

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

Volume 25, Number1 Spring 2010

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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.

March 26: Cross-Timbers Chapter Meeting. Judy Jordan will be speaking. Page 7

March 29: Central Chapter Meeting. Patricia Folley will deliver her "Botanizing with the Best". Page 7

April 10-11: Field Trip to the Carey's Woods (Lynn Michael's mom). President's Paragraph.

May 3-4: Wildflower Workshop in Lawton. More to be mailed in March or early April.

Field trips are planned by all chapters but no dates and times have been finalized.

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

## ONPS THANKS THESE DONORS

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#### PRESIDENT'S PARAGRAPH

# Lynn Michael

I would be a professional student if someone would pay me to do so. I hope to never stop learning, I want to know everything. It is said that the beginning of wisdom is the realization of how little one knows. That is certainly true of the wildflowers of Oklahoma. Each of us comes as teachers or students, some to appreciate the beauty and diversity of our native heritage, some to protect and enhance it.

I have been delivering the same mail route for ten years and yet just before I transferred off that route I saw a plant I had not seen before. I decided through the key and through fellow botanists that it was Dasistoma macrophylla or mullein foxglove. Finding a new plant just makes my day, and that is why, after all this time, I have transferred to a different route in Claremore. Now this spring I will have a chance to find and admire plants in new territory and, hopefully, some new species. But, I will dearly miss revisiting those finds of past years that continued to give me pleasure. In fact, I was reminded of that old saving "Familiarity breeds contempt." And I thought, what fool said that? The more wildflowers I see, the more I want to find and the more I want to know about them. I will probably be driving around my old mail route on my days off to catch those "familiar" friends.

According to our by-laws the Purpose of the Society is "to encourage the study, protection, propagation, appreciation and use of the native plants of Oklahoma". If we are not covering all areas of this purpose, please consult me and discuss how to rectify the situation. We have all heard jokes about the oldest profession. Well, I contend that the oldest profession on earth is a botanist. We began in a garden and were required to be stewards of all that was there. People who love native plants and work in that field are very blessed. Anyone with a job they love is very lucky. But we can all work toward these goals even if it is our hobby and not our vocation.

Many people expressed an interest in revisiting my mom's home at Lake Eufaula. We saw it during the dormant season when we were there for the Annual meeting in October. So, I invite you all to come back for a field trip the week-end of April 10-11, 2010. No need to register as meals will be on your own. You have the info on lodgings

from the annual meeting flyer or you may pitch a tent on their property. Just send me an e-mail at zebraweeds@sbcglobal.net or call me at 918-381-0219.

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# IMPORTANT GENERAL NOTICES

The Wildflower Workshop will be May 7-8, 2010 at Lawton. We have not finalized all the speakers yet, so flyers will be mailed separately around March or early April. Save the date, as this is a very interesting area of the state.

2010 Service and Anne Long Awards:

August 31 is the final date for nominations for this honor to be made. The recipient of the award must be a member of ONPS in good standing, have exhibited service to the Society above and beyond that normally associated with membership, and has carried out assigned responsibilities in an exemplary fashion. Nominations must be in writing, with documentation supporting the prospective recipient's qualifications for the Service Award.

Send nominations to Sue Amstutz, 4190 E. 46th Place, Tulsa OK 74135 by August 31, 2010.

The Anne Long Award is for individuals or groups that exemplify the goals of ONPS. Send documentation to Gloria Caddell, Dept. Biology, UCO, 100 N University Dr., Edmond, OK 73034 by August 31.

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**BOTANIST'S CORNER** 

PROTECTING POLLINATORS

Chadwick Cox

Although this article is not strictly about botany, the topic is certainly pertinent, being about pollinators, or more correctly, a lack of pollinators. Although native pollinators are the focus here, most everyone is familiar with the colony collapse disorder (CCD) of honey bee hives where most of the workers in the winter just disappear. The cause for CCD is still under research. A Canadian bee specialist reports that loss of Canadian hives, where the carcasses remain in the hive, are contaminated with varroa mites that are resistant to pesticides commonly

used there. He thinks this might be the same cause of CCD here. Agricultural Research Service reported the only pathogen found in almost all samples from honey bee colonies with CCD, but not in non-CCD colonies, was the Israeli acute paralysis virus, a dicistrovirus that can be transmitted by the varroa mite. It was found in 96.1 percent of the CCD-bee samples. But this does not prove a causal relation. Honey bees are an European import but native pollinators have their own problems.

Could the loss of pollinators lead to BCD, botanist collapse disorder?

The reason for writing this article arose from a recent request that ONPS received from Xerces Society and other organizations asking for our support of their petition calling for regulation of commercial bumblebee trade. Bumblebees are major pollinators for commercial crops such as tomatoes. The shipment times and areas of these commercial bumblebees correlated with the sharp decline in 4 species of native bumblebees, one of which may now be extinct. Our board agreed to sign on after considering the facts. My own review lead me to write this article.

A visit to the Xerces Society's website, www.xerces.org, provides an introduction to the whys and wherefores of the decline in many pollinators and links to other useful information. They have Red Lists of various pollinators that are at least vulnerable to extinction if not at a higher level of danger. In addition to the four bumble bees mentioned above, there are four others on the list. Other native bees are listed as well. While bees are particularly good pollinators, there are many other pollinators, butterflies, moths, flies, etc., that have their own Red Lists.

We may not be capable of helping in the research on causes of the declines in numbers of pollinators but we can help in increasing these pollinators chances of surviving. Marilyn Stewart has lectured on the how to improve the lives of butterflies and moths and similar aid can support bees. Instead of certain plants for the larva to eat as needed for the lepidoptera, bees need a place for nesting. For 70% of bees, they require open ground for nests. The other 30% nest in wood, although some may nest in hollow plant stems. According to instructions for a nesting site for smaller bees, I drilled different sized holes in blocks of wood and hung one each in the front and

back of the house near flowers but never saw bees nest there. Bumblebees primarily are ground nesters but you can make nest boxes for them and that information is at www.bumblebee.org. The rate of occupancy of these nest boxes is 30% at best so you may need several to assure you have even one with bees. Perhaps I should have made more bee blocks.

At the end of winter, a mated bumblebee emerges from hibernation and looks for a suitable nest site. Only these new queens live through the winter. The queen at first will raise small workers and these then will raise more and bigger workers. Here in Oklahoma, the queens may be out and about as you read this. All of these bees are raised on nectar and honey. So the other thing you can do is to plant flowers they like.

Bees generally prefer flowers in colors that they see best; white, yellow, blue and ultraviolet. The queen needs those that bloom very early and later those would be queens need even more late blooming flowers to build up their energy stores for the winter. The whole enterprise needs flowers in between. From the Xerces website are links to lists of suggested genera and species for different areas but you undoubtedly have already come up with your own suggestions. Obviously, pesticide use during blooming is a no-no.

If all of us do these things to help our pollinators, and perhaps our botanists and entomologists friends, we can help. What is really needed is that every scrap of land that is not constantly mowed or used to raise monocultures be planted in native wildflowers. If that occurred, my guess is our native pollinators would not be in the trouble they are in. But how do you convince all those people that think these flowers are just worthless weeds that these "weeds" are just what is needed for our country's health if not our own security?

You can read the letter we signed onto and see the other native plant societies that also signed at http://www.xerces.org/wp-content/uploads/2010/02/native-plant-society-support-letter-for-bumblebee-regulations.pdf

#### **COLOR OKLAHOMA**

# **Tina Julich**

Need volunteer for CO committee. The Color Oklahoma team is still in need of a volunteer to join the CO committee. We usually meet during the week in various locations around the state, so you will have to be available during the week. What does the Color Oklahoma Committee do? We oversee the matching grant program; deciding what organizations will receive a matching grant, coordinate the ordering of wildflower seeds planted around the state, man information tables at festivals to give out information on Color Oklahoma and our wildflower planting programs. If you would like to help with this great and rewarding job, contact Lynn Michael.

Car tags: Show your support for Oklahoma wildflowers by ordering a new Color Oklahoma special vehicle license plate. The tags are issued by the state Tax Commission and cost just \$35 plus a \$2 mailing fee, with \$20 of each tag going to our wildflowers.

You can download a tag order form from the Color Oklahoma website; www.ColorOklahoma.org, or you can email a request for a form to wildflowers@coloroklahoma.org and we'll send you one by mail. Your local tag agent can also provide a form. Just fill in the blanks and mail your check for \$37 and the form to the state Tax Commission.



**BOOK REVIEW** 

# Particia Folley

Green Planet: How Plants Keep the Earth Alive: by Dr. Stanley A. Rice

I know Dr. Rice as a professor of botany at SEOSU, and as an amazing speaker on any subject in Botany. So I was not surprised when this book turned up as a recommendation to me from Amazon.com.

In a lively prose which sounds just like his lectures, Rice begins with a brief introduction using the plight of the Oklahoma population of seaside alder (*Alnus maritima*) as example of the current extinction crisis.

In a chapter called "An Injured Paradise", he recounts the loss of green life due to human expansion in this way: "But it is not just a loss to those who feel inspired by a poetic spirit in the woods. It is a loss that threatens everyone who breathes, eats, and drinks — that is, everyone". And again, "in a world of war and poverty, the environment cannot be rescued by environmental engineers". He quotes a common statement: "Sorry, I'm not into the environment" by countering with a question: "What part of the environment are you not into — the eating part, the drinking part, or the breathing part?"

How will global warming affect the green lives? Studies indicate that plants we know as weeds, like the animals we know as pests, will be benefited at the expense of useful, even necessary plants. Then there is the effect of industrial agriculture to contend with. Those practices reduce the humus in the soil, depleting it of the nutrients necessary for continued production. Without humus, earthworms have nothing to live on while they perform the magic of recycling. Erosion is described as "tragic".

Having established the problem as the reader's personal task, he then lays out detailed and achievable practices that can help heal the green community. Page 247 becomes lyrical on the long-neglected practice of fallowing: allowing the soil to heal between harvests. He quotes the Old Testament on the necessity of resting the land, with a warning that the instructions still apply today, perhaps now more than ever.

By now convinced of the urgency of doing something, you are given 37 fine-print pages of notes and references and a thorough index.

Understand, though, that this is not a text-book. There is no quiz at the end. You will read this fine book for enjoyment, and if enlightenment follows, then you got the point.

# PAT"S REQUEST

Pat Folley has requested that we look for a rare plant as follows. Taylor and Taylor report the presence of *Anemopsis californica* in the central part of Oklahoma, but we have no specimens in the herbarium (Bebb). It is a water-plant, with a pretty flower that resembles an Anemone, white-petals on a simple stem. The herbal name for it is "yerba del mansa". I'd sure like to get a specimen.



William & Wilma Follette @ USDA-NRCS PLANTS
Database / USDA NRCS. 1992. Western wetland flora: Field
office guide to plant species. West Region, Sacramento.

Bruce Hoagland added the following. Yes, I would like to relocate a population as well. The only specimen is from Woods County dated 1935. The location is reported to be from between dunes near Waynoka. I spent sometime looking for it in the late 90s and early 2000s with no luck

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# **NPSOT MEETING**

# Call for presentations

The Native Plant Society of Texas will hold their 30<sup>th</sup> Anniversary Symposium in Denton on October 7-10, 2010. Titled "Save Texas One Landscape at a Time: Our Native Plants Light the Future", in this symposium we will return to our roots and reach not only our members, but a wide audience of those interested in:

- 1) The preservation of our botanical heritage and native plant habitats, and restoration of native plants in open or urban spaces, such as farms and ranches, parks, municipal and private open spaces, highways and roadsides.
- 2) The reasons for, the economic and other benefits of, and "how-to" of landscaping with native plants, whether at commercial, municipal or residential properties.
- 3) The current status of native plant research, conservation, and utilization in Texas and nationwide; accomplishments of the past 30 years; priorities & methods to address future challenges.

The audience will include teachers, nursery retailers and growers, irrigation designers and installers, botanical garden professionals, city planners, landscape professionals, Master Naturalists, garden club members and others who

influence the public to preserve habitat, reduce pollution and conserve water by using native plants.

Each attendee should come away armed with the tools and confidence to put these concepts into practice. Members should be inspired by new directions in the native plant cause and be challenged to greater participation in NPSOT's mission.

With this in mind, NPSOT invites you to submit a paper(s) &/or workshop proposal addressing one or more of the above topics. Articles on research related to these subjects are welcome. Please respond within the next 30 days as to your potential interest and a possible title or topic.

This early response will allow us to make preliminary plans for an invigorating and inspiring symposium. Abstracts will be due next summer, date to be announced.

Please reply to state@npsot.org with author, title, a brief description of the paper or workshop, mail and email addresses, and include "NPSOT 2010" in the subject line. For questions, please contact the NPSOT state office at 830-997-9272

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2009 ANNUAL MEETING

#### Lynn Michael

This year's Annual Meeting was at Lake Eufaula at the home of Mary Margaret Carey and son, Scott. Teamwork was the word for the whole meeting. Lynn and her mom and brother prepared a lot of the meals and Scott had mowed and marked trails for many, many weeks beforehand and made trail maps. Gloria pitched in with the luncheon items, and almost everyone helped put out food, move chairs and do whatever was needed. During and after the fieldtrips there was much collaborating on identifications and animated conversations about what had been seen. The trails included woodland, sandy beach and open fields. Some of the less common blooming plants we saw were Yellow Leaf-Cup (Polymnia Canadensis), Scrophularia marylandica, Irasine (ID by Gloria) Heliotrope indicum, Cardinal flower (Lobelia cardinalis) and rose mallow. We also pulled down mistletoe and saw both male and female flowers. Many species were berried or with fruit, including Persimmon trees,

greendragon, Lizard tail, Passiflora incarnate, and Carolina Buckthorn, to name just a few. Bruce Smith was excited to find a bulbous fern. Many people enjoyed taking the four wheelers and going further up the mountain than one could attempt on foot. On Sunday, on intrepid threesome of Bruce Smith, Scott and Lynn went up to a different area and found more ferns, a beautiful bluff overlooking Mill Creek and Orange-fruited horse gentian.

The Saturday evening speaker was Pat Gwin of the Cherokee Nation and he told us of some of the important plants in Cherokee history. He spoke of Bloodroot, Huckleberry (*Vaccinium pallidum*), Shagbark Hickory and their efforts to reintroduce plants that are less prevalent today.



Sue Amstutz presenting the Service Award to Mary Korthase



Ron Tyrl presenting the Anne Long Award to Pearl Garrison

The identifications went on for days after the meet and more and more species were added to the overall list. Some included quite a bit of research and amazing traits were discovered. This story from Sue Amstutz sums it up well, "now there is one more to add: Woodland Lettuce, Lactuca floridana (also ID'd by Gloria.) There's a story behind this one! Dale and I found this very tall 5'

to 6' high plant on the west side of the Shady Lane Trail, about 100 yards from where the trail enters the woods from the clearing north of the garage. It had deeply cut, huge leaves but no flowers in that morning. On Sunday while we were having a board meeting, Dale wandered back to have another look and found a couple of small bluewhite blossoms on the plant. Dale told Gloria what we had found and brought her one of the huge leaves he had plucked. Gloria at first couldn't identify the plant, although she suspected it was a wild lettuce, but the evidence didn't match her keys. So after board, she took Bruce to see the plant, and he too was stumped. After we got home and several days had passed, I got an excited email from Gloria. She had finally keyed out the plant and discovered that while most of the lactuca genus has achenes with beaks, the plant at mom's place had no beaks, which is what had thrown Gloria off the track. In further study, she discovered that in some species of lactuca, there are NO beaks on the achenes."

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#### INDOOR OUTING

Sheila Strawn

Since the Annual Meeting last Fall, the cold and icy weather has precluded any winter field trips, but the Mycology Chapter met several times, planning our 2010 Indoor-Outing. It was held on Saturday, February 6 and Dr. Wayne Elisens, Director of the Bebb Herbarium and member of ONPS, helped us host about 45 members and 25 non-members (potential members) at the George Lynn Cross Botany and Microbiology Building on the OU Campus.

After our guest speaker, Marielle Hoefnagels from the Departments of Botany and Microbiology and the Department of Zoology gave us a great introduction to the "forgotten" Fungi Kingdom, four of our mycology chapter members, Clark Ovrebo, Ken Hobson, Steve Marek, and Steve Strawn gave presentations about interactions among fungi and organisms of other kingdoms.

When we returned from lunch at various restaurants on Campus Corner, participants were shuttled to Oklahoma Mushroom Gardens east of Norman in vans provided by the Department of Zoology and driven by Ken Hobson and Brendan Furneaux. Everyone who toured OM Gardens was

very impressed with their facility and was delighted about what they had learned. If you were one of those who didn't get the chance to attend that day, be sure to contact the owners, Steve & Jacki Morton if you want to buy mushrooms or mushroom growing kits. You can also take their tour or even help them with their expansion projects, by being part of a USDA research grant project. You can contact them at (405) 413-5649 or omgarden@gmail.com or visit their website www.omgardenmushrooms.com. They'd really like to see you again — or for the first time.

Being such a small chapter, Lisa Rountree, Gayle Snider, and I had to have help from Tina Julich, Betty Culpepper, and Jeannie Coley from the Central Chapter, and Sue and Dale Amstutz from the Northeast Chapter with setting up and TCB. Everyone's help was greatly appreciated.

CHAPTER ACTIVITIES

**Northeast Chapter** 

A replacement for Sue Amstuzt as Chair of the NE Chapter has not stepped forward so there will be no report for this quarter.

Cross-Timbers Chapter Ron Tyrl

The weather won as the snow and ice storm of January 28 & 29 buried our desire for a scheduled field trip to Stillwater's designated natural areas. We were going to look at six area's established by the city's Department of Parks, Events and Recreation and hopefully develop ideas as to how the chapter could help with their establishment and improvement. The trip has been rescheduled for Saturday, February 20th (weather permitting of course).

Chapter members also are looking for their favorite recipes in anticipation of hosting a potluck dinner for out-of-town ONPS members attending Judy Jordan's lecture on Friday, March 26th. The dinner will begin at 6:00 PM in Room 110 of the Life Sciences East Building immediately adjacent to the library. The OSU Botanical Society (a student organization) will cohost. You don't have to bring a dish; we'll have enough food for all.

Our next local field trip is planned for late May or early June, but a definite date has not been set.

Central Chapter Jeannie Coley

Indoor meetings are held at the OSU/OKC
Student Center 2<sup>nd</sup> floor North Conference Room,
on the last Monday of most winter months.
OSU/OKC 900 N. Portland Ave, Okc, OK 73107
Field trips will be scheduled later for the warmer months.

Feb. 22, 7 p.m., our speaker will be someone most members know, Dr. Ron Tyrl, botany professor emeritus, esteemed botanist, researcher, teacher and author. He spent many years as curator of the OSU Herbarium and collected many new specimens of native plants. Dr. Tyrl, a terrific storyteller, will entertain us with "Forensic Botany". We will learn how plants helped solve some of the mysteries from Crime Scene Investigations. What fun!

March 29, 7 p.m, Patricia Folley will present "Botanizing With The Best" Long-time dedicated botanist and Bebb Herbarium volunteer, Patricia Folley, will speak at our March meeting. She has trudged through the terrain of most Oklahoma counties, almost since the inception of the organization. She wasn't alone in most of her plant seeking adventures.

Pat knew and worked with great Oklahoma botanists. When asked about her mentors, she replied, "... some of the "old-timers" that I had the privilege of following on field trips include Dr. Doyle McCoy, Dr. Jim Estes, Dr. George Goodman, Dr. Paul Buck, Jimmie Norman, Drs. John and Connie Taylor, Berlin Heck and Dr. Neil Sunnison. There are many more but that's enough for a starter."

Mycology Chapter Sheila Strawn

Although I mentioned our chapter was small in the article about the Indoor Outing, we can no longer complain about the small size of our chapter, however. Six more members joined us during the meeting. In addition to looking out for lichens, which, as we learned at the Indoor-Outing, can be found at any time of year, we now have members watching for mushroom "blooms" in Stillwater, Shawnee, Tulsa, Lake Thunderbird, Lake Stanley Draper, and Martin Nature Park.

When that happens, chapter members will be sent date, time, location, and other "impromptu" field trip information, electronically. We are currently developing a "Facebook" page and an email/cell phone communications network to send out those fieldtrip details. While we realize that some may not have email addresses or cell phone numbers for quick notifications yet, we're hoping this will encourage you to get into the electronic age, and it has the potential of adding more, younger mycologists to our membership rolls. Incidentally, we want to thank Dr. Bruce Smith, who brought about 9 students from McLoud High School to the Indoor-Outing. How's that for recruiting younger members?

If you'd like to receive such notices, please email or call me with your contact information and we'll let you know about upcoming trips, including the Morel walk we are planning in March or April (as soon as they show up); Sheila Strawn, Chair, sastrawn@hotmail.com, Cell: (405) 733-0864. Hope to see you then.

## WELCOME THESE NEW MEMBERS

Dawn Mahiya, Midwest City
Dr. Stephen M. Marek, Stillwater
Gregory D. Mayberry, Meeker
Leslie and Alan Moyer, Hulbert
Barry L. Redlinger, Tulsa
Amy Richardson, Stillwater
Channing Richardson, Stillwater
Adam and Maranda Ryburn, Mustang
Gayle Snider, Oklahoma City
Angela Tady, Edmond
Diane Vanlandingham, Norman

#### 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.

# First Annual Paul Buck Memorial Lecture in Plant Ecology

# What is the Future of Rocky Mountain Wildflowers and their Pollinators in a Changing Climate?

David Inouye – Professor of Biology University of Maryland

University of Tulsa – Helmerich Hall Room 219 Thursday April 15, 2010 7:00 p.m.

> All Welcome Reception Following

Members of the Oklahoma Native Plant Society are especially invited to attend the First Annual Paul Buck Memorial Lecture in Plant Ecology on Thursday April 15<sup>th</sup> 2010 at 7:00p.m. in Helmerich Hall at the University of Tulsa.

Paul Buck was Professor of Botany in the Biological Sciences
Department at TU from the 1964 through 1989. He was a botanist
and plant ecologist who gave generously of his time, knowledge and
leadership to students at the University of Tulsa and the Rocky
Mountain Biological Laboratory as well as to friends and colleagues in
the Oklahoma Native Plant Society. He was on the founding
committee of ONPS and served the Society in many capacities until
his death in 2008.

David Inouye from the University of Maryland has been invited to give the first lecture. Inouye was Paul's colleague and friend at RMBL, beginning in the early1970's. At RMBL in Gothic, Colorado Inouye has studied resource partitioning by bumblebees, territoriality in hummingbirds, ant-plant mutualisms and pollination biology. Most recently he has focused on the influence of changing climate on phenology and abundance of flowering. Inouye will also present a seminar on Friday, April 16<sup>th</sup> at 3:00 in Room 300 of Oliphant Hall, The University of Tulsa – 'How does natural history become science and what can it tell us about climate change?'

Paul Buck's family will attend the Thursday evening lecture and the reception. The lecture is free and open to the public. Contributions to sustain the lectureship will be gratefully accepted.

For more information contact Constance Murray-Goble, Tulsa Community College, 918-595-7257 or cmurray@tulsacc.edu or Estelle Levetin, University of Tulsa, 918-631-2764 or estelle\_levetin@utulsa.edu.

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FOR JOINING OR RENEWING USE THIS FORM		
Fill out this form or supply the same information. Make checks payable and mail to Oklahoma Native Plant Society, 2435 South Peoria, Tulsa, C Membership is for Jan. 1 - Dec. 31 of current year and dues include sub-	OK 74114.	
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#### The Gaillardia

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Historian Sharon McCain

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2011: Ron Tyrl and Marilyn Stewart
2012: Clare and Buddy Miller

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OPEN Northeast
Betty Culpepper Central
RonTyrl Cross-Timbers
Sheila Strawn Mycology

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