

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

Volume 24, Number 2 Summer 2009

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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 5-6: Wildflower Workshop. See Spring Gaillardia or website.

June 13: NE Chapter Plant Survey at Centennial Botanical Gardens. Page 9

June 13: Central Chapter Festival at will Rogers Park.
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June 14: Central Chapter Field Trip to Pat Folley's Farm.
Page 10

June 19: NE Chapter Fabulous Wildflower Friday. Page 9

June 27: NE Chapter, Grand Re- opening Oxley Nature Center. Page 9

July 17: NE Chapter Fabulous Wildflower Friday.

Aug 21: NE Chapter Fabulous Wildflower Friday.

Sept 18-19: BioBlitz, See www.biosurvey.ou.edu

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

ONPS THANKS THESE DONORS

Color Oklahoma Fund Barry L. Redlinger

General Fund

Linda Schemmer
in memory of Lou Duke
Carol I. Eyster
Florence (Betty) Miller
Connie Taylor

PRESIDENT'S PARAGRAPH

Lynn Michael

There's nothing like a trip to make you appreciate home. My husband and I went to Europe for two weeks in April. Our son, Nicholas, is on a study abroad semester in Swansea, Wales. The school has a month Easter break from the middle of March through the middle of April. Our son was using this time to backpack across Europe and we decided to join him for part of it. My first surprise was seeing our Oklahoma state tree the Redbud, Cercis canadensis everywhere in Rome. They were in full bloom and quite spectacular. I'll never stop being proud that Oklahoma has this tree for a state symbol. There were, of course, planted tulips and flowers everywhere, but the native foliage was what gave me pause. The wisteria was bountiful - also in full array. A most interesting cliff in Nice, France had native bromeliads cascading down. In the United Kingdom I found miniature ferns in the rock fences, gesneriads at Gower, and a strange, prickly yellow bush I've yet to identify. My son insisted that I had more pictures of plants than he did of historic places - but that's not true. Now I know why they talk of "April in Paris", as it was a most beautiful time to visit.

When we returned to Oklahoma we were met with three weeks of almost constant rain. I was glad that we had glorious weather for our trip. The down side of this all was that I missed out on some of my favorite spring wildflowers and the joy of first seeing them appear.

In spite of that, I've been able to see the last of Jack-in-the Pulpits, Arisaema atrorubens, Yellow Lady's-Slippers, Cyprideium parviflorum, and Green Trilliums, Trillium viridescens, and blooming Green Dragons, Arisaema dracontium, and Solomon's Seal, Polygonatum biflorum. We are so blessed in the variety of plants we have to enjoy.

The Everything Garden Festival was held in Claremore on April 25-26th and I spoke on Growing Natives in Your Yard. It was a first time event, well attended and with many great programs and vendors. That same week-end many of your fellow native plant society members were manning information tables at other events across the state which you can read about in the chapter articles. The Tulsa Audubon Backyard Habitat Tour is coming up May 30-31, 2009 and

will feature vendors with a plethora of native plants for sale. The Wildflower Workshop comes the next weekend in Boise City. You can find a registration form in the last issue, or download from our website www.usao.edu/~onps.

Our Annual meeting was scheduled for October 9-11, but Roman Nose State Park called me and announced that they will not be open then. I will try to schedule a different location, but for the same weekend, so look for details in the next issue.

All this rain should provide an amazing wildflower display this year, so put on a raincoat and see what you can find.

30300Brobbs

IMPORTANT GENERAL NOTICES

Remember we need to have Nominations for the Service and Ann Long Awards sent respectively to Sue Amstutz and Pat Folley by August 31st. See previous Gaillardia or website.

30300 Beoble

BOTANIST'S CORNER

Oklahoma's Parasitic Plants

Gloria Caddell

Why are we particularly intrigued by some plants, and always remember the first time we saw them? One plant I will always remember seeing for the first time is one of our native species of broomrape, Orobanche multiflora. In a "sea" of yellow Indian paintbrushes on the gypsum outcrops in northwestern Oklahoma, a student and I had at first overlooked it because of its resemblance to the paintbrushes when its aboveground parts turn brown. But then one with cream-colored, purple-tipped flowers caught our eyes, and we realized that it was something quite different. Now I always look for it, an odd little parasite often nestled among stiffleaf goldenaster (Heterotheca stenophylla), and always feel thrilled to find it and to share its story with others.

Broomrape is classified as an obligate root holoparasite on members of the sunflower family. What does that mean? Parasitic plants are classified into groups based on whether the plant is completely dependent on a host plant (an obligate parasite) or whether it can live on its own (a facultative parasite); whether it attaches to the

stems or to the roots of its host; and whether it obtains just water and mineral nutrients, or also organic nutrients from its host. Holoparasites lack chlorophyll and are totally dependent on a host for water, mineral nutrients, and organic nutrients. Hemiparasites have chlorophyll; they obtain water and mineral nutrients, but may also obtain some organic nutrients from their host. Some parasitic plants have a single host; others are "generalists" that can attach to several hosts. All attach to their hosts by means of special root modifications called haustoria. Orobanche multiflora often parasitizes Heterotheca, but can also be found on Artemisia and Hymenopappus. Some introduced broomrapes are important pests of crop plants such as tobacco, cotton, tomato, and eggplant, and are listed as noxious weeds.



Broomrape

Worldwide, over 4,000 species of plants in about 19 families are parasitic. How many of these species are found in Oklahoma, and to how many families do they belong? Since I first saw *Orobanche multiflora*, the broomrape family (Orobanchaceae) to which it belongs has expanded to include 24 species in 9 genera, including the Indian paintbrushes (*Castilleja*) and other parasitic plants previously included in the

snapdragon family. Other Oklahoma parasites include 11 species of *Cuscuta* (dodder) in the Cuscutaceae, *Krameria lanceolata* (krameria) in the Krameriaceae, *Comandra umbellata* (bastard toadflax) in the Santalaceae; and *Phoradendron leucarpum* (mistletoe) in the Viscaceae. Together these plants account for about 1.5% of Oklahoma's plant species.

To which groups of parasites do these plants belong? Members of the broomrape family range from hemiparasitic to holoparasitic root parasites. Dodder species are generally obligate holoparasites. Bastard toadflax is hemiparasitic on the belowground parts of species in many families of plants. It is related to the sandalwood trees of Asia, famous for their uses for timber, oil, and incense, and which are facultative root hemiparasites. Krameria is also reported to be a hemiparasite on a variety of host plants. Mistletoe is a hemiparasite on the branches of its woody hosts.



Bastard Toadflax

Some of these parasites have names that could offend some people. The common name "broomrape" is based on a species of *Orobanche* that is parasitic on the shrub called broom, a member of the genus *Cytisus*. And the common

name "bastard toadflax" is used for *Comandra*umbellata, apparently because of the resemblance
of its leaves to those of toadflax (*Linaria*).

Note that some Oklahoma plants that lack chlorophyll, such as *Monotropa* (Indian pipe), are not included in the above list of Oklahoma parasites. *Monotropa* species are often referred to as parasites, but they are mycotrophic. This means they obtain nutrients through mycorrhizal fungi that are in turn attached to the roots of trees. The term "parasite" is usually restricted to plants that produce haustoria.

How often has parasitism evolved? Are parasites more closely related to one another than they are to other plants? It appears that parasitism has evolved about 12 times, in many different families. If you are interested in parasitic plants, an excellent website is the Parasitic Plant Connection by Dan Nickrent at Southern Illinois University (http://www.parasitic plants.siu.edu). On his website, you can see a phylogenetic tree that highlights hemiparasitic and holoparasitic plant families. The diagram clearly shows that many of these families are only distantly related to one another. And the website even has lists of parasitic plants that have appeared on stamps, and of those used as food.

How "picky" are these parasites about their host plants, and how do they recognize them? According to Elizabeth Estabrook and John Yoder at the University of California, facultative parasites have the largest variety of hosts, while obligate parasites are "pickier." Some parasitic plants apparently are stimulated to germinate by compounds produced by the roots of their host plant, and development of haustoria may also be stimulated by chemical signals from the host. Other researchers (Runyon, Mescher, and De Moraes) have reported in the journal Science that dodder can "smell" and distinguish between volatile compounds released by available hosts and grow preferentially toward certain ones. Is it advantageous to attach to one host rather than another? It can make a big difference in terms of growth and photosynthetic rate. One study by Lynn Adler published in the journal Ecology showed that Indian paintbrushes that parasitized lupines were more attractive to pollinators and produced more seeds than those that parasitized grasses.

It is important to know which plants serve as hosts for parasitic plants. A recent article by Michelle Marvier and David Smith in the journal Conservation Biology emphasized that if we are to preserve rare species of parasitic plants, we need to know their hosts.

As I conducted research for this article, I became intrigued with *Pilostyles thurberi*, a species in the Rafflesiaceae that is parasitic on various shrubs in the Southwest. Its vegetative tissues grow within the host; only its reddish-brown flowers and a few scalelike leaves emerge and form a plant that is only up to about 5 mm tall. What is so amazing is that this tiny plant is a member of the family that contains *Rafflesia*, a holoparasite that produces the largest flowers of any plant. Although it is not an Oklahoma species, I think I will still put *Pilostyles* on my list of "100 Plants to See Before I Die"!

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CONSERVATION CORNER

Chad Cox OkIPC Conference

Oklahoma Invasive Plant Council (OkIPC, Ohio council beat us to OIPC abbreviation) is finalizing our First Annual Meeting to occur on July 8 at the OSU Student Union. This conference differs from the first conference that strove to define invasive plants in Oklahoma to one that outlines what is needed. Jeanetta Cooper, the Control Specialist of Oklahoma Dept. Agriculture and Jim Harris, Biologist for US Corps of Engineers will discuss what they do for invasive plant control in the state and Jeff Vogel, State Weed Specialist, Kansas State Plant Protection & Weed Control, will cover Kansas, which has a much more active program. There will also be an overview of Aquatic Nuisance Species Management Plan for Okiahoma by Curtis Sackett, Aquatic Nuisance Species Biologist. Jay Pruett, Director of Conservation, will enlighten us about the Nature Conservancy Oklahoma Chapter's Invasives Audit, where the national organization appointed a team from outside of Oklahoma to exam preserve management and their relation with state and federal agencies and other interested entities, then report their findings and recommendations. Even the preliminary report that Jay shared with us at the last board meeting suggests that this will also serve as a good guideline for how OkIPC should

proceed. National EPPCN Director, Damon Waitt, Senior Botanist, Lady Bird Johnson Wildflower Center, will review the status of the national organization.

The business session at the end will be to elect board directors since those were selected by me and the officers were appointed by that board for first year. A similar plan was used by Texas to establish their council and Damon Waitt, of the Texas council provided all this information to me. The members will also elect the officers and will decide whether to have dues and if so, the amount. Again, the first year was without dues for members, in part, to encourage membership, with in mind this upcoming election.

I began this adventure because essentially every field trip I went on was accompanied with observations of areas taken over by non native plant species. I even felt I had gain a responsibility from becoming Chair of the Conservation Committee to at least address the problem. At that time, the State government appeared disinterested in invasive plants other than red cedar and three plants called thistles. However, members of the Department of Wildlife Conservation were working on aquatic nuisance species along with the US Corps of Engineers and that work has lead to a very active effort to control aquatic invasive species, many of which are non native plants. This has left the terrestrial plants, especially the non agricultural plants, to their unfair fight with our introduced bullies.

I thank ONPS members for their encouragement that they have given me in this endeavor. As treasurer of OkIPC, I additionally thank the board for support as well. This brings up the question of what to do about the tax status for OkIPC. For the foreseeable future, OkIPC will remain on limited funds, which precludes trying to establish our own 501(c)3 tax standing. I have tried to tie into other councils, one established for the Southeast regional council, the umbrella 501(c)3 for eight state councils in that area and separately with the Texas council (they are still working on theirs) but without success. The ONPS board has approved a motion to make OkIPC a project organization similar to that of Color Oklahoma. This will be presented for approval by the members at the Annual Meeting.

I would also like to thank individually two other of our ONPS members, Bruce Hoagland and

Karen Hickman for making OkIPC a reality. Remember, I am not a botanist but a retired professor of Biochemistry. So they give legitimacy as well as providing much of the heavy lifting. My only experience controlling invasive plants has been in my fight against Japanese honeysuckle, Vinca major and Bermuda grass in my own yard. So all the other members of OkIPC are the real fighters of invasive plants that are needed for OkIPC to be successful.

A notice will be posted on ONPS website when the registration is available.



TRAILS AND TRIALS

Sheila Strawn

Trails, Trials, & TicksRecent personal experience with this topic has prompted me to write this article. Hopefully, all your trails will be trial free, but from time to time we reprint "Field Trip Rules" and tell you that "Participation is at your own risk". We know that is not enough, so before each hike the leader warns each participant to wear boots, long pants, and a hat, and to use insect repellent, and sunscreen and to do a thorough tick-check afterward. Along the trail there is always someone to point out poison ivy or greenbriar to avoid; pocket gopher holes to step around; or has insect repellent to share with you. Even when you follow that advice, you may find some of the trials of the trail follow you home. There is more we can do, and that is the purpose of this article. It might also be a good topic for an Indoor-Outing or a chapter presentation.

Our most common trials on hiking trips come from mosquito bites, greenbriar scratches and two to seven days later, from poison ivy rashes. There are several other trials that can "bite you later": ticks. Just like ONPS field trippers, ticks are active April through September. Although Rocky Mountain Spotted Fever (RMSF) is named after the Rocky Mountains, it has infected more people in Oklahoma than anywhere else! Also in Oklahoma, Ehrlichiosis infects the lone star tick and Tularemia has been found infecting the lone star tick and the American dog tick. Although Lyme disease is named after Lyme, Connecticut, it has been found in many states between Oklahoma and Connecticut, but it is not found in Oklahoma. There has been a lot of confusion and controversy regarding this. I'll try to explain why.

Persons in the southern states, including Oklahoma have reported an illness indistinguishable from the early stages of Lyme disease, including the "Bull's-eye" rash. Testing for the Lyme disease bacterium, however, has always given negative results. In 2001 the CDC isolated a different bacterium, that of Borrelia lonestari, from a patient with what they are now calling the Southern Tick-Associated Rash Illness (STARI) as well as the lone star tick that bit her. Furthermore, these ticks, which are common in Oklahoma, are not the deer tick associated with Lyme disease.

In Oklahoma RMSF, Lyme, Ehrlichiosis, and Tularemia are "reportable" diseases. This means that any medical personnel who diagnose it are required to report it to the State Health Department. STARI is not a "reportable" disease. When it is diagnosed it does not have to be reported. Although seven cases were investigated in Oklahoma between 2001 and 2005, no one can know for sure how many cases of this Lyme disease look-alike there have been since its first isolation. Most of us know someone who has had symptoms like those of Lyme disease. When people report that "Lyme Disease doesn't exist in Oklahoma" they are right. The State Health Department hasn't had any tests for Lyme disease come back positive. What's more, ticks can carry more than one disease-causing bacteria. That's why it's so confusing. Nevertheless, prevention, symptoms, and treatment are generally similar for all types of tick-borne illnesses.

Being a native Oklahoman, I've been taking my "tick precautions" for a long time. I've always worn a hat and pushed my pants down in my socks and worn deet insect repellent around the edges of my clothing. I would do my tick-check when showering and either thoroughly brush or wash my hair after each hike. I would peel my clothes off inside out, directly into the washer.

Even when you do all of these things, they can still follow you home and "bite you later". When they do, what do you do? The several times I've pulled ticks off, I've watched the site for a week or two to see if a rash develops or the site appears infected. If you find them, cut them in two. They are impossible to squash, but if you do mash them you risk spreading the bacteria. If you find them embedded in skin, folk remedies like petroleum jelly or hot matches rarely cause them to back out. I've had the best success following the health

department's guidelines: pulling gently and steadily on the tick, as close to where it is embedded as possible, (with the pointed tweezers in my dissecting kit).

The Center for Disease Control reveals that one does not always have a rash with the disease, but untreated, Rocky Mountain spotted fever can be life-threatening and Lyme disease can reoccur and result in arthritis, heart problems, and vision and hearing difficulties. We don't yet know if STARI has the same lingering effects, but given the overall similarity, it's best to assume that it does. Even before you get a rash, here are the symptoms you should look for:

Rocky Mountain spotted fever symptoms may include any of the following: fever, nausea, vomiting, muscle pain, lack of appetite, severe headache. Later: abdominal pain, joint pain, diarrhea, and a pink rash that starts on the wrists and ankles then spreads to face & torso and turns red, can occur. There is no lab test that can be done in the early stages of the disease to confirm it. So if the symptoms fit and you've been hiking in tick territory, seek medical attention. Most often the doctor will prescribe an antibiotic, like doxycycline, to keep the disease from progressing while waiting for a definitive answer.

Lyme disease and STARI causes flu-like symptoms: headache, fatigue, fever, chills, and aching muscles and joints within one month of the bite. Tularemia may also present with skin ulcers and swollen lymph glands. The rash may appear during that time, or not at all. There are lab tests for Lyme disease, but not for STARI. Treatment is also with doxycycline.

The take-home message is: If you've removed a tick in the last 30 days and start having flu-like symptoms (without respiratory involvement, seek medical attention, don't wait for a rash. Tick-borne diseases are curable without complications if treated within a couple of weeks of the bite.

References: www.cdc.gov/ticks/diseases, www.ok.gov/health Tickborne Disease Prevention Link, Dr. Koop's Self-Care Advisor, C. Everett Koop, M.D., Medical Director, Time Life Medical 1996.

COLOR OKLAHOMA

Tina Julich

Wildflower Grants

The June 1st deadline for the matching grant applications is fast approaching, and we anticipate receiving several applications from communities across the state. Grant awardees will be announced in the next edition of the Gaillardia.

Proposed Legislation

Representative Ryan Kiesel has been working diligently with Color Oklahoma members to introduce legislation to help preserve our beautiful roadside wildflowers by changing the mowing practices of ODOT. He has decided that it would be best to wait until next year to introduce an amendment for this. We look forward to working with him on this next year.

Outreach

Members of the Color Oklahoma committee have been attending plant sales and shows, passing out information on our committee's purpose: to cover the roadsides of Oklahoma with wildflowers. We also have information on the Color Oklahoma car tag that is available, as well as our colorful t-shirts and (new this spring) tote bags. If you're at a plant show or another event and you see a Color Oklahoma/ONPS table or booth, stop by and say hello!

30300Blocked

Central Chapter's Draper Nature Area Project Sheila Strawn

On the afternoon of Sunday, May 3, Central Chapter sponsored a field trip at Lake Stanley Draper. At 4:30 pm groups set out in opposite directions to locate possible trail heads starting at Recreation Area Two. Eventually these trails will be constructed and maintained by the Oklahoma City Parks and Recreation Department with ONPS's input regarding invasive species and reestablishing native species. Educational signage will be used to discribe the crosstimbers habitat there and to designate native species. At 5:30 pm the groups returned to the pavillion for a pot-luck supper and an update on the project as follows:

The plans for Draper's nature trails include 1/4 mile of handicap-accessible trail and 2-3 miles of more rigorous trail. The area around the trails

will be managed to restore the crosstimbers habitat with reduction of non-native species and removal of invasive species. Native trees will be planted and wildflowers will be seeded. There will be no mowing along the trail. The parks department would appreciate all help that ONPS can provide so that their funds will go farther. More specific plans cannot be made or carried out until we overcome one major problem: The underbrush is too thick and it would require an



Ten of us found our way to Lake Stanley Draper (Jeannie & Dan Coley, Betty Culpepper, Elizabeth Keys, Tina Julich, Barbara Klein, Lisa & Tom Rountree, Steve & Sheila Strawn), all of whom brought food/utensils for the potluck and five of whom worked on the trails project.

immense amount of work to clear by hand or machine. The area needs to be burned before beginning the trails, to clear out vines and invasives and to see what natives will come back. However, the weather for the last two springs has not allowed them to burn. We can still do plant surveys around Recreation Area Two, but they will be more difficult and hazardous (See "Trails & Trials"). Our next survey will be in June, the date is not yet determined. Call or email Sheila Strawn [sastrawn@hotmail.com / (405) 733-0864] if you want to be a part of this project and you are not already getting ONPS-DNA email notices

2009 PHOTO CONTEST WINNERS

Kim Shannon

This year there were a total of 13 entrants who submitted 61 photos characterizing our beautiful native flora. The specialty category of ferns had a total of 10 submissions. Awards include \$50 for first place winners; \$25 for second place winners; and \$15 for third place winners. Honorable mentions (no prize money) and a special prize of \$75 may be awarded for the best photo from a "botanical" point of view at the judges' discretion. The judges for this year were Bruce Hoagland of the Oklahoma Natural Heritage Inventory, Norman, OK, Amy Buthod of the OU Bebb Herbarium, Norman, OK, and Blair Baker of Bristow, OK, a biologist for Kleinfelder, Inc. The judges did not award any honorable mentions or the best "botanical" photo award. All entries were automatically considered for these special awards. Awards were presented at the Boise City, OK Wildflower Workshop on June 5-6, 2009. Prizes will be mailed to those who could not be present. Many thanks to all our entrants for their lovely photos!

The winners for the 2009 ONPS Photo Contest are:

Category: Close Up

1" place - Becki Sheets of Blackwell for her Mentzelia photo

2nd place - Becki Sheets for her daisy fleabane photo

3rd place - Tom McCreary of Oklahoma City for his basketflower photo

Category: Close Up, first time submission

1st place - Richard Waters of Broken Arrow for his passionflower photo

2nd place - Sandy Graue of Tulsa for her milkweed photo

3rd place - Sandy Graue for her Monarda photo

Category: Habitat

1st place - Becki Sheets of Blackwell for her Cholla habitat photo

2nd place – Becki Sheets for her *Coreopsis* habitat photo

3rd place - Tom McCreary of Oklahoma City for his 2 yuccas habitat photo

Category: Habitat, first time submission

1st place - Sandy Graue of Tulsa for her cypress swamp habitat photo

2nd place – Sandy Graue for her yucca habitat photo

3rd place - Richard Waters of Broken Arrow for his foxtail grass habitat photo

Category: Ferns

1st place - Tom McCreary of Oklahoma City for his fern photo

2nd place – Becki Sheets of Blackwell for her fern frond photo

3rd place - Tom McCreary for his emerging fern crozier photo

Category: Ferns, first time submission

1st place - Richard Waters of Broken Arrow for his fern frond photo

Fern Crozier by Sallie Webb



CHAPTER ACTIVITIES

Northeast Chapter Sue Amstuzt

Trevor Howard, member of the Tulsa Cacti and Succulent Society, presented the program for Northeast Chapter's May 4 meeting. The Cacti and Succulent Society, like ONPS, is an affiliate of the Tulsa Garden Center, and it is always of value when organizations such as ours can make use of the expertise of other affiliates. Mr. Howard brought live plants from his garden to illustrate his informative presentation on the eighteen varieties of cacti native to Oklahoma.

The Chapter visited the J. T. Nickel Preserve near Tahlequah on Saturday, May 9. Rainfall in the eastern part of the state had created lush, luxuriant growth in the trees, shrubs, and wildflowers of the Preserve which is managed by the Nature Conservancy of Oklahoma. Six members and Chris Wilson, Preserve manager, participated in the day-long excursion. The Preserve is home to a wide variety of plant communities, ranging from prairie/ savanna, to riparian, to open woodlands.

Two other field trips are planned for Northeast Chapter in the next few weeks. The first, on

May 23, will be to Birch Lake in Osage County near Barnsdall. The second, on June 13, will be another plant survey at the site of the Oklahoma Centennial Botanical Garden northwest of Tulsa. Both trips will begin at 10:00 a.m. and conclude in the afternoon. Participants are encouraged to bring water, a sack lunch, insect repellant, and plenty of sunscreen.

The Chapter sponsored an information / merchandise table at the Jenks Herb Fair on April 25. Kim Shannon, Ethel Mae Brown, Sue Amstutz, and Karen Haworth provided ONPS and Color Oklahoma literature and offered Society merchandise to the hundreds of visitors who streamed up and down Main Street in Jenks during the one-day affair.

An important event taking place on Saturday, June 27, will be the official Grand Re-Opening of the Interpretative Building at Oxley Nature Center in Tulsa's Mohawk Park. The building had been closed for many months while extensive renovations, remodeling, and upgrading of facilities were taking place. Though the newly remodeled building has been open for several weeks, the Grand Re-Opening will feature daylong experiences designed to highlight the work of the Oxley staff with the public. Included in the festivities will be an afternoon Farmer's Market and Green Fair. ONPS has been invited to participate in the Green Fair by offering our literature and expertise on wildflowers and native plants.

Our Fabulous Wildflower Friday social times at Panera Bread on East 41st Street will continue through the summer months on the third Friday of each month—June 19, July 17, and August 21.

The next meeting of the Chapter will occur on Monday, September 14 with the program to be announced at a later date.

Cross-Timbers Chapter Elaine Lynch

Our fall field trip is scheduled for September 19th. We will make a return visit to the Bustani Plant Farm, owned by Steve and Ruth Owens. Steve and Ruth have beds in their display gardens planted with Oklahoma wildflowers. We visited them in May 2005, and saw the gardens in late spring flowering. This return visit will give us the chance to see how they look in late summer/early fall. The Bustani Plant Farm is located south of Stillwater. The Owens's concentrate on mailorder but are open at special times for on-site plant sales. To learn more about the Bustani Plant Farm, visit their web site: www.bustaniplantfarm.com.

We will meet on the OSU campus to car pool to the Bustani Plant Farm. Exact place and time will be in the August Gaillardia.

On November 6, 2009, we will hold our fall potluck dinner. Our speaker will be John McClenny, director of Stillwater Parks, Events and Recreation. He will speak about plans to create designated natural areas in low-use areas of some 5 or 6 Stillwater parks. The goals are to reduce natural resource consumption, maintenance costs, and pollution, and to promote reestablishment of wildlife and native plants. Mr. McClenny's talk was tentatively scheduled for this past March. We decided to postpone it when we had the opportunity to hear Bellamy Parks-Jansen speak during her visit to Stillwater in February. We will hold our annual election for chapter officers during the dinner. We ask that

chapter members consider running for office or nominating someone to run for office.

Contact Paul Richardson at 405-377-4831 for more information about either event.

Central Chapter Jeannie Coley

On March 30, Steven Smith spoke about Native Rangeland Management to the Central Chapter. Smith is a Wildlife and Fisheries Consultant with the Samuel Roberts Noble Foundation, Inc. located in Ardmore. www.noble.org/.

May 3, Sunday - Ten of our members surveyed Recreation Area # 2 on the north shore of Lake Stanley Draper. Afterwards, we paused to eat at one of the new, covered, picnic tables. Several blue birds in their mating plumage flitted from tree to tree playing 'follow me' on the branches of nearby trees. They were in full view of the group the whole time, adding a pleasant ambience to the evening and although it was cloudy and a bit wet we had a great time. Learn more about the Draper Natural Area (DNA) project by reading Sheila Strawn's article in this issue

June 13th Saturday - Festival in the Park - Marilyn Stewart will be a featured speaker. Tina Julich will represent ONPS and Color Oklahoma with a booth at the festival. Will Rogers Park, 3400 NW 36, OKC.

www.okc.gov/Parks/will rogers/index.html

June 14th Sunday 1:00 pm - ONPS members and their guests are invited to Patricia Folley's farm 15100 Etowah Rd, Noble. The property includes a number of diverse eco-systems including a deep spring fed pond where gigantic koi can often be spotted, and another pond with mosquito fish and interesting bog plants. Pat, who is an OU Bebb Herbarium volunteer, has documented many of the plants on her place. She will set up the "40acre herbarium" on the front porch. Bring a sandwich for yourself and a snack to share. Pat will furnish cold drinks. Directions to the Folley Farm: "From Norman, take SH 9 east to SE 120th Street. Thunderbird Lake will be visible on the left; turn right on 120th and proceed three miles to the first stop sign. That's Etowah Road. Turn left (east) on Etowah and proceed 2.6 miles. There is a big green mailbox at the bottom of a hill with my name and address on it, and a gate to the right of the road. Follow the gravel drive to a green

house up on the hill, and you're there. Phone 405-872-8361 if you get lost or discouraged."

No indoor meetings are scheduled for July or August.

Contact for more Central Chapter information Betty Culpepper, bculpepper3@cox.net

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.

WELCOME THESE NEW MEMBERS

Jocelyn Bennett, Edmond
Alyne Eiland, Tulsa

Lane Greer and Mark Fishbein, Portland, OR
Kevin and Britta Gustavson, Tulsa
William Knecht, Pocasset
Marci Hawkins, Broken Arrow
Isaac and Jennifer Ogle, Fayetteville, AR
Ben Pressman and Deborah Bright, Drumright
Laurie and Paul Ribitzki, Cleveland
Lynn and Carl Roberts, Luther
Rebecca Roundtree, Oklahoma City
Sandra Schwinn, Broken Arrow
Susan Treadway, Gladwyne, PA



Spotted St. John's Wort by Richard Waters

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