



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 2
Summer 2007

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FOR NEXT ISSUE IS AUGUST 15**

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 2: Board Meeting. Contact Kim Shannon at (918) 425-0075 or okpenstemon@yahoo.com.

June 10: Mycology Chapter Mushroom Outing. Page 11

June 15: NE Chapter Happy Hour. Page 10

June 17: C-T Field Trip to OSU Research Range. Page 11

July 20: NE Chapter Happy Hour. Page 10

August 17: NE Chapter Happy Hour. Page 10

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

ONPS THANKS THESE DONORS

Anne W. Long Fund

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Mary D. Price

Sharon M. Lee

Mary Korthase

In Memory of Danney Goble*

In Memory of Ruth Boyd*

In Memory of Larry Magrath*

General Fund

Leslie Imboden

In Memory of Danney Goble*

In Memory of Ruth Boyd*

In Memory of Larry Magrath*

Color Oklahoma Fund

Pamela Lloyd

Bob & Aline L Guthary Family Trust

Patricia L. Stamper

In Memory of Larry Magrath*

* See Important Notices, Page 3

PRESIDENT'S PARAGRAPH

Hello again ONPS members and friends,

Our relatively long, cold winter has been followed by a spring season that has been rough on our ONPS membership. We lost Dr. Larry Magrath in March and Ruth Boyd in April. Larry will be remembered for his enthusiasm and love of Oklahoma's orchids along with his many contributions and efforts toward the creation of the upcoming *Flora of Oklahoma*. His contributions to ONPS were many including his years of service on the Executive Board, assisting with field trips for various events, and general support of our endeavors. His support continues even after his passing as he included ONPS in his will. His final contribution to our society is not yet known, due to some legal work that is still in process. Ruth Boyd was a charter ONPS member who worked diligently on our Board and various committees for many years. While I was not fortunate enough to know Ruth well or work with her much, I know her contributions to ONPS were many and that she will be greatly missed by our membership.

Our former ONPS President, Connie Murray, also lost her new husband, Danney Goble in March. Danney's untimely death was, and still is, a shock to all of us. My thanks to all who contributed to the flowers for Danney's memorial service. Our thoughts and prayers are with Ruth's family and Connie during their difficult time and Larry will remain in our collective ONPS thoughts. Currently, we also need to keep Lou Duke in our thoughts as she faces her own medical battle.

Other challenges face ONPS and our Color Oklahoma project. We have an annoying and recurring problem facing us; *MOWING!* We have 2 major obstacles related to the mowing dilemma to overcome, the first of which is an order from ODOT to keep highways mowed (fence to fence) for our state's Centennial. The other is more complicated and is related to the recent retirement of Joanne Orr from ODOT. Since her departure in December, the Beautification office has dwindled and our fear is that the department may either be drastically understaffed with under-qualified personnel or that it may be eliminated completely. Members of Color Oklahoma have been in contact via letters and by phone with Gary Ridley (Director) and other ODOT officials and we have only been given very general and often

contradictory answers to our many inquiries regarding the fate of the Beautification office and its partnership with Color Oklahoma. The dissolution or downgrade of ODOT's Beautification Office will affect both the planting of wildflower seeds and mowing. Unfortunately, there are wildflower plots across the state being mowed this spring, with complete disregard for previous years work by the Beautification office and by Color Oklahoma. One of the sites awarded a 2006 Color Oklahoma Grant in the Tulsa area has had blooming flowers mowed! I spoke with two members of the "Let Turley Bloom" committee (after a presentation I gave to the Tulsa Audubon Society about Oklahoma's wildflowers) who witnessed the mowing of the majority of their new wildflower plots. You can imagine their frustration.

In the days to come ONPS will be launching a new initiative: **DON'T MOW, LET THEM GROW!** We will take a multi-faceted approach that will include a petition, letters accessible from our website for concerned members and citizens to use, and with some luck, a bit of publicity. By the time the printed copy of this newsletter reaches you, there will be information (in the form of facts; draft letters for you to send to legislators, our Governor, the Centennial committee, and other officials; contact lists, etc.) on both the ONPS (www.usao.edu/~onps/) and Color Oklahoma (www.coloroklahoma.org) websites. If all goes well, there will be some information available to you on our website by the time the electronic version of this newsletter arrives.

I was wonderfully surprised by the recent selection of our state quarter that will feature both our state bird (the scissortail flycatcher) *AND* our state wildflower, the Indian Blanket. At the same time, I find it ironic that while our new quarter will proudly represent Oklahoma across the United States, and around the world, we may not be able to enjoy our state wildflower along our highways, as it must be mowed. I am certain we will have the support of many Oklahomans who, like us, wish to see our native wildflowers blooming in great abundance along our roadsides. We must instill a greater appreciation for the abundant natural and *WILD* beauty in our state and help eliminate the idea that our roadsides must resemble a golf course in order for them to be safe and appealing. I am willing to bet that one

hundred years ago, as our state was born from prairies, mowing did not equate to beauty.

Muster your forces and stay tuned!!

-Kim

P.S. Don't forget about the upcoming Audubon Wildlife Habitat garden tour in Tulsa on June 9th and 10th. Our first round of "Don't Mow, Let Them Grow" petitions will be available at this event due to the cooperation of the Tulsa Audubon Society! For tour information and map, visit www.tulsaaudubon.org or call 918.446.2720.

IMPORTANT GENERAL NOTICES

This current tragic period for ONPS began with the death of Connie Murray's husband, Danney Goble, a Pulitzer Prize-nominated author and popular OU history professor. Then two of our major contributors to ONPS died. Ruth Boyd for many years was a major force in our society. Although less active in ONPS after a life threatening bout with pneumonia, she was still active in other of her interest including the Christmas Store which she participated at this last December. Larry Magrath, a professor at USAO, was our resident authority on orchids. He remained active in ONPS during his long fight against cancer. To add to our sorrow, Lou Duke is now in a battle with cancer.

Also, Jim Erwin, ONPS's good friend and manager of the Pontotoc Ridge Preserve, after a severe vehicular accident has retired from The Nature Conservancy.

Contributors to the memorial for Danney Goble are: Lou Duke, Paul Buck, Alice R. Richardson, Lynn Michael, Dale and Sue Amstutz, Chadwick Cox, Susan Chambers, Monica Macklin, Mary Korthase, Sheila Strawn, Gloria Caddel, Charley and Ellen Shannon, Kim Shannon and Marilyn Stewart.

Contributors to the memorial for Ruth Boyd are: Dorothy A Foster, Chadwick Cox, James and Dorothy Henkle, Paul and Lou Ann Buck, Mary Korthase, B.J. and Bob Dow and Betty Kemm.

Contributors to the memorial for Larry Magrath are: Paul Buck, Mary Korthase and Chadwick Cox.

BOTANIST'S CORNER

Sheila Strawn

MINING THE DEPTH AND BREADTH OF LICHEN DIVERSITY

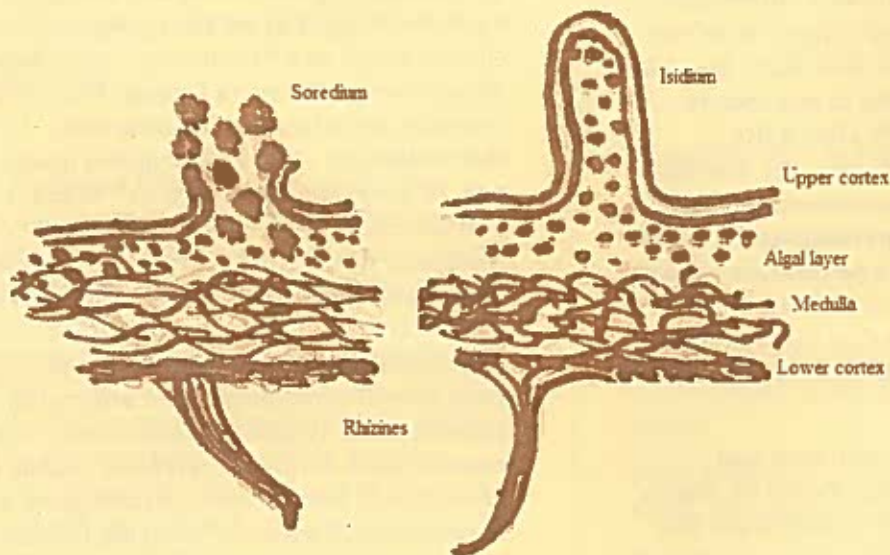
Most botanists know lichens are comprised of a photosynthesizing photobiont (algae or cyanobacteria) living among long hyphal cells of a mycobiont (fungus). The fungus absorbs minerals and water from the substrate. This relationship has been called a classic example of "mutualistic symbiosis". Actually, some lichen mycobionts are parasitic on their photobiont partners. What's more, some lichens are parasitic on other lichens and some lichens are parasitic on mosses. And yes, some fungi live on lichens. Some lichens with algae as "primary" photobionts can also have cyanobacteria in or on the surface of their thallus (lichen body) as a "secondary" photobiont, but *Geosiphon pyriforme* (a fungus) lives with cyanobacteria inside of its own cells, intracellularly - like a chloroplast inside a plant cell. It, however, is not a "true" lichen. If scientists will take lichens off that shelf marked "classic symbiotic mutualists", they will find intimately linked organisms with a maze of interacting characteristics. Since most mycobionts are photobiont specific, lichenologists identify them by their fungal component in an attempt to simplify classification. In spite of such effort, lichens defy classification across hierarchical realms of *genetic, biochemical, microscopic, physiological, and environmental sciences*. Studying lichens requires a strong background in all these.

Both the mycobionts and their photobionts are visually simple organisms without internal differentiation and have been physically unchanged for many millions of years; but the co-evolution of their genomes has been going on for millennia. *Genetic* research has begun to show this interplay between the lichen's dual genomes. Favorable mutations would increase the viability of one without decreasing the viability of the other. Furthermore, genomic variation within a single lichen thallus can exist due to ribosomal DNA introns, as it does in *Cladonia chlorophaea*. These cell-to-cell gene transfers between mycobiont and photobiont may not be visibly evident, but may give ambivalent results to *biochemical* tests normally used to identify the fungus. These naturally inserted genes may also affect growth rate, maturity, or other biochemical

pathways as well as physical features within a single thallus.

Gene transfers may also be the reason characteristics of some fungal species are unrecognizably different with the symbiont than without. This problem is why you have to look at *microscopic* fungal spores to identify some lichens: their thalli can be different, depending on the effect of the photobiont's genes on the fungus' gene expression. The fact that most lichens reproduce by spores can simplify their identification. However, those fungal and algal spores, which travel independently of each other, would need to reestablish symbiosis with their symbiont wherever they are dispersed. Fortunately, if the photobiont is the green alga,

Trebouxia, as most are, it may already be residing in the new area as a symbiont in another lichen. Even if it is not, contrary to a common misconception, most photobiont and many mycobiont species are capable of living independently until they do find each other. If they are reunited, how do the symbionts each recognize their partners? A cascade of genetically-expressed chemical metabolites are produced by the biochemical pathways they share. Each would have the metabolites that the other uses. Lichens are also capable of reproducing by "isidia" or "soredia" which are vegetative diaspores consisting of balls of fungal and algal cells that break off and are dispersed. These enable even those which cannot live without each other to reproduce together.



Lichen thalli with vegetative diaspores in cross section

modified from Nash et al, 2002 after Purvis, 1992.

Physiological studies have revealed numerous metabolites present in lichenized fungi that have evolved with their photobionts. In lichens, fungi have become "kissing cousins" to their distant relatives, algae and cyanobacteria. Such close relationships are a way of life for many fungi, which don't usually kill another organism in a predatory fashion. They just use all the resources they can get their hyphae into, regardless of whether the substrate is living. Organisms living closely with fungi have evolved mechanisms that keep them at bay. Fungal symbionts have survived because they produce molecules the fungus needs. Fungi have survived by using or tolerating metabolites of photobionts, from which they get

energy, but from which it must not extract too much, or else both die. This "pound of flesh" exchange is deplored in Shakespeare's arena, but it is common in lichens.

What has *environmental science* revealed about lichens? Location, location, location! Cyanobacteria are either primary or secondary photobionts in 10% of all lichens. Those lichens can live in very low nitrogen environments because cyanobacteria fix nitrogen from inorganic substrates in the environment (soil, air, or runoff) and convert it to ammonia. Ammonia would be toxic to lichens, but they can convert it to glutamate like they do nitrates, and then convert

that to other amino acids. There is a tradeoff: nitrogen fixation requires energy and more moisture than photosynthesis does.

However, ninety percent of lichens do not have nitrogen-fixing cyanobacteria. They live where they can absorb fixed nitrogen from organic substrates and from ammonia-enriched runoff. Other lichens can live in very high-nitrogen substrates like bird droppings where urea breaks down into NH_3 and CO_2 . The ability to convert greater amounts of ammonia to less toxic molecules gives lichens in the genus *Xanthoria* an advantage in those nitrogen-rich areas, but makes them more susceptible to sulfate pollution. Humans use their susceptibility as a marker to identify high sulfate pollution areas.

For lichens, the interaction between mycobiont and photobiont characteristics has made classifying them problematic and challenging. This has led to a very shallow understanding of their roles in biological processes. Lichens do not get much type-space; they are not cute and fuzzy; and they don't produce brilliant blooms. However, their study can provide a deep well of biological knowledge; knowledge that can only be gained by a combination of genetic, chemical, microscopic, physiological, and environmental research. No single set of classification rules can begin to describe lichens, for fungi and their photosynthetic partners interact at all levels.

References:

Nash, Thomas H, III 1996. *Lichen Biology*. Cambridge University Press, Cambridge, UK.
Brodo, Irwin M, Sylvia Duran Sharnoff, & Stephen Sharnoff 2001. *Lichens of North America*. Yale University Press, New Haven, US.



COLOR OKLAHOMA REPORT

Tina Julich

The deadline for applications for Color Oklahoma's matching grant program was May 15th, and as I write this article the number of applications is still unknown. Last year we awarded \$5000 in grant funds and this year we're expecting to do it again! The winners of this year's matching grants will be listed in the next issue of *The Gaillardia*.

Earlier in the year CO committee members contacted Gary Evans, ODOT's Director of Operations, and spoke with him about our concerns for the existing wildflower plots along our roadsides, as well as future plantings. CO is only part of the Roadside Wildflower Program and there are many communities that raise and donate large sums directly for ODOT to plant wildflowers. This interest in beautifying our state through the use of wildflowers has been stressed to ODOT but it will be a continuing battle. CO will keep the ONPS membership informed of ODOT's response to our campaign to keep the wildflowers and minimize the mowing.

SAVE OUR WILDFLOWERS!

Tina Julich

While driving to Oklahoma City I could identify (at 70 mph, no less!) several wildflowers growing along the I-40 roadside of the 30 or so miles I drive in my daily commute, including: Yarrow, Indian Paintbrush, Penstemon, both the *Penstemon oklahomensis* and another larger-bloomed variety, False Dandelion, Wine Cup, Spiderwort, Tickseed, Nightshade, Milkweed, Evening Primrose, Yucca, and Toadflax, along with the wonderful grasses.

And then they were gone.... Yes, in full bloom and they were mowed. Fence to fence.... The only places not mowed were the very, very steep or the very, very damp, with just the Cattails left standing. The sign dividing Oklahoma County and Pottawattamie County was the difference between beauty and an unattractive mess, since the mowing started at the county line. I do realize that beauty is (indeed) in the eye of the beholder because my brother and I have a standing joke that I see wildflowers and he sees weeds. So much of what each of us 'sees' is a matter of perspective, but I think that it's time we try to change the perspective of the people who make the 'mowing' decisions. This year, because it is Oklahoma's 100th birthday as a state, someone at ODOT has decided that the roadsides need to be mowed fence-to-fence.....six times!!! We might as well kiss our wildflower plots goodbye. I don't know about you, but I think that it's time we let ODOT (and others) know how we feel. Take the time to comment about our beautiful and diverse wildflowers to anyone that will listen. Perhaps someone just hasn't thought about how pretty and colorful wildflowers can be. Talk to your

neighbors, and the greeter at Wal-Mart, and the bank teller, and the church choir director, and your beautician. Call the newspaper. Call your local representative. Call ODOT. Call the Governor. Be bold.... Let everyone know that you like the roadside wildflowers. Make others *think* about it..... We can start a real grass-roots (pun intended) campaign to preserve the beauty we already have as well as enhance it with additional plantings. And Oklahoma will be a better and more beautiful place for it.

Here is a link to Oklahoma's web site: <http://www.oklahoma.gov/>. There is a link there to "Find your legislator". There is also a link to Governor Brad Henry's web site, with contact links there for both Gov. Henry and his WIFE! For comments to ODOT call Gary Ridley, Director, at (405) 522-1800 or 521-4675.

If you have an idea for a program, would like to volunteer or have questions, please contact me at 918 728-2707 or pearl@botanicalgardentulsa.org.

CONSERVATION CORNER

Chad Cox

In discussing global warming, the two major issues are the increase in temperature and the effect of human activity on the increase. The temperature is increasing without doubt. The most obvious sign is the net loss in ice mass and the greater loss in surface covered by ice. The latter fact assures that the temperature will rise because of the loss of reflectivity from the surface of earth that ice provides, given a consistent level of energy arriving from the sun and given no other changes in energy retention.

Whether you accept the consensus of climatologists that human activity contributes to the rise in temperature or not, humankind needs to prepare for the effects of this warming. Most often, the discussion here in the states most often concern populations in low lying areas because of flooding and some areas near the equator, especially in Africa, that are predicted to have increased droughts.

However, environmentalists interested in biodiversity are more concerned with the possibility of exacerbation of mass extinctions which are occurring now but predicted to increase with global warming. Even now, scientists consider that 40 percent of species they have examined are in peril. Edward O. Wilson, an

eminent Harvard biologist, predicts that half of current species will be gone by 2100. Although many factors contribute to the extinctions, currently habitat loss is major. (Wilson also ranks invasives as the second leading cause of species extinction.) Habitat loss is more complicated than just setting aside some areas because these areas are fragmented and little exchange can occur between these areas. Fragmentation prevents exchange of gene pools which is crucial for large animals, especially. Furthermore, fragmentation prevents movement of species required with changes in environmental conditions. This problem will be more severe with increasing warming, especially for plant life.



The Wildlands Project, a conservation group, hopes to lessen the problem of exchange loss by developing continuous corridors, south to north along natural migration routes. This very ambitious plan originated more than a decade ago through a collaboration between Dave Forman, Earth First founder and Michael Soule, one of the founders of conservation biology. The plan is to reconnect sections of protected areas of wilderness with public and private lands, where private owners would be encouraged to be good stewards of their lands that bridge portions of these wildlands. Interestingly, some of the large land owners near wildlands, such as Yellowstone, would prefer bears and wolves to developments.

The grand scheme is shown in the figure obtained from the Wildlands Project website. No doubt much needs to be researched for including

different ecological systems. (Note the corridors do not include Oklahoma.) And of course this only addresses the North American continent. Similar plans are needed for other continents. Hopefully, we can be the model of how this can be done.

OK CENTENNIAL BOTANICAL GARDEN

Pearl Garrison

A lot of activities are being scheduled for the Oklahoma Centennial Botanical Garden's Centennial Celebration Sept. 8 and 9, and more will be added in the next few months.

We are thrilled that the Oklahoma Native Plant Society will be one of the presenters and we welcome all members to attend and/or volunteer for the Garden's first major event. This will be the first time the general public will be able to go on the site of the future \$40 million botanical garden, which will be seven miles northwest of downtown Tulsa.

The weekend's activities will be at Post Oak Lodge and Conference Center, 5323 West 31st Street North, which is adjacent to the Garden site. The hours will be 9 am to 5 pm Saturday and noon to 5 pm. Sunday. Because of limited parking, we encourage visitors to use a shuttle service. Updates on programs and parking will be posted at www.ocbg.org.

Featured speakers will include Dr. Carl Whitcomb, nationally known expert on crepe myrtles; Steve Dobbs, author of *Oklahoma Gardeners Guide* and director of the University of Arkansas - Fort Smith's grounds and landscape department, native plant experts Drs. Ron Tyrl and Bruce Hoagland, and Tulsans Barry Fugatt and Russell Studebaker.

Horticulturist Allan Storjohann will be on site for his Saturday morning call-in show on KRMG radio. Seedlings and bulbs will be given to early arrivals.

There will be dozens of education programs for adults and children, samples of chuck wagon cooking, cooking demonstrations, butterfly and racing pigeon releases, presentations by Master Gardeners, Linnaeus Gardeners and affiliates of the Tulsa Garden Center, and entertainment.

Children will be able to plant native wildflower seeds by tossing mud balls containing seeds. We would love for several ONPS members to volunteer to help them and teach them about native plants.

If you have an idea for a program, would like to volunteer or have questions, please contact me at 918 728-2707 or pearl@botanicalgardentulsa.org.

2007 Photo Contest Tina Julich

The 2007 ONPS Photo Contest had 40 wonderful entries in four categories submitted by 8 photographers. This year's judges, Sheila Strawn, Clark Ovrebo, and Gloria Caddell, worked hard to determine the winners of the photo contest. They were especially pleased to award an Outstanding Photo award to Marion Homier for her photograph of Indian Heliotrope. This special award is only given at the judge's discretion for a photograph they feel shows outstanding photographic technique and displays the plant in an exceptional way. Jillian Luker swept the Amateur Closeup category, winning 1st, 2nd and 3rd place prizes.

I was disappointed that there were no entries in our new "Special" category, which for 2007 was graminoids. The 2008 "Special" category will be announced after our June board meeting.

Categories for submission are Beginners, for those who have never entered one of our contests before; Amateur Close-Up, for photographers who have not placed in an ONPS contest before; Advanced Close-Up, for those entrants who have placed in one of our previous contests, or who choose to enter as "advanced"; Habitat, which is open to all photographers and may show one plant or a group of plants, with emphasis on the plant's community; and "Special", which will be changed each year. This extra category was added to encourage a variety of photographic subjects or plant categories that might be overlooked by most people because they aren't as photogenic as some of our showier plants. Hopefully, this category will encourage some creative entries!

Photos received in the contest are mounted on display boards and used for educational purposes for ONPS. The 2007 posters will be on display at the Photography Hall of Fame at the Omniplex in Oklahoma City from June through August, and will then be displayed at our Annual meeting in October.

For more information on the 2008 photo contest please check the ONPS web site (<http://www.usao.edu/%7Eonps/>) or email Tina Julich, contest coordinator, at tjulich@hotmail.com. We encourage all of our ONPS members to send in photos but you don't have to be a member of ONPS to submit photos for the contest. So take the time to go through your stash of photographs and find next year's winning photos!

2007 PHOTO CONTEST WINNERS

Category and Prize Awarded	Photographer	Photo Title	Botanical information
Advanced Closeup			
1st Place and Outstanding Photograph	Marion Homier	Indian heliotrope	<i>Heliotropium indicum</i> L.
2nd Place	Marion Homier	rayless gaillardia, perfumeballs	<i>Gaillardia suavis</i> (Gray & Engelm.) Britt. & Rusby
3rd Place	Lynn Michael	Arisaema, green dragon	<i>Arisaema dracontium</i> (L.) Schott
Amateur Closeup			
1st Place	Jillian Luker	hairy sunflower	<i>Helianthus hirsutus</i> Raf.
2nd Place	Jillian Luker	butterfly milkweed	<i>Asclepias tuberosa</i> L.
3rd Place	Jillian Luker	purple poppymallow	<i>Callirhoe involucrata</i> (Torr. and Gray) Gray
Beginner			
1st Place	Jillian Luker	tall thistle	<i>Cirsium altissimum</i> (L.)
2nd Place	Peggy S. Long	Carolina spider lily	<i>Hymenocallis caroliniana</i> (L.) Herbert
3rd Place	Peggy S. Long	snow on the prairie	<i>Euphorbia bicolor</i> Engelm. & Gray
Habitat			
1st Place	Marion Homier	Virginia creeper, eastern redbud, American sycamore	<i>Parthenocissus quinquefolia</i> (L.) Planch., <i>Cercis canadensis</i> L, <i>Platanus occidentalis</i> L.
2nd Place	Linda Schemmer	showy milkweed	<i>Asclepias speciosa</i> Torr.
3rd Place	Sallie Webb	liatris, prairie blazing star	<i>Liatris pycnostachya</i> Michx.

2007 WILDFLOWER WORKSHOP REPORT

Submitted by Kim Shannon; written by Jean Carriker

The 30th Annual Wildflower Workshop and Field Trip was ranked as one of the best by the attendees as Pansy Garden Club and South Central District of the Oklahoma Garden Clubs, hosted the event at Southern Oklahoma Technology Center (SOTC) in Ardmore in conjunction with Oklahoma Native Plant Society (ONPS) and Joanne Orr, retired Beautification Coordinator for Oklahoma Department of Transportation (ODOT.) Jean

Carriker, local chair, stated that not only did the evaluation sheets give top marks in all categories, most of those in attendance sought out members of the Pansy Garden Club who assisted, Carolyn Graysneck, Arline Guthary, Elsie Johnson and Sandy Alexander plus South Central District President, Bettie Cooper, to tell them personally how much they enjoyed the food, facility, and speakers. "This is one of the best learning workshops we have had in a long time," stated Lynn Michael, State Garden Club Wildflower chairperson. About 125 folks from out of town were treated to the hospitality of Ardmore.

Regina Turrentine, President of Ardmore Beautification Council, was lead speaker and those in attendance were impressed with the beautification projects undertaken by this local group. Several of the project sites were then visited on the Field Trip segment of the workshop the next day. The host group heard several "oohs" and "aahs" as the tour bus drove from Commerce Street west on Highway 70 to Lake Murray Drive, where the latest wildflower plot was seeded by ODOT last fall through a donation to ABC from Landmark Bank.

Chuck Coffey, Pasture and Range Specialist, and Russell Stevens, Wildlife and Range Specialist, both of Noble Foundation then gave insight into the effects of the wildfires of last year on the wildflowers and native plants in the Ardmore area as well as the Arbuckle's along Interstate 35. Attendees were then able to view several of the areas these speakers had pointed out on the Saturday field trip led by renowned botanist Dr. Ron Tyrl, Curator of Oklahoma State Herbarium in Stillwater.

Steve Owens, host of Oklahoma Gardening, spoke about "Native Ornamental Legumes" that are featured in his new book. He brought native plant items, including legumes, as well as his books, for the vendor's room from his Bustani Plant Farm in Stillwater for an educational display and to sell.

Retired Professor of Botany, T. H. Milby, of the University of Oklahoma then took the audience back in time with his talk about Oklahoma vegetation through the eyes of early explorers. Mrs. Milby brought decorated ornamental gourds which were a popular feature in the vendor's section.

The Snodgrass Award, a memorial honoring Mrs. Bess Snodgrass of Ardmore who worked so diligently in getting the coreopsis planted in the Arbuckles, was presented by John Snodgrass of Ardmore, to Joanne Orr, retired Beautification Coordinator for ODOT. This memorial was started seventeen years ago and each recipient has led an outstanding campaign with an active interest in the wildflowers along Oklahoma Highways. This year a framed picture of the Oklahoma wildflower, the Indian Blanket, with an attached plaque was presented to a very deserving organizer of many wildflower workshops and events for many years, Mrs. Joanne Orr. A cash contribution from the Snodgrass brothers, in Mrs. Orr's name, will be given to ODOT for the planting of one acre of

wildflower seeds in a location of her choosing. Congratulations and a standing ovation was acknowledged by the group to a very deserving, Joanne Orr.

Marilyn Stewart, Wild Things Nursery, then spoke on attracting butterflies and pollinators in her presentation. She brought many native plants and grasses as well as caterpillars to sell in her vendor's booth, as well as other gardening items.

Rounding out the day, Helen Chitwood, Coordinator of Murray County Wildflower project was joined by Dr. Ron Tyrl, Professor of Botany at Oklahoma State University, and Joanne Orr, Retired Beautification Coordinator of ODOT where many ideas and suggestions were discussed. Working with ODOT to keep the wildflowers along the highways for future generations is ever-present in the minds of all attending, for like all noteworthy projects, funds are needed to keep the seeds being re-sown throughout the State on a yearly basis. Even more importantly a campaign to change the mowing policy so the native wildflower areas have a chance to reseed themselves will be addressed soon for this would be a terrible loss to the State of Oklahoma's wildflower heritage.



On the Sunday morning field trip

Friday evening Dr. Tyrl used the title..."Happy 300th Birthday, Carl"...honoring Carl Linnaeus, on his 300th birthday, May 4th. Linnaeus, a very interesting character in his own rights, developed the classification system that has led the way in classifying wildflowers and plants. Dr. Tyrl then explained the relationship of a botanist to Linnaeus. Kim Shannon, president of the Oklahoma Native Plant Society then presented a power-point presentation and announced and awarded the ONP Photo Contest winners for '07. To enter the '08

contest, interested parties should contact Tina Julich, tjulich@hotmail.com for more information. Categories include beginners, amateur close-up, advanced close-up, and habitat. Information may also be found at the ONP web site, www.usao.edu/~onps/ or on the Oklahoma Garden Club web site, oklahomagardenclubs.tripod.com/

The two-day workshop was self-supporting. A generous donation from ABC was appreciated as well as other donations from R & R Nursery of Wilson, Brad Bolles, Attorney in Ardmore, Judy Grotts, OGC president, and Pansy Garden Club of Ardmore. As a "thank you" to the South Central District and the Pansy Garden Club of Ardmore, the WFW committee will donate money for an acre of wildflower seed to be planted by ODOT in the Ardmore Area.

CHAPTER ACTIVITIES

Northeast Chapter
Sue Amstutz

On May 7 Northeast Chapter welcomed Amy Buthold as our speaker. Amy used power point photos and interesting dialogue to inform us about the plant surveys in which she has been involved at the site of the developing Oklahoma Centennial Botanical Gardens northwest of downtown Tulsa. Amy, Dr. Ron Tyrl, Bruce Hoagland, and others have participated in several day-long tours of the Gardens site during which appropriate trail locations were proposed, native plants of the area surveyed and catalogued, and opportunities for the preservation of natural areas outlined. The first official activity on the site was held on April 30 when the Osage Tribe conducted a Native American ceremony called "A Blessing of the Land". Tulsa boy scout troops have already begun the development of the trail system through the natural parts of the Gardens. Public opening activities are scheduled at the site on September 8 and 9; ONPS plans to participate in the two-day kickoff.

The Northeast Chapter has had two spring field trips. In March, five members visited Beaver's Bend State Park in southeast Oklahoma. Early spring wildflowers were found in profusion, and ideal weather conditions encouraged investigation of several areas of the park.

Our trip to Okmulgee State Park was hampered by the rain and late season cold snap which gripped the state in mid April. Only three intrepid, bundled-up participants braved the 37- degree cold for a

couple of hours of limited exploration. Even those three gave up by noon and headed for warmer, indoor comforts.

Our May field trip found a group of us wandering about Chandler Park in West Tulsa. This urban park operated by Tulsa County is a typical "people park", but the wide variety of trees and shrubs, a cliff ridge facing the Arkansas River, and a "wilderness" area generally provide sufficient botany for what has resulted in a series of visits by us over the years.

In June we plan a field trip along Highway 20 in Osage County. Beginning at Hominy Lake, this adventure will find us stopping along side roads which intersect Highway 20 and investigating the profusion of wildflowers in the southern portions of the Osage Hills.

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.

Prairies, savannahs, and meadows, much of it unfenced, should welcome our exploration on a day-long drive-and-hike visit to the area.

Our monthly Happy Hours on Fridays at Panera Bread on East 41st Street will take place during the summer on June 15, July 20, and August 17.

Around a dozen NE Chapter members participated in the Wildflower Workshop May 4 - 5 in Ardmore.

We joined the rest of ONPS in mourning the loss of Ruth Boyd who for so many years played such a vital part in the life of the Society. Ruth departed this world in early April.

Cross-Timbers Chapter
Elaine Lynch

We held our spring pot luck dinner on Friday, March 9. We heard from Clark Ovrebo, Mycology Chapter chair, about "Spring Mushrooms of Oklahoma". Dr. Ovrebo showed slides of various species of mushrooms and discussed where they would most likely be found. He also identified which are edible or poisonous. Not surprisingly, morels were a favorite topic during his presentation and in the question and answer period that followed.

We visited Redbud Valley Nature Preserve near Tulsa for our spring field trip on April 21. Ron Tyrl led our botany walk. Redbud Valley is a lovely area with a wide range of habitats in a small area. This allows a large variety of plants to grow there, from those that like shaded stream sides to those that prefer dry, sunny locations. It is well worth a visit.

We will have our next field trip on Saturday, June 16. We will tour the OSU Research Range to look at wildflowers and the results of the prescribed burning program. Chris Stansberry, Station

Superintendent, will lead "A Walk upon the Prairie: Patchiness is Good." We will meet in the parking lot north of Life Science East at 9:00 AM, to carpool to the Range. The Range headquarters are located 2.5 miles South of OK Hwy 51 on Coyle Road. We will finish the tour by noon. Contact person is Paul Richardson (405-377-4831).

Jim Ownby is scheduled to speak at our November potluck on the topic of "Proteas of South Africa". The exact date is still being worked out.

Mycology Chapter
Clark Ovrebo

Mushroom Walk, Sunday, June 10, 1 pm, Lake Thunderbird State Park. Meet at Crow's Secret Nature Center, off Hwy 9, east of Norman.

WELCOME THESE NEW MEMBERS

Nancy Hamill, Jenks
Sarah and Mike Hansel, Tulsa
Donna Mackiewicz, Edmond
Gala and William McBee, Tulsa
Doug and Nelda Sander, Stillwater
Carol Whitney, Gracemont
Calvin Craig Williams, Lawton

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The Gaillardia

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