

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

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# Gaillardia

The Oklahoma Native Plant Society Newsletter

#### **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.

- 3 December, 10:00 a.m. in Norman: Board Meeting. This is our annual planning session, all offices and committees must be represented.
- 25 December, all day: Have a Very Merry Christmas!
- 1 January, 1995: resolve to participate in all the outings and field trips this year. Ours are the best, and Oklahoma is the wildest!
- 4 February: first Saturday: Indoor Outing. more on page 10 and on flyer.
- 15 February: deadline for Spring issue of Gaillardia
- 27 February: 7:30, OSU-OKC Hort. Center, Central Chapter Meeting with Judy Jordan giving a slide-lecture on the Galapagos Islands.
- 15 March: deadline for photography contest.
- 23 March: deadline for registration for Spring Field Meeting (page 9)
- 27 March, 7:30, Central Chapter meets at the Horticulture Center. Program by Pat Folley on the Spring Wildflowers of Central Oklahoma.
- 1-2 April: Spring Outing at Dwight Mission (page 9) & short Board Meeting on Saturday before dinner.
- 21 23 April, Spring Field Meeting of Oklahoma Academy of Science at
  Beaver's Bend State Park. Contact President Connie Taylor
- 15 May: deadline for Summer issue of Gaillardia
- 20 May: Wildflower Festival, Quartz Mountain State Park (405)563-2424
- 3-4 June: Backyard Habitat Home tours, Tulsa. See page 11
- 9-10 June: Wildflower Workshop, Boise City. Brochures will be mailed to all ONPS members.

#### MEMORIAL FUND DONORS

ONPS thanks these generous donors to our two memorial funds:
Betty Kemm, Tulsa, to the Anne Long Fund in honor of Theresa Grosshans
Ruth Boyd, Noble, to the Anne Long Fund in memory of Gloria Brannum
In memory of Jim McPherson, donations to the Harriet Barclay Fund were
made by: Paul Buck, Ruth Boyd, Patricia Folley, Des & Del Isted.
Susan Chambers, Midwest City, to the Harriet Barclay Fund

(For our newer members, the Anne Long Fund provides recognition of the person or organization annually who has contributed most significantly to the ONPS' goals. The Harriet Barclay Fund is given to the authors of the best papers on Botany submitted to the Junior Academy of Science by a high school student and a junior-high school student.)

#### GARDENING ON THE WILD SIDE

by Ann Randle

#### VIRGINIA CREEPER, CRAWLER, & CLIMBER

A month ago I was admiring the print of a late 17th century painting when I noticed that growing on the pictured stone verandwas a vine that I recognized instantly - Virginia Creeper. As this painting is relatively old and I was under the impression that Parthenocissus quinquefolia is a native North American I was intrigued enough to do a little research. John Tradescant, the 17th century plant collector, is credited with being the first to grow it in England around 1617. He received it (and other specimens) from the colonies because he was a subscriber to the Virginia Companie. By ten years later it had been welcomed to gardens all over the continent as well as England and still ranks as one of Europe's favorite exterior wall ornaments. Pamous gardens it is featured in include the Royal Botanical at Kew, England and that of Charles Darwin who included it in his 1888 book, The Movements and Habits of Climbing Plants.

Its original popularity stemmed (forgive the pun) largely from its adaptability and fall color. It is a strong grower, creeping across the ground wherever support is not offered, climbing virtually anything in its path up to 50 feet tall at a rate of 6 to 10 feet a year. In my yard it clung across and hung back down from the top of several mature locust trees to the point that Kudru came to mind and I feared the yard man (my husband Bill) would 'clothesline' himself. Its leaf form, growth habit and autumn coloring allow it to be confused occasionally with poison ivy. I realized this one year when a friend asked why I would plant poison ivy around my front door. (A new landscape use immediately came to mind.) Its species name "quinquefolia", however, means "five leaves" as opposed to the three leaflets of poison ivy. Also, unlike poison ivy which has white berries, Virginia Creeper has black fruit.

Cultural requirements in civilized locations are so few as to be nonexistent. I have never found a soil type or pH it would not grow in. Michael Dirr ( author Manual of Woody Landscape Plants) reports it growing in pure sand on the beach at Cape Cod. I have never found an exposure it disliked. It grows in my own yard in the dense, permanent shade between two two-story houses overhung by mature cottonwoods. In this location its leaves easily reach a foot across. It also grows in my yard on a fence stained black and facing west in full sun where the leaves become smaller, thicker and the distance between nodes proportionately shorter. However, berry production improves and fall color scales up to a red that requires careful planning of hue in any mums or pansies I might plant in nearby flower boxes. Its exuberance (virility?) multiplies with improvements in soil fertility, tilth and moisture but no such improvements are required. Its best fall color occurs in full sun but its most common use is in deep shade where our plant palette is more limited. Once established, water Virginia Creeper only on the same occasions as you do other woody plants in your yard. Pertilize it only if you feel its size or speed of growth are inadequate. Pruning will usually be required sooner or later to control its growth. As it climbs by forming disk-like roots on the underside of stems it is easier to pull down from walls or trees than vines that climb with tendrils. I have never had to do more than give it a firm tug to bring it down around my head so the painters could get to a fence. Nor does this removal from pillar or post seem to curtail its growth more than temporarily. Trim off at any time any part you don't want. Pests include leaf rollers and mildew. I ignore the first and remove the vine anywhere the second consistently occurs.

The first landscape architect I ever worked with told me most plants used in garden design had one of two cultural problems: either they grew or they didn't grow. Virginia Creeper assuredly falls into the former group - once you welcome it to your yard it will probably be with you forever. Where moisture is adequate, this plant will invade by seeding itself, crawl into, creep over or climb nearly anything anyplace. This can make it a pest in yards with sprinkler systems. The best controls include limiting the moisture it receives, pruning and hacking, and only planting it where its unrestricted growth is an advantage.

This plant's uses in the landscape are multiple. No woodland garden can be without it and where its growth can be limited to the trunks of large shade trees its red fall color screams suddenly up the tree in October. As a ground cover it stays at about 10 to 12 inches tall and easily runs 10 feet or more in a single season if given a damp root run. If using it in this manner, plant on 1 or 2 foot centers, prune to 3 nodes, fertilize and mulch. It will cover the ground in 1 year. Virginia Creeper makes any wall more interesting, especially if pruned so some of the wall shows through in a pleasing, informal manner. No trellis is required. The 1/4 inch berries ripen in August and are an addition in any wildlife garden as they are eaten by thrushes, warblers, mockingbirds, cathirds and woodpeckers. Propagation can be accomplished with cuttings or seed. Softwood cuttings taken in the summer require no special treatment and are usually rooted in a peat/perlite 50/50 mix. I find it easier to acquire rooted vines in the forest or my own yard, cut them into sections that each have their own rooted node and pot them up.

Seeds have a dormant embryo so require stratification. Plant them about 1/4 inch deep in a container with damp soil and enclose entire result in a plastic baggy. Store in the refrigerator. After a couple of months remove to a window sill. Another way to germinate seed is to plant it in a marked row, in the fall, in an out of the way garden location. It will come up in the spring without further help from you. While you are waiting for germination, sharpen your pruning shears. Pot up the robust babies (infant Virginia Creeper has three leaves -you didn't make a terrible mistake) in ordinary good garden soil and grow on or transplant immediately. I can find no sources for these plants by mailorder. I recommend searching nurseries that usually carry native species. Atleast they will know what you are taking about. Ordinary nurseries are likely to attempt to sell you Parthenocissus tricuspidata, better known as Boston Ivy. This is an oriental cousin with more refined growing habits but a less robust spirit. The wild or my yard are good alternative sources as no one would claim Virginia Creeper is threatened.

The only seed source I could locate is Thompson and Morgan, P.O. Box 1309, Jackson, N.J. 09527 0308. I find it interesting that this is an English company.

#### CONSERVATION CORNER

by M. Frank Carl

# NORTHWEST OKLAHOMA BIRD AND BUTTERFLY GARDENING

Volunteering to come up with a list of native plants for northwest Oklahoma butterfly and bird gardeners (Partners in Flight) was the inspiration for this venture. After drafting our daughter, Juaretta and I planted a 24' by 16' flower garden leaning heavily to native plants, but also including nonnatives and cultivars. At last count we had 58 species, most of which performed very well.

To start, Okeene, located in Blaine County, is not a bird or butterfly mecca. The countryside around Okeene does not have a lot of supporting habitat, surrounded as it is on the most part by wheat fields. Fortunately, there are a lot of flower gardeners and pesticide use is not as heavy as in some areas.

The garden has a 4'x16'x1' raised bed filled with sandy loam. The rest is best described as gumbo. The native flowers which proved most attractive to skippers and butterflies are listed following the description of *Cleome serrulata*, commonly called "Cleome", spiderflower or Rocky Mountain bee weed. This native perennial, naturally occurring in extreme western, northwestern and nanhandle counties, was the centerpiece of the garden. It was dug om a cattle corral in Woodward County and transplanted to the raised bed in April. With a light application of Miracle Grow and periodic watering, it grew to 6' with a spread of around 5'. This is almost twice the size of naturally-occurring plants. It bloomed most of July and into September and was heavily utilized by Monarchs during the summer. Queen butterfly, not commonly seen in this part of the state, was observed irregularly feeding on the Cleome.

The fragrant, lavender-colored blossoms were covered with bumble-bees, miner and honey bees, thread-waisted wasps, spiders, and beetles. We spent many pleasant hours this summer attempting to identify and photograph bugs. The open foliage of this member of the Caper family was a favorite resting area for our one female ruby-throated hummingbird. It was also a favorite foraging area for a pair of house wrens which managed to raise

two broods this summer, fledging 2 and 6 birds.

Native plants most attractive to butterflies and skippers in its garden were: purple coneflower, *Echinacea purpurea*, (Sachem, American Painted Lady, Painted Lady, Funereal Dusky Wing, Gray Hairstreak); bachelor's button, *Centaurea cyanus*, (Sachem and an unidentified checkerspot); prairie coneflower, *Ratibida columnifera*,

(Pearl Crescent). Indian blanket (Gaillardia pulchella, (Sachem and several unidentified skippers); and butterfly weed, Asclepias tuberosa, (variegated fritillary). A planting of Senna, Cassia spp., resulted in observation of the life cycle of over 20 Sleepy Orange Sulphur Butterflies, Eurema nicippe. Skippers were abundant on most of the flowers, many of them unidentified.

Those native plants lightly utilized were lance-leaf coreopsis, *Coreopsis lanceolata*, and Mexican hats, *Ratibida columnifera*, forma *pulcherrima*.

Several cultivars were heavily utilized by butterflies. Lantana, (Buckeye, Gulf Fritillary, Silver-spotted Skipper, Sachem, two species of Sphinx Moth not previously observed in our flower beds, Common Wood Nymph, Sleepy Orange Sulphur, Monarch and Queen). Mexican sunflower, Tithonia, (Sachem and heavily used by Monarchs during fall migration). Three small plantings of fennel were defoliated by Black Swallowtail caterpillars. Those were observed forming a chrysalis on adjacent vegetation including Quince, flowering kale and Salvia. An interesting observation of one of these chrysalises was an intense vibration when an ant crawled around on its surface. I haven't read of this type of response to stimulation. The adult Swallowtail fed mostly on Zinnia. White-line Sphinx moths fed on Tall Phlox.

Birds observed foraging on various invertebrates include House Wren, Blue Jay, Northern Cardinal, House Sparrow, Robin, Chickadee and an unidentified Warbler. The hummingbird fed on Salvia coccinea, (a Texas native), Pentas and Beebalm.

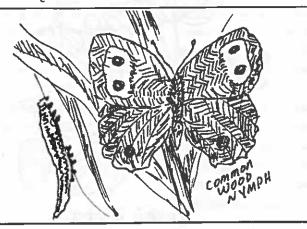
Invertebrate predators observed include Robber Fly, Jagged Ambush Bug, Praying Mantis, Cicada Killer Wasp, Ladybug, Widow and Red Skimmer dragonflies, numerous spiders and wasps.

The only serious plant pests were leaf miners in the hollyhock and an aphid infestation, the same color as the blooms, on *Asclepias tuberosa* Dishwashing detergent mixed with water was a very effective control on aphids.

An immature male Northern
Cardinal fed for 4-5 days on Black Swallowtail caterpillars. He seemed to take
on a bedraggled appearance about the
fourth day -- maybe he needed detox.
Anyway, he quit the caterpillars and

didn't show up in the garden again.

Some advice: 1) Dead-heading really works. 2) bumblebees won't bother you unless you sit down on them. If you succeed in irritating one, don't grab him since they evidently don't lose their stinger the first time around.



#### **BOTANISTS CORNER**

by Rebecca Troth, Rose State College

Parthenocissus quinquefolia (L.) Planch. (Probably much better known as Virginia Creeper)

In the last month or two have you, while speeding along an interstate highway, caught a vertical blaze of red out of the corner of your eye and thought the woods were on fire? I have. But it was a fire of color only -- a tree that had lost its leaves but whose trunk was wrapped in very healthy Virginia Creeper. This trunk-clinging vine, under the right conditions, provides one of the most brilliant reds in Oklahoma's autumn palette -- it's rivaled only by some of the Sumacs.

Fall, in fact, is the most demonstrative season for this species. In winter after its leaves have fallen this woody vine, which never swings freely like the true grape vines, is often overlooked. In spring and summer it's intermixed with the leafiness of the trees on which it climbs. Its flowers are inconspicuous (less than a half cm in length and not brightly colored), as are its fruits. But in the fall, for a brief time, it declares its presence in a blazing, glorious way.

Well, what else is there to know about this mild-mannered vine? It is a native climber, near the western edge of its range here in Oklahoma; however, it is quite abundant and widespread from here eastward. It is without thorns and rarely does damage to the trees that support it -- it is not parasitic but excessive biomass can damage the support trees. It is not generally referenced in poisonous and medicinal plant books but I did find mention of the berries not being edible and perhaps even poisonous to children. In fact, the strongest charge against it -- that it causes skin irritation -- seems to come from misunderstanding; that is, it is often misidentified as Poison Ivy and therefore saddled with the "sins" of that vine in the minds of many people.

Let me clarify the differences between Virginia Creeper and Poi-

son Ivy (*Toxicodendron radicans*). They are both vines but when creeping along the ground Poison Ivy often resembles a low shrub; Virginia Creeper hardly, if ever, does this. The leaves for both species are compound but Poison Ivy has three leaflets and Virginia Creeper, five. (You can tell whether a leaf is simple or compound by looking at the lateral buds -- there will be a bud at the base of

each complete leaf (that is, at the base of the petiole where it attaches to the stem); the stalks of leaflets do not have buds at their bases. Checking for the buds is a straightforward procedure; however, it usually involves handling the plant which is not a good idea, of course, if what you're trying to identify might be Poison Ivy.) The margins of the leaflets for Poison Ivy vary in pattern, from smooth and entire, to serrate, to actually lobed; the leaflets of Virginia Creeper are always serrate, somewhat variably, but the margins are neither completely entire nor genuinely lobed. The flowers for both species are inconspicuous. The fruits when present (which is not terribly frequent) are white and waxy for Poison Ivy and dark blue to black for Virginia Creeper. The easiest features to use for separating these two species is their leaves. Learn the features of the Virginia Creeper leaf and you will not mistake it for Poison Ivy.

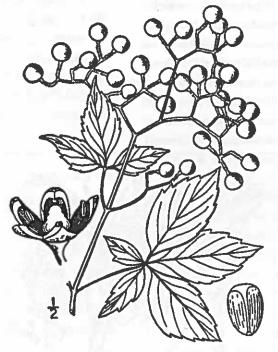
Parthenocissus quinquefolia -- that's quite a mouthful. The genus name is derived from the Greek word parthenos for "virgin" or "unfertilized" and the word kissos for "ivy". The specific epithet, quinquefolia, means 5-leaved. This species was first named by Linnaeus in 1753 as Hedera quinquefolia. If you know the scientific name for English Ivy (Hedera helix) you will realize Linnaeus was saying Virginia Creeper was in the same genus as English Ivy, something we no longer accept. In

1793 it was moved into the genus Vitis, the genus of the true grapes, 1-Lamarck. In 1803 Michaux put it ... the genus Ampelopsis, the genus in which Oklahoma's Raccoon Grape is located. Along the way Greene put a hairy form into the genus Psedera as Psedera hirsuta (Donn) Greene. It was Planchon who put it into Parthenocissus; it is this taxonomic and nomenclatural decision that we use today. There are about 10 species of Parthenocissus in the world. The natural distribution of the genus is North American and Asia. Taylor and Taylor list two species in Oklahoma, P. quinquefolia and P. inserta.

In thinking about this article I became curious about the innocuous persona for this species.

Was it truly as mild-mannered as I

had always thought? Was there, in fact, <u>any</u> current research interest in this species; or was it just what it appeared, a common member of the forest community completely undemonstrative except its splash of fall color? While training some students in bibliographic research techniques I idly searched a database for recent



Virginia Creeper.

>>>>continued on page 7

# PAUL BUCK RECIPIENT OF ANNE LONG AWARD by President Connie Taylor

It gave all of us at ONPS great pleasure to present the Anne Long Award to Paul Buck. Paul exemplifies the true naturalist. And more importantly, he has been willing to share his love of plants with others. Schedule a field trip to which he can contribute, and he will be there, bringing with him patience, kindness, grace, humor, and just a bit of wit. He makes the lesson so pleasant that it seems like entertainment until you realize that you have achieved an insight. The strong ONPS membership in the Tulsa area owes much to his leadership as an instructor, friend, and mentor of enthusiastic "want to know" nature lovers who show up for a first field trip and return again and again.

Besides doing the fun part of field trips, he has willingly served for many years on the ONPS board as Membership Vice-president, maintaining the membership list. Currently he is collecting, sorting, and sending the mail. He has chaired the Anne Long Award Committee. He wrote the Plant Collection Guidelines for the society. He helped write and revise the by-laws (an arduous and thankless job.)

Paul has also given graciously of his time and talents to the Oklahoma Academy of Science, where he served several years as Executive Secretary-Treasurer. He also devotes considerable time to he Flora of Oklahoma Project, contributing his expertise on woody plants.

Paul was born in Highland Park, Michigan. He served in the Navy (1945-48) and then during the Korean war. He was both a fireman and police officer in Tulsa. He received a B. S. and M. S. in botany (1958 & 1959) from the University of Tulsa. He received his Ph. D. in botany from the University of Oklahoma researching the woody vegetation of the Wichita Mountains. He has also researched weather patterns and the pollen counts of allergenic plants. Paul has been a faculty member of the University of Tulsa, Tulsa Junior College, The University Center in Tulsa, and the Rocky Mountain Biological Laboratory.

There is no reason to quit field trips during the winter season. All you need is Paul's book "Distribution and Identification of Woody Plants of Oklahoma in the Winter Condition".

That Paul knew and worked with Anne Long makes this a double honor for them both.

# BOTANIZING AT DEER RUN LODGE by Connie Taylor

Biology at the limits could have been the theme for our annual meeting field trips. Deer Run Lodge is nestled on the Antlers Sand, just below a limestone break. On this sand we find the west-ern-most limit of the range of short-leaf pine (*Pinus echinata*), willow oak (*Ouercus phellos*), and sparkle-berry (*Vaccinium*)

arboreum). The limestone hosts about the northernmost populations of cedar elm (*Ulmus crassifolia*). Other interesting plants seen were the <u>biggest</u> rattan vine (*Berchemia scandens*) -- so high in the tree you could not see the leaves and over 3.5 inches in diameter, and numerous huge 2-people-hugger old trees with very large diameters that were along an old regrown section line road.

Afternoon found us in a blackland tall grass prairie. This prairie is mowed each year, with woods invading the ravines. Here we found compass plant (Silphium laciniatum), azure salvia (Salvia azurea), and one of the Spiranthes orchids. Across the road was an unmowed prairie with light cattle grazing. Here the prairie species still predominated with more weedy species and woody plants intermixed with the grasses.

Sunday morning a long caravan wound through southern Atoka County, arriving eventually at the Boehler Sandhills and Bogs, a Nature Conservancy Area. Barry and Sidney Carpenter lead us through the preserve. Interesting trees were the Bluejack Oak (Quercus incana) and river birch (Betula nigra). We saw sundews Drosera annua) and a second large-flowered Spiranthes orchid. On the bare sands, brightly burnished with red leaves, was a plant new to Oklahoma, Euphorbia geyeri.

Jimmy Norman led the hardy to the Hugo Bog, where grass-of-parnassas (*Parnassia grandifolia*) was in bloom. This is the only known location of this species in Oklahoma and is a relict population.

1994 ANNUAL MEETING & SUMMARY OF THE MINUTES by Patricia Folley

First of all, we arrived at Deer Run Lodge on Friday evening in a heavy downpour, and had an exciting time of it just getting the cars unloaded and our stuff into the rooms. A great spaghetti dinner and an evening of Jim Norman's beautiful slides made the rainy night a fine time.

Connie has already told you about the field trips on Saturday, which was a fine, fair day. The business meeting followed:

We convened at 4:30 in the dining room of the Lodge, President
Taylor presiding. Minutes of the last annual meeting had been distributed earlier, and as there were no corrections or amendments, they were approved as written. Judy Jordan made the Treasurer's report, and showed us how she had separated the two memorial funds into individual accounts for better visibility. The Treasurer's report was also approved without changes. I distributed copies of the State's rather unfortunately worded weed control law, but no one present wanted the job of petitioning the Legislature for a better one, so it was accepted for study/reference only.

The acceptance of ads for the *Gaillardia*, as determined by the new guidelines from the Post Office, was also approved. Ruth Boyd displayed the new Oklahoma Wildflower calendars, offered to us at a reduced price as a fundraiser. We will make about \$4.50 each, selling them at the same price as the Oklahoma Today Magazine's, or \$10.

Clark Ovrebo sent a call-in report on the Photography committee, and asked for volunteers to judge. Bob and Emma Crane will do it. Ruth Boyd and Sue Amstutz will continue to handle distribution of the posters from past contests -- a very popular display.

Jim Norman announced plans for the Spring outing at Dwight Mission (described on page 9). Ruth Boyd, as chairman of the Publicity Committee, made another plea for clippings of press releases, as she hasn't access to every newspaper in the state. Wildflower Workshop details were not available at that time. It will be held in the Northwest section.

Nominating Committee Chairman, T. H. Milby, presented the slate of officers for 1995. As almost all the 1994 officers were eligible to serve again, and willing, we elected Richard Bradley to the vacant Boardmember at Large position, and reelected everyone else. Following chapter reports, Susan Chambers outlined the Indoor Outing plans, detailed on an application insert in this issue.

The site for the next Annual Meeting was set at Quartz Mountain Lodge, and Ann Randle agreed to make arrangements. No date was set at that time. The meeting was adjourned in time for dinner.

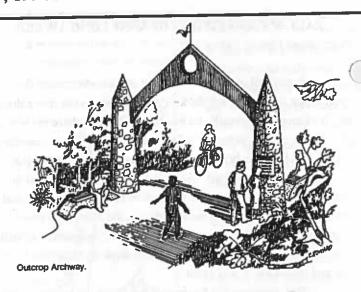
As reported earlier, Connie presented the Anne Long Award for outstanding support of the goals of this organization to Paul Buck of Tulsa. Betty Kemm and Pat Folley entertained the guests with a slide program about Tulsa's Gluedobbers' Field and other small prairies.

The Sunday Morning board meeting assembled at 7:30 a.m. in the dining hall to read and approve the minutes of the June 18, 1994 board meeting, discuss the application of the interest accruing to the now-separated memorial funds, and table any action on that until Mr. Long can be consulted. Karen Haworth reports that the new membership brochures will be available at the December planning meeting, set for December 3, 10:00 a.m. in Norman, at a site to be selected by T. H. Milby.

Other business included a request by Dr. Milby for information and historical pictures of Methodist Canyon for use in planning any changes there, and setting a procedure for ordering promotional copies of the Gaillardia. See the box below for details.

# 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...



## ONPS OFFICER WINS TOP AWARD

The American Society of Landscape Architects' Oklahoma Chapter officially presented the profession's highest state accolade, the Award of Honor, to Great Plains Design of Oklahoma City for excellence in site planning and analysis of the Ardmore Regional Park. Partners in the firm are ONPS secretary Darlene L. Michael, Robert D. Lewis and JoAnne E. Vervinck.

In a joint venture with Golf Associates Design Services (golf course architects), Great Plains Design played the lead role in developing the park's thematic concepts and provided primary services of planning and landscape architecture. A visionary municipal project commissioned by the Ardmore Regional Park Authority, the 1,038-acre site along I-35 will become a regional park/36-hole municipal golf course.

Lying just 12 miles south of the Arbuckle Mountains, the site embraces native prairie grasses, wildflowers, riparian vegetation, Crosstimber remnants, lake, streams, and ancient Pennsylvanian-era rock outcrops. Anticitipated development includes more than seven miles of naturalistic interpretive pedestrian/bicycle trails connecting a multi-purpose center, sports fields, native plant arboretum, amphitheater, fountains, fishing pavilion, boat ramp and dock, picnic areas, and tower (half-size replica of Ardmore, Ireland's medieval tower) which doubles as a sundial.

Professional judges complemented the park plan because "it provides a mechanism to experience the highly significant geologic value of the site while enhancing the tourist industry. The project included several creative approaches to portraying the passage of time" and Ardmore's historic connection to Ardmore, Ireland. The project "provides thorough analysis which supports a good design intent", and the accompanying in-depth report guides the design's implementation.

<<<continued from page 4

articles on *Parthenocissus*. To my surprise I unearthed from a single database 18 journal articles, none dated older than 1989. Not ally is there interest, but it's scattered across the geographical range of this genus, North America and Asia. I won't review all 18 articles here (partly because several of the articles were written in what are to me esoteric languages -- Chinese, Hungarian and Russian) but a sampling will demonstrate the varied and interesting directions research is taking.

Taxonomic work continues on the genus and the family. A Chinese author moved two species into a newly created genus, *Yua*. These species, *Y. thomsonii and Y. austro-orientalia*, both have genus-hopping nomenclatureal histories analogous to that of Virginia Creeper. In another taxonomic article an Indian researcher presented a chemical basis for splitting *Vitis* into four genera. Recently unearthed fossils in Hungary have added to existing information on the paleoclimate and paleoecology of that region.

In terms of plant/animal interactions, one paper presented data showing that woodchucks actively avoid *Parthenocissus quinquefolia*, even eating Poison Ivy in preference to it. In another study *P. quinquefolia* was found to be acutely toxic to parakeets.

Another paper investigated the chitinase activity in *P. quinquefolia*. Chitinase is a term for one or more enzymes that break down chitin, a compound found in the cell walls of fungi and the exoskeletons of insects. What can be inferred from the level of enzyme activity in *P. quinquefolia* is that this species may have anti-fungal defenses. Another paper describes the resistance of *P. quinquefolia*, along with several other species, to chloroplast membrane damage caused by nitrogen oxides. Numerous species did show damage, but not *P. quinquefolia*.

A Canadian paper included *P. quinquefolia* in a list of native plants recommended for use in shoreline stabilization projects. A Russian paper noted *P. quinquefolia* as an introduced species occurring in the far east of Russia.

I would not dare to draw specific conclusions from these disparate bits and pieces. However, it is clear that much more is going on with this superficially bland species than generally is supposed. Isn't this likely to be the story for every species? If we dig (into the ground or into the literature) and look and listen to the species around us, a bland 2- dimensional plant becomes a 3-dimensional riot. How can anyone ever be bored with the natural world?

Though I do not believe
that a plant will spring up
where no seed has been,
I have great faith in a seed.
Convince me that you have a seed there,
and I am prepared to expect wonders.
H. D. Thoreau

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(I will be glad to send the journal citations upon request.)

#### HARRIET BARCLAY AWARDS

Editorial apology: When I wrote about the Barclay Award given to Kelly Courcamp of McLoud High School last spring, I was not aware that we also made a first-ever Junior Barclay Award to the best Junior High paper. The winner was Keri Courcamp, Kelly's little sister! Both share a teacher who encourages projects that will suit our need. Also this year, and for the first time, we gave a year's subscription to the Gaillardia to the school as well.

#### JOHN SKEEN WINS AWARD

From the Fall '94 edition of Watchable Wildlife News:

"Dr. John Skeen, wildlife and lands biologist for McCurtain County Wilderness Area and formerly Nongame Wildlife Program biologist, was recently honored for his work on the endangered red-cockaded woodpecker. The Arkansas Audubon Society awarded Skeen the 1994 Shugart Red-cockaded Woodpecker Conservation Award, citing his efforst to monitor the birds, provide high-quality cavities for their use and work for their overall recovery in Oklahoma. The honor is awarded annually to people or organizations who have somehow worked to save the species and its habitat from extinction."

>>>Ed. note; John Skeen is a former ONPS board member.



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Leslie Cole-Jackson of Edmond contributed this poem:

AND THE GAY LITTLE BUDS ARE RED Oh, long are the nights, when the wild flowers sleep; When the leaf and the snow blankets over them heap; When the forest is dim, and the silences deep; And the soft little ferns are dead.

But short are the nights, when the wild flowers spring: When the shadows are blue, and the mocking-birds sing; When ineffable fragrance delights everything; And the gay little buds are red. from "Red Earth", by Jennie Harris Oliver

#### **BOOK REVIEW**

## DISTRIBUTION AND IDENTIFICATION OF WOODY PLANTS OF OKLAHOMA IN THE WINTER CONDITION by Paul Buck, University of Tulsa

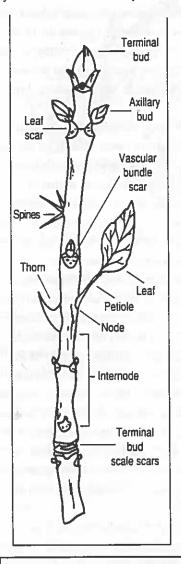
Ever try to figure out the species of a bush or tree when there were

not only no flowers or fruit, but no leaves, either? It's no wonder the landscaping crews just use a bulldozer on the native shrubs and start all over with imports from Siberia! Meet Paul Buck's masterpiece with the long, long name (see title). "The purpose of this effort, Oklahoma Winter Botany, is to provide a mechanism for the identification of the woody flora of the state and encompasses all species with above-ground woody tissue during the winter, including vines, shrubs and trees." Where introduced trees such as Ginkgo or Mimosa have spread into the surrounding areas, they are included too.

Complete with two indexes, keys, distribution maps and glossary, the book provides a description of the plant and for most of them, a clear line drawing of a twig, bud, and winter-persistent fruit or thorns. Besides the position and shape of leaf scars and buds, the clues include habitat, habit of growth, and twig characteristics. How so difficult an art can be made to appear child's play is a secret that Dr. Buck will make clear to you, step by step, as you play the key game with him and the mystery plant. Although developed for use by teachers of botany, it is equally useful for homeowners, gardeners, and horticulturists who enjoy nature in the winter, or have to work with the real world, whatever the season.

This indispensable reference for botany classes across Oklahoma (and a few adjacent states, too), is published by the Oklahoma Academy of Science, and was originally issued in 1983. Recently revised, it can be found in most college bookstores or purchased from the Oklahoma Academy of Science, c/o Ed Nelson, Executive Secretary-Treasurer, P. O. Box 701915, Tulsa, OK 74170-1915 for under \$15.

diagram borrowed from the National Wildflower Research Center's Wildflower.



SWITCH GRASS: Panicum virgatum -- a great native tallgrass for your well-rounded view. Switch grass is a perennial bunchgrass, 3-6 feet tall under most conditions, that is lovely at all times of the year. Its long graceful leaves make a smooth, blue-green fountain until the flowering spike develops in mid-summer. The open, airy flower-paniele has sparks of bright magenta, yellow and gold, and remains on the stalk well into winter. when it adds its soft muted winter "bluestem" colors to a landscape.

You'll find switchgrass more often in rural barditches than in the city nurseries, but it is worth a treasure hunt to find your first clump. Give it any old kind of soil and enough water to maintain that awful alien, Bermuda grass, and it will thrive. Like most of the native perennials, it is easier to start from roots than from seed.

#### 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 are submitted on disks.

As editor, I welcome all sorts of input, from the high-tech to the scratch pad. You may send clear blackand-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, Editor

## SPRING STATEWIDE OUTING ANNOUNCED

y Jim Norman, Field Trip Co-Chair

Spring Wildflower Trip Now a Two-Day Event! No foolin', April 1 and 2 have been chosen for the spring outing in the fabulous northeastern Oklahoma area. Dwight Mission, a Presbyterian camp and conference center located near Sallisaw, will be the site of the ONPS spring field outing. Situated on beautiful Sallisaw Creek amid the wooded hills of eastern Oklahoma, this area offers a grand assortment of botanical delights. Here's hoping they'll be in bloom by April 1!

The map shows how to reach the mission but best and least stressful is to take the Dwight Mission exit from I - 40 (about 5 miles east of US 59 at Sallisaw) and travel northeast about 9 miles to the camp gate on the right. Upon entering the impressive grounds, you will find signs to diect you to a registration table. Since you will have already sent me a check by March 23, you will be assigned a dorm room -- men in Washburn hall, women in Sage hall -- and be presented with a meal ticket. BRING YOUR OWN BEDDING AND TOWEL.

A total charge of \$23 covers your dorm fee for Saturday night and three meals: Saturday lunch and dinner, and breakfast on Sunday. Campers are welcome: camping cost is \$18 including campsite and all meals. No single-meal reservations will be taken.

The schedule is:

Saturday, April 1:

9-10 a.m. Registration
10:00 a.m., field trips on foot in
vicinity of camp and along Sallisaw Creek.

12:00 noon, lunch in the dining hall. 1:30-5:00 p.m., field trip.

6:00 p.m., dinner, followed by an ilinstrated presentation by Dr. Ron Tyrl of Oklahoma State University on "Botanizing in China".

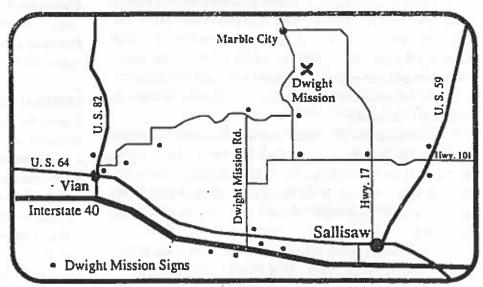
Sunday, April 2:

6:00 a.m. birding with Jim Norman.

8:00, breakfast in the dining hall

9:30, field trip by carpool, possibly to Short Mountain, near Kerr Dam. We may be able to find the rare Yellowwood tree (Cladrastis kentukea) and the downy arrow-wood (Viburnum raffinesquianum).

Registrations with your check for \$23 or \$18 must be in Jeff Burkhart's hands by March 23. See you there!



#### **DIRECTIONS TO DWIGHT MISSION**

Dwight Mission telephones are: (918)775-2018 or (918)775-2144

#### >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 Dwight Mission spring outing on April 1 & 2.. Details at left. To register, just notify Dr. Jeff Burkhart at (405)233-7639 (home) or (405)237-4433 (work) or 2502 E. Elm, Enid, OK 73701.
- >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.

#### **CHAPTER NOTES**

#### NORTHEAST CHAPTER

by Betty Kemm

The NE Chapter plans an evening program on December 5, 7 p.m. at the Tulsa Garden Center: 2435 S. Peoria. Eddie Reese of the Oxley / Redbud Valley staff will present a slide program titled "The Past and Present of Redbud".

>>CONTINUED ON NEXT PAGE

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By the time you get this newsletter, the pot-luck supper scheduled for December 5 will be history. Hope you all enjoyed it.

At the September chapter meeting, Leigh Standingbear, City Horticulturist, presented a program about the variety of environments in the Tulsa Park System. There is a real interest in using native plants in Tulsa parks. Five men associated with the parks attended the Mid-South Native Plant Conference in Memphis in October. On September 17 the Chapter field trip was led by Corps of Engineers Ranger Mike Schrick. He led the group to a very interesting and undisturbed area of sandstone bluffs and bottomland along the Arkansas River west of Cleveland. It would be worth another trip in the spring.

Although the NE chapter only meets quarterly, its members are quite active in environmental projects in Tulsa. Many members are promoting backyard habitats for wildlife and others are very interested in plant rescues. In the spring they will begin taking some specimens from Gluedobbers' Field and from other sites as opportunities arise.

Dr. Janet Combes is very involved in an employee project at the Amoco Research Center. They are converting a large part of the manicured grounds into a natural area. Loretta Bowers and Gary Schaum are each raising native plants for sale, Richard Dahlke sells native plants and designs wildflower gardens, two of which were featured in the Garden Center's Fall Garden Tour. Marcy Robinowitz has a one-woman campaign to raise money for wildflower seeds for highway planting. She has funded plantings for several years. Other members are involved in Blue Thumb water quality education, Audubon school projects and as Oxley Nature Center volunteers. Some are fighting the proposed use of Riverparks land for an aquarium.

There are a number of exciting suggestions for spring field trips. Watch this space for more!

NE Chapter has suffered a great loss in the death of Charter Member and co-founder Theresa Grosshans. Theresa was also one of our first Life members. She enjoyed and attended many of the Wildflower Workshops, the last being at Lawton when she was only 86. She had a green thumb and shared her wildflowers with many of her friends. A fine photographer, she was on the first contest committee and had camera tips in the early Gaillardias. From the obituary which Betty thoughtfully provided, some other information on the life of Theresa Grosshans: She was born November 29, 1905 in Commerce, Texas and died at Tulsa on October 7, 1994. She was part of the Highway Wildflower Beautification Program, Tulsa Photographic, Orchid Society and Garden Clubs, and a volunteer at St. John's Hospital. She is survived by sons Richard Grosshans of Tulsa and Dr. Charles Grosshans of Lakewood, Colorado, 6 grant children and 4 great-grandchildren.

Just as the final copy was being prepared for print, Betty called with more bad news: Walter Long, husband of our co-founder Anne Long, died on Tuesday, November 22. More in the next issue.

Another charter member and life member, Prof. Raymond Kays, had a stroke last winter and is now at Forest Hills Nursing Center, 4300 W. Houston, Broken Arrow 74012.

#### CENTRAL CHAPTER REPORT

tion.

by Patricia Folley Central chapter's next meeting, as I write this, will be over before this newsletter is out, too. It's hard to write anything sensible about a future event when it needs to be past-tense. Anyway, our November 28 evening begins at 7:30 at the OSU horticulture center, featuring Ms. Jacque Savage, who will demonstrate the making of a seasonal wreath with native plant materials. An instruction sheet

There will, of course, be no meeting on December 26, and as we're hosting the Indoor Outing on 4 February, the January gettogether will probably be a work detail. Then, Judy Jordan will bring us a program on her tour of the Galapagos Islands on Febr ary 27 and I will do another lesson on the spring flora on March 27. So much for winter: by April, it will be all field trips again.

will help the memory-challenged to get home with enough informa-

We had a good turnout for the Halloween meeting, probably because it coincided with the annual fall plant exchange, though there was a lesson on the Composite family (short, mercifully). There is no better way to increase the population of our wild plants than to give them a good home, and then share the increase. @

#### **INDOOR OUTING '95**

Susan Chambers reports that the entire schedule for the 4th of February, 1995 Indoor Outing has been arranged. To be held in the OSU-Oklahoma City Technical Branch, the all-day, indoor seminar will feature: Speakers Sally Wasowski, author & native landscaper; Steve Bieberich, tree farm and horticulturist and Darlene Michael, Landscape Designer. An Herbal luncheon, catered by Tom Bergey of the Golden Trowel Herb Farm and workshops by Toby Goodale, Valley Tree Farm, on propagation. By Jesse Rohde, Myriad Gardens, on acquiring and transplanting, and Georgia Muenzler, OU, on designing how-to. Look for the insert with directions for registration, etc., in this issue.⊕

### **ANNOUNCEMENTS**



MAKE EVERY HOME A HABITAT (MEHAH), a Tulsa group, sends this report: The MEHAH working group has met twice to discuss the possibility of establishing a wildlife habitat demonstration garden on the grounds of the Tulsa Zoo. A site has been chosen and permission obtained from the Zoo director pending the approval of our final plans. A lot of work needs to be done to pre-

pare the site for planting. We think that this will be an exciting project that many members can be involved in and will allow thousands of people each year to be exposed to the types of plants and other features necessary for a backyard wildlife habitat.

Several MEHAH members have been involved in placing special tags on plants at local nurseries. To date we have tagged plants at Binding-Stevens and Southwood nurseries and we still have to do Juniper Hill. There are other nurseries that have not yet been contacted. This is an ongoproject as new plants arrive and new nurseries subscribed. It's easy, fun, and there is always room for more help. The tags are bright orange and have the MEHAH logo and the

words "Buy Me, I'm Wildlife Friendly".

The search is on for people whose yards and gardens could be used for our Backyard Wildlife Habitat Garden Tour, which will be held the first weekend of June, 1995. We want five or six yards and will hold the event on both Saturday and Sunday. To offer your yard or nominate one which should be seen, call Carol Eames at (918)446-2720. Carol will also supply information on membership in MEHAH on request.

Notice found on the bulletin board in the Herbarium:
"Time flies like an arrow ... but fruit flies like a banana"

The Flora of Oklahoma Project, a committee of plant tax-onomists from all over Oklahoma, is in the process of writing a comprehensive flora of Oklahoma, but that goal is still several years away. In the meantime, we are making the new family key and Waterfall's Keys to the Flora of Oklahoma available to anyone who needs it. Send \$15 plus 68¢ state tax with mailing instructions to Flora of Oklahoma, 15100 Etowah Rd., Noble, OK 73068. The price includes cost of postage. Title of the temporary two-part Keys is "Identification of Oklahoma Plants".

"Some of my most prized possessions are the words I never said"!

# 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 Individu \$5.00 Student \$200.00 Lifetin		[_]Gift from
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#### RENEWAL TIME!

Please look down at your mailing label P 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.). 3

ONPS WELCOMES THESE NEW MEMBERS

Wally Kerr, Norman

Helen Kodesh, Tulsa

Priscilla Iba, Tulsa

Holder's Herbs & Gifts, Choctaw

John & Wenonah Flood, Ponca City

Jere Covington, Claremore Evelyn Browning, Tulsa

Bob & Betty Hill, Tulsa Kathleen Sullivan, Tulsa

Deborah Benesh, Noble

Lynn Bates, Broken Arrow

Harry & Ingabee Redus, Hugo

Victoria Byre, Norman

Linda Fielder, Norman

Janet Huckaby, Henryetta

Nancy Sacra, Tulsa

Gregg Robinson, Kaw City

Corey Couch, Chickasha

Coby Hood, McAlester

Debra Broome, Tulsa Gerald Brown, Chickasha June Boyd, McAlester

Doris Ellis, Del City Sue McPherson, Spencer

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Constance Taylor

Susan Chambers

Darlene Michael

Karen Haworth

Judy Jordan

and the McLoud High School Science Club, a new feature of the Harriet

President:

Secretary

Treasurer

Historian

Vice President

Barclay award! Ed. note: some of these names should have been in the last issue, but we had a few bugs in the system. Sorry, folks! 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!

Oklahoma Native Plant Society c/o Tulsa Garden Center 2435 South Peoria Tulsa, Oklahoma 74114

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