CALENDAR

Ed. note: to make the calendar a better reference, I have put either the page number for a more detailed explanation, or the name of the person to contact for more information. The phone numbers for persons named in bold type below.

24 June: NE Chapter field trip to local prairies. Meet at the Tulsa Garden Center at 8 a.m. (page 10).

29-30 June & 1 July Flora Oklahoma editorial meeting at Bebb Herbarium. Please don't schedule anything fun at this time!

8 July (firm): Board Meeting at St. Stevens' United Methodist Church, Norman, at 10:00 a.m. Field trip at 8:00 a.m. Connie Taylor* or T. H. Milby* for more information.

5 August 95: Orchid tour of SE Oklahoma.

Register with Jim Norman*,

2 September, 9:00 a.m.: One day field trip to Blue River Country. Connie Taylor*, Jim Norman*, or Jeff Burkhart*.(page 9)

7 October: Central Chapter, walking tour of OU campus trees with Dr. Forrest Johnson of the Oklahoma Biological Survey (no football traffic on this Saturday) Meet at Botany Building at 10 a.m.

13-15 October, Native Plant Society of Texas, Annual Meeting at Waco. Contact Connie Taylor* for details.


30 October: Evening meeting of Central Chapter in the Horticulture Center, 4th & Portland, OKC, 7 p.m. Program by Darlene Michael.


Help! If you are moving, remember to notify the ONPS: our bulk-mailing practice, while economical, does not provide forwarding services

MEMORIAL FUND DONORS
Harriet Barclay Memorial Fund:
A donation by Dr. Paul Buck in memory of Ruth Magrath, mother of our former president and orchid expert, Dr. Larry Magrath of USAO.
The Harriet Barclay Memorial recognizes and promotes student achievements in the field of botany.
Gardening on the Wild Side
by Ann Randle

BLOODROOT

Bloodroot, or Red Puckoon, appears to be a good example of the continued blurring of distinction between the native plant and gardening world. This was emphasized to me when my research at home revealed its mention in more volumes on garden perennials than in my books dealing with wildflower landscaping. Certainly it has been used as an ornamental for a few years - Thomas Jefferson had it in his garden. No doubt he would be amused at my relatively recent discovery of its virtues. Virtues which require it being discussed in this column even though its bloom period is over for all of Oklahoma. Sanguinaria canadensis is one of the first of the woodland plants to bloom. Here in Duncan I start looking for it with the later daffodils around the end of March.

Its growth progression is fascinating and fun to follow day by day. A tightly furled single leaf breaks through the soil and loosens a little in a few days to reveal a flower bud wrapped protectively within the leaf center. This bud soon shoots ahead of the leaf to a height of about eight inches and opens to reveal an one and a half to two inch flower with eight or more pure white petals surrounding many gold stamens, a green pistil in the center. The flower closes at night or in cloudy weather but reopens each day for about a week. A stand will last in bloom only about two weeks. (Jefferson, complaining of the short bloom period, wrote in 1776 that on "April 6, Narcissus and Puckoon open; April 13, Puckoon flowers fallen".) One of the interesting things about this plant is that up to this point the leaf remains loosely curled, only about four or five inches across and well beneath the flower. As the flowers abscise and the seed capsule forms the leaf below spreads out its scalloped blade and expands to as much as ten inches wide while its petiole elongates to eventually catch up. The leaves now become the plants dominate feature. They are a pleasant medium-green with smooth, exaggerated lobes and often flawlessly overlap to form a solid ground cover until late summer.

As the common name refers to the rhizome we should not forget it. If broken it yields a red liquid. This is not sap but latex and characteristic of its family Papaveraceae. Indians used Bloodroot for painting themselves and as a dye by boiling fabric in water with the rhizomes. Bare ("Wild Flowers and Weeds of Kansas") mentions that in the early days of this country physicians experimented with the alkaloid sanguinarine which occurs in the latex. They discovered caution was required to avoid fatalities but still used it as an emetic, as an expectorant and for rheumatism, ulcers and diseases of the liver.

Because it is the most easily obtained I feel obligated to mention that there is a double-flowered garden form of this species named S. c. 'Multiplex'. It reliably blooms longer - about a month and is more compact and shorter. I do not care for it. Its additional petal layer is at the expense of the stamens and thus can be propagated only by division. The leaves unfurl too early and thus hide most of the much-praised double flowers. In addition, its leaves offer no advantage over the native for when used as a ground cover.

Cultural requirements are predictable from observation of this plants native woodland habitat in the counties of eastern Oklahoma: moist, slightly acid to neutral (5.5 - 6.5), humusy soil in deciduous shade. This far south (bloodroot grows all the way north into Canada) shade from summer sun is required but the spring flowers need some sun. Mulching is useful to provide a cooler, dummer root run. Fertilizer is optional. A little bloom seed is all I have ever used and that mostly to discourage an armadillo that was driving me crazy. I have not had a single insect, disease or snail attack this plant in the five or so years I have had it and thus have no pesticide recommendations.

The uses for this plant in the landscape revolve mostly around its tolerance for shade. It is a constant search for new materials to use in the gardens of homes with established trees - especially given the homeowners current desire for more and more shade. Bloodroot makes a pleasant, dense groundcover that competes well beneath shrubs and larger specimens. My stand surrounds an oakleaf hydrangea which itself grows beneath sandhill plum pruned into dwarf, fifteen foot tall trees which in turn form an understory beneath black locusts. If you like plants you can't afford to lose any space - vertically or horizontally. Many sources suggest bloodroot in shaded rock gardens. I, personally find its neat, regular growth pattern a little formal for this use. It does not drape, trail, clump, fall over or produce spikes. It is, in fact, so tidy I wonder if some of you may find it difficult to fit into a native plant landscape.

Propagation can be had by purchasing rhizomes or by division of established plants. Each segment of the rhizome is capable of budding at both ends, each bud producing a single leaf and flower each spring. A half dozen segments will produce about a four foot circle in four years with optimum conditions. Under these same conditions S. canadensis will self-sow. The tiny new inch plants appear in the spring about the time the seed capsule is forming on older family members. The first year the new guys look a lot like baby violets as the leaves rarely form their characteristic lobes. These leaves grow larger and more scalloped each year and bloom appears about the third or fourth year. I have transplanted bloodroot at all stages of growth and rarely lost one. As I have no seed source for this plant I have will not list germination instructions.

At present I have found only two sources for the plants - both are mail order.Neillinger's garden catalog offers the wild variety and can be reached at 1-800-321-7444. Carroll Gardens Inc. sells both S. canadensis and S. c. 'Multiplex'. Predictably the wild version is more expensive. They can be reached at 1-800-638-6334.
CONSERVATION CORNER  by Ruth Boyd

1 note: Ruth is the ONPS delegate to this task force, which is composed of representatives from agricultural, forestry, education, outdoor recreation, industry, and organizations like ours and The Nature Conservancy. It is a massive and time-consuming effort to produce a plan for the future use of Oklahoma resources that will consider the needs, not only of the people, but of the other lives which share this state with us. Another ONPS member, Dr. Mike Palmer, serves on the Biology Committee.

The following is a news release prepared by Norman Murray of the Oklahoma Department of Wildlife Conservation. ONPS is part of the Conservation and Recreation Committee, along with most of the other conservation groups in Oklahoma, such as the Audubon Council and the Sierra Club.

"Human needs addressed by Biodiversity Project

In all the talk about how to protect the environment, many people may think that humans aren't part of the picture. However, Oklahoma's Biodiversity Project will explore ways that a healthy economy and a healthy environment can co-exist.

'For the Biodiversity Project to be successful, we knew we had to include human use and needs as well as biological recommendations,' said Norman Murray, biodiversity coordinator for the Oklahoma Department of Wildlife Conservation. 'By addressing the needs of humans, we believe that more private landowners would implement suggestions within the plan.

'The three-year Biodiversity Project, which is funded by Weyerhaeuser Company, will define and describe the variety of life in Oklahoma and find ways to integrate biodiversity concerns with human use and economic growth,' Murray said.

'Traditionally, many projects like this included only the biological aspect, worrying about how plants and wildlife were affected,' he said. 'However, because Oklahoma is 93 percent privately owned, most actions that would impact Oklahoma biodiversity would occur on private lands. Therefore, we are looking for ways to provide for the needs of biodiversity and private landowners by addressing a variety of interests.

'For example, a council that oversees the Biodiversity Project and ensures that issues are treated fairly is represented by members from five interests: conservation, agriculture, business, education and government. The council consists of 11 members, who serve in administrative roles in various state and federal agencies and private companies.

'The Biodiversity Plan itself is being developed by a task force consisting of seven committees. Each committee addresses a slightly different component of the Biodiversity Plan. Although the Biology Committee is designing background information and recommendations for biodiversity conservation, the other six committees are identifying specific ways to integrate biodiversity concerns with practices within their field. Over 100 members from various government agencies and private organizations have been asked to represent their group on the following committees: biology, education, forestry and agriculture resources, mineral resources, land resources, conservation and recreation, and water resources.

'Many government entities are represented on the Biodiversity Council and various committees,' Murray said. 'However, participation in the Biodiversity Project is voluntary and is an effort to address biodiversity concerns in a proactive manner. By addressing these issues now, we can conserve our natural resources, ensuring that present and future generations will enjoy the wealth of Oklahoma's biodiversity."

For more information on the Biodiversity Project, write Murray at Oklahoma Department of Wildlife Conservation, 1801 N. Lincoln, Oklahoma City, OK 73105, or call at (405) 521-4601.
BOTANY BAY
by Patricia Folley

The Plants That Hold the World Together

There are three families of flowering plants which cause much more than their share of distress among plant taxonomists. All are herbs, have narrow leaves and usually very small flowers. In addition, they tend to look very much alike. Still, it makes sense for the amateur botanist or gardener to become familiar with these plants: they comprise together, 15% of the total species in Oklahoma, and no doubt, much more than that share of individuals.

Many of us learned the mnemonic "grasses are round but sedges have edges" in our first field biology courses. Usually, that is true, and a good first indicator. Here are some more indicators leading to a family identification:

**Juncaceae**: usually common-named rushes, they are easily discriminated from grasses and sedges by the fruit, a capsule with many tiny seeds inside. Also, a 10 power magnifier will show the flower of a rush to be a miniature "lily", with 6 tepals surrounding the floral parts. Usually, the stems are solid and round.

**Poaceae**: the true grasses, with a whopping total of 308 species in Oklahoma. Most grasses have round, hollow, jointed stems, one relatively large seed in each flower, and the seed enclosed in at least two scales. The stem leaves have open sheathes that clasp the stem above each joint.

**Cyperaceae**: the sedges, with 155 species in 12 genera in Oklahoma. While most do have the triangular cross-section stems, a few are round or square or even cog-shaped. The stem leaves are whorled in three ranks around the unjointed stem, and the sheaths are closed, or fused. Each tiny flower, usually on a many-flowered spike, has only one scale below the seed. Like grasses, the seeds are one-to-a-flower—but they are often triangular in cross-section like the stem.

Once you start to discern the characteristics of the sedges, though, you will find most of them to be as individual as people. The trouble is often in the keys available for identification -- and the fact that there are no photographic guides like the McCoy books to ease your first attempts.

While grasses are the most important plants in the world for people, the sedges have a different function which anyone who lives in a sandy wetland will appreciate: they clasp the soggy sand with such tenacity that it is incapable of moving, even under the force of floods. Without sedges, most of the Folley Farm would be in Lake Eufaula by now. Our land was once covered with scrub oaks and sumac, but the pioneer farmers cleared the little trees and planted cotton! Within two years the land would not support any crop and started eroding away. During the dust bowl years, a huge dune formed on the northeast side of the creek. Old-timers say it covered and closed the county road that now passes about 0.2 mile to the north of its crest.

On the west-facing slope, the lower 1/3 is under shallow water at least part of the year, and some is a perennial marsh. Sedges, tolerant of the saturated soil, lace that wet sand so firmly that it takes a sharp blade and considerable force to remove a plant for study. We appreciate their usefulness, and we also enjoy their delicate beauty. Like most other organisms, sedges achieve their highest beauty under magnification. A 10x lens reveals their precise and patterned structure. A binocular microscope displays features that make the finest man-made items coarse by comparison.

Here are magnified drawings of some common sedge flowers. Examine some of yours, too.
SUMMARY OF ONPS BOARD MEETING, 1 April 1995
by Darlene Michael, Secretary

President Connie Taylor called the business meeting to order at Dwight Mission, north of Sallisaw, OK, on April 1, 1995 at 5:45 p.m. Minutes and Treasurer's report were postponed until the next meeting. Two motions passed unanimously: (1) The Annual Meeting was scheduled for the third weekend in October at Quartz Mountain State Park; and (2) The Oklahoma Native Plant Society will act as a liaison between commercial interests and the Forest Service to promote wildflower conservation.

President Taylor and Pat Folley are slated to serve as judges for the Harriet Barclay Award during the Oklahoma Junior Academy of Science competition. It was decided that the June 9-10 Wildflower Workshop will feature Paul Buck and Paul Nighswonger as field trip leaders. Botanists assigned to individual tour buses were: Pres. Taylor, Pat Folley, Jim Norman and T. H. Milby. Pres. Taylor distributed copies of Oklahoma Federal Candidate Species and Former Candidate Species, January 1995.

The meeting was adjourned at 6:15 p.m.

HARRIET BARCLAY AWARDS ANNOUNCED

There seems to be a great deal of uncertainty among our members and even the Board as to just how the Barclay Awards are granted, so this announcement will be followed by a brief explanation.

Senior High School, best botany paper submitted:
Jessica Adams of McLoud High School
Title: A Phenetic and Taxonomic Study of the Genus Cheilanthes
Sponsoring teacher: Bruce Smith

Junior High School, best botany paper submitted:
Brad White of Cushing Middle School
Title: Which Section of Payne County's Soil Promotes the Best Growth of Alfalfa?
Sponsoring teacher: Brad Hawkins

p.s.: McLoud High School and teacher Bruce Smith have produced the Barclay Award winners during four of the past five years. In fact, McLoud High School, with 300 students, took 5% of the Junior Academy awards in the entire state this year. How about letting the school know we are proud of them!

The Harriet Barclay Awards are made to Oklahoma high school students in honor of the late Dr. Harriet Barclay, an inspiring teacher of Botany at Tulsa University who was one of the founding members of the Oklahoma Native Plant Society. The winners are selected by a jury of science teachers and professional scientists at the Oklahoma Junior Academy of Science, a branch of the Oklahoma Academy of Science. Using funds donated to the Oklahoma Native Plant Society's Harriet Barclay Fund, we give each of the winners a check for $25, a handsome wall-plaque bearing their names, the names of the school and the teacher, and the date. In addition, the school is placed on our membership list for the following year, thus receiving the Gaillardia, invitations to our outstanding field trips, and other benefits of membership.

It is the hope of Dr. Barclay's many friends and former students that this award will serve to perpetuate her memory in a positive and productive fashion.

LONG-AWAITED BOOK FINALLY IN PRINT
by Patricia Folley

The University of Oklahoma Press has released the book on which Dr. George J. Goodman and Dr. Cheryl A. Lawson have been laboring for the past twenty-or-so years. Under the title Retracing Major Steven H. Long's 1820 Expedition, The Itinerary and Botany, the book is now available in bookstores statewide. The price is $38.80, or only $1.93 per year of preparation.

If you know Dr. Goodman or his one-time graduate assistant, Dr. Lawson, you will expect to be informed, intrigued and entertained at once. As I haven't had time to read it yet, this is not a "review", but I've watched it being written, and have had the privilege of reading some of it in that state. The Long expedition has been called the "lost expedition", because the leaders spent most of their tour thinking they were on a different river, so it was assumed that no one would ever know exactly where the places described in their journals really were. The expedition's botanist, Dr. Edwin James, gave his name to many species of Oklahoma plants, (for example, Hoffmanseggia jameii, named by the taxonomists Torrey and Gray from collections made by James). This expedition brought the first scientific collectors not only to Oklahoma, but to Texas and Colorado as well.
Gaillardia

18TH ANNUAL WILDFLOWER WORKSHOP RECALLED
by Joanne Orr, director of Oklahoma Department of Transportation's Highway Beautification program.

Wildflower Workshops are always unique, wild and wonderful, but the 18th Annual Wildflower Workshop just held (on June 9-10) at Boise City tops them all. The Cimarron Heritage Center folks proved that Panhandle hospitality can't be beat, as did the folks at Kenton who hosted the Saturday lunch. The 128 paid attendees plus several tour guides and bus drivers were treated to chuckwagon barbecue, a crisp sunny Friday as we toured the tepee rings and found pastures full of wildflowers that had just had half the area's annual quota of rain.

Friday morning found us assembled in the Heritage Center's brand-new facility for interesting and informative talks by Judge Ron Kincannon of Boise City on the area's history, Dr. Paul Nighswonger on the effects of controlled burning on range plants, Dr. Connie Taylor on the area wildflowers, Hal Cantwell on professional photography techniques, Laurie Stillings on the Oklahoma Department of Transportation's wildflower planting program, and Dr. Paul Buck on the effects of altitude on wildflowers.

Displays in the commodious hall included the ONPS Photo Contest entries, book sales and displays, the ODOT's fabulous collection of wildflower prints and handouts, several gift, T-shirt, seeds and souvenir booths, and "Mr. Cactus", Gunther Brandt, who has some 800 species of cactus (none native to Oklahoma, though) at his nursery in Boise City, and had some handsome ones at his sales table. All the local exhibitors have shops located on the main street/highway or courthouse square and warrant a stop when you are up that way.

The Saturday trip found everyone in awe as we read the 323 names of wagon train travelers who signed Autograph Rock as they passed by on the Santa Fe Trail during 1859, 1870, etc., including the fellow in 1932 who herded a flock of turkeys along the trail (Honest!!). Saturday was overcast and cool, perfect for climbing Black Mesa...Pat Folley finally made the top (third try's a charm), as did a passel of other folks. First on top was the bus driver and teacher, Randy Stone of Keyes, with Matt Stillings of Harrah a close second...Matt climbed it twice on the ONPS' memorable field trip two years ago. By special permission, the buses were allowed to park at a nearby ranch, saving some three miles of hiking and enabling climbers to start near the bottom of the old jeep trail to the west end, which is the most gradual of the trails on the north side. Rain began as the last wanderers returned to the bus, (which was conveniently parked in a patch of the Hoffmannseggia jamesii mentioned on page 5).

Wildlife abounded...antelope, rattlesnakes, horned toads, prairie dogs, burrowing owls, lizards, mule deer...plus frisky cattle who wanted to play as we nudged them off the roads or traveled on their pastures.

Paul Buck, ONPS charter member, past board member and vice president, and long time leader of Wildflower Workshop field trips, received the Bess Snodgrass Award for 1995. The award is given by John F. and Charles H. Snodgrass, Ardmore, in memory of their mother, Bess, who was largely responsible for the planting of coreopsis seed in the Arbuckles back in the 1940's. The seed has covered the area and makes a spectacular show every spring. The award is "In memory of the coreopsis that bloom in the Arbuckles and in recognition of those who carry on Oklahoma's legacy of wildflowers". The award consists of an acre of wildflowers planted anywhere in Oklahoma, at the honoree's choice of sites, plus a large framed photograph of an Oklahoma wildflower scene.

Next year's Wildflower Workshop will be held in the southeastern part of the state, most likely the first or second weekend in May. Keep tuned for additional details.

Tom Creider of the Tourism Department, Parks Division, was present at the workshop with some draft plans for the Black Mesa area information signing and parking improvements. He would appreciate comments, suggestions, etc., from everyone interested in the area, and especially the Native Plant Society members. Anyone wanting to give ideas, etc., should contact him at the Oklahoma Division of Parks, 500 Will Rogers Building, OKC, OK 73105 / 405/521-3411.

Needless to say, a good time was had by all. We came away with a great appreciation of the unique wildflowers and habitat of the Oklahoma Panhandle. We appreciated as well the tumultuous history of the area, and the reverence of the residents of Cimarron County for their local history. We are glad they are a part of Oklahoma.

Photo contest winners are listed on page 11. I hope you enjoyed Joanne's report, written while the experience was still fresh, as much as I did!

NEED A FEW EXTRA COPIES? JUST ASK!
Many of us belong to other organizations with similar interests. If you know you will need some extra copies of the Gaillardia for distribution as promotion of the ONPS, just write Patricia Folley or Ruth Boyd by the regular cutoff date, so we can order enough.
Last Call for 1995 Anne W. Long Award Nomination

Once again, ONPS will recognize outstanding contributions to the purposes of the Society via this award named for one of the ONPS' founders. Individuals, groups of individuals, scout troops, church groups, science or environmental clubs, businesses or similar organizations who have contributed to the purposes of ONPS are eligible for the award. Nominees need not be members of ONPS, but members are eligible when they qualify. Recognition and presentation of the award will be made at the Annual Meeting of ONPS in October. Remember that current ONPS board members are not eligible for this award.

The deadline for nominations is September 1, 1995.

Nominations are to be made on this form (you may make a Xerox copy), and submitted directly to the chair of the Awards Committee: Dr. Rahmona Thompson, East Central University, Department of Biology, Ada, OK 74820. All nominating letters will be kept strictly confidential.

Nominee:_________________________ Nomination by __________________________

Contact Person:_________________________ Address:_________________________

City, State, Zip __________________________ Date:__________________________

Note: Please use separate sheets to provide detailed information supporting the nomination. Such material is necessary for the Awards Committee to make final decisions. Nominations may be submitted any time prior to the 1st September deadline.
ONPS readers are welcome to recycle our articles to other newsletters if desired. Some are just too good to use only once! We'd appreciate our authors getting credit for their work, though!

OPPORTUNITY KNOCKS
The Oklahoma Wildlife Federation office in Oklahoma City wants to turn its backyard into a wildlife habitat featuring as many native plants as possible. Since its location is on north Santa Fe in the heart of one of OKC's industrial areas, the local wildlife needs all the help it can get.

A few years ago Wayne & Susan Chambers drew a plan for using native trees and shrubs in front of the building but there was a change in administration before it could be implemented and it was never used. We don't believe that would happen again. The project is viewed as an ongoing effort and will be built slowly. Those having expertise, interest and some time available may contact Mary Dennis at the Federation at (405)524-7009 or Ruth Boyd at (405)872-9652. Ann Randle, our co-chair for the wildflower gardening column, writes that she is just extra-busy right now: her husband, Bill, is working part-time in Oklahoma City and they now have an apartment there in addition to their home and their two businesses in Duncan. She did, however, send her column right on time! You'll find that on page two.

Laurel Upshaw, who lives in Tulsa, sends this memorial:

George Amos Large, member of the Oklahoma Native Plant Society, passed away on April 12, 1995. He was born in Booneville, Arkansas, and learned to love nature in the Arkansas hills of his grandfather's farm. As a young man he worked in CCC camps as a surveyor and builder of farm ponds in Oklahoma and Colorado. He was educated in agriculture at Connors, a branch of O.S.U. at Warner, OK. He went into the field of Biology at Northeastern State, then completed his MS degree at Tulsa University as the first masters' candidate under the Barclays. His research investigations were done in 1947 and 1949 at the Rocky Mountain Biological Laboratory; in June, 1947, he and Wanda were married and the Drs. Barclay gave them a smorgasbord shower before they left for their "honeymoon" in Gothic. George taught Biology for 38 years, mostly at Hale High School in Tulsa.

George and Wanda have worked diligently to produce, from a Bermuda grass yard, an outstandingly beautiful woodland filled with native plants and ferns that attract a multitude of birds not usually seen in our city. They are active in the Oklahoma Native Plant Society's Northeast Chapter and took part in Tulsa's first tour of "Wildscape" yards last year.

ONPS regrets the loss of Mr. Large and thanks Ms. Upshaw for preparing this notice for us.

BUTTERFLY GARDENING
by Patricia Bergey

Prairie plants favored by butterflies recently were listed in "American Butterflies," a quarterly publication of the North American Butterfly Association. The list, compiled by Ann Swengel, focused on the northern half of the Midwest. Some of these native to Oklahoma are:

Birdfoot violet  Black-eyed Susan  Buttercups
Pussytoes  Puccoons  Bonesets
Smooth phlox  Indian Blankets  Coreopsis
Coneflowers  Chrysanthemum  Bee-balm
Butterfly weed  Blazing-stars  Goldenrod
Sunflowers  Asters  Bluestems
Compass-plant  Bush-clover  Gama grass
Golden crown-beard  Wild Chervil

Most provide nectar. Some, especially the grasses, are caterpillar foodplants. The crown-beard, or Verbena encelioides, is in bloom until frost and provides fuel for migrating monarch butterflies in fall. (See seed sources on page 10)

CONTRIBUTIONS WELCOME
ONPS members and friends are encouraged to contribute to the Gaillardia, published quarterly. Many of our articles are written by professionals, and may be submitted on disks (without columns or tabs, please).

As editor, I welcome all sorts of input, from the high-tech to the scratch pad. You may send clear black-and-white drawings to illustrate your material, or describe the illustration you wish and I will insert one for you.

Of course, as a non-profit organization trying to keep our membership rates as low as possible, we cannot pay in real money. You will have to work for love -- every author who contributed to this and all other of our newsletters does the same. ...........Patricia Folley

Please send contributions directly to my home address: 15100 Etowah Rd., Noble OK 73068. (saves time)
ORCHID TOUR TO BE REPEATED AT PUBLIC DEMAND

Dear Jim Norman has relented, and agreed to lead one more Orchid Tour: on Saturday, August 5. Please let Jim know to expect you, as instructed in the box below. We will meet at 9:00 a.m. in the parking area in front of the restroom at Raymond Gary State Park, which is reached by going east of Hugo on US 70 about 15 miles, passing Ft. Towson by one mile, then south to the park. The meeting place is within the park, so just keep going until you see a good-looking crowd without fishing poles.

If you want to take a motel room in Hugo the night before, we recommend the Hugo Inn, owned by our members Harry & Ingabe Redus. Their phone is (405)326-6437.

Lest anyone think this sounds like "the field trip from hell", be assured that with an air-conditioned car it is comfortable and fun. Jim knows every bbg and pothole in SE Oklahoma that will bloom with orchids at that time. Lunch at the famous Catfish King in Idabel. Plant lists at past OTs have been astounding, with most participants seeing flowers that they hadn't expected to see outside the tropics. Also birds, bugs, butterflies ""??

AND, ANOTHER OUTING ON SEPTEMBER 2

This one, the post-postponed tour of the Blue River country near Tishomingo. Since some of our leaders will be taking vacations, register for this with Jim Norman or Connie Taylor or Pat Folley (whoever you can catch).

Meet at the Blue River Hunting and Fishing Area east of the Tishomingo National Wildlife Refuge: east of Tishomingo on SH 78 for 3 miles, then north 6 miles on a county road.

Dwight Mission Remembered

On the weekend of April 1 & 2 some 50 members of ONPS convened at beautiful, historic Dwight Mission. a Presbyterian Church retreat located in Sequoyah County on scenic Salislaw Creek.

Field trips were led by botanists Connie Taylor, Rebecca Troth, and Ron Tyrl; first to the Dwight Mission lawn, then to a nearby wooded area and later to some roadside thickets. Among the plants discovered were Phlox drummondii, Erythronium americanum and Camassia in the woods and blooming Sassafras in the fence rows.

Following a delicious Saturday-night dinner, Dr. Ron Tyrl presented an excellent discussion on life in modern China in general and Chinese forage grasses in particular. The presentation was livened by his slides, woven into an audience-participation game that had us all enthralled.

Sunday morning was spent climbing and botanizing on the steep trail up Short Mountain, some 25 miles south of the Mission. This north-facing slope was definitely mesic, and was well-forested with species that indicated this cool, moist environment. Among those noted were Quercus rubra, Amelanchier arborea, Cladastis lutea (the yellow-wood tree), Dodecatheon and Aquilegia, to name but a few.

Near the rocky summit, the conditions changed dramatically to xeric exposure. Now the dominant trees were postoak and blackjack. Dr. Connie Taylor was elated to find an uncommon species: Lepuropetalon spathulatum, called "petite plant", in a small stream that dropped to a waterfall at our feet.

Ed. note: Jim Norman wrote the above and submitted it as "some notes to help you describe the trip". I think he did it beautifully, and there isn't room in this newsletter to adequately extol the resources laid at our feet. I do want to add that I saw my first Aralia spinosa (Hercules club), in the lawn at

>NOTICE

> Preregistration is now required for all field trips.
> Field trip announcements will contain the name, address, and telephone number of the leader. If you have doubts about terrain, difficulty, etc., ask.
> Field trips take place rain or shine. Proper dress and shoes, hat, etc., are essential. Bring water and lunch. Sunscreen and insect repellent are always in demand.
> 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.
> Chapter-initiated field trips are also open to all ONPS members who may be able to attend. Please register.
> Next state-wide event will be the Orchid Tour of SE Oklahoma on August 5. More details on this page, to the left.
> To register for other events, notify the person listed on the notice. Names, address and phone are listed. It is never too late or too early for planning.

the mission, and also Staphylea trifolia (bladdernut) in that woods full of yellow trout lilies and white, yellow, blue, purple, and striped violets. Also that some of us went on to Webbers' Falls to see the state-record Osage-orange tree (and I have pictures of our fearless leaders "hugging" it).
Blame the rain, perhaps, and the well-known aversion of modern man for getting his/her feet wet. It wasn't raining on field-trip day, May 27, and as luck would have it, Dr. Mike Palmer came over from OSU in Stillwater. (Later, I asked one of the OU staff botanists about Mike's magic way of naming grasses that were not even in bloom. He said, in a baffled voice, that he thought it was something they teach in agronomy classes.) I think I will learn how to do it anyway.

As we entered the Prairie, it was plain to see that the Spring shift had gone off-duty: no more Xyris or Nemastylis, though the Sisyrinchiums were still plugging away. The tall-grasses were coming up, and yellow stonecrop (Sedum nuttallianum) was in bloom in the thin-soil patches. The first plant we noticed was a lovely little prairie-bur (Krameria lanceolata), soon eclipsed by tall stands of Echinacea pallida (the tall orchid coneflower) and Callirhoe alcaeoides, or pale-pink-powpy-mallow. Marisirus cylindrica was already budding out, as were many kinds of sedges. There were more pink-flowered Alliums than ever, and worlds of Coreopsis.

Privately owned and carefully managed, this small prairie stands as a living refutation that good management is inconsistent with good farming. It is too rocky to plow, but the soil, never fertilized, is as black and heavy as the fabled plains of Illinois. We tried to leave not even footprints in the wet, rich soil: maybe Leslie can get the owner to let us come again.

After a trail lunch of apples and graham crackers and peanut-butter, Ruth and I followed Mike Palmer to a new botanical study area in Stillwater, to be called the Jim McPherson Nature Preserve. It is a quarter-section with trees and a creek that had been allowed to grow up nearly-solid with red-cedar. Mike is burning parts of it at various times and conditions, trying to control the cedar without discouraging such native species as might return. So many great places to see; so few sunny spring Saturdays....

Central Oklahoma ONPS members who are not getting postcard notices of chapter meetings or outings may call Ruth Boyd at (405)872-9652, mail to 812 Jordan Drive, Noble OK 73068 and ask to be added to the list. Those promised seed sources:

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PHOTO CONTEST WINNERS ANNOUNCED AT
THE 18TH ANNUAL WILDFLOWER WORKSHOP

Committee Chairman Clark Oviedo announces the winners of this year’s ONPS
Wildflower Photography Contest as:

Beginners
First Place: Jeri McMahon, Pale Coneflower (Echinacea pallida)
Second place: Jeri McMahon, Large Prairie Penstemon (P. cobaea)
Third Place: Jeri McMahon, Queen Anne’s Lace (Daucus carota)

Amateur Close-up
First Place: Kirk Bowers, Spiderwort (Tradescantia sp.)
Second Place: Betty Koenig, Violet Collinsia (Collinsia violacea)
Third Place: Kirk Bowers, Twisted Ladies’ Tresses (Spiranthes vernalis)

Advanced Close-up
First Place: Bob Smith, Horse Gentian (Triosteum perforatum)
Second Place: Kirk Bowers, Twisted Ladies’ Tresses (Spiranthes vernalis)
Third Place: Jim Norman, Yarrow Lady’s Slipper (Cypripedium kentuckiense)
Honorable Mention: Jim Norman, Wild Columbine (Aquilegia canadensis)

Habitat
First Place: Jeri McMahon, Blazing Star (Liatris sp.)
Second Place: Karen Koski, Indian Blanket (Gaillardia pulchella)
Third Place: Pam Harrison, Common Sunflower (Helianthus annuus)

Honorable Mention: Nora Jones, Narrowleaf Daisy (Hymenoxys linearifolia)
Honorable Mention:
Anton Kammerlocher, Ohio Spiderwort (Tradescantia ohiensis)
Best from a Botanical Standpoint
Kirk Bowers, Passionflower (Passiflora incarnata)

The photos have been mounted on foam-board and are on display at the
Wildflower Workshop in Boise City. Certificates and cash prizes were awarded
there. Judges for this year’s contest were Sally Burr, Larry Heifner and Dr. Gloria
Caddell. I would like to offer thanks to Lynn Allen, who helped mount the photos.

Ed. note: This year’s first prize for advanced close-up went to a stunning picture
of a plant with small, inconspicuous flowers. In a category in which
passionflowers and Indian blankets, showy flowers with brilliant color, often are
selected winners, it is good to see expert photography rewarded.

p.s. My own entries to the photo contest became “lost in the mail”, despite first-
class postage, but weren’t returned to me as undeliverable, either. I’d like to hear
from anyone else who had that problem. paf

WE DO ADS NOW! BUSINESS-CARD SIZE JUST $20/ISSUE, IF ONPS-RELATED

How about a seed & plant exchange at the Annual
meeting? It’s a good time to start a few cuttings or
start harvesting seed. Be a true friend and pen a few
instructions on cultivation as well.

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RENEWAL TIME!

Please look down at your mailing label If the top line has a date entry of 12-94 or before in the third "word" position, your renewal for 1995 is due. The first "word" is your membership group: IM for individuals, FM for families, SM for students. The second "word" indicates the time you joined ONPS.

ONPS WELCOMES THESE NEW MEMBERS

Lillian Dixon, Edmond
Blossom Harris, Okla. City   Judith Hill, Okla. City
Dick & Jan Woolheater, Durant  Kim Shannon, Stillwater
Elizabeth Weatherholt, Tulsa  Cheryl Wooton, Tulsa

Wm. & Charlotte Love, Norman  Virginia Pattinson, Piedmont
Sue & Kent Lucas, Norman  Diane Vanlandingham, Norman
James & Linda Taylor, Hinton  John Wagner, Oklahoma City
Paula Craig, Chickasha  Mary Dennis, Oklahoma City

Jane Bechtold, Indiannahoma
Virginia Boyter, Oklahoma City
Angela Collins, Tulsa
Taera Kamei, Tulsa

Know any of these fine folks? Why not give them a call, welcome them to the organization, invite them to go along on a field trip, get acquainted. We need them!
Growing Native Wildflowers is a handbook developed to help you grow and use native Kansas wildflowers as part of the landscape in your garden or yard. A set of fifteen species accounts is being offered annually through subscription from the Kansas Wildflower Society, the sponsor of this project. The How-To Guide includes general helpful hints for planning your garden, preparing soils and seeds, planting, and a list of useful references. Species Accounts give unique characteristics, management techniques, and seed collection and propagation methods for each species. The How-To Guide, the 1991, 1992, and 1994 Species Accounts and a three-ring binder are available separately or in any combination.

1991 Species Accounts

Butterfly milkweed — Asclepias tuberosa
Ground-plum milkvetch — Astragalus crassicarpus
Blue false indigo — Baptisia australis
Plains yellow primrose — Calycanthus serrulatus
Plains coreopsis — Coreopsis tinctoria
Purple prairie clover — Dalea purpurea
Black samson echinacea — Echinacea angustifolia
Dotted blazing star — Liatris punctata
Wild bergamot bee balm — Monarda fistulosa
Missouri evening primrose — Oenothera macrocarpa
Prairie coneflower — Ratibida columnifera
Black-eyed susan — Rudbeckia hirta
Fringeleaf ruellia — Ruellia humilis
Pitcher sage — Salvia azurea
Cattclaw sensitive briar — Schrankia nutallii

1992 Species Accounts

Leadplant — Amorpha canescens
Smooth milkweed — Asclepias sullivantii
White boltonia — Boltonia asteroides
Round-head prairie clover — Dalea multiflora
Prairie larkspur — Delphinium viridescens
Illinois bundleflower — Desmanthus illinoensis
Maximilian sunflower — Helianthus maximilianii
Junegrass — Koelreuteria pyramidalis
Button blazing star — Liatris aspera
Showy evening primrose — Oenothera speciosa
Breadroot scurfpea — Psoralea esculenta
Tuberous prairie dandelion — Pyrrhopappus grandiflorus
Compass plant — Silphium laciniatum
Rigid goldenrod — Solidago rigida
Ohio spiderwort — Tradescantia ohiensis

NEW! 1994 Species Accounts

Little blue stem — Andropogon scoparius
Whorled milkweed — Asclepias verticillata
White wild indigo — Baptisia alba
Showy partridge pea — Cassia chamaecrista
New Jersey tea — Ceanothus americanus
Canada wildrye — Elymus canadensis
Rattlesnake master — Eryngium yuccifolium
Tall eupatorium — Eupatorium abissinum
Tall gayfeather — Liatris pycnostachya
Roundhead lespedeza — Lespedeza capitata
Wavyleaf agoseris — Microseris cuspidata
Large-flower penstemon — Penstemon grandiflorus
Prairie groundsel — Senecio plattensis
Slender greenthread — Thelesperma megapotamicum
Rose verbena — Verbena canadensis

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To place an order, contact Dr. Dwight Platt/Lorna Harder, The Knauffman Museum, Bethel College, N Newton, KS 67117-0531 (316/283-1612). Check or money order should be payable to The Kansas Wildflower Society.