



# Gaillardia

The Oklahoma Native Plant Society Newsletter

The purpose of the ONPS is to encourage the study, protection, propagation, appreciation and use of Oklahoma native plants.

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Volume 9 Number 1  
Spring 1994

**COPY AND ART DEADLINE  
FOR NEXT ISSUE IS 15 MAY  
1994.**

## 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 green pull-out sheet enclosed with this newsletter contains addresses and phone numbers for contact.**

28 March 1994: (Monday) 7:30 p.m. Central Chapter meets at Kirkpatrick Horticulture Center, Peggy Brennan demonstrating basket-making using native plants. Contact Ruth Boyd for more information.

9 April 1994: Spring Field Trip to NE Oklahoma woodland. Details on p. 9.

23 April 1994 (Saturday): NE Chapter field trip to Keystone Park. Pg. 9.

24 April, 1994: **Sunday** Central Chapter field trip to the Menzie farm, east of Noble in the edge of the Crosstimbers. Brown-bag lunch. Regularly attending Central Chapter members will be notified. Others may call Ruth Boyd at 872-9652, about mid-April.

29-30 April 1994. Oklahoma Academy of Science spring field meeting. Note: ONPS participates in these excellent field meets. Details on p. 4.

9 May (Monday) NE Chapter regular meeting. Contact Betty Kemm.

7 May 1994: Eufaula Wildwomen Wildflower and Herb Festival. See pg. 9.

15 May 1994: Summer *Gaillardia* deadline.

20-21 May: 17th Annual Wildflower Workshop in Tulsa. See page 10.

>>The ONPS Spring Outing previously announced for May 28-29 has been cancelled due to lack of suitable facilities.

18 June 1994: ONPS Board Meeting. Contact Connie Taylor

30 June 1994: Call for award nominees. Jeff Black.

13 August 1994: Bog-tripping field trip to SE Oklahoma. Native orchids and lots more. Contact Jimmy Norman.

15 August 1994: Fall *Gaillardia* deadline.

8 & 9 October 1994: ONPS Annual Meeting: Deer Run Lodge, near Durant. Details and registration form will be in the Summer *Gaillardia*.

1 October (Saturday) State-wide field trip to Arbuckle Mountains, at the Chickashaw NRC in Sulfur. No fee: registration to Jeff Burkhart.

15 November 1994 Winter *Gaillardia* deadline.

Native North Americans used 1112 species of plants for food or beverages before European settlers arrived. Only about nine of those were cultivated, and only sunflower (*Helianthus annuus*) has become a major modern crop.

C. B. Heiser, Jr., in *Flora of North America*

## CONSERVATION CORNER

## URBAN WILD, NATIVE PLANT, WATER GARDEN FOR THE BIRDS

by Richard Bradley

A bird one has never seen before is fascinating perched in front of a dining window. The secret to having this is a free-form wild garden with native and ornamental plants, a meandering path, a spring dripping from rocks, a trickling creek backed by openly arranged bare branches in front of dense bushes, and a small pond with gently sloping edges.

Before creating this my small grassed backyard with a bird feeder in the center of Tulsa hosted the House Sparrow, Starling, Grackle, Blue Jay, Cardinal, Goldfinch, Purple Finch, Brown Thrasher, Mockingbird, Mourning Dove, Cedar Waxwing, Robin, Chickadee and Titmouse.

Since the wild garden, there have been the Green Heron, American Woodcock, Wood Thrush, Hermit Thrush, Ovenbird, Louisiana Waterthrush, Wilson's Warbler, Prothonotary Warbler, Parula Warbler, Orange-crowned Warbler, Yellow Warbler, Redstart, Yellow-rumped Warbler, Black-and-White Warbler, Common Yellowthroat, Tennessee Warbler, Nashville Warbler, White-crowned Sparrow, Fox Sparrow, Rose-breasted Grosbeak, Rufous-sided Towhee, Catbird, Least Flycatcher, Carolina Wren, Bewick's Wren, House Wren, Red-headed Woodpecker, Hairy Woodpecker, Downy Woodpecker, Yellow-bellied Sapsucker, Mississippi Kite, White-breasted Nuthatch, Red-breasted Nuthatch, Screech Owl, Barred Owl, Great Horned Owl, Red-tailed Hawk, and probably others.

The native plants which came from friends, nurseries, roadsides, and construction sites, are the compass plant, *Silphium laciniatum*; lead plant, *Amorpha canescens*; *Verbesina*; *Polymnia*, nettles, *Urtica spp.*; elephant's foot, *Elephantopus spp.*; sow thistle, *Sonchus asper*; touch-me-not, *Impatiens capensis*; wood mint, *Blephilia ciliata*; basket-flower, *Centaurea*; eryngo, *Eryngium spp.*; four o'clock, *Mirabilis spp.*; purple cone-flower, *Echinacea purpurea*; passion-flower, *Passiflora incarnata*; pipestem vine, *Aristolochia tomentosa*; Joe-Pye weed, *Eupatorium fistulosum*; pokeberry, *Phytolacca americana*; serviceberry, *Amelanchier arborea*; wild onion, *Allium spp.*; turtlehead, *Chelone glabra*; coralberry, *Symphoricarpos orbiculatus*; goatsbeard, *Tragopogon major*; horsetail, *Equisetum hyemale*; cattail, *Typha spp.*; arrowhead, *Sagittaria spp.*; spiderwort, *Tradescantia spp.*; day-flower, *Commelina spp.*; *Coreopsis spp.*; *Gaillardia sp.*; *Geum*; May-apple, *Podophyllum peltatum*; bloodroot, *Sanguinaria canadensis*; *Yucca spp.*; obedient plant, *Physostegia virginiana*; star of Bethlehem, *Ornithogalum spp.*

Jerusalem artichoke, *Helianthus tuberosa*; tall ageratum, ?; lamb's quarters, *Chenopodium album*; goosefoot, *Chenopodium berlandieri*; rough sunflower, *Helianthus hirsutus*; Maximilian sunflower, *Helianthus maximiliani*; ox-eye, *Heliopsis helianthoides*; Virginia creeper, *Parthenocissus quinquefolia*; trumpet vine, *Campsis radicans*; daisy fleabane, *Erigeron strigosus*; boneset, *Eupatorium sp.*, wild hyacinth, *Camassia scilloides*; rosin plant, *Silphium integrifolium*; bedstraw, *Galium sp.*; columbine, *Aquilegia sp.*; buttercup, *Ranunculus sp.*; cinnamon fern, *Osmunda cinnamomea*; royal fern, *Osmundia regalis*; nightshade, *Solanum sp.*; sweet william, *Phlox divaricata*; *Lythrum sp.*; *Liatris sp.*; milkweed, *Asclepias sp.*; thistles, *Cirsium sp.*; Queen Anne's Lace, *Daucus carota*; *Veronica sp.*; *Verbena sp.*; evening primrose, *Oenothera sp.*; black-eyed Susan, *Rudbeckia hirta*; blackberries, *Rubus sp.*; wild cherry, *Prunus serotina*; beautyberry, *Callicarpa americana*; paw-paw, *Asimina triloba*; *Juniperus virginiana*; Solomon's seal, *Polygonatum biflorum*; mulberry, *Morus rubra*; persimmon, *Diospyros virginiana*; deciduous holly, *Ilex decidua*; pecan, *Carya illinoensis*; redbud, *Cercis canadensis*; dogwood, *Cornus florida*; American holly, *Ilex opaca*; hackberry, *Celtis sp.*; wild lettuce, *Lactuca sp.*; and dock, *Rumex sp.* Native plants are survivors. They require no care, watering, fertilizer, or insecticides. Birds need insects and native plants are the necessary hosts.

Some observations have emerged. Let the fallen leaves stay. Birds like them for looking for insects and seeds. Let some remain in the bottom of the pond. Black minnows, which require no feeding, go under them and reappear in the spring even if frozen. A buried garden hose works fine for the dripping spring. A pump aerator frightens birds and is needed only for large fish. The creek and sloping pond liner edges can be covered with clay soil or brown pea gravel. Put a flood plain around it, if you want it larger part of the time. Small birds prefer the tiny quarter-inch deep creek. Any pond overflow creates a good bog for marsh plants. The end of January, remove dead foliage that would retard bulb and plant growth, and in July remove excess plants. Observe from behind a dining window if possible. You are there longer for viewing, and the birds relax.

A wild, native plant, water-garden oasis for birds is relaxing, educational, and constantly entertaining. I wish everyone had one, for it can range from simple to complex and inspires desire for conservation of our natural heritage.

*Editorial note: Richard's garden sounds like paradise. Don't I wish I were there now (there is an inch of frozen sleet on my garden, outside). Want to tell us about yours? You don't need to supply the "official" botanical name for the plant if you don't have it handy -- I'll look them up as they go into the Gaillardia. But if you want to know them, then use John and Connie Taylor's List of the plants of Oklahoma. The third edition, just published, has more information than ever, still only \$9.*

*Ed. note: Thanks to all who suggested titles for this new feature for The Gaillardia. Second in the series:*

## GARDENING ON THE WILD SIDE

by Wayne Chambers, co-owner with wife Susan of Rose Rock Landscape and Design in Midwest City.

### DECIDUOUS HOLLY

Deciduous holly (*Ilex decidua*) is one native plant that can be found in many local nurseries. Also known as Possum Haw, this large shrub or small tree is not only widely available, it is also widely adaptable. Although native to eastern Oklahoma, primarily in wet, low areas, it also grows well in very diverse sites elsewhere in the state. It has been transplanted successfully into such difficult locations as the SCS Experiment station in Woodward, the OU campus in Norman, the heavy clay soils of Nichols Hills, and in sandy crosstimbers soil.

As if adaptability weren't enough, deciduous hollies are essentially pest-free. They also seem to accept differing exposures readily. Our plant is doing well in a good amount of shade. Another plant -- quite possibly the mother plant of ours -- is growing in full sun less than 20 feet from a major highway. It is also doing well.

With all these attributes it would be a plant worth growing even without its major attraction; winter color, or more precisely, winter berries. ("winterberry" is yet another of its common names). Maturing in late summer from small spring-blooming white flowers, the berries are usually red-orange and 1/3 inch in size. The plants are lovely enough before leaf drop, but after the leaves have fallen they can be traffic stoppers -- literally.

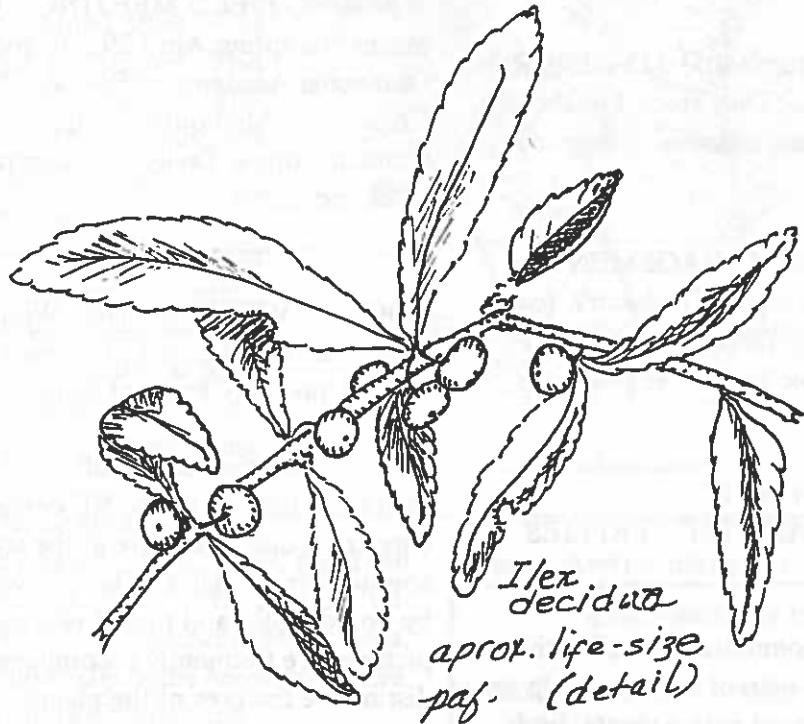
Berry color varies. Usually native populations lean more to true red, or in some cases, yellow. Only fe-

male plants bear fruit. For best berry-set a male should be planted nearby, or a male twig can be grafted onto the female plant.

The many theories on how to plant nursery stock are too extensive to list in this article. (I just dig a hole and put the plant in it). The main consideration is the condition of the root system. Most deciduous hollies are container-grown and the roots may have begun to circle in the pot. This can eventually kill the plant as it matures. The circling roots should be carefully scored before planting, or a plant with a better root system should be selected.

Winterberry hollies display their fruit nicely against white structures, with an evergreen background, or near a large window where the cedar waxwings can be viewed feeding on the berries.

There are several selections of possum haw in the nursery trade: most are unavailable in Oklahoma. Deciduous hollies are more popular in the northern states where broadleaf evergreens so common in the South are not reliably hardy. The following is a short list of deciduous hollies that might be found locally.



in great numbers. Upright growing plant. Most readily available locally.

- (1) "Warren's Red" -- selected by Warren's Nursery in Oklahoma City. Bright red berries
- (2) "Grace" -- selection named by Sunshine nursery in Clinton, Oklahoma. Has large red berries.
- (3) "Sentry" -- fastigate form. Big red berries.
- (4) "Cascade" -- pendulous growth habit. Extra heavy set of red berries.

(5) "Pocahontas" -- good form. Good choice for training into standard form. Bigger red berries than most. Drops leaves at first frost -- earlier than some other selections.

(6) "Council Fire" -- good red berry selection.

(7) and (8) "Beyer's Golden" and "Goldfinch" -- selections with yellow berries.

#### Sources:

Check with your local nursery folks first. If they cannot help you, here are two who probably can:

(1) Warren's Nursery, (405) 769-2678, 10901 NE 23d, Oklahoma City OK 73141. They carry "Warren's Red" in 1 & 5-gallon, occasionally larger field-grown plants. They also stock male plants.

(2) Sunshine Nursery & Arboretum (405) 323-6259, Rte 1, Box 4030, Clinton OK 73601. They stock Pocahontas, Grace, Warren's Red, Cascade and possibly others in 1 and 5-gallon sizes. ●

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#### DIS-INTEGRATED PEST MANAGEMENT

*"If it moves slowly enough, step on it; if it doesn't, leave it -- it'll probably kill something else"*. From a delightful book loaned us by Dorothy Norris: "Old Wives' Lore for Gardeners", by Maureen and Bridget Boland.

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#### BACKYARD HABITAT

#### TAKES OFF FOR BIRDS AND BUTTERFLIES

##### Book Reviews Needed

The Backyard Habitat Committee met after the Indoor Outing and decided on a plan of action to help encourage homeowners to think about native plants, birds and butterflies when they plan their landscapes.

This committee's exciting plans include development of lists of habitat plants that will work in different parts of the state. Ann Randle, Wayne and Susan Chambers and Darlene Michael will be working on this project. After the lists are made, garden plans will be developed for each section of the state.

A backyard habitat tour will be held in Tulsa on June 4. Mark your calendars now. The tour will include at least three gardens that are bird and butterfly friendly. Volunteers are needed to help coordinate the tours and to

serve as hosts at the gardens on tour day. Contact Nora Jones at (918)585-1117 to volunteer and for more information.

A bibliography of backyard habitat books will be developed. If you have favorite books on native plants, backyard habitat or water gardens, please take a moment to write a few sentences describing the book. Include the following information in the description: Title, author, publisher, publisher location, date, ISBN Number (usually on the back of the title page in the Cataloging in Publication data). List major topics covered by the book and be sure to note the region covered. Give a short assessment of the book. Send the description to Sandy Shadley, Tulsa City-County Library, 400 Civic Center, Tulsa, Oklahoma 74103, by **March 31, 1994**. ☼

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**A SPRING FIELD MEETING.** Come learn some new plants this spring April 29, 30, and May 1, 1994 with the Oklahoma Academy of Science. They are meeting at Cross Point Methodist Camp, 5 miles south of Kingston. Contact Connie Taylor for registration forms (405) 924-0121, ext. 2209.

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**BOOK REVIEW--Roadside Wildflowers of the Southern Great Plains** by Craig C. Freeman & Eileen K. Schofield. 1991. University Press of Kansas, Lawrence, Kansas, 66045.

This book covers all of Oklahoma west of a diagonal from the SW to the NE corner, including Oklahoma City and Tulsa which are at the southern boundary of the southern great plains. The 239 wildflowers are arranged by flower color and then flowering time. The beautiful pictures are frequently accompanied by line drawings of distinctive features of the plants. The accurate descriptions are followed by blooming period and habitat descriptions as well as information on telling this flower apart from similar species. Designed for use with or without the identification keys. Excellent for both beginner and experienced wildflower enthusiasts (Paperback \$17.95) ☼ Submitted by Sue Wheeler

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**"there is no limit to the amount of good a man may do if he does not worry about who gets the credit."**  
Robert Fulghum, from "UH, OH!"

*The Botanist's Corner***FONDLY FONDLING FERN FRONDS  
AND OTHER PARTS**

by Rahmona Thompson, East Central University

When you mention the word fern, most people respond in the affirmative. They have a mental image of a plant with filmy, divided leaves. But inquire much further and the concept of what a fern is becomes very vague.

The part of the fern life history that is most conspicuous is composed of three parts: roots, stems, and leaves. The roots tend to be narrow and wiry, growing in a dense mass. The roots of *Osmunda* are so matted that they may be cut up and sold as "osmundine," a potting media for orchids. The stem is usually horizontal and grows right at ground level or is slightly buried. It is called a rhizome. The leaves, which are called fronds, grow vertically upward from the rhizome. The frond is divided into two parts: the petiole and the blade. If the blade is divided into segments, each is called a pinna. It is the pinnae that we associate with the typical fern image. There are several flowering plants that have divided leaves to which we attach the label fern, such as the asparagus fern. But they are not ferns; a fern does not complete the sexual aspect of its life cycle by producing flowers.

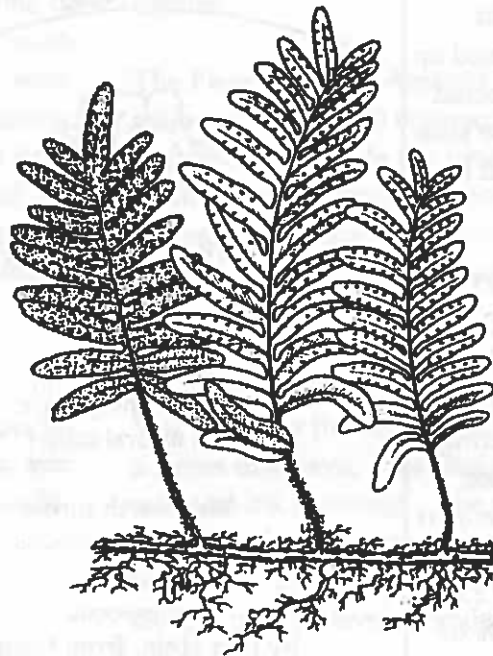
The young frond arises from the rhizome in a tightly curled manner. As it grows, the frond slowly unwinds into an erect position. The partially unwound position accounts for the appellation, *fiddle-head*, for these young fronds. Supposedly fiddle heads are edible; I have seen recipes for them in stir-fry and fried.

Fronds can be classified into two groups: fertile fronds and sterile fronds. Fertile fronds differ from sterile fronds, in that the former bear sporangia. Sporangia maybe on the underside of the frond or they may be so thickly aggregated that they replace the blade of the frond. On several occasions I have had surprised looks from students when I describe sporangia because they have mistaken them for the plant pest called scale. Sporangia are specialized structures where the form of cell division, meiosis, that produces spores occurs. Spores are cells encased in a hard shell. When the weatherman gives his report on the pollen and spore count, some of these spores that were tallied were from ferns.

These spores are dispersed either by floating on the wind to some distant site or by dropping to the ground under the parent plant. If the site where the spore lands has enough moisture and nutrients the spore germinates. Germination is the splitting open of the outer casing and emergence of a filament of cells, called a protonema. These cells divide until an inconspicuous, three-dimensional mass of cells, a fern prothallus, is formed. Fern prothalli are different shapes depending on the species but it is on this body that the sperm and the egg cells are produced. In a potted fern, the fern prothalli are often on the edges of clay pots.

Moisture is required for the sperm to swim to the egg. The moisture can be a heavy dew or a gentle rain. Into this water, hundreds of sperm are released with the slim chance of a few locating an egg.

Once fertilization has occurred, the zygote grows into an embryo. This embryo has a first leaf, a stem, and a root which will grow into fronds, rhizomes and a tangled mass



*Polypodium*

of roots. And the life cycle of the fern begins again.

#### **Contributions to Memorial Funds**

Contributions to the Harriet Barclay Fund since December, 1993, include a memorial by Paul Buck in memory of Ollie Crosby, who passed away on December 8

Ollie was a charter member of the Oklahoma Native Plant Society, a faithful member who was also an active conservationist involved in many organizations, a bird watcher, a leader in community library support, classical music, a sincere lover of nature and a good friend.

A gift of \$1000 for the Anne Long Fund was made in December by an ONPS member who wishes to remain anonymous. We deeply appreciate this generosity.



## GERMINATION TIPS

by Connie Taylor, SEOSU

**GERMINATING INDIAN BLANKET SEEDS**--Studies by M. J. Kaspar, Director of Wild Basin Preserve in Austin Texas, show that Indian Blanket, *Gaillardia pulchella* seeds germinate best at 25° C. which is about 77° F. He also found 75 % of his seeds germinated when exposed to light, and only 38.5 % germinated in the dark.

The seeds continued to germinate over a 2 week period with a high of 10% germination at day 6. Therefore, the best time to plant *Gaillardia* seeds is when the soil has warmed up and mild temperatures are expected the next week. Seeds should be scattered on the surface so they will be exposed to light.

**GERMINATING WILDFLOWER**

**SEEDS.** In the fall/winter 1993 issue of *Wildflower*, Journal of the national Wildflower Research Center, M. J. Kaspar gives information on germination of several wildflower species.

His results are as follows: *Coreopsis lanceolata* (Lance-leaf Coreopsis) was found to germinate best at 25° C which is about 77° F. Over 50% of the seeds will germinate between 4 and 8 days of planting at that temperature. Germination was 40% when seeds were exposed to light. *Monarda citriodora* (Lemon Bee-balm) germinated best at 30° C. which is about 86° F. It too did best in the light with an high 82% germination rate. Over 50 % of the seeds germinated on the second day and most within a week when planted at favorable temperatures. *Phlox drummondii* (Drummond's Phlox) germinates best at 15° C (58° F.). It germinates best in dark (18.5%) with fewer seeds germinating within the 10 to 15 days required. This species does best on deep, well-drained sand. *Eustoma grandiflorum* has an optimum germinating temperature of 30° C. (86° F.). It germinates between 4 to 10 days after planting with a 41.7 % rate. It did not germinate at all in the dark. It prefers heavy clay seasonably moist habitats. (Lisianthus, as it is known in the horticulture trade, can sometimes be bought as young plants from a local greenhouse) ☼

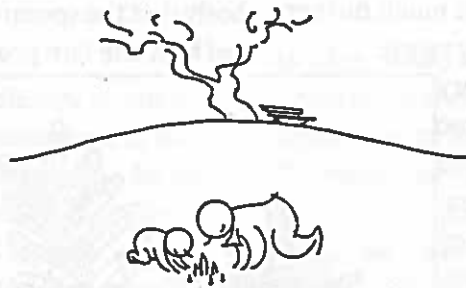
## BACKYARD HABITAT GARDEN TOUR

by Sue Wheeler

The Partners in Flight Committee is planning a backyard habitat garden tour in Tulsa in June. As one means of promoting native plants for the home landscape, the committee has been collecting catalogs from nurseries that

offer these plants. We hope to be able to provide information on plant source availability to both the public and the nurseryman and landscape architect.

Two catalogs of interest are (1) Missouri Wildflower Nursery, 9814 Pleasant Hill Road, Jefferson City, Missouri 65109. They offer seeds plus bare root or pots of grasses, wildflowers and shrubs. Cost is \$1; (2) Holland Wildflower Farm, 290 O'Neal Lane, Elkins, Arkansas 72727. They offer seeds and plants of trees, shrubs, flowers and herbs. For price list send SASE with two first-class postage stamps. Both nurseries are open for visitors at select times.



## THE MIRACLE OF SPRING

We glibly talk  
of nature's laws  
but do things have  
a natural cause?

Black earth turned into  
yellow crocus  
is undiluted  
hocus-pocus.

by Piet Hein, from *Grooks I*

If you are searching for a particular plant, call Sue Wheeler at (918) 743-4272 and she will be glad to search the catalogs for you. ☼

**ZERO-DISCHARGE SEPTIC SYSTEM**

Definitely not for everybody, and much too long to include in the *Gaillardia*, is a fascinating 10-page series on the construction (and red-tape management) of a zero-discharge septic system on the Gulf coast. The article appeared in two issues of the Mississippi Native Plant Quarterly. It is well-illustrated and covers materials, plantings, and installation.

For any member who wishes, I will mail a copy on request. Please send \$1 for reproduction and postage to Pat Folley / 15100 Etowah Road / Noble, OK 73068.

## WILDFLOWER GROWING GUIDES

by Sue Wheeler

"Growing Native Wildflowers" is an extremely valuable reference notebook developed by Drs. Dwight Platt and Lorna Harden of Bethel College, Newton, KS. Sponsor of this project is the Kansas Wildflower Society.

The handbook initially is being prepared in notebook form so "that pages can easily be revised." A set of 15 species accounts is offered each year, starting with 1991. Each species account has the same detailed format covering ornamental characteristics, growth characteristics and management, uses, relations to animals, seeds and fruit, seed germination, growing seedlings, vegetative propagation, geographic range and habitat. Black and white line drawings by Lorna Harden are a part of each account and show the flower, the seed pod and seed, the cotyledon and the true leaves. A Literature Cited list is included for each year.

The authors reconstructed a prairie plant community on the Bethel College campus, so many of the initial species accounts describe plants from the prairie grasslands, but the goal of the project is to cover all Kansas native wildflower species. To this end, the authors actively solicit input from their readers.

Included with the initial publication in 1991 is an introductory section on How To Grow Wildflowers plus an explanation of the criteria for each section of the species accounts.

This is a scholarly and extremely useful reference tool considering the proximity of Oklahoma to Kansas. It is also the best bargain in town -- \$16.50 will get you the complete set to date including postage. Future additions of 15 species accounts will be available annually for \$5 each. Make checks payable to the Kansas Wildflower Society. Send orders to:

Drs. Dwight Platt / Lorna Harden  
Kauffman Museum  
Bethel College  
North Newton, KS 67117

## FLORA OF NORTH AMERICA

## Volumes 1 &amp; 2

When Rahmona Thompson, who is on the editorial board for the *Flora of North America* project, wrote her review and publication announcement for the Winter *Gaillardia*, the books had not yet been released. Now, with copies of the first two volumes (of a projected 14 over a period of 12 years) before me, I have more information to add. In the first place, the books are beautifully bound, library-quality work. For anyone who ever wanted a reference on the plants of North America, this is the book of our dreams.

The Flora of North America project is a collaborative, binational effort of 30 botanical institutions and hundreds of botanists to compile the first comprehensive description of all the plants growing spontaneously in the United States, Canada and Greenland. The Missouri Botanical Garden serves as the organizational center for the project.

You may want to refer to Rahmona's article about the specific contents of the two volumes in print. Briefly, Vol. 1 covers the history and development of floristics in a series of essays, well-illustrated with photographs and pen-and-ink drawings. The evolution of plants as impelled by the changing environments through time is detailed, and the economic, taxonomic, and systematic bases for our current level of understanding.

Volume 2 begins the great task of describing all the species known to live on the continent, with the ferns and fern-allied plants and the gymnosperms. Keys aid in the specific determinations while also describing the relationships between and among the types. Again, illustrated with hundreds of distribution maps and line drawings.

Wait, there is more: along with the published volumes, all the information in the entire FNA will be stored in a computerized data base, allowing easy access, sorting, and comparison of huge amounts of information. The Missouri Botanical Garden is committed to maintaining and adding to that data even after the publication of the FNA is completed.

Naturally, all the activity and research necessary to such a monumental work has unearthed areas where more work must be done. The project is stimulating initial research  
...continued on page 8

.....continued from page 7

on these subjects as an integral part of preparing the text. It will be invaluable to researchers in agriculture, horticulture, forestry, and biology, and promises to be the standard reference for environmental management. Here is a potential source for the hard data required to determining a species' potential for survival or extinction. A lack of a common point of reference in these studies has handicapped researchers working in distinct areas but on related problems.

Now that the ONPS has the first two volumes in our library, we can have them available for admiration at our regular meetings, but, so far, we do not expect to be able to lend them as a library would. You really need your own!. From Oxford University Press, \$75 each volume. By phone, 1-800-451-7556. The press' mail address is 200 Madison Ave., New York, NY 10016. ☉

### MEET YOUR BOARD MEMBERS

Continuing a series begun in the Winter, 1993 issue.

#### Susan Chambers, Vice-pres. and Membership Chair.

Susan received her BS in Biology at Southwestern State University in Weatherford and her MS in Horticulture at OSU. She taught horticulture at the Oklahoma City branch of OSU Tech from 1981 to 85. Since 1983 she and husband Wayne have operated "Roserock Landscape and Design" in Midwest City. She is currently president of the Oklahoma Organic Gardeners Association. She is often called upon to give programs in the central Oklahoma area and was a featured speaker at the Wildflower Workshop this year in Enid. Having been Secretary/Treasurer of the Central Oklahoma ONPS chapter since its inception in 1989, Susan has offered to give up that pleasure if anyone else can be persuaded to do it. If Wayne and Susan had time for a hobby, it would be the rescue of wild and threatened plants whose only fault lies in their proximity to a "development".

#### Darlene Michael, Secretary

As a child, Darlene had an opportunity to enjoy the flora of almost the entire US, as her father was in the Marine Corps. She came to Oklahoma when she was married. She earned her BS in Environmental Design and MS in

Landscape Architecture at OU. Darlene is now one of three partners in a landscape architecture business: "Great Plains Design", in Oklahoma City. Two recent commissions have been the North Canadian Riverfront Corridor in downtown Oklahoma City and the Lake Hefner Planting Plan. She's had plenty of experience as a secretary, as she was one for the Federal Government for several years.

### RHODORA

In May, when sea winds pierced our solitudes,  
I found the fresh Rhodora in the woods,  
Spreading its leafless blooms in a damp nook,  
To please the desert and the sluggish brook.  
The purple petals, fallen in the pool,  
Made the black water with their beauty gay;  
Here might the redbird come, his plumes to cool,  
And court the flower that cheapens his array.

Rhodora! if the sages ask thee why  
This charm is wasted on the earth and sky,  
Tell them dear, that if eyes were made for seeing,  
Then Beauty is its own excuse for being:  
Why thou wert there, O rival of the rose!  
I never thought to ask, I never knew:  
But, in my simple ignorance, suppose  
The self-same Power that brought me there brought you.  
"On Being Asked Whence is the Flower", by Ralph Waldo Emerson

### CONTRIBUTIONS WELCOME

ONPS members and friends are encouraged to contribute to the *Gaillardia*, published quarterly. Many of our articles are written by professionals, and are submitted on disks.

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



## FIELD TRIPS

Jimmy Norman, Field Trip Co-Chair

Predicting on a cold day in February that April 9th will be sunny and full of blooming wildflowers can be dangerous to my health! But, what the heck. You people from west of the Arkansas River need to see what spring really looks like here in Green Country, so let's go for it.

In the not-too unlikely event of a rain-out, I'll have my trusty projector at the ready and we'll see spring flowers regardless

--and I invite you other flower-shooters to bring along some of your best shots, too. Just early stuff now: no Asters.

So, at 10 a.m. on Saturday, April 9, I'll be expecting a whole passel of you all to show up at scenic Camp Christian -- over here in Mayes County, on the west bank of Ft. Gibson Lake. It's a beautiful place, and should have lots of early bloomers to offer.

If you'll look at your map and find where highway 412 runs east from Tulsa and intersects with highway 69 between Pryor and Wagoner, then you're practically there. The Camp Christian sign is 1.2 miles south of the 412/69 intersection. A blacktop road leads east 1 1/2 miles straight to the camp and another sign. (There's a road off to the right: don't take it -- go straight east.) If you're coming from the south on highway 69, the Camp Christian sign is 13 miles north of Wagoner.

We'll meet there at the camp headquarters at 10 a.m. Bring lunch; we'll provide cold drinks. Y'all come! ☺

## MENZIE FARM TOUR

The Central Chapter invites you to tour the Menzie Farm with us on Sunday, 24 April. This is a fine, wild place in the edge of the Cross-timbers with lots of wildlife habitat; creeks, marsh, springs, grassy clearings, Blackjack / Post Oak / Hickory woods and other delights. An established bluebird trail should be full of birdy residents by then. To register and get directions to the meeting place, call Ruth Boyd. We'll provide the drinks for your brown-bag lunch. ☺

## KEYSTONE PARK TOUR

The NE chapter will tour Keystone Park on Saturday, 23 April, with a Park Ranger as guide. He

promises to take us to places not often seen by casual visitors. Meet at the Tulsa Garden Center at 8 a.m. to car-pool for the trip. Brown-bag lunch advised. A morning hike will feature easy walking, with a more strenuous hike scheduled for after lunch. ☺

## 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.
- > 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 spring wildflower tour in NE Oklahoma on 9 April. Details at left. To register, just notify Jim Norman at (918)682-1896 or 502 North 14th, Muskogee, Oklahoma .74401.
- > To register for other events, notify the person listed on the notice. Names, address and phone are on the green insert. It is never too late or too early for planning!

Posey Park in downtown Eufaula. No registration required, but questions can be directed to: Wildwomen Wildflowers / 418 S. Main / Eufaula OK 74432 / ph (918)689-5481 ☺

## ALASKA NATURAL HISTORY EXPEDITIONS

We have an interesting letter in the mail, from a former president of the Alaska Native Plant Society, now offering package tours. They sound wonderful. As announced: "Backpack / raft Denali, ANWR, Gates of the Arctic, or Yukon River with Univ. of Alaska naturalist. Credit available. \$585-1085 for 9-14 days. For details see clip. Pat Folley has two copies of brochure.

## Alaska Natural History!

Backpack/raft Denali, ANWR, Gates of the Arctic, or Yukon River with Univ. of Alaska naturalist. Credit avail. \$585-\$1085 for 9-14 days. For expedition details, write leader, John E. Wenger, 6038 E. 12 Ave., #10 P Anchorage, AK 99504



**THE NATURE CONSERVANCY TOURS**

Two offerings open to the public from TNC are of interest to our members: Saturday, June 11, **Tallgrass Prairie Day** will feature wildflower and bird-watching hikes, kite-flying, and a tour of the bison herd. Lunch available at a small charge.

On Saturday, September, 10, TNC will tour the **Great Salt Plains State Park**, where there are opportunities for crystal-digging, bird-watching, some really unique salt-and-alkali-tolerant plants. Cabins available. TNC's offices are (405)235-0654 in Oklahoma City and (918)585-1117 in Tulsa, for information on time and gathering points. ☉

**CHAPTER NEWS**

**NORTHEAST CHAPTER** liason Betty Kemm reports that fifteen members and tour leader Paul Buck enjoyed a winter botany field trip to Redbud Valley Park on the 13th of February.

It was Paul Buck again on the 7th of March, when an indoor program on the plants that cause pollen allergies was the feature of their regular quarterly meeting. Sure wish we could clone Dr. Buck!

NE chapter's field trip to Keystone Park on Saturday, April 23 is described on page 9. Don't miss it.

The next scheduled regular meeting will be at the Tulsa Garden Center on 9 May. Contact Betty Kemm for time and subject.

An interesting new project for the NE chapter is the sponsoring of a fund-raising drive to provide wildflower seed for planting by the Department of Transportation. Tulsa member Marcy Robinowitz has agreed to chair this effort.

Also, the NE Chapter will be co-sponsoring the Wildflower Workshop on May 20-21 in Tulsa. More on that below.. ☉

**17th ANNUAL WILDFLOWER WORKSHOP**

**BROCHURES** will soon be in your mailbox for the Wildflower Workshop, to be held at the Tulsa Garden Center on May 20-21. Registrations are due in by the 13th of April. The \$4.50 registration fee will get you a whole day (Friday) of lectures and demonstrations, including one by Dr. Paul Buck on Medicinal and Edible Plants of Oklahoma. Also, displays of books, live plants and photographs. Participants are encouraged to bring specimens of local plants for expert identification. The evening speaker will be Harvey Payne, director of the Tallgrass Prairie Preserve.

Then, on Saturday, there will be a choice of field trips:

- (1) All-day trip to the Tallgrass Prairie Preserve by chartered bus, lunch included, guided tours by ONPS members.
- (2) Or, you may choose a shorter tour of the beautiful Redbud Valley Park and Oxley Nature Center in Tulsa. Drive your own car and leave when you wish. Lunches provided.

If your Wildflower Workshop brochure hasn't arrived by 1 April, call Joanne Orr at (405)521-4037. ☉

**CENTRAL CHAPTER** had a busy winter, despite having its regular meeting date in December pre-empted by New Year's holidays, because we co-hosted the Indoor Outing with the Bebb Herbarium at University of Oklahoma. Finally, on the 28th of February, we managed a regular meeting at the Kirkpatrick Horticulture Center in Oklahoma City. Our speaker was Dr. Gloria Caddell of CSU, on the natural history of Japan. Future plans include an indoor meeting at the Horticulture Center on Monday, March 28, to feature Peggy Brennan, who will demonstrate the craft of basket-making using native plants. ONPS members who can get to Oklahoma City for these fun and informal programs are encouraged to notify Ruth Boyd or Pat Folley for inclusion on the post-card announcement list. Only those who have attended or joined new during the last year are routinely notified (postage costs, you know).

The field trip to Menzie Farm is described on page 9. Another field trip is scheduled for May 14, to tour the Oklahoma City Zoo's gardens and greenhouses. Regular zoo admission of \$4 will apply, and includes entry to the animal displays after the guided tour.

Also planned: a booth at the Norman Environmental Fair, Saturday April 23. And, on Saturday, June 25, our annual picnic and wildflower walk will visit the Kessler farm near Purcell. This is a 220-acre organic farm, maintained in conjunction with the University of Oklahoma, and a beautiful place to see. Brown-bag lunch. ☉

**NEW MEMBERS**

ONPS proudly welcomes these new members:

Steve Dobbs, Stillwater.	Corine Dragon, Norman
Linda Galahar, Tulsa	Bebb Herbarium, Norman
Carol Kowaleski, Norman	Rob Suiter, Duncan
Virginia La Quey, Duncan	Newell McCarty, Norman
Yvonne Evans, Norman	
Philip & Johanna Meredith, Norman	

**Note: if you are on this list, and haven't received a welcoming note from Susan Chambers, don't despair: the local post-office returned several on a technicality.**

See anyone you know on this list? Give them a call.

## INDOOR OUTING REPORT

The 1994 Indoor Outing was held at the University of Oklahoma, Norman, in the Botany / Microbiology building. Beginning at 9:30 a.m. on Saturday, February 5, the all-day event featured lectures, an indoor field trip through the department's research greenhouses, and demonstrations. Joining the 79 paid participants were four special guests: Dr. & Mrs. Elbert Little, Dr. George Goodman, and Keri Taylor. Rebecca Troth, of Rose State, and Connie Taylor, of SEOSU, brought students.

Amy Kornkven, Assistant Curator of the Bebb Herbarium, coordinated the program. Dr. Rahmona Thompson of East Central University, Ada, spoke on Growing Grasses as Ornamentals. Her stunning slides of natural grasses in the landscape will be an inspiration to many who might not have considered grasses as garden plants. Dr. Wayne Ellisens of University of Oklahoma presented a slide / lecture demonstrating the many variations in color and conformation that occur in populations of plants in the family Scrophulariaceae (*Penstemon*). Dr. Bruce Hoagland, from the Oklahoma Biological Survey, described some of his work with the rare and little-known

plants of Oklahoma wetlands, including some surprising areas included in the traditionally dry western quarter. Dr. Karol Schubert of U.O. talked about his adventures botanizing in Costa Rica.

The greenhouse tour was led by its director, Cal Lemke. Many who visited Cal were pleased to receive samples of exotic plants which had produced a surplus under his care. Amy Kornkven and Debbie Benesh, OU Botany department graduate students, offered walk-through demonstrations on collecting and pressing plants. A static display in that area displayed Pat Folley's "40-acre Herbarium" with sample specimens of the 300-odd plants found blooming on their farm. Pat Folley and Rahmona Thompson shared another walk-through demonstration on the process of identifying plants by keys, and offered a copy of the new Draft Key to the Families of Oklahoma just issued by the Flora of Oklahoma Project. John Ferrier served as host for visitors to the Bebb Herbarium. Ruth Boyd chaired the Central Chapter Hospitality Committee, which also included Lynn Allen, Mary Beth Dragoo, Hal Howard and Sheila Strawn.

To all who helped and attended: many thanks!

### BECOME AN OKLAHOMA NATIVE PLANT SOCIETY MEMBER

Please enroll me as a Member of the Oklahoma Native Plant Society. My dues payment is enclosed for the category checked. Make checks payable to *Oklahoma Native Plant Society*, and mail to:  
Oklahoma Native Plant Society / 2435 South Peoria / Tulsa, OK 74114

\$15.00 Family     \$10.00 Individual     Gift from \_\_\_\_\_  
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**RENEWAL TIME!**

Please look down at your mailing label  If the top line has a date entry of 12-93 or before in the third "word" position, your renewal for 1994 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.)

If you are a LIFE member, why not use this notice to send a gift subscription? Our low rates make it easy for anyone interested in natural plants to get in on our great field trips, interesting and educational programs, and lots of new friends. Just fill in the application on page 11 and send it to the Tulsa Garden Center address, and we'll do the rest. 

*The Gaillardia*

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*Paul Buck, bless him, sends these thoughts for your consideration:*

"How the universal heart of man blesses flowers! They are wreathed round the cradle, the marriage altar, and the tomb. They should deck the brow of the youthful bride, for they are themselves a lovely type of marriage. They should twine round the tomb, for their perpetually renewed beauty is a symbol of the resurrection. They should festoon the altar for their fragrance and beauty ascend in perpetual worship before the most high.

Lydia M. Child (1802-80) American Abolitionist

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