If I recall correctly the title was simply "War in the Garden" and it introduced the concept of allelopathy to the lay person. Keep your eyes open for allelopathy in your yard, I suspect it is there. It is a vicious world in nature.

HARRIET BARCLAY AWARD

Connie Taylor

Each year the Oklahoma Native Plant Society chooses 2 botany research presenters at the Oklahoma Junior Academy of Science to honor with the Harriet Barclay Award: A Senior High Student (10th-12th grade) and a Junior High or Middle School Student (7th-9th grade). The OJAS is held at the same time and location as the State Science Fair. Each student receives \$50.00,

an ONPS T-shirt, a plaque, and membership in the Oklahoma Native Plant Society.

The Senior High Winner this year is Eric Whelan, 11th graded at McLoud High School. His teacher and mentor is Dr. Bruce Smith. His research is "Forms of *Polystichum acrostichoides* in Oklahoma". More commonly known as Christmas fern, it grows in Eastern Oklahoma. Finding a slightly different form of the fern at Crum Creek in Pushmataha County, he collected this species from numerous locations. Examining 24 specimens, and measuring 15 different traits, he determined that indeed there were 2 different forms occurring in the state. These variations do occur in other states and have been described as forms. Some botanists think the difference in forms is hereditary and some contribute the difference to the environment. He has extracted DNA from selected specimens, and his research continues.

The Junior Winner this year is Shelley Free. She is a 9th grader at Miami High School. Her Teacher and Mentor is Sally Fenska. Her research is titled "Shades of Green: Chlorophyll Analysis and the Application of Pick's Theorem to Compare Leaves Collected from Full Sun and Shade Zones of Selected Oak Trees". She used sun and shade leaves from Red Oak and Pin Oak. From each species, 20 sun leaves and 20 shade leaves were examined. Then 1 cm. by 1 cm. squares were removed from the center of 3 leaves from each species and type. They were crushed in acetone and by use of a spectrophotometer tested at different wavelengths to find each leaf's absorbency and transmittance. Pick's Theorem, developed in 1800, is a method of tracing shapes on dot paper thus enabling the area of an irregular polygon to be determined. Areas of all 80 leaves were traced and areas of leaves and sinuses (space between lobes) were measured. Results varied between the two species.

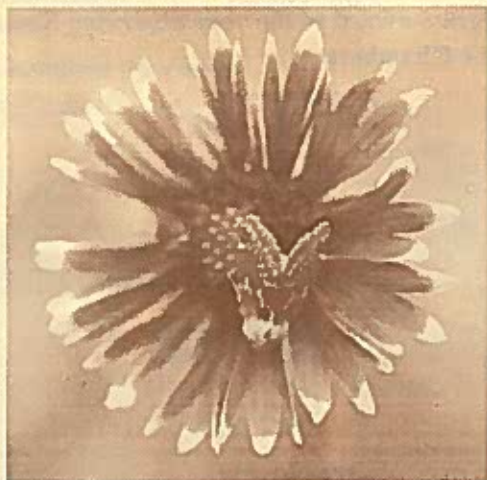
WILDFLOWERS ON TV & WILDFLOWER SPOTTING

Kim Shannon

In an effort to spread the beauty of our native plants to as many folks as possible, I recently started sending digital photos of wildflowers via email to some meteorologists at various Oklahoma City and Tulsa television stations. I initially got

favorable responses from Gary England at channel 9 in Oklahoma City and from both Jim Giles at channel 6 and Travis Meyer at channel 8 in Tulsa. One of the earliest emails, featuring some more Eastern wildflowers, went to both channels 6 and 8 in Tulsa.

Travis Meyer of Ch. 8 replied promptly and said he would air the photo but he also made a comment about how his Tulsa competitor was included in the email. So, half jokingly, I told him I would be happy to send the photos to him exclusively if he would air them on behalf of the Oklahoma Native Plant Society and the Color Oklahoma project on a regular basis. Since the middle of April, I am happy to report that Travis has been airing most of the photos I have sent to him. So I have continued to send photos to him and to Gary England in Oklahoma City. On May 11th I sent two photos of the Indian Blanket in bloom, one of which includes a Gaillardia moth. Travis Meyer typically shows the wildflower photos during his weather forecast at either 6:00 or 10:00pm.



Since early March I have sent photos of Spring beauty, Indian paintbrush, Rose verbena, Prairie phlox with a butterfly, Showy evening primrose and the Indian blanket. While many of the photos have been aired on Ch. 8 in the Tulsa area, I am not sure if any have been aired on Ch. 9 in the Oklahoma City area. Have you seen any on TV? If you have, please let me know. I can be reached via email at kimshannon@ou.edu or at 918.697.3488. As we progress into summer and fall I will continue sending photos as often as possible.

I also did a very short segment on the "Six in the Morning" show with Casey Norton (Ch. 6 in Tulsa)

on March 26th. They showed some photos of Coreopsis, Indian paintbrush, Prairie phlox, Lemon Mint and Indian blanket.

If you have digital or scanned photos you would like to share with others across Oklahoma, you can be a Wildflower Spotter. Along with your photo please include the following information:

- Make note of the date of your photograph.
- Note the general location of the Oklahoma wildflowers you have photographed (for example: Payne County just west of Stillwater on Hwy 51 or Payne County at the intersection of Hwys 51 and 18.)
- Make note if the location of your spotting is potentially a wildflower plot planted by the Oklahoma Department of Transportation. There are rest stops and roadsides across Oklahoma that are planted each year and many continue to bloom year after year.
- *REMEMBER, don't trespass onto private property to take a photo! And avoid picking the wildflowers so they can continue to bloom!*
- *ALSO, please use caution if you stop along a roadside to take a photo.*
- Email photos, preferably in jpeg format, to kimshannon@ou.edu. If I use your photo I will do my best to let you know.

ONPS AT EARTH DAY

Patricia Folley

The Central Chapter of ONPS was asked to provide a children's activity for an outdoor celebration of Earth Day, 2004. The venue was Reaves Park in Norman, with the major sponsors being the Norman Parks and Recreation Department and the Little River Zoo. Not wishing to add another piece of paper to the litter load, I offered free wildflower face painting. I had never done this before, but had observed some of the work being done at other events.

I made a presentation at the ONPS chapter meeting prior to the event, asking for volunteers. Seven members signed up there, and I drafted my daughter and granddaughter to help if needed. They were. We used a "practice session" the day before to prepare a set of sample wildflowers for the children to select from. This was also valuable training for the volunteers.

The weather was perfect after a week of rain. We painted flowers and butterflies on over two hundred children and a couple of mamas. Some of the older children wanted other designs, and some of our helpers tried to oblige, but mostly we stuck to the flowers. The kiddies looked very much in tune with the Earth Day concept, and nearly every small child there soon sported a face-flower. The most popular "flower" was the Tiger Swallowtail butterfly! I was so proud of our members, who worked for several hours each with patience and good humor. Most found time to tell the child about his or her flower as it was being painted.

This was not a good venue for promoting the Native Plant Society, *but was a much-appreciated public service.* Though Wayne and Susan brought plenty of literature for anyone who expressed interest, our "customers" were there to entertain their kiddies and not interested in why we were there.



Lou, Betty and Susan painting flowers on kids

My feeling is that some activity for adults and older children might have improved our chances for getting the wildflower-appreciation message out, but that this event was geared to grade-school age and younger children. The weekend nearest April 22 in Norman is very crowded, with a Master Gardeners' event on Friday, the 89'er day celebration and parade on Saturday, and Earth Day on Sunday.

We were very successful in two goals: we spent very little on materials, and we generated no trash. The organizers expressed their appreciation time and again: it was one of the most popular booths in the park. Our volunteers worked very hard and

for two to 7 hours each. I was amazed at the patience and willingness to make the experience fun that our volunteers displayed.

Those who helped: Betty Culpepper, Wayne and Susan Chambers, Betty Kaelin, Lou Duke, Sharon McCain, Jeannie Ho-Coley, Mona Taylor, Amy Shepherd, Pat Folley.

WILDFLOWER WORKSHOP

The 2004 Wildflower Workshop was held in Elk City May 21-22. On Friday we were treated to a series of diverse topics including spiders, macrophotography and tourism efforts in Oklahoma. Talks specific to the area covered recommendations for native flowers and trees, vegetation management in grasslands, a 40,000 year review of the area and a lists of wildflowers that we actually saw the next day. That evening we heard about the history of Elk City itself. Winners of the ONPS photo contest were revealed and the results are giving following this article. The highlight of the evening was the presentation of the Snodgrass award to the very deserving Susan and Wayne Chambers.



Saturday's field trip including visits to the Cheyenne Museum that chronicles the long-suffering trials of those Native Americans meted out by our government and the Metcalf Museum that honors the artistic pioneer homesteader woman that became world famous for her paintings. We visited the Black Kettle Battle Site to view the mixed grass wildflowers and the Black Kettle Recreational Area for riparian flowers. The wind for all days was wicked but kept the temperature bearable.

ONPS PHOTO CONTEST WINNERS FOR 2004

Beginners

Harry Henson	Weatherford	<i>Mimosa nuttallii</i>	Sensitive briar
John McKnight	Midwest City	<i>Omphalotus olearius</i>	Jack-o-lantern
Harry Henson	Weatherford	<i>Matalea gonocarpos</i>	Climbing milkweed

Amateurs

Harry Henson	Weatherford	<i>Tradescantia ohiensis</i>	Ohio spiderwort
Harry Henson	Weatherford	<i>Commelina erecta</i>	Erect day-flower
Carol McCreary	Oklahoma City	<i>Mimosa nuttallii</i>	Sensitive briar

Advanced

Sallie Webb	Idabel	<i>Ruellia strepens</i>	Smooth petunia
Pat Folley	Noble	<i>Tradescantia ohiensis</i>	Ohio spiderwort
Tom McCreary	Oklahoma City	<i>Monarda russeliana</i>	Russel's monarda

Habitat

Ellen Jonsson	Oklahoma City	<i>Aster</i> sp.	Aster, Wichitas
Carol McCreary	Oklahoma City	<i>Populus occidentalis</i>	Cottonwoods, Turner Falls
Tom McCreary	Weatherford	<i>Acer saccharum</i>	Sugar maple

Best Botanical Specimen

Harry Henson	Weatherford	<i>Commelina erecta</i>	Erect day-flower
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Seventy-nine photos were submitted, 6 deleted as non natives, so 73 judged.

Judges: Dr. Bruce Hoagland, Professor of Botany, University of Oklahoma and Harvey Payne, The Nature Conservancy at Tallgrass Prairie Preserve.

Identification of plants: Kim Shannon, Oklahoma Natural Heritage Inventory and Amy Buthod, Robert Beeb Herbarium, both at University of Oklahoma.

For information for the 2005 photo contest see the spring issue of the *Gallardia*, visit the website at www.usao.edu/~onps or contact Chad Cox at cox.chadwick@att.net or (405) 329 8860.

ANNUAL MEETING SITE

Sue Amstutz

During the Winter meeting of the ONPS Executive Board, held at Norman in early December, the decision was made to hold the 2004 Annual Meeting at Lake Eufaula State Park next October 8 - 10.

Lake Eufaula State Park is located in east central Oklahoma, readily accessible to travelers from all parts of the state via Interstate 40. The park is a five - mile drive south of I-40 on State Highway 150 which actually runs right through the park.

Lake Eufaula State Park was known as Foutainhead State Park until November 1, 2002, when its current title was introduced to better identify with the park's location on beautiful Lake Eufaula, Oklahoma's largest lake. The park occupies 2800 acres on lands that were historically the hunting grounds of the Muscogee (Creek) tribe. The area is still home to a vast assortment of wildlife including birds, mammals and marine life.

The park offers a wide range of camping opportunities ranging from tent sites through modern full hook-up RV sites with sewer, water and electricity available. ONPS has reserved the

park's Group Camp for our Annual Meeting. Pickens Group Camp is a well-equipped setting for our meeting with cabins accommodating up to 96 people, a fully functional Community Building with kitchen and dining facilities, a 3/4ths mile trail in the camp area, Pickens Lake for fishing and wetlands exploration, and adequate space for as many folks as we can accommodate for the meeting.

For members who prefer accommodations a bit more upscale than park cabins, two motels within a fifteen minute drive of the park will be expecting to house them. A Days Inn is located about five minutes south of the park, and the Lake Eufaula Inn (formerly a part of the Best Western motel system) is located at the intersection of 1-40 and State Highway 150.

The park has its own Nature Center, where ONPS Photo Contest Posters have been displayed each year since 1996. Our naturalist friend at the Nature Center is Loraine Richmond. It was Loraine who actually provided the impetus for our planning the 2004 State Meeting at the park when she commented last fall that ONPS had never had a special meeting of any kind at Lake Eufaula and that she believed that the staff at the park could provide us with just the kind of experience that we would all enjoy. Park Manager at Lake Eufaula is Sue Hughart, a former ONPS member, who is assisting us in a myriad of ways in arrangements for the meeting. Loraine and Sue appeared on a segment of the *Discover Oklahoma* television program in January, touting the wonders of their park and encouraging visitors to make Lake Eufaula a part of their Oklahoma exploration. It's a good thing ONPS had already made arrangements for the October 8 - 10 weekend! Sue and Loraine made such a great case for the park on the broadcast that the park is sure to have lots of visitors in the near future.

In addition to the Nature Center, Lake Eufaula State Park has a Visitor Center, gift shop, stables, picnic sites and wonderful hiking trails. Since we will be using some of the trails for our field trips during the meeting, descriptions of the trails and the flora to be seen along them plus a more extensive cataloguing of the wildlife of the park will be the subject of the next preview of our October meeting which will appear in the summer *Gaillardia*.

CHAPTER ACTIVITIES

Crosstimbers Chapter
Paul Richardson

The Crosstimbers Chapter met on April 2 for their spring potluck dinner and meeting in the OSU Department of Botany's teaching lab. During the business meeting, Paul Richardson was elected chapter chair for the coming year. Elaine Lynch and Olen Thomas will continue to serve as secretary-treasurer and vice-chair, respectively.

FIELD TRIP RULES

- Participation is at your own risk.
- Preregistration is required for all field trips.
- Field trip announcements will contain the name, address, and telephone number of the leader. If you have doubts about the terrain, difficulty, etc., ask.
- Collecting any plant parts or other materials at the site must be approved by the field trip leader.
- Field trips take place rain or shine. Hiking boots, long pants and a hat are essential.
- Bring water and lunch or a snack. Sunscreen and insect repellent are always in demand. Field guides, a camera and binoculars are nice.
- 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.
- Children old enough to keep up are welcome. Pets are not.

The program was presented by Rebecca Sherry from the OU Ecology Lab, who described her research project, Global Warming and Flowering Times on the Prairie, and showed slides of the results of the study. We are completing plans with the speaker for our fall program, Dave Stahle of the University of Arkansas Tree Ring Lab; who will speak to us about tree rings and timing prairie climate changes. This program will be on September 17.

Since many chapter members were not able to attend the meeting, we did not develop a specific plan for meeting dates and topics for the coming year. Therefore, we wish to poll our members via this newsletter. In particular, we would like to know if there were programs in the past you enjoyed so much you would like them repeated or if there were programs you missed and would like

another opportunity to attend or if you have suggestions regarding topics or locations for field trips we have not yet explored. We would also like to know if you like the present mix of potluck dinner/speaker presentations and field trips or would prefer more or less of either. Please email Paul Richardson at speedy154@juno.com or call him (405-377-4831) or send US mail to 1023 South Western Road, Stillwater, OK 74074 with your comments and/or suggestions.

Central Chapter
Sharon McCain

March 29, 2004 we met at the OKC/OSU Hort Center at 400 N. Portland, Oklahoma City. Speaker was Lewis Scott, park naturalist with Will Rogers Park, OKC with a program on "The Turf Free Lawn".

April 25th, 2004 from 1 to 6 p.m. several central chapter members manned a booth at Norman's Earth Day. Wildflower face painting was enjoyed by all. Pat Folley organized the day.

May 2nd, 2004 at 2:00 p.m. about 15 people met at the Jasmine Moran Children's Museum in Seminole for a look at a pristine prairie. Marilyn Stewart reports that the Oklahoma Penstemon was in full bloom, also Barbara Buttons and Coreopsis in the perfect little prairie remnant. About 20 new plants were added to the already plant list of about 110. Pat Folley led the field trip and took home a couple of specimens for positive identification.

June 19th, 2004 we will have a field trip to the Tallgrass Prairie Preserve in Osage County. Plan to meet at the Tallgrass Prairie Preserve at approximately 10:00. Bring a sack lunch for a picnic. Since there are several different ways to get there from OKC area, if you want to carpool or caravan, please give Sharon McCain a call. Home # 376-2768 or Work # 556-2341.

July 17th, 2004 early morning field trip to Betty Kaelin's on the South Canadian River. For a river walk to locate the least tern. Betty's place has been listed on the Natural Heritage Inventory because she has least tern nesting sites. Watch for map and details to come on postcard or email notification.

September 18th 2004 field trip to Bonnie Winchesters farm at Douglas, Oklahoma. Bonnie was featured in the first issue of Oklahoma Gardening and has many native grasses, etc on her wheat farm. Details as to time to follow.

October 30th, 2004 field trip to Red Rock Canyon to view the Caddo Sugar Maple fall foliage.

November 29th, 2004 indoor meeting finally. Speaker will be Tim Cannon.

Since this year is somewhat planned, if you have any suggestions for speakers for 2005, please let me know. Sharon McCain 376-2768 or direct work # 556-2341
2005

February – Stan Blanchard – Wetland Remediation for Federal Government. Does French Drain Installation 840-1177

Mycology Chapter
Clark Ovrebo

About ten individuals turned out for the morel field trip at Lake Thunderbird State Park on April 4. The weather had been dry for about a week so we did not have any luck finding morels or other spring ascomycetes. Rumor has it that morels were collected in the state this year.

As we head into summer it is important to know about a couple of the larger mushrooms that are common on lawns throughout the summer and early fall. The first is *Chlorophyllum molybdites*. This species is one that you probably all have seen. It occurs after periods of wet weather, sometimes singly, in small groups, or in a fairy ring. It reaches five to six inches in height and the cap (pileus) can be as large as seven to eight inches across. The button stage appears as a nearly globose cap on the stalk. At maturity, the pileus expands to a broadly conic or flattened shape. The surface of the cap has brownish scales in the central area or sometimes overall. The rest of the surface is whitish. The stem (stipe) is whitish and has a ring (annulus) which is the remnant of where the pileus edge was attached to the stipe. The gills (lamellae) start out a whitish cream color and eventually turn green. The green color is due to the maturation of the spores which are formed on the sides of the gills.

Lamellar color does not always reflect the color of the spores. To confirm the spore color for this or any mushroom you need to make a spore print. This is done by placing the cap with gill side down on a piece of white paper. The cap is then covered with a bowl to keep the cap from drying out. This set-up is left for several hours (sometimes overnight) for the spores to be deposited on the paper. *C. molybdites* is important to recognize because it is poisonous, not deadly, but will cause severe gastrointestinal upset. It is the number one cause of mushroom poisoning in the United States. After eating, symptoms of the poisoning occur within an hour. It is also the only gilled mushroom with a green spore print.

A second species of large stature is *Amanita thiersii*. It appears usually in late summer and early fall. It is about the same size as *C. molybdites* and may also occur in fairy rings or arcs on lawns. The pileus and stipe are white. When fresh, the mushrooms are covered with a powdery-flocculent coating. Touching the mushroom leaves this coating on your fingers, but rain may wash away the coating. An annulus can be seen near the stipe apex on freshly expanded specimens. The lamellae are cream-colored and leave a creamy white spore deposit. The genus *Amanita* contains some of the deadliest poisonous mushrooms. The edibility/poisonous status of *A. thiersii* has not been determined, perhaps because people are hesitant to try it. It is best to leave it alone. Both species discussed here can be viewed on numerous websites. As always, never experiment with the eating of mushrooms unless you are absolutely sure of their identification.

If you would like to be on an e-mail list to receive announcements of impromptu mushroom field trips, please let Clark Ovrebo (covrebo@ucok.edu) or Pat Folley (pfolley7@juno.com) know.

Northeast Chapter
Connie Murray

This spring the Northeast Chapter has hosted two Pot Luck – Program Meetings: March 1 Amy Ganguli, a graduate student in Wildlife Management at OSU, spoke to us about strategies for managing red cedar in Oklahoma; May 3 Gloria Caddell, professor at UCO introduced us to the Selman Living Laboratory and the wildflowers found there, particularly the gypsophiles.

We sponsored an outing to the Clear Creek Farm Open House near Peggs on April 3. Afterward, part of the group went on to Buddy and Clare Miller's 'place', and part of the group went home to plant their new acquisitions.

We attempted two events that did not transpire. No one met Kim Shannon to see the shooting stars at Pontotoc Ridge. And the hike at Short Mountain was canceled because of an unstable trail. (The trip to Short Mountain has been rescheduled for May 29th.)

Northeast Chapter Upcoming Events: May 29th - Short Mountain Field Trip: Meet at the Garden Center at 8:00 a.m. to carpool from Tulsa or meet at 10:00 a.m. at I-40 and HW59 (south side, gas station: look for Charles red Jeep Cherokee, with signs 'OK-Wild'.) Contact Charles Lewallen at granylil@cox.net.

July 3rd – Field Trip to Lake Eufaula, below the dam. Meet at the Garden Center at 8:00 a.m. to carpool from Tulsa or meet at 10:00 a.m. below the dam. Contact Charles Lewallen at granylil@cox.net

June 18, July 16, August 20 - Happy Hour at Panera, 41st and Hudson, 5:30 p.m. for planning field trips and general merriment.

WELCOME THESE NEW MEMBERS

Don Beadles, Alva
Dorothy Bowen, Stilwell
George Carney, Oklahoma City
Carol I. Eyster, Wetumka
Bryce Fair, Oklahoma City
D. Wayne and Marlene Foxworthy, Ponca City
Becky Grigg, Tulsa
Harry and Faye Henson, Weatherford
Donald V. Hertzler, Weatherford
Ellen Johnson, Weatherford
Louise Manes, Tulsa
William and Bertha McMurtry, Oklahoma City
Mike Mooney, Red Oak
Michael Morris, Tulsa
Brian L. Nichols, Altus
Cathie Rose, Edmond
Charlie and Cindy Sandine, Oklahoma City
Jennifer Shubert, Edmond
Steve K. Smith, Oklahoma City
Gene Strunk, Oklahoma City
Jan and Robert Swinney, Weatherford
Amy Tyler, Norman

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