

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

> Volume 22, Number 1 Spring 2007

LOOK INSIDE FOR

PRESIDENT'S PARAGRAPH		
BOTANIST'S CORNER		
NEWS OF FRIENDS 4 FIELD TRIPPING 4 BOOK REVIEWS	IMPORTANT NOTICES	,
FIELD TRIPPING	BOTANIST'S CORNER	2
BOOK REVIEWS	NEWS OF FRIENDS	ŀ
COLOR OKLAHOMA	FIELD TRIPPING4	ŀ
OU BIOLOGICAL STATION	BOOK REVIEWS	,
OU BIOLOGICAL STATION	COLOR OKLAHOMA	5
SPRING FIELD TRIP	OU BIOLOGICAL STATION	5
SPRING FIELD TRIP	CENTENNIAL GARDEN	f
WILDFLOWER WORKSHOP9 CHAPTER ACTIVITIES10 ONPR ORDER FORM11 MEMBERSHIP FORM11		
WILDFLOWER WORKSHOP9 CHAPTER ACTIVITIES10 ONPR ORDER FORM11 MEMBERSHIP FORM11	INDOOR-OUTING	ß
CHAPTER ACTIVITIES10 ONPR ORDER FORM11 MEMBERSHIP FORM11		
ONPR ORDER FORM11 MEMBERSHIP FORM11		
MEMBERSHIP FORM11	ONPR ORDER FORM11	ĺ
ONPS website: http://www.usao.edu/~onps/		
ONPS website: http://www.usao.edu/~onps/		
	ONPS website: http://www.usao.edu/~onps	/

Email: chadwick.cox@cox.net

Printed on recycled paper

COPY AND ART DEADLINE FOR NEXT ISSUE IS 15 May 2007

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.

March 5: Northeast Chapter meeting. Page 10

March 8: Central Chapter meeting. Page 10

March 9: Cross-Timber Chapter meeting. Page 10

March 16: NE Chapter Happy Hour. Page 10

March 19-21: NE Chapter field trip to Beaver Bend area. Page 7

April 14: Central Chapter field trip to Wichita Mountains. Page 10

April 20: NE Happy Hour. Page 10

April 21: Cross-Timbers Chapter field trip to Redbud Valley. Page 11

May 7: NE Chapter meeting. Page 10

May 26: Center Chapter field trip to Deep Fork National Wildlife Refuge. Page 10

June 2: Board Meeting. Kim Shannon, 918-425-0075.

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

ONPS THANKS THESE DONORS

Color Oklahoma Fund T. Jo Thompson, in Memory of Clifton Wilson Barry L. Redliner

General Fund

M. Visser Monica Macklin Missouri Botanical Garden

WELCOME THESE NEW MEMBERS

Paula and Herb Elbert, Cleveland Mary E. Gard, Stillwater James and Joyce Hochtritt, Oklahoma City Steve Wilson, Fletcher

PRESIDENT'S PARAGRAPH

Greetings ONPS Members and Friends!

As I write this message for the Gaillardia the north wind is blowing and it is snowing again. The snow is sparse this time and it sparkles as it passes by the porch light in the early morning darkness. Personally, I am glad that we have had a real winter season this year; not just a week or two of coldness, but a whole season's worth. These cold winter months provide us with the opportunity or at times force us to slow down a bit. (They make me want to either go into hibernation mode or bake.) But when I do slow down for a few minutes to enjoy a warm fire, curl up with a dog (or 3) and relax, my mind soon thinks of spring. And when I think of spring I see my yard covered with the little pink and white striped blossoms of Spring Beauty with a smattering Violas and even some henbit. Yes, at this point of our winter season I believe I will look forward to seeing even the henbit again. The small patches of color in the fresh green grass along with the early flowering shrubs will be a welcome change to the cold, gray, icy and windy months we have endured this winter. But while it lasts, enjoy the winter months and keep the contrast they provide in mind when the upcoming spring blossoms return.

I missed seeing folks at the Indoor Outing on February 10th, but I am sure it was a successful event. Many thanks to the Crosstimbers Chapter members for all their time and efforts to make everything happen and also to our hosts, the Oklahoma Gardens staff and ambassadors, for their work. Next on our ONPS calendar will be our chapter meetings and various committee meetings, the upcoming weekend festivals across Oklahoma that will feature our favorite native plant growers, then the Wildflower Workshop in Ardmore, and of course many field trips. I look forward to seeing many of you throughout the spring at these meetings and events.

In the meantime, enjoy the cold while it is here. Bundle up, go outside and take in the season that is on hand.

"If we had no winter, the spring would not be so pleasant: if we did not sometimes taste of adversity, prosperity would not be so welcome."

Anne Bradstreet, 'Meditations Divine and Moral,' 1655 American poet (1612 - 1672)

Stay warm; both inside and out, Kim

IMPORTANT GENERAL NOTICES

If you have not received recently an email from Chad Cox about an item of interest to ONPS members, I probably do not have your correct address or you have not listed me on your list of people that can send you mail. Send me your address and place my email address on your acceptance list if you have one, if you would like to see these notices.

A roster of member email addresses and phone numbers are maintained at the website. If you would like to access this roster, Chad can email you instructions.

3030080808

BOTANIST'S CORNER

TINY SPRING FLOWERS YOU DON'T WANT TO MISS! GLORIA CADDELL

Oklahoma - where the wind comes sweeping down the plains! With it come billions of pollen grains of some of our most common trees! Grab a hand lens, and let's peek in on some of our earliest-flowering trees. I think you'll be awed by their exquisite, tiny reproductive structures. We're all familiar with trees like plums and redbuds that flower before they leaf out. But on our less conspicuous wind-pollinated trees, the flowers often lack petals, and go unnoticed. Their flowers usually open before the leaves expand, or just as the leaves come out. This keeps the leaves from interfering with pollen transmission by wind. Their lack of petals also makes sense; they're not needed to attract insects, and they too would get in the way! Wind-pollinated trees also tend to share some other characteristics. Because wind pollination is relatively inefficient as a means of getting pollen from anthers to stigmas, many pollen grains are wasted. Wind-pollinated flowers therefore tend to have a high pollen:ovule ratio. They produce many more pollen grains - millions more! - than are needed to fertilize their ovules (i.e. immature seeds). Try to calculate the chance of a wind-borne pollen grain hitting a stigma that is perhaps only a millimeter or so across! The pollen grains are dry and smooth, and are dispersed singly or perhaps with a few grains together. The stigmas of wind-pollinated flowers are often relatively large and feathery to trap the pollen. Although wind pollination may be more "chancy" than insect pollination, it is still a fairly good strategy for trees such as oaks that grow together in such large numbers in temperate zone

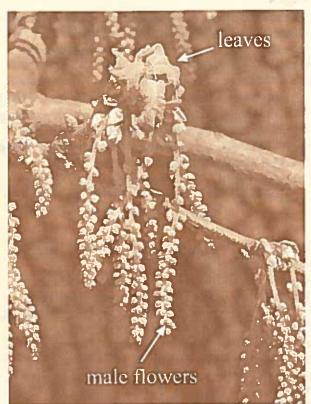
Page 3 forests. The probability is fairly high that a pollen grain will at least land on a *tree* of the same species!

Despite the characteristics they share, there is enormous diversity in the details of windpollinated flowers. Elms are some of the first trees to flower; their flowers have both male and female parts, but no petals. They are borne in clusters, come out before the leaves, and go quickly to fruit. Look closely at the tiny flowers, and you will see several stamens, as well as a tiny ovary that will become a winged, wafer-shaped fruit called a samara. When elm trees first turn green in the spring, it is not the leaves coming out quite yet; the trees are covered with these tiny samaras. Within a few days, the samaras are dispersed by wind, and then the leaves begin to expand. Although elm flowers have both male and female parts, the stamens mature and release their pollen before the stigma in the same flower is receptive. This phenomenon, called protandry ("first male"), reduces the chances of self-fertilization.



Elm fruits (samaras)

Probably the most obvious of our spring-flowering trees are the oaks that dominate much of Oklahoma's landscape. Oaks are monoecious ("one house"), bearing separate male and separate female flowers on the same tree. They bear dozens of male flowers on pendulous inflorescences called catkins that hang like cheerleaders' pompoms from the new twigs. The male flowers lack petals (they do have sepals), and they have many stamens. The female flowers are nestled at the base of leaves near the tip of the new twigs. They have tiny leaflike bracts at their base that will later form the cap of the acorn into which they develop. Although insects may visit the male flowers to obtain pollen, they have no reason to bother with the female flowers, so they are just "visitors" and not "pollinators" of oaks.



Oak catkins with male flowers.

Other spring-flowering wind-pollinated trees include osage-orange, hickories, black walnut, and some maples. Maple flowers have tiny green sepals and can have tiny red petals, depending on the species. Flowers on the same maple tree may be either bisexual or unisexual. Use your hand lens and see if you can distinguish between these. Bisexual flowers have several stamens as well as a pistil, which already looks like the helicoptershaped, winged samara into which it develops. However, even if both stamens and a pistil are present, the flowers are sometimes functionally unisexual, with either male or female parts being non-functional! Most maples are actually pollinated by insects – they attract insects with nectar, which is usually lacking in wind-pollinated species. How much pollination can be attributed to insects versus wind in some maple species still has not been fully resolved.

Hickories and black walnut are monoecious, bearing male flowers in catkins and female flowers either alone or in clusters. Both types of flowers have tiny green to brown sepals, but lack petals. The male flowers can have numerous stamens, and the stigma of the female flowers can be quite large, particularly in black walnut.

Osage-orange trees bear their male and female flowers on different trees. Botanists call such species dioecious, literally meaning "two houses".

The male flowers are borne in globose or elongate clusters, and the female flowers in globose "heads" that develop into the yellow-green "horse-apple" fruits.

Although these flowers are not among the colorful ones that most people would say brighten a spring day, they are exquisitely beautiful in their own way. They always brighten my spring days! Good things do come in small packages.

NEWS OF FRIENDS

Rose Marie West, who died in late 2006, was an original committee member for OperationWildflower, a committee that was formed back in the 70's to promote planting of wildflower seeds along Oklahoma State highways. This organization preceded any other organization or person's work in this area. The membership was made up of Tulsa people; Aline Gates (Rhodes) was the chair, Anne Long, Rose West, Evelyn Conners, Teresa Grosshauns, Russell Studebaker, and a few others.

Nels Holmberg received the Missouri Native Plant Society's 2006 Arthur Christ Research Award, one of the five prestigous awards of MONPS. He said sometimes I can't believe life is so much fun. I have been working on several surveys, some for the state and some with the Missouri Native Plant Society, finding 2 new mosses for the state and a polygonum that had been missing for 50 years.



Pat Folley

Field trips are notoriously uncomfortable. Whether they involve a short stroll or a long road trip, they take you out of your customary environment into places that are too hot, too cold, too wet, too dry, or all at once. You get muddy. You get stickers. You get sand in your socks and in your camera. Some of your fellow-travelers bite, sting, or raise blisters.

All of those discomfort elements somehow enhance the feeling that the experience gathered is genuine. It is certainly true for me. I've been in swamps so deep that other volunteers had to hold my elbows above water so I could use the camera. Slogged slippery wet trails in deep forest, stepping in hidden holes and grasping vines that turned out to be poison ivy. I loved every minute of it!

Ask anyone you meet what were the best, most memorable activities they ever had in a school, and the chances are good that the response will involve a field-trip. If you ask about a science class in particular, the odds become overwhelming. It's not just the break in routine, it's the access to "wild" information.

Observations that have not been edited by well-meaning teachers and textbook authors have the impact of personal reality. It's the "real thing", and not just another exercise.

Field-trips were certainly the food on which my interest in botany fed. I had good books, great teachers, and the desire to learn, but when it came to internalizing the facts, all that wild information gathered on field trips brought the theory home.



On an ONPS field trip to an orchid bog in Choctow County

A good many of those field trips were made at first with the Oklahoma Native Plant Society, and then with The Nature Conservancy. Years ago, I answered a plea from the Oklahoma TNC science director for specialists in botany and zoology to do volunteer work. I wrote that I could make any event within 100 miles. Within a month, I had tracked the state from southeastern McCurtain County to Black Mesa.

Every site we examined was worth a day's drive just to see. To be given the privilege of exploring them in detail, and in the company of some of the best biologists in the state, was beyond belief. Many of the sites were ones being offered to the Conservancy by owners who for one reason or another would not be able to pass the property on to family. They loved that land, and wanted someone else to love it too. But the Conservancy cannot manage all the land that is offered. The rules for saving what is most valuable involve knowing exactly what is present, and in what conditions it lives.

So we went, on foot, in all weathers except snow, and with what company managed to be present. I collected plant specimens so they could be examined by experts, and in the process became something of an expert myself. While gathering my handfuls of carefully labeled hay, I listened to expert birders, mammalogists, herpetologists, geologists and entomologists discuss how the local environment and plant life supported all of "their" animals.

All the while, I was taking pictures. Sometimes I was given an audience for a slide program on the results – another kind of outing, rewarding in its own way. On longer trips, we stayed in youth camps or local homes offered to TNC by other volunteers. We ate peanut butter on apple slices for lunch (they don't spoil), and were glad to get bottled water to drink. Eventually, time slowed, then nearly halted those trips. I still remember them as some of the best times in my life. Those experiences led me to continue working in botany.

Yesterday, I called TNC's Oklahoma office in Tulsa. Yes, field trip experiences are still available to anyone with time and interest. Those with the skills to make site assessments can go wherever the need exists, pretty much on their own schedules. Those with more general skills, like clearing weeds and brush, trail-making, and fence-mending, go out on scheduled work teams. To begin making your own field-trip memories, contact Jay Pruett, phone 918-585-1117 or on line at www.nature.org/oklahoma. Maybe I'll meet you there.

(Reprinted from the Norman Transcript by permission)

SOOK REVIEWS

Stanley Rice, ONPS Board member, and associate professor of biology at Southeastern, has published the Encyclopedia of Evolution, from Facts on File. With 215 entries and five essays, this encyclopedia covers all of evolutionary science and related areas. At the end of the encyclopedia is a brief summary of Darwin's Origin of Species. It is a valuable resource for school libraries, where both students and teachers can find concise answers to their questions about evolution. The hardcover edition is now on sale; an updated and less expensive paperback edition will be released in April. You can find the book at the usual websites such as amazon.com, Barnes and Noble, etc., as well as from the publisher at factsonfile.com.

Two suggestions from Elaine Lynch

Snell, Alma Hogan

A Taste of Heritage: Crow Indian Recipes & Herbal Medicines. Lincoln: University of Nebraska Press, 2006.

This book includes black and white pictures of plants, where to find them growing, which part(s) are used, and how to harvest and prepare them. There are many recipes, as well. The Crow live in the Montana/Wyoming area but many of the plants are also found in Oklahoma.

Armitage, Allan M.

Armitage's Native Plants for North American Gardens. Portland: Timber Press, 2006.

This book is designed to help people who want to include native plants in their gardens but don't know where to start. It is mostly composed of an A-to-Z Genera listing of plants that Armitage considers good native "garden" plants that are available to the average gardener, either through local sources or mail-order. Information about the plants in the A-to-Z guide includes habitat, hardiness, garden site, garden maintenance, and recommended methods of propagation. At the back of the book are lists of native plant nurseries, plant societies, internet sites, and other books of interest. It also includes lists of plants that meet various needs, such as drought-tolerance, sun requirements, and butterfly and hummingbird attraction.

Chad Cox

Flowers: How They Changed the World William C. Burger

Not surprising but this title got my attention. Furthermore, the blurb describing the book mentioned that the author said he wrote the book because he thought the flowering plants have not received their due. He certainly tries to do that, as well as informs the reader of many aspects of flowering plants' contributions to life. The book is divided between a description of flower structural/function, including their relationship to those agents that pollinate and disperse seeds and the history of flowering plants to life in general and more specifically to humans. ONPS members, having an interest in flowers, would appear perfect readers but perhaps he would be preaching to the choir.

The first section on structure and function reminded me of a very long Botany Bay.

Nevertheless, considering the breadth of the topic,

this brief coverage will be helped by some prior knowledge of flowers by the reader. This section is very specific to Angiospermae, essentially devoid of references to Gymnospermae. The structural portion covers variability of form and the functional part contains discussion of the variability in methods of pollination, seed dispersal and protection.

The second part of the book covers history of flowering plants as related to other species, especially humans. This history includes the effects of flowering plants on the evolution of humans and their agriculture on the development of mankind. Again, the scope of this section is immense, thus, leading to a rather sparse coverage. Despite the brevity, some topics contained some redundancy. He finishes this section with a review of the evolution of life on earth, including the major episodes of the mass extinctions of species, even the one that we are in now.

Overall, the book is an enjoyable read. Certainly, the author meets his intention by presenting a compelling outline to the importance of flowering plants to life now on earth. Now that is something that we can agree with. My copy will be donated to our library.

COLOR OKLAHOMA

Tina Julich

Initiated to aid communities and civic organizations in planting wildflowers along nearby highways, Color Oklahoma's 2006 Matching Grant Program was a great success! The committee received more than a dozen applications and awarded grants of up to \$500 to Riverfield Country Day School in Tulsa, Let Turley Bloom in Tulsa County, Choctaw County Arts Council and Iris Garden Club, the City of **Edmond, Hennessey 2010 Beautification** Committee, Piedmont Kiwanis Club and Lawton Beautiful. The Beautification Office of the **Oklahoma Department of Transportation** (ODOT) planted the seeds in the fall for spring and summer blooms in 2007. Look for them! Color Oklahoma will again sponsor the Matching Grant Program in 2007 and the information packet and application forms have been prepared and are ready for mailing to cities and organizations throughout the state. Unfortunately, ODOT's commitment to the program and other established beautification and wildflower programs is uncertain. Joanne Orr retired Dec. 1, 2006, as Beautification Coordinator for ODOT. Another key employee was promoted earlier in the year. As of this writing, ODOT had

not advertised that the positions were open and the status of the Beautification Office was unresolved.

The office has been an integral part of Color Oklahoma's success. It has provided funds for the printing and mailing of the program's brochures and the Matching Grant information. It also has coordinated seed planting by ODOT personnel and equipment. As many of you are aware, the Beautification Office sponsors with ONPS and the Oklahoma Council of Garden Clubs the annual Wildflower Workshop, which will be held in Ardmore in May. Other programs coordinated by the office include the Roadside Wildflower Program, the Highway Tree Grants Program, and the Don't Trash Oklahoma Program. Color Oklahoma is contacting Gary Evans, ODOT's Director of Operations, to inform him of the growing interest in planting wildflowers along Oklahoma's highways. The committee is expressing its concerns about the fate of the Beautification Office and ODOT's commitment to Color Oklahoma and other programs. At this point, we are hoping that Mr. Evans will listen with a sympathetic ear to our concerns, but we might need to call on you, the members of ONPS and voters of this state, to let elected officials know how we feel. If this becomes necessary, we will notify the ONPS membership via the Gaillardia and e-mail that we need to speak out about roadside plantings and ODOT mowing practices.

If you know of an organization or community that might be interested in the matching grant program, the application deadline is May 1. The application form is available at www.coloroklahoma.org. The program applies only to state highway rights-of-way. Eligible applicants

to state highway rights-of-way. Eligible applicants include nonprofit groups, businesses, schools and universities, individuals, Indian Nations, civic groups and governmental entities.

Color Oklahoma committee members and hopefully personnel from ODOT's Beautification Office will help applicants and recipients with the application, seed selection, purchase, and planting. Grants can be used for the purchase of native wildflower seeds only.

2007 UNIVERSITY OF OKLAHOMA BIOLOGICAL STATION ANNOUNCEMENT

The University of Oklahoma Biological Station (UOBS) at Lake Texoma will host its Summer Session 2007, May 20— June 2 and July 29 - Aug. 10. Students can earn 3 hours of upper-division or graduate Zoology or Botany lecture w/lab

summer semester credit for each two-week course taken. Most courses are field based and include field trips to other areas of interest. Course prerequisites are two collegiate laboratory courses, one of which must be in the biological sciences, preferably principles of ecology or other field-based courses and the other in the natural sciences (e.g. chemistry, physics). UOBS courses can fulfill the additional science course (2000-level or above in Botany or Zoology) requirements for the psychology major. Scholarships are available.

Facilities at the lakeside UOBS campus include classrooms; laboratories; library; stockroom; game room; laundry facilities; apartments, dormitory-style rooms and one barracks-style room and cafeteria. Computers with high-speed internet access and up-to-date software are available for student use, in addition to wireless internet access to a portion of the campus. Outdoor recreation facilities include basketball and volleyball courts, along with access to the lake.

Classes offered this summer are:

Vascular Aquatic Plants
Wildlife Conservation
Experimental Herpetology
Experimental Design in Ecology
Molecular Techniques for field Biology
Field Botany
Reservoir Fish Ecology
Field Mammalogy
Invasion Biology
Capstone-Close to Home: Human Alterations of the Oklahoma Landscape

Please visit our Web site at www.ou.edu/uobs for further information and application materials or contact Gail Barnes gbarnes@ou.edu or 405-325-5391 in the UOBS Norman campus office, 103 Sutton Hall. Applications will be accepted starting Jan. 2, 2007. Students are encouraged to apply early to secure a seat in the selected course(s).

OKLAHOMA CENTENNIAL BOTANICAL GARDEN

Pearl Garrison, Director of Communications

The Oklahoma Centennial Botanical Garden invites ONPS members to two special events this year. The first is a Blessing of the Land ceremony Monday, April 30, and the second is a centennial celebration Saturday and Sunday Sept. 8 and 9. The blessing and celebration will be at 5323 West

31st Street North. You can learn more about the Garden at www.oklahomacentennialbotanicalgarden.com.

The Garden is being developed on 215 acres in the Osage Hills seven miles northwest of downtown Tulsa. When completed, it will have 15 major theme gardens, more than 60 smaller ones, a 17-acre lake, 3,000-seat amphitheater, 3-story observation tower, interfaith chapel, visitor center, conservatory and much more. A wildflower garden will be one of the features.

Drs. Ron Tyrl and Bruce Hoagland are making major contributions with plant identification and establishment of trails into the Cross Timbers. The trails, which will be the first feature to be completed, will be dedicated at the September celebration.

In the April ceremony, members of the Osage Nation will purify the land and ward off negative influences on the Garden. Prayers will be sung in the Osage language and dancers will perform in their native attire. The 30-minute ceremony will begin at 11 a.m.

The September celebration will be the first opportunity for the general public to go onto the Garden site. There will be educational programs and entertainment for all ages.

The weekend will be a wonderful opportunity for ONPS to educate the public about its programs and native plants.

If you would like to attend the blessing ceremony, please RSVP Pearl Garrison at (918) 728-2707 or pearl@botanicalgardentulsa.org. Please contact me as well if you are interested in being part of the Garden's centennial celebration. Many volunteers will be needed.

WEI COME TO SERING EIEI D. TRIP

A WELCOME TO SPRING FIELD TRIP Sue Amstutz

Northeast Chapter of the Oklahoma Native Plant Society invites you to join us as we welcome spring.

WHERE: Beaver's Bend State Park, Broken Bow, Oklahoma

WHEN: March 19 - 21, 2007

Proposed Agenda
March 19 - Drive to Broken Bow, Oklahoma
Overnight in Broken Bow
Dinner at the Oaks Steakhouse in Broken Bow
March 20 - Breakfast on your own

Meet at the Beaver's Bend Nature Center, 9:30 a.m.

Morning and afternoon hikes for early spring wildflowers in the park
Lunch at the Park Cafe

Dinner at the Oaks Steakhouse in Broken Bow March 21 - Breakfast on your own; Departure for home

Accommodations in Broken Bow: Charles Wesley Motor Lodge (580) 584 - 3303; Broken Bow Inn (866) 863 - 3735; Microtel Inn (580) 584 - 7708 At Beaver" Bend: Cabins or Camping (800) 435 - 5514. (Participants are responsible for making their own overnight arrangements)

Registrations must be made with Sue Amstutz by March 5, please. (d-s-amstutz@cox.net or (918) 742 - 8374)

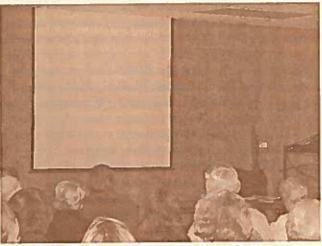
30300 Brokes

INDOOR OUTING FEBRUARY 10, 2007
Alice Richardson

"A Centennial Celebration of Oklahoma Plants" was the theme of the 2007 Indoor Outing hosted by the Cross Timbers Chapter on February 10th at the OSU Botanical Garden in Stillwater. Use of the state's native plants before statehood was presented by Wayne Elisens, Curator of the Bebb Herbarium at the University of Oklahoma. In his presentation, titled "Ethnobotany of the Southern Plains: Plant Usage Among the Kiowa, Comanche, and Apache in Southwestern Oklahoma" Wayne outlined the ecogeographical and cultural histories of these tribes, and then summarized the number of species used as edible plants, material plants, ritual and medicinal plants, or personal care and adornment plants. Striking photographs of particular species and the items made from them illustrated each category of use. Species mentioned and familiar to ONPS members included: Rhus glabra, Juglans nigra, Echinacea angustifolia, Artemisis ludoviciana, Monarda fistulosa, Yucca glauca, and Cornus drummondii. Wayne acknowledged the significance of long-time ONPS member Judy Jordon's work on the ethnobatany of these tribes.

Following Wayne, Ron Tyrl, Curator of the OSU Herbarium, presented a synopsis of European and Caucasian American contributions to our understanding of Oklahoma's flora in a paper titled "A Cavalcade of Oklahoma Botanists". In the first half of his talk, he presented a chronology of early plant explorers and collectors, including Coronado, Onate, Wilkinson, Nuttall, James, Irving, Shumard, Bigelow and Bebb. Photographs of Oklahoma species discovered by these explorers

or named in their honor accompanied his comments about each individual. In the second half of his presentation, Ron described the formal taxonomic treatments of the state's flora by various individuals including G.W. Stevens, Elbert little, Doyle McCoy, George Goodman, Paul Buck, and the Flora of Oklahoma Editorial Committee.



Ron Tyrl presenting at Indoor-Outing

Next up was Mark Bays, Urban Forestry Coordinator for the Oklahoma Department of Agriculture, Food, and Forestry. Mark delivered an entertaining explanation of the Centennial Witness Tree Program. The program is a joint effort by the Oklahoma Department of Agriculture and The Greater Oklahoma City Tree Bank. The Centennial Witness Tree Program is an attempt to help citizens participate in celebrating our statehood centennial by identifying trees that are approximately 100 years old. The program provides guidance on noninvasive measuring of trees to determine approximate age. Mark provided forms for nominating said trees and encouraged all to consider nominating suitable candidates. Details on the Centennial Witness Tree Program and how to measure trees of interest can be found at www.thetreebank.org.

Julia Brady Ratliff then took us on a fanciful tour of "Oklahoma, Native America 1832, when Washington Irving and Friends toured Riverbottom Forests, Cross Timbers and Prairies." She described the members of Washington Irving's party, how they met and some of their observations of each other, the native people, plants they encountered on their trip and numerous incidents of the practice of using fire as a means of maintaining open spaces by the Indian hunting parties. True to her background in teaching and history, she gave us an extensive listing of books and internet websites

where we can get more information on these topics. She also left several narratives of sections of their tour, using modern day landmarks and highways. For more information, her website is www.washingtonirvingwest.com

Dale Chlouber told us of some of the especially unique exhibits we would see at the Washington Irving Trail Museum including memorabilia of the nation's first western band, the Cross Timbers exhibit, the Gerald Johnson Collection of Native American and Southwestern pioneer days artifacts. He described efforts presently under way to have the Washington Irving Trail identified as a "scenic byway" and encouraged ONPS members to assist in this effort. Carla Chlouber gave us additional information about the significance of the Cross Timbers region and how it was viewed by the various members of Washington Irving's party. The website for the museum is www.cowboy.net/non-profit/irving.

The field trip to the Washington Irving Trail Museum was very informal. People arrived at the museum according to their own schedules. Some went directly there after the seminar, others went to eat lunch first. Once there, everyone browsed the exhibits at their own pace. Museum Curator, Dale Chlouber, was on hand to answer questions and discuss the history and significance of any exhibit for those curious for more information. The museum features an exhibit covering Washington Irving and his A Tour on the Prairies, which describes Oklahoma before extensive settlement. The history of this area of Oklahoma is told in the artifacts and accounts about the Gunfight at Ingalls, Oklahoma Territory involving the Doolin-Dalton Gang, the Civil War Battle of Round Mountain, and the Boomer Movement to settle the Unassigned Lands led by David L. Payne. The Gerald Johnson wing contains the artifacts collected by Payne County native Gerald Johnson and willed to the museum. The collection contains some outstanding examples of Native American art and crafts. It is possible to visit one of Washington Irving's campsites on the property but the weather was too cold for more than a few hardy souls to take the walk to see it.

We received several comments about how enjoyable the entire program was, but one which will probably stay with us a long time was from a woman who came from Houston, Texas just to attend it and told us it was well worth the trip.



30TH ANNUAL WILDFLOWER WORKSHOP

Joanne Orr

For thirty years The Wildflower Workshop has been traveling to different towns in Oklahoma, spreading the word about Oklahoma's diversity of wildflowers and helping folks learn and appreciate the treasure that Oklahoma is privileged to have.

The Workshop will celebrate its anniversary in Ardmore on Friday, May 4 this year. The Saturday, May 5, Field Trip will visit locations in the Arbuckles.

The Workshop will meet at the Southern Oklahoma Technology Center on US 70 east of Ardmore with registration beginning at 8:00 am and the programs beginning at 9:00 a.m. Some of the speakers include, Steve Owens, horticulturist and host of Oklahoma Gardening television program. He will speak about Native Ornamental Legumes and his new book.

From the Noble Foundation, Chuck Coffey, Pasture and Range Specialist, and Russell Stevens, Wildlife and Range Specialist, will discuss the 2006 wildfires and their effect on the wildflowers and native plants in the Arbuckles. They also will describe their newly enlarged website with a Plant Image Gallery which provides a handy and extensive reference.

Dr. Ronald J.Tyrl, Botany Professor at Oklahoma State University and Curator of the Bebb Herbarium, will give a "Happy 300th Birthday to Carl" message that, he says, will include, sex, intrigue and jealousy. Carl Linnaeus was the father of the floral identification system that is used around the world.

Norma Lynn Paschall and Regina Turrentine will describe the very successful programs of the Ardmore Beautification Council, including their wildflower plantings, Highway Tree Grants and daffodils. Several additional speakers are pending.

The always popular vending area will include native wildflowers and plants, watercolor paintings and notecards, gourds, wildflower teeshirts, books etc.etc. The Friday evening dinner will have the presentation of the lovely winners of the Native Plant Society Photo Contest plus the Snograss Award.

For information and a copy of the Workshop flyer, contact 405-521-4037.

Page 10 CHAPTER ACTIVITIES

Northeast Chapter Sue Amstuzt

Northeast Chapter's next meeting at the Tulsa Garden Center will feature Carol Eames speaking on "Gardening for Wildlife." Beginning with our regular Potluck dinner at 6:00 p.m., the March 5 event will include a short business meeting, a preview of a special Northeast Chapter Field trip (see below), and Carol's interesting program. Guests are welcome. Our March field trip will be a three-day excursion to the beautiful Beaver's Bend State Park near Broken Bow in southeastern Oklahoma. Northeast Chapter invites other members of ONPS to join us in this unusual opportunity taking place March 19 -March 21. More detailed information is offered on the ONPS Website and page 7 of this issue of the Gaillardia, as well as by contacting Sue Amstutz, NE Chapter Chair, at (918) 742 - 8374.

Happy Hours at Panera Bread are scheduled for March 16 and April 20. Our April calendar includes a field trip to Okmulgee State Park on Saturday, April 14, to see what kinds of midspring wildflowers we can find. Our May 7 Chapter meeting will feature Amy Buthod, Botanical Specialist associated with the Oklahoma Biological Survey and the Oklahoma Natural Heritage Inventory. Amy is one of three ONPS-related botanists (including Dr. Ron Tyrl and Bruce Hoagland) who have been doing extensive research at the site of Tulsa's soon-to-be Centennial Botanical Gardens northwest of downtown Tulsa. Amy, Dr. Tyrl, and Hoagland are in the process of surveying the site for existing plant varieties which will be protected in natural areas of the Gardens, planning trails from which visitors to the Gardens may enjoy the native plants in existence at the site, and documenting and preserving areas of the native woodlands and prairies which will best demonstrate to the public the original environments present before statehood. In September of 2005 the chapter heard Pearl Garrison of the Gardens staff describe the plans for the Gardens which at that time were very preliminary. Amy's program will provide a progress report with insights into the survey work being done on the site at the current stage of development. Plans for a public "Open House" at the Gardens next September 8 - 9 have been announced by officials of the Gardens. Northeast Chapter will participate in the Tulsa Garden Center's "Garden Info Fair" on Saturday, February 17. We will have a booth with information about ONPS, membership forms, native plant descriptive materials, and of, course,

the 2006 ONPS Photo Contest Posters.
"Manning" the booth will be Kim Shannon, Betty
Kemm, and Sue Amstutz.

Central Chapter Marilyn Stewart

On January 29th, Randy Anderson came and spoke to us about photographing butterflies and birds. He had some wonderful pictures and we had a good turnout.

On March 8th, the one and only Bruce Smith will be speaking about ferns of Oklahoma at OSU/OKC Student Center at 7:30. Note that this is a different night than usual. Watch for a notice on this.

On April 14th, we will take a trip to the Wichita Mountains and plan to meet at 10:00. The winter rains should make this a particularly nice field trip.

May 26th is a field trip to the Deep Fork National Wildlife Refuge in Okmulgee. We will meet at 10.00.

Emails and postcards will be sent with maps and instructions fro each event. If you're not receiving the emails, please let Bonnie Winchester winwin@pdli.net know. For Postcard address updates contact Tina Julich, tjulich@hotmail.com Last minute questions, call Marilyn Stewart 405-382-8540 or 405-2551707

Cross-Timbers Chapter Elaine Lynch

On February 10th, the Cross-Timbers Chapter hosted the 2007 Indoor Outing in Stillwater. We gathered at the Oklahoma Botanical Garden and Arboretum, which is also the studio garden for the PBS program "Oklahoma Gardening". It was a cold day but we warmed it up with fellowship, good speakers and good food. We would like to thank our speakers for their interesting presentations and taking the time to come speak to us. We thank Dale and Carla Chlouber for hosting our field trip to the Washington Irving Trail Museum. Also, we thank the 102 people who braved the cold and distance to attend, and all the members of ONPS and the Oklahoma State University Botanical Society who donated refreshments. Everyone seemed to have a good time.

Our next event is the spring pot luck dinner on Friday, March 9, at 6:15 p.m. It will be in Room 110 Life Science East on the Oklahoma State University Stillwater campus. Following dinner, we will hear from Clark Ovrebo, Mycology Chapter chair. His talk will be on "Spring Mushrooms of Oklahoma". Dr. Ovrebo's program should start around 7:00 p.m. Everyone

attending is asked to bring a dish to share at the dinner. Beverages and paper goods will be provided. We will also have a brief business meeting to discuss future potluck speakers and field trip locations. Bring your suggestions! Our spring field trip is scheduled for Saturday, April 21. We will car pool to Redbud Valley near Tulsa. Ron Tyrl will lead our botany walk. Those wishing to carpool should meet in the Life Sciences East parking lot before the 9:30 a.m. departure time. We should reach Redbud Valley around 11:30 a.m. Everyone is asked to bring

their own sack lunches to eat at the site. We will then botanize for two to three hours and be back in Stillwater by 5:00 p.m. If you wish to meet the group there, we plan to begin the botany walk at noon. Bring rain gear, insect repellant, sturdy walking shoes and hand lens. Contact Paul Richardson (405-377-4831, speedy154@juno.com) or Ron Tyrl (405-377-1569, rj.tyrl@okstate.edu) if you need directions to Redbud Valley.

Oklahoma Native Plant Record order form Name Institution Mailing address State and Zip code # of Print Volume 1 (free to members & libraries) # of Print Volume 2 Sold out. Contact editor for special order # of Print Volume 3 @ \$8.50 # of Print Volume 4 @ \$9.00 _____ # of Print Volume 5 @ \$9.00 # of Print Volume 6 @ \$9.00 Total enclosed \$ # of CD Volumes 1-6 @ \$9.00 Enclose order form with your check (let us know if you need an invoice) and mail toONPS FOR JOINING OR RENEWING USE THIS FORM Fill out this form or supply the same information. Make checks payable to Oklahoma Native Plant Society and mail to Oklahoma Native Plant Society, 2435 South Peoria, Tulsa, OK 74114. Membership is for Jan. 1 - Dec. 31 of current year and dues include subscription to Gaillardia. Affiliation: (School, Business, or Avocation) Home Phone: _____ Office Phone: _____ Please do not list my phone ___ Renewal or New Member Dues are tax deductible. Annual Membership Choice: \$15 Individual __ or \$20 Family __, or \$5 Student __ Life Membership Choice: \$250 Individual ___ or \$350 Family ___

Add \$5.00 to cover cost of copying and mailing a complete ONPS directory if desired.

The Gaillardia

Published quarterly by the Oklahoma Native Plant Society 2435 S. Peoria, Tulsa OK 74114 President Kim Shannon Vice-president Gloria Caddell Secretary Lou Duke Membership Coordinator Tina Julich Treasurer **Mary Korthase** Historian Sharon McCain Directors at Large: 2007: Paul Buck and Elfriede Miller 2008: Ron Tyrl and Lynn Michael 2009: Monica Macklin and Stan Rice Chapter Chairs: Sue Amstutz Northeast Marilyn Stewart/Lou Duke/Kathy Webb Central Paul Richardson Cross-Timbers Clark Ovrebo Mycology

Gaillardia articles, except those reprinted here with permission from other sources, may be reprinted at will. Please acknowledge source and author.

Send all mail except contributions to the Gaillardia to:
Oklahoma Native Plant Society
c/o Tulsa Garden Center
2435 South Peoria
Tulsa, OK 74114

Kim Shannon, 918-425-0075, okpenstemon@yahoo

For Gaillardia material only, use the editor's address:
Chad Cox
2241 Ravenwood
Norman, OK 73071-7427
(405)-329-8860
Email: chadwick.cox@cox.net

- All material accepted is with the understanding that it can be freely copied.
- Submit as txt, rtf or word files by disc or email.
- If submitted by hard copy, use Times New Roman or other standard font types for OCR.

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

IF YOU HAVE NOT PAID YOUR 2007 DUES PLEASE DO BEFORE WE SEND YOU A REMINDER Non-Profit U. S. Postage Paid Tulsa, Oklahoma Permit No. 357