Gaillardia

The Oklahoma Native Plant Society Newsletter

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

Volume 15, Number 2
Summer 2000

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FOR NEXT ISSUE IS
15 August 2000

CALENDAR

Note: the events dated below are identified by either a page number where the event is fuller described or the name of the contact person for that event.

June 3 (Saturday) Cross-Timbers Field Trip. Page 8
June 10 (Saturday) Summer Board Meeting, 10 am-2 pm, Tulsa Garden Center. Sheila Strawn
June 10-11 MEHAWH garden tour Page 6
June 10 Oklahoma Gardening's 25th Anniversary Page 6
July 15 (Saturday) Central Chapter Meeting at Sharon McCain's Page 10
October 14-16, 2000 (Friday – Sunday) Student Center of Western Oklahoma State College. Field trips will be to Quartz Mountain State Park and surrounding area. Paul Reimer & Sharon McCain.

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

ONPS THANKS THESE SPECIAL FUND CONTRIBUTORS

Anne Long Fund
Judy & William Jordan
Ruth Boyd & Doyle McCoy

Harriet Barclay Fund
Judy & William Jordan
Ruth Boyd & Doyle McCoy
Paul and Lou Ann Buck

General Fund
Mrs. Carl Wiedeman's
Kirk and Loretta Bowers

PRESIDENT'S PARAGRAPH

Sheila Strawn
President, ONPS

This Spring has brought more opportunities for ONPS than I know what to do with. Some come with a phone call from someone who needs help right away, some come with a mailing from a government agency that needs input from concerned citizens, some come from members who have memberships in other conservation & education organizations like our own. Part of my job as president has been to get the volunteers together with the needs. This particular aspect of my job has been the most rewarding and pleasant because members are so willing to take responsibility. If I have failed to call (or email) you and ask for your help, it's probably because I don't know what you'd like to do. With our new computerized membership list, we will soon be able to keep track of things like that. As we grow we will be needing more help with field trips, mailings, meeting accommodations, etc. Please let me know what you'd like to do. I'm starting a file and I'm hoping to hear from you. Here are a few of the opportunities we've been given:

Georgia Prakash, President of Native Plant Society of Texas, with whom we had a joint meeting a year and a half ago, sent an invitation to our members to present a paper at their Annual Meeting on Oct 19-22 in Denton Texas. Their subject this year is the Cross Timbers, the Grand Prairie, and the Red River area. You can reach her at prakash2@airmail.net, or at 1905 William Brewster, Irving, TX 74114

Neil Garrison, Audubon Society of Central Oklahoma's President has asked if any of us would like to help them upgrade & add to a nature trail they are working on in Southeastern Oklahoma. It sounds like a great opportunity to hike & work at the same time. His number is 755-0676

John Blevins, who has previously given presentations at ONPS meetings regarding the use of earthworms in home gardens, recently gave the Central Chapter a great opportunity to take part in a program promoted by the Oklahoma Food Bank. It's called "Red Dirt Gardeners" and promotes the establishment of community gardens for beauty, recreation, and social needs.

The U.S. Forest Service has completed the Ozark-Ouachita Highlands Assessment.

It reports on social, economic, and biophysical trends and conditions in the Highlands of Arkansas, Oklahoma, and Missouri. This report will be used to revise the land and resource management for these areas. You can request the set of 5 assessment reports (GTR-SRS-31 through GTR-SRS-35 or the Summary Report alone (GTR-SRS-31) from Publications, Southern Research Station, P.O. Box 2680, Asheville, NC 28802 or call 828-257-4830. They are available online at www.fs.fed.us/oonf/ooha/welcome.htm.

Don't forget that the state and local chapters of ONPS are always looking for officers and at every meeting we need members to help at membership & book tables. Please let me know what you'd like to do!

Harriet Barkley Award presented at the Oklahoma Junior Academy of Science Meet in Ada.

By Connie Taylor

The Junior High winner of the best botany paper was Brandon Fimple of the Vinita Public School System. His research was entitled "The Battle of the Space Invaders: The Science of Allelopathy. " Brandon collected leaves from 29 species of trees near his home. He then tested to see if the leaf extract inhibited the germination of radish seeds and pinto bean seeds. For those species showing strong inhibition, he tested their extract on the germination of marigold and watermelon seeds. Brandon has an excellent writeup and made a very interesting presentation of his research. Not only did he win the ONPS award, but he received several other awards. Altogether an outstanding research project. Brandon is an 8th grader.

The Senior High winner was John W. Story II, from McLoud High School. His research is entitled Pleopeltis polypodioides (L.) E.B. Andrews & Windham. (The Resurrection Fern). John visited over 50 populations of this fern growing in eastern Oklahoma. It is usually found on tree trunks and branches or on rocks. John noted the fern seemed to always be associated with moss. He wondered if the moss helped the fern to grow. From the numerous experiments conducted, he

found the plants stayed hydrated longer if they were embedded in a mass of moss, and dried out faster if the moss was removed. John has a very interesting writeup and made an excellent presentation. John also received numerous honors at the OJAS and Science Fair. He is a Junior. He was selected to attend the National Science camp in Virginia this summer.

Oklahoma Native Plant Society
2000 Photography Contest

The purpose of the photography contest is to encourage the study, protection, appreciation and use of Oklahoma's native plants.

Many great photographs were submitted in each category of the contest. The contest was judged in January by Linda Lockett of Color Chrome in Norman, Professor Susan Barber of the Oklahoma City University, and Professor Andrew Strout of the University of Oklahoma The photography committee thank both the contestants for their photographs and also the judges for their time. Based on recommendations from the judges last year, we increased the photo image size to 5"x7". The judges felt that this increase improved the quality of photos submitted and should be continued. Other suggestions include cropping photos, eliminating background clutter, and sharper images. Overall, they were very impressed with the quality this year, and even awarded a "Best of Show" and Best Botanical!

BEGINNERS:

1st Place:	Barbara Klein, Warr Acres, OK	Fungus
2nd Place:	Francis Callahan, Carrollton, TX	Wichita Mountains
3rd Place:	Ellen Jonsson, Oklahoma City	Woolly Phlox
Hon. Mention:	Ellen Jonsson, Oklahoma City	Century

AMATEUR CLOSE-UP:

1st Place:	Gregory Mayberry, Meeker, OK	Wavy-leaf Thistle
2nd Place:	Charles Lewallen, Henryetta, OK	Wild Azalea
3rd Place:	Sheila Strawn, Midwest City, OK	Winding Trail
Hon. Mention:	Gregory Mayberry, Meeker, OK	Shooting Star

ADVANCED CLOSE-UP:

1st Place:	Jeannie Ho Coley, Norman, OK	Spiranthes Orchid
2nd Place:	Leslie Cole-Jackson, Edmond, OK	Showy Milkweed
3rd Place:	Charles Lewallen, Henryetta, OK	Slender Prairie Clover
Hon. Mention:	Patricia Folley, Noble, OK	Yellow Trout Lily

HABITAT:

1st Place:	Laurie Stillings, Harrah, OK	Coreopsis, Wichita Mountains
2nd Place:	Leslie Cole-Jackson, Edmond, OK	Kochia, Logan County
3rd Place:	Patricia Folley, Noble, OK	Highway Beautification Plant.
Hon. Mention:	Jeannie Ho Coley, Norman, OK	Pin Cushion Cactus

BEST BOTANICAL:	Charles Lewallen, Henryetta, OK	Texas Beclandies
BEST OF SHOW:	Dick Clapp, Noble, OK	Persimmon

The awards were presented at the Oklahoma Wildflower Workshop in Tahlequah, Oklahoma on May 19-20, 2000.

Summary - We received 95 entries from 22 entrants. All of the entries were accepted.

PLANTING THE MUSEUM

by Pat Folley

The old "Stovall Museum" at OU has a new name – a long name: the Sam Noble Oklahoma Museum of Natural History. As a fan of Dr. Stovall, I regret the necessity that impelled the change of name, and will henceforth just refer to the facility as "The Museum". I know I can do this, because once anyone has seen this one, all other museums will have to be specified, but this one will be the ONE.

Even unfinished, and only half or less of the projected displays are open now, it is a triumph and a treasure. The dinosaurs are pretty much complete, as is a small area of Ozark woodland habitat. The dinosaurs are incredible. Lively poses, great backdrops, and of course, the glass elevators that take you right to the eye level of the largest one. Skeletons are relieved by several huge bronze sculptures, pictures and such. Even dinosaur art is displayed. Soon there will be a prehistoric Indian village with real artifacts and a reconstructed house.

However, for me the real attraction is the grounds. With several acres of prairie to the south of the building, there is room for an attempt to re-create a living history of the ecological regions of Oklahoma. Much of the undeveloped land is on a remnant of old dairy farm that used it for pasture, and the mixed-grass prairie is still there.

Landscaper Steve Hill is performing daily miracles as he turns the terribly disturbed areas around the building into miniature Crosstimbers, Eastern deciduous forest, and gypsum hills landscapes. As a piddling-around type of gardener, I was sincere when I told Steve in April that it would not be possible to plant natives in that maze of muddy holes, some filled with dumped concrete and others serving as parking spaces for construction equipment, even in this year, much less by opening date of May 1. Guess what? He did it!

Within a week after my rash remark, Steve and his crew had excavated the mess, replaced it with real soil and tons of native rock, and started planting. They moved a 50-year old deciduous holly from under the water tower into the newly constructed stream bed, and it didn't even lose a leaf. Nature helped a little: the three days of actual planting was done during a gentle drizzle. There is a rocky-bed stream with living native plants and fish, a small waterfall, and some dry stream bed for the plants that like it just that way.

Against the south wall (the Museum faces north) are the heat-loving calciphiles. Mesquite and cactus rub elbows with gramma grasses and wild zinnia. Around the parking lot winds an embryonic crosstimbers, complete with sapling blackjack and post oaks. Rough-leaf dogwoods and buckbrush form the understory. I haven't seen briers yet, but expect to.

Still to come are a seasonal prairie stream, a mist system to maintain the woodland wildflowers, and maybe even a marsh. Expect miracles.

It's fun to be an oddball native plant gardener and all of a sudden find out that what I have is what they want. Even more fun to visit the museum and see my green children performing for such a great audience, in such a beautiful facility.

BOTANY BAY

By Paul Buck

Anthropomorphism

While browsing in a used book store I ran across a small book titled Chapters on Plant Life by Sophia B. Herrick published by the American Book Company and copyrighted in 1885. It was such a delightful work I could not resist it.

The author's style was common to that period, anthropomorphic (ascribing human form or attributes to a being or thing not human). It is clearly an unacceptable approach to scientific writing and will not be found in academic publications, yet does produce acceptable popular writing, as long as the reader clearly understands it is anthropomorhic.

Let me share a portion of the book as an example. You may feel some of the author's comments reflect a lack of knowledge of plant structure and function and I suspect you are right. It quickly becomes obvious we have come a long way since 1885 — where will we be in another hundred plus years?

On pages 96-98 the author writes - "People can sleep where there is light . But plants cannot. Until the darkness comes they go on working and working, no matter how tired they are, till the plucky little creatures drop in harness and die Many plants are not contented to merely stop working. That does not give them all the rest they need. The leaves want to lie down or to hug close to each other, in order to sleep comfortably and rise refreshed. If you notice carefully a spray of locust leaves, for instance, by daylight, you will see it look something like this (Fig. 33). I drew this, one bright

Fig. 33.—Locust Branch Awake. (*Robinia.*)

Fig. 34.—Locust Branch Asleep. (*Robinia.*)

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August day, just as it grew on the tree. The leaves are all spread abroad to catch the light and breezes. The thousand little mouths are open, breathing in the air. In the evening after it had grown dark, I went out and drew the same spray asleep (Fig. 34). There was just enough light for me to see but not enough to wake the locust leaves. There they lay, hugged up to keep warm, their little mouths pressed close against each other."

Later (page 100), the author comments - "Darwin tells us of a plant he says he watched carefully, and for two nights after having been violently shaken by the wind did not cuddle down to sleep. It was probably too much excited to rest properly."

This is an interesting anthropomorphic comment but I rather doubt Darwin put his observations in these words.

A number of years ago, while searching the shelves of the Oklahoma State University library, a small volume titled The Intelligence of Flowers caught my eye (Matterlinck, Maurice 1907, Dodd, Mead and Co.). It too was written in the anthropomorphic style and I think you will agree Chapter VIII is a beautiful description of the floral biology of Vallisneria, an aquatic member of the Hydrocharitaceae. That family is represented in Oklahoma by Limnobium and Elodea, some of the latter of which reproduce in the manner described:

CHAPTER VIII

"We cannot take leave of the aquatic plants without briefly mentioning the life of the most romantic of them all: the legendary Vallisneria, an Hydrocharad whose nuptials form the most tragic episode in the love-history of the flowers. The Vallisneria is a rather insignificant herb, possessing none of the strange grace of the water-lily or of certain submersed comas. But it seems as though nature had delighted in giving it a beautiful idea. The whole existence of the little plant is spent at the bottom of the water, in a sort of half-slumber, until the moment of the wedding-hour in which it aspires to a new life. Then the female flower slowly uncoils the long spiral of its peduncle, rises, emerges and floats and blossoms on the surface of the pond. From a neighboring stem, the male flowers see it through the sunlit water, soar in their turn, full of hope, towards the one that rocks, that awaits them, that calls them to a magic world. But when they have come half way, they feel themselves suddenly held back: their stalk, the very source of their life is too short; they will never reach the abode of light, the only spot in which the union of the stamens and the pistil can be achieved!

Is there any more cruel inadvertence or ordeal in nature? Picture the tragedy of that longing, the inaccessible so nearly attained, the transparent fatality, the impossible with not a visible obstacle! It would be insoluble, like our own tragedy upon this earth, were it not that an unexpected element is mingled with it. Did the males forsee the disillusion to which they would be subjected? One thing is certain, that they have locked up in their hearts a bubble of air, even as we lock up in our souls a thought of desperate deliverance. It is as though they hesitated for a moment; then with a magnificant effort, the finest, the most supernatural that I know of in the annals of the insects and the flowers, in order to rise to happiness they deliberately break the bond that attaches them to life. They tear themselves from their peduncle and, with an incomparable flight amid pearly beads of gladness, their petals dart up and break the surface of the water. Wounded to death, but radiant and free, they float for a moment beside their heedless brides and the union is accomplished, whereupon the victims drift away to perish, while the wife, already a mother, closes her corolla, in which lives their last breath, and rolls up her spiral and descends to the depths, there to ripen the fruit of the heroic kiss."

A beautiful, anthropomorphic description of an unusual approach to sexual reproduction in a flowering plant. Listen closely. You will find friends and colleagues making anthropomorphic comments but you and they subconsciously accepting them as such. (That squirrel out on the lawn is scratching its head. Probably trying to recall where it buried a bur oak acorn last fall.) Anthropomorphic writing is not an acceptable literary style from the scientific perspective. However, my vote is to recognize the shortcomings and continue using it - the results are interesting and often beautiful.

Diggs, Jr., D.M., B.L. Lipscomb and R.J. O'Kennon 1999 *Shinners & Mahler's Flora of North Central Texas*. Botanical Research Institute of Texas (BRIT) ISBN: 1-889878-01-4

Reviewed by Paul Buck

Members of the Society pursuing an academic approach to plant identification need to be aware of a recent publication prepared to cover North Central Texas but effectively encompassing much of central Oklahoma. It is Shinners & Mahler's Flora of North Central Texas. Prepared by D.M. Diggs, Jr., B.L. Lipscomb and R.J. O'Kennon, it was published by the Botanical Research Institute of Texas (BRIT).

The physical size of the work obviates its use as a field guide but the comprehensive treatment of the area and taxa dictates its presence on the book shelves of every botanist, amateur and professional, in Oklahoma and Texas. The 1600+ pages include an excellent, and very interesting, description of the region covered embracing geography, geology, climate, soils, history and vegetational association. There are over 170 excellent colored plates of more common species and each of the almost 2400 taxa included are illustrated by line sketches. Each Family, Genus and species is described in depth and at the specific level each taxon range, habitat, phenology and usage is provided. This is clearly a publication of interest to each of us and one that should be in every library in our state.

E. C. Pielou, *After the Ice Age, the Return of Life to Glaciated North America*.

Reviewed by Leslie Cole

If you ever wanted to know more about Lake Agassiz, drunkin forest, or what the heck a jokuljlaump is, boy have I got the book for you! It explains these subjects and much more.

ASK GRANDMA NATURE

By Pat Folley
May, 2000

Ah, Summer! When I was a child, "deprived" of the wonders of Television, Nintendo, and trips to the Mall, summer was devoted to "poking around". It is natural for naturalists and other children to poke around, and I want to remind you who are parents that it is good for the child in all of us.

I've been reading a wonderful collection of essays about enjoyment of rivers and streams, called "Riverwalking". It's by a teacher of philosophy named Kathleen Dean Moore, published by Harcourt, Brace and Company in 1995. Only the laws of copyright prevent me from copying here for you one essay titled "Winter Creek". So, I'll just poke through it and know that you will understand that the inspiration, if not the words, are from that book.

Of course, the art of poking around can be practiced anywhere there are sufficient varieties of things, like libraries, but the best way is to poke around in a natural place. A vegetable garden, for example, is 'way too organized: everything is strictly organized to make food grow where before there were only weeds. Still, it is possible to find interesting things there: insects like butterflies and grasshoppers, toads (if you haven't been too liberal with the bug spray), perhaps a little brown snake. Better places are woods and the edges of creeks and ponds, where human values haven't eliminated all the really fun stuff.

It takes discipline to poke around. The first lesson I had to learn when I started poking around with a trained naturalist was that I mustn't pick up trash. Soon, I was seeing nothing but trash. Since I learned to leave it alone, I seldom see it at all. Next, it is essential to abandon all intentional agendas. If I look for birds, I won't see lizards. If I look for lizards, I might miss the blackberry

flowers. The secret is in not looking for anything specific. Go out thinking "if I am lucky and observant enough, one of nature's secrets will be revealed to me". Then follow your curiosity where it leads you.

Interruptions are encouraged: begin, perhaps, by noticing a bird call. When you look for the bird, you may see that the tree, or the grapevine on it, is in bloom. Or you may notice an unusual bug, or that there is about to be a beautiful sunset. For practice, shut your eyes and try to figure out the source of all the smells. Dr. Moore suggests two other starters: wondering and hoping. You wonder why the butterflies are clustered on a bare mudbank. You hope the mosquitoes won't find you for a while. Wondering and hoping give you additional scenes of awareness to explore.

Poking around is less structured than studying, but requires more imagination than just strolling through the landscape. Have you noticed that you see more detail when you walk than when you drive through? There is another dimension of detail that emerges when you poke, allowing the local attractions to lead you constantly astray. It is always different, even in the same place. For example, I have a life-long habit of listing all the plants that are blooming on the first day of each month. In between, I am free to just enjoy the flowers. Guess which approach nets the most interesting results?

What do you get for a day of poking around? Seeds in your socks. Rocks in your pockets. Memories of tantalizing glimpses of little brown birds as they forage in the treetops. Butterflies in your soul.

Love, Grandma Nature

Herbs In The Lab: Can Not Do Without Them

By Chad Cox

While toxins of plants and animals provide them with weapons for subduing predators or prey, they are valuable research tools for us. My research interests during my career as a biochemistry professor dwelled primary in the area of blood coagulation, both with the plasma proteins that lead to the clot and the platelets, the cellular component of coagulation. Our appreciation of the coagulant process has benefited greatly from these toxins. In fact, without them, our knowledge of how coagulation works would be rudimentary at best. Some of the toxins that have contributed are rather specific to coagulation but some are more general. But the same can be said of other areas and fields of the life sciences. While few toxins serve as useful medicines, many have proved valuable in the lab and subsequently, to our knowledge of how life works.

A few examples can illustrate this point. Willow extracts served as an early analgesic. Salicylic acid, the active component, was much later converted to acetylsalicylic acid, aspirin, a much more potent form. What salicylic acid and aspirin do was determined much more recently. They block the formation of thromboxanes, short-lived, very potent potentiators of platelet responses to wounds. More recent investigations showed aspirin inhibited the formation of similar potentiating compounds in other cell types that could account for its analgesia. The man made addition to salicylic acid that converts it to aspirin does produce greater efficacy but salicylic acid does have those medicinal properties ascribed to it.

In several of our experiments with platelets, we used aspirin to selectively block the potentiating effects of thromboxanes to determine what role this potentiation played in the process under investigation. Of course, many other investigators employ aspirin for the same purpose, even in other cell types.

Another example, tetradecanoylphorbol ester (TPA), originally isolated from croton oil, rather than blocking a reaction, turns on another by activating protein kinase C. This was a previously unknown pathway of cellular activation that was literally defined by TPA. What this pathway does was rapidly elucidated by selectively activating it with TPA in platelets as well as other cell types. Undoubtedly, we would be aware of the pathway by now but certainly with little detail of what it did without TPA as a research tool.

My most intimate experience with one of these toxins, actually a class of toxins, taught me plenty

but little about the toxins themselves. Feverfew, *Tanacetum parthenium* (L.) Shultz-Bip. synonymous with *Chrysanthemum parthenium*, contains a collection of closely related compounds (parthenolide and relatives) that have the same reactive part that accounts for all the demonstrable effects of feverfew. Very old medical records attributed to extracts of feverfew a wide array of effects as even suggested by its name. One that is indelibly burned in my memory was the description of how a woman straddling a boiling vat of feverfew was relieved of menstrual distress. Rather easy to see how such a woman would readily say she felt much better and depart in haste.

Two more recent reports perked my interest. The first reported that feverfew caused an aspirin-like effect in platelets, whereas the second, refuted this with compelling evidence that another process was blocked. Always on the lookout for new reagents, especially one that might have medicinal uses, I bit the bait and began my investigations and my lessons.

After trying several sources, one sent me chamomile blossoms, I obtained seeds from the Smithsonian Institution and grew my own. Not only did this give me a source to quote for other investigators that might want to duplicate my experiments but the only reliable source I found. Hence, my first lesson: reliable sources for natural products can be difficult to obtain even for common ones.

My next lesson began as I explored the putative medicinal properties of these toxins. To make short what was painfully long, I terminated the project with little to show for my efforts. The principle reason was that platelets appeared an inappropriate cell type to study the medicinal properties of feverfew. This became apparent from the results of the only other group publishing their work at that time. This group in two separate clinical trials tested feverfew extracts for their most promising putative benefits for relieving the pains of arthritis and migraines. While no benefit was found for arthritis there was a detectable prophylaxis for migraines. The dose was much lower than what was required to affect platelet function. In fact, the concentrations necessary in platelets was near those that would yield nonspecific effects with a variety of compounds. That is, even if I worked out what these compounds did in platelets, the mechanism behind the prophylaxis might differ.

Added to these reasons for terminating the project, during this same time period, very effective drugs for treating migraines at onset was discovered and marketed, so called cerebral vasoconstrictor abortive drugs. While not all migraineurs are helped by these drugs, it revolutionized treatment for the others. Also, a significant number of prophylactic drugs have been marketed as well. Furthermore, among those people consuming feverfew, for medicinal or gastronomical (yes, a common salad component for some), a significant number developed allergenic responses, not a property desirable in a drug. No more need be said for why I ended my study. My second lesson: our forefathers often and vastly overstated the efficacy of many herbal remedies and seldom are they as effective as their current counterpart commercial drugs.

Lest I end on a negative note, let me assure you I have a lasting benefit of my study. Every year several volunteer feverfew plants spring up in my yard. I still enjoy them for the handsome plants they are but foster a truly paternal feeling for them as well.

OTHER UPCOMING EVENTS

MEHAWH (Make Every Home a Wildlife Habitat) is having its garden tour in the Tulsa area on June 10-11 from 9-5 on Saturday and 12-5 on Sunday. They need volunteers, who will get $25 + a free tour ticket, but even if you don't volunteer, it would still be a great tour to see. Those who want to volunteer should call Ron or Myra Jeffris, (918) 492-5022. The addresses of gardens to tour are: 6733 S. Birmingham Ave; 4347 E 58th St; 7401 S. Juniper Ave; 16549 E 127th St.

OKLAHOMA GARDENING'S 25TH ANNIVERSARY

Will be held June 10. ONPS supplied them with our mailing list and you should receive an invitations. If you have not, call Stephanie Larimer at 405-744-5404.

FIELD TRIP PLANS

April 22 - Chandler park in Tulsa meet at 12:00 noon near picnic areas on upper level.
Leader Dr. Paul Buck. Further information call - Jim Elder (918) 747-0735

June 3rd (Saturday) and Saturday, September 16th. Departure time is 10:00 AM from the parking lot adjacent to Life Sciences East on the OSU campus in Stillwater. Ron Tyrl (405-744-9558)

FIELD TRIP RULES

- 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.
- 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.
- Participation is at your own risk.
- 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. Children should be warned against picking flowers or collecting animal or plant souvenirs: many of our field trip sites are havens for the rare and endangered.

CHAPTER ACTIVITIES

NE Chapter

About a dozen hardy souls met January 15 at Chandler Park in Tulsa flora Northeast Chapter outing. Dr. Paul Buck led the field trip.

There were many interesting trees, shrubs, and grasses to be observed, even with the absence of flowering plants at this time of year.

Dr. Buck started the outing by explaining how you could identify trees during winter by observing leaf scars and the general shape of a tree. The group explored the upper level of the park, traveling along the limestone bluffs. We examined the characteristics of the common Blackjack and Post Oak, noting that the silhouette of the Blackjack Oak has a somewhat droopy and ragged appearance.

The illustrious group attending a similar Chandler outing on April 22

Numerous species of trees occur along these bluffs, including all three species of Ashes, the Blue, Green and White Ash. The four sided twigs of the Blue Ash were especially interesting. The American Smoke tree occurs along these bluffs. Dr. Buck mentioned the graduate research by Ann Long, where she observed the Smoke tree occurring at different levels along these Arkansas River bluffs, growing wherever there was a layer of limestone.

Dr. Buck talked about the importance of seeds during this time of year and how they have evolved to adapt to their specific niche. Clusters of Sumac with their bright red seeds were abundant. Several species of grasses were also observed.

Central Chapter

Nathan Kuhnert, a hydrologist with the Water Resources Board and who works part time with Melynda Hickman at Hackberry Flats, spoke to the Central Chapter about the Restoration of Hackberry Flats, a wetland about halfway between Lawton and the Texas border. These wetlands were drained in the early 1900s for agricultural purposes but has been partially restored primarily

for wildlife management. About a 10 minute video explained that the wetlands were restored by the Oklahoma Department of Wildlife Conservation in partnership with several other organizations and companies, one major one being Ducks Unlimited. This restoration is major part of a larger plan, the Playa Lakes Joint Venture, designed to restore a series of wetlands along the migratory corridors of waterfowl.

Nathan read an old newspaper article from the Frederick Enterprise describing how wonderful it would be once the wetlands were drained to make available all that land for raising cotton. The shortsightedness of the community is so very prominent in hindsight, but isn't that so appallingly often the case.

For the restoration starting in 1993, 7,120 acres that includes the basin were purchased and a series of canals and gates were constructed. Water rights from Tom Steed Reservoir and a pipeline provide permanent water and the canals and gateways allow cyclical flooding of portions of the wetlands.

Nathan then showed a series of slides of some of the birds that can be seen at the wetlands, some nesting at the site but many only in the spring and fall migration. His passion for this portion of the presentation was most obvious as he pointed out the diagnostic elements that identify many of these birds. A lively question, answer and comment session ended the program.

Central Chapter took a field trip to Pontotoc Ridge on April 29, 2000 with 18 members in attendance. We were lead on a truly nice hike by Pat Folley who pointed out many plants, as always. We had sprinkles on us throughout the day.

Central Chapter's next meeting with be a field trip to Sharon and Don McCain's acreage where hopefully the bush morning glories will be in bloom. Since they are early bloomers, we plan to meet at 7:30 a.m. on July 15th. Cinnamon rolls, juice and coffee and then a hike in the pasture. Please register for this field trip by calling Sharon McCain-376-2768 or 495-9810. Our address is 12621 S. Mustang Road, from I-40 go south on Mustang Road,(there is a Xerox Plant on the right).Go through the town of Mustang approximately 3 1/2 miles from Highway 152. There will be an ONPS sign at the driveway.

Cross-Timbers Chapter

Local field trips to see spring and fall wildflowers are scheduled for Saturday, June 3rd and Saturday, September 16th. Departure time is 10:00 AM from the parking lot adjacent to Life Sciences East on the OSU campus.

Another potluck dinner and slide presentation on Friday, November 10th concludes the chapter's activities for the year.

Zoo's Garden Gala

By Ruth Boyd

(*This did not appear in the winter issue for obvious reasons nor in the spring issue oops - editor*)

On Friday and Saturday, October 1 & 2, the OKC Zoo held its first Garden Gala and ONPS was invited to participate, I took my usual dog and pony show of ONPS photo contest posters, an assortment of books, note cards, bookmarks, newsletters, membership brochures, collection guidelines and litter bags. Jerry Brown, a Central Chapter member, assisted on Friday morning and he and Sally Boyd Yones, a member from Shawnee, both helped that afternoon. A grand thing on Friday was that a busload of biology students from El Reno High School and two of their teachers were there. The students were assigned to interview the people manning the booths and were required to write reports for the class. They came by in groups of twos and threes throughout the day and were a delightful young people. One young man joined ONPS and gave us a tip for a possible location for a future field trip.

On Saturday morning, Sheila and Steve Strawn helped run the booth and Leslie Cole-Jackson and sons, Cole and Philip were my assistants in the afternoon. We talked to hundreds of people and the posters drew people in. Nineteen people took autumn newsletters and signed up to receive winter issues.

Zoo personnel were so helpful and provided this senior citizen with cart service for material and all

sorts of physical help. They seemed pleaseed with the results of the two day activity and seemed optimistic about continuing the event next year. Both days provided the kind of weather we Oklahomans look forward to autumn for.

On October 7 in Tulsa, the same exhibit was at the annual tree conference sponsored by the Urban and Community Tree Council at the Double Tree Hotel. Several more people took newsletters and signed up for more.

There are people in our membership who do things to make the public aware of our presence and I would like to read about some of them in future newsletters.

WELCOME THESE NEW MEMBERS!

Susan Albert, Bartlesville
Jeff Allen, Bartlesville
Shannah Hughes Arthur, Calera
Janice Bourns, Bethany
Jerry D. Campbell, Seminole
Chuck Coffey, Ardmore
Traci Cole, Tulsa
Sunny Dixon, Antlers
Mary Frye, Stillwater
Barbara Kelly, Tulsa
Helen Kodesh, Tulsa
Beverly Ann Lowry, Jenks
Jettie McElroy, Tulsa
Kenneth & Mary McKinley, Stillwater
Nancy Page, Claremore
Frank Phillips Foundation, Inc., Bartlesville
Carol Nelson Richards, Durant
Russell Studebaker, Tulsa
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