



MASTER MINUTES

February 1998

Volume 9 / Issue 1

Romantic roses for passionate gardeners

By Helen Hronas

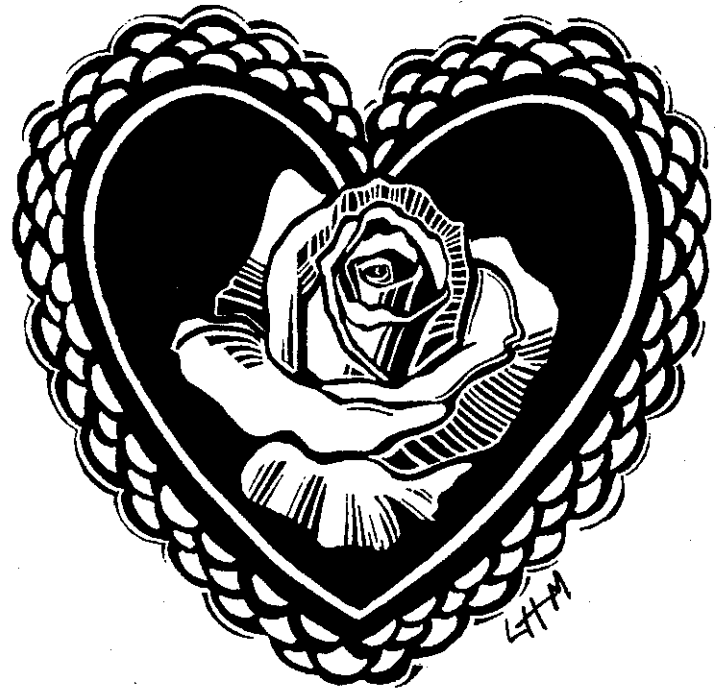
"Roses are red. Violets are blue. Sugar is sweet, and so are you!"

A Valentine's rhyme can bring back sweet nostalgia from childhood, visions of ruby red hearts edged with Victorian lace and the elegance of a dozen, long stem roses. Valentine's Day arrives at the perfect time of year for planting roses, and a young Little Rock couple, Christy and Ben Pollock have begun a romantic tradition of planting a rose in their organic garden each Valentine's Day. These rose enthusiasts use no commercial fertilizers or chemicals, preferring their own compost, insecticidal soap and sulphur spray when needed. Ben reports great success with two newer varieties, "Scandia," which still had a bloom after the new year, and "Tropical Breeze." A miniature red rose, recently transplanted, is also happy in the Pollock's Little Rock garden. Ben has been able to delight Christy with rose bouquets almost year round. What a lovely tradition!

Early settlers moving across America brought with them from Europe cuttings of their favorite roses. In this century, these sturdy heirlooms often have been discovered in old, untended cemeteries and abandoned homesteads around the South by "rose rustlers" who search for them. Of course, these rustlers ask for permission to take cuttings

when specimens are found in some one's garden!

Roses are probably the most-loved of all flowering plants, but today's busy gardeners prefer not to spend their weekends spraying and babying, coaxing and coddling. We need



survivors, and these surviving antique roses have the traits to resist pests and diseases.

William C. Welch's *Antique Roses for the South* tells the history of these "living reminders of our gardening heritage," as Welch describes how these roses can be used to great advantage in today's landscape. The book, available at the Master Gardener library at the County Extension office, features wonderful color photographs and chapters on landscaping, arranging, propagation and sources.

Antique roses need full, direct sun for 5 to 6 hours each day. Early morning sun is desirable to dry moisture from leaves and to discourage diseases. Good drainage and air circulation are needed. Raise bed if necessary and leave adequate space between plants. Thoroughly mix compost, pine bark, well-rotted manure, 1/2 cup bone meal or superphosphate and peat moss into upper 12 inches of soil; slightly acid (pH6.0-6.8) soil is preferred.

See ROSES, Page 2

In this issue ...

- 2 Trading Post
- 3 MG Calendar and Notes
- 4 Plant of the Month
- 5 Book Review
- 5 Nursery of the Month
- 6 February Garden Checklist
- 7 What Works!
- 8 1998 Officers and Chairmen

Roses, continued from Page 1

Soaker hose or drip irrigation is recommended; deep watering weekly is far better than frequent light sprinkling often. Pruning varies: After spring flowering for climbers and one-time bloomers; hybrid teas, floribundas and grandifloras are usually pruned back to 18-24 inches from the ground in late winter. Cut back one-third of bush roses to encourage full foliage and heavy bloom; climbers require only removal of dead canes and tip pruning. If not dead-head or pruned, many old roses produce hips that brighten the winter garden and provide food for wildlife.

Antique roses make great hedges, but require intensive maintenance unless using a variety like "Lady Banks." For a security fence, use one of the thorny ramblers such as "Mermaid" or "Cherokee" which form an impenetrable wall and furnish habitat for wildlife. "Marie Pavie," a white, highly fragrant rebloomer, is great in containers. Many smaller varieties are also good for containers. If the container is large enough, lantana, verbena or dianthus are lovely spilling over the rim of the pot.

"Silver Moon," Swamp rose, "Fortuniana," "Petite Pink Scotch" and "Banksias" all cover slopes and tumble over walls effectively. In mixed borders among small flowering trees, shrubs, perennials and annuals, use three or more of one variety for impact. This gives an effect similar to massed azaleas.

"Cecile Brunner," "Lamarque" and many other are dramatic growing on arbors, pillars, arches, pergolas, trellises and walls. Stumps and old dead trees make good pillars. Take care in siting arches — they make such a strong statement. Arches should be placed over a path or at the entrance or exit of a garden. The materials should be compatible with other garden features and it

is critical that it be in scale with its surroundings. An ideal size is 8-foot tall and 5- or 6-foot wide which accommodates the drape of the rose canes.

Taking cuttings is the most common way to propagate roses. Take a 6- to 8-inch cutting from a stem that has recently bloomed. Use a sharp knife or shears and make the cut at a 45 degree angle. Remove flower heads or hips down to the first set of healthy leaves. Keep cutting moist and avoid exposure to heat or cold. Remove lower foliage and dip stem rooting hormone or use willow water tea. Use a pencil or dibble to make a hole for planting so the rooting hormone doesn't get scraped away. Plant about half the length of the cutting in sandy, well-drained soil. Plant in a protected east- or north-facing bed. Pack soil firmly around cutting and water every other day, never allowing it to dry out. Leave it in place the first summer for good root development. Transplant when dormant in late fall.

The secret to growing lazy but wonderful roses is in selection. So start a charming tradition in your family: Plant a fragrant old-fashioned rose on Valentine's Day! Here a list roses for folks in central Arkansas to try. The list comes from Pulaski County Master Gardeners, Welch's *Antique Roses for the South*, and *South-ern Living* magazine.

species (native) roses: Chestnut rose, Russell's Cottage rose, Fortunes Double Yellow, Sweetbrier, Mermaid.

China roses: (single flowers, repeat blooms — "everblooming.") Old blush, Archduke Charles, Hermosa, Cramoisi Superieur, Louis Philippe, Mutabilis, Ducher, Comtesse du Cayla.

Noisette: (clusters of flowers.) Lamarque, Jaune Desprez, Madame Alfred Carriere, Celine Forestier, Reve d'Or.

Old European roses: Rosa Mundi, Autumn Damask, Salet.

Bourbon: (fragrant with beautiful blossoms.) Souvenir de la Malmaison, Louise Odier, Zephirine Drouhin.

Tea roses: (fragrant, large blossoms; everblooming.)

Duchesse de Brabant, Sombreuil, Madame Lombard, Mrs. B.R. Cant, Mrs. Dudley Cross.

Early Hybrid Teas: La France, Belle Portugaise, Climbing Etoile de Holland, Crimson Glory, Lafter.

Hybrid perpetuals: Marquise Bocella, Baroness Rothschild, Ulrich Brunner Fils.

Polyanthas: (prolific bloomers; compact size; large clusters of small flowers.) Cecile Brunner, Marie Pavie, the Fairy, Perle d'Or, Climbing Pinkie.

Musks: (useful in landscape, fragrant rebloomers, takes light shade.) Ballerina, Erfurt, Aglaia, Trier, Prosperity, Penelope, Vanity, Buff Beauty, Belinda.

Trading Post

Marilyn Wheeler, 835-9649, wants shade-loving plants.
The Greenhouse Committee, 666-2498 or 664-7863, wants unusual seeds or cuttings for the spring sale.
Guy Baltz, 835-4266, has a few butterfly bush seeds.
Kathleen Wesson, 663-9146 wants vinca minor.
Breck Campbell, 666-9195, has garlic chives.
Charles R. Emerson, 455-4071, has western maple seeds.
Sue Wolfe, 664-3005, wants delivery of good top soil and compost at a reasonable price.
Marge Van Egmond, 224-7632, has four o'clock seeds.

Master Gardener Calendar and Notes

FEBRUARY

The Pulaski County Master Gardener next meeting will be at 11:30 a.m. Feb. 11 at the state Cooperative Extension Service office. Master Gardener Trudy Goalsby will talk about "Favorite Plants From Seeds and how to Start Them" after the business portion of the meeting.

Pine Bluff and Jefferson County Master Gardeners will present a Lawn and Garden Show and Seminar from 8:30 a.m. to 3 p.m. Feb. 14 at the Regional Park Waterfront Meeting Facility. Seminars include Carl Hunter on Wildflowers, Butterflies and Hummingbirds at 9:30 a.m.; Water Gardening and ponds at 10:30 a.m.; Jane Gulley on Antique and Shrub Roses at 11 a.m.; Turf Type Lawns at 1:15 p.m.; and Fruit Frees at 1:45 p.m. Admission is free; (870) 534-1033.

Twigs, the tiny country shop selling flower seeds, dried flowers, bird houses, antique kitchen wares and time-worn garden tools, continues its 25 percent off Winter Sale until Feb. 23. The shop, operated by Pulaski County Master Gardener Nancy Porter, is located off Arkansas 10 about a mile west of King's Ones Stop at 24708 Pleasant Grove Road, Roland. Twigs is open 10 a.m. to 5 p.m. Saturday and 1 to 5 p.m. Sunday; by appointment on Monday and Friday. Call 868-9772.

Study insect and disease control and soil science in depth at the Intermediate/Advanced Level Organic Greenhouse Workshop from 10 a.m. to 4 p.m. Feb. 28 at the Ozark Folk Center State Park in Mountain View. The cost is \$35; preregistration is required. The class will be repeated April 11. Call (870) 269-3851.

The University of Arkansas Cooperative Extension Service, Arkansas Farm Bureau Federation, Arkansas Federation of Garden Clubs and the Arkansas Florists Association will present the sev-

enth annual Arkansas Flower and Garden Show Feb. 20-22 at the Statehouse Convention Center. The show, titled "Accents of Spring," will feature landscaped gardens, garden seminars, a trade show, flower show, florist's competition and children's activities. Guest speakers will be Erica Glasner, Pam Harper and Pearl Fryer. Tickets cost \$4, \$3 for seniors and \$2 for children. Call (800) 459-SHOW or 821-4000.

The Homebuilders Association Show will be Feb. 20-22 in Fort Smith. Admission is \$2, children free. Call (501) 452-6313.

Children ages 12 and up can learn weaving and make a pine needle basket at the Pine Needle Workshop from 10 a.m. to 3 p.m. Feb. 21 at Toltec Mounds State Park in Scott. The cost is \$20; preregistration is required. Call (501) 961-9442.

The Missouri Botanical Garden's Orchid Show, titled "Egyptian Oasis," continues through March 15 in St. Louis. The show costs \$2, \$1 for seniors, free for ages 12 and under in addition to regular garden admission. An Orchid Illustrations exhibit by botanical illustrator Marion Sheehan also runs until March 15 in conjunction with the Orchid Show. Orchid Illustrations is free with regular garden admission (\$5, \$3 for seniors). Call (314) 577-9400.

MARCH

Camden will host its annual Camden Daffodil Festival March 13-15. Attractions include hundreds of acres and hundreds of varieties of narcissus and jonquils, craft and food vendors, garden tours, historic homes, live entertainment and children's activities. Admission is \$3; parking is free. (870) 836-6426.

The Ozark Folk Center State Park in Mountain View will host a Medicinal herb Seminar and Luncheon from 9 a.m. to 5 p.m. March 14. The cost is \$40; call (870) 269-3851.

— Laurie Pierce

Learn about green house propagation and organic pest control at the Beginners Organic Greenhouse Workshop from 10 a.m. to 4 p.m. March 28. at the Ozark Folk Center State Park in Mountain View. The cost is \$35; preregistration is required. Call (870) 269-3851.

APRIL

Study insect and disease control and soil science in depth at the Intermediate/Advanced Level Organic Greenhouse Workshop from 10 a.m. to 4 p.m. April 11 at the Ozark Folk Center State Park in Mountain View. The cost is \$35; preregistration is required. Call (870) 269-3851.

The Florida Cooperative Extension Service will host the Southeast Region Master Gardener Conference April 20-22 in Pensacola Beach Fla. Seminars include Shrubs for Southern States, Landscaping With Ornamental Grasses, Invasive Plants, and Passalong Plants: Teaching Others How to Teach Others. Call (850) 477-2893 or e-mail bbolles@gnv.ifas.ufl.edu

The 4-H Center in west Little Rock will host a Native Plants Seminar on April 22. Beth Phelps will provide details at a forthcoming Pulaski County Master Gardeners meeting.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson



Plant of the Month: Tuberose

— Julia Loyall

Master Gardeners at the State Convention at Fayetteville last fall found in their welcome bag of goodies a small sack containing some unimpressive little dried tubers with a folder labeling them "tuberose" and detailing instructions for their care. I stuffed them into my suitcase and went on with the fun of the convention, feeling happy that they didn't need immediate planting in my garden back home.

Later on, as we rubbernecked our way around the fascinating Fayetteville Square, I found a flower stall with dew-covered cut flowers exuding a heavenly fragrance in the cool morning air. My nose led me to some tall spikes with waxy white flowers which the saleslady proudly informed me were tuberoses she had grown herself. At that moment, I resolved to learn much more about these fabulous flowers, hence this article. Those with perfume allergies need read no more!

Story has it that the tuberose, which grows wild in Mexico, was first cultivated by the Aztecs in Central America before Columbus. Perhaps through unknown missionaries, it found its way to a monastery in Southern France where it was kept secret for many years, and may have been the guarded ingredient in a perfume.

At present, the tuberose is grown in France, the Mediterranean basin, in Morocco, Taiwan, Sri Lanka and Java. The single-flower form is cultivated for perfume, and the double for ornamental use. The tuberose's current botanical classification places it in the family *Amaryllidaceae* (formerly *Agavaceae*), and Linnaeus named it *Polianthes tuberosa*. The 'Polianthes' may have been from the Greek 'polys' meaning many and 'anthos' meaning flower, or from 'polios,' meaning white or shiny and 'anthos' for flower.

Some folks pronounce the word "tube rose," but the Latin *tuberosa* means "tuberous." The bulbs grow up from around a central rhizome.

The one- to two-foot bloomstalk emerges from a rosette of linear, deeply grooved, gray-green leaves. Other leaves are successively smaller as they grow on up the stalk, wrapping

around it slightly at their bases. The tubular flowers open to funnel-shape and grow in racemes on terminal spikes.

The tuberose is hardy in Zones 8 to 10, but should be treated as an annual or grown in containers as a patio plant here in Zone 7. The tubers should be planted outdoors in spring after all danger of frost is past. Plant in full sun and in fine, rich, well-drained soil. A mixture of sandy loam, leaf mold, rotted manure, and extra potash is recommended. Cover with an inch of fine soil. The soil should be kept stirred and not allowed to dry out. Water plentifully while actively growing. If planted by June 1, they should bloom naturally in late summer or fall. Dig after flowering and before frost.

After digging, discard the old tubers which have flowered and will not flower again. Store the small ones in a dry, cool place (about 50 degrees F) until the following spring. They will not flower the second year but should the third year if properly ripened. They should also produce offshoots.

To force earlier bloom, plant indoors about the first of January on a two-inch layer of damp moss in a three-inch-deep flat box with bottom heat of about 75 degrees. In about five weeks, when roots are spread throughout the box, pot in four- to five-inch pots and keep at a temperature of 75 to 80 degrees. Succession planting at three- or four-week intervals will provide flowers throughout May and June.

Bloom can be delayed until November or December by holding the tubers in a cool dry place until mid-August, or until mid-September for December bloom. Good tubers may be three- to six-inches in diameter.

These lovely flowers have long been favorites of European gardeners and florists. Like calla lilies, they became associated with funerals here for a time, but are enjoying a new popularity in American gardens and flower shops. They are available in many plant catalogs. You will enjoy their delightful scent on summer evenings in your garden or on your patio.

The company that donated our bulbs was Coyote Farms, (800) 521-8690 or (501) 521-1311.

Treasury of Gardening

— book review by Julia Loyall

Treasury of Gardening: Annuals, Perennials, Vegetables and Herbs, Landscape Design, Specialty Gardens, by Wayne Ambler, et al (Publications International). With its gilt-edged pages and gold-scrolled cover, this oversized gardening book would be a handsome addition to any coffee table. Its more than 500 pages combine the contributions of 12 horticulture writers and teachers with fabulous illustrations, excellent photographs, drawings and charts.

There are six sections: Landscape Design; Annuals; Perennials; Trees, Shrubs and Vines; Specialty Gardens; and Vegetables and Herbs. Each section ends with a directory of plants that would be useful in that area.

Careful planning of the garden is stressed throughout. Landscape Design, for instance, recommends initial assessment of your unique garden needs and expectations. It asks you to consider whether you expect your garden to provide a beautiful but low-maintenance frame for your home, a place for entertaining friends, a private retreat from the stress of the day, a safe play area for children or pets, a vegetable garden for your table, a screen to shield your home from sun, wind or prying eyes, or perhaps a specialty garden where you can pursue your horticultural interests. Your garden might contain several of these features.

Topics covered in this section are the preliminary drawing, traffic flow, plant growth patterns, and garden movement of shade, water, plants, insects, and birds. Container planting is discussed along with privacy and patios. Special accents such as statuary, arbors, and benches are also included.

Landscape Design then covers culture and pests of lawn and ornamental grasses, and ends with pictures and cultural information on turf grasses, decorative grasses, and ground covers.

The Annuals and Perennials sections have large encyclopedias with color-cued hardiness indicators and detailed instructions on culture and propagation. Both have charts of plants by color and cultural needs. An Annuals chart shows step-by-step maintenance required monthly in an annual garden for each zone. Perennials has a chart of bloom dates for Zone 7. Its encyclopedia includes wildflowers for home gardens which could be used for highways or other public places.

Trees, Shrubs and Vines recommends use of a scale map with cutouts on graph paper to locate properly these more permanent garden features with regard to color, form, texture, and eventual size. This section has pruning tips and how-to drawings. It does not discuss fruit trees or edible berries, except apple and crabapple trees as ornamentals.

Specialties covers planning and culture of rose, bulb, rock, shade, and water gardens, each section ending with a directory.

Vegetables and Herbs includes a chart of common herbs and their cultural requirements. It has excellent coverage of good gardening methods.

The Index lists each entry by common and Latin names. Photos throughout the book are clear and characteristic of the plant.

This is not a book about indoor or greenhouse gardening. You will look in vain for information on your ailing orchid; but *Treasury* is a useful and beautiful reference for any outdoor gardener.

NURSERY of the **Month**

CANTRELL GARDENS

7800 Cantrell Road, Little Rock
225-1030

HOURS 8 a.m. to 5:30 p.m. Monday through Saturday; 11 a.m. to 5 p.m. Sunday

MANAGERS Abby and Rick Minor

MASTER GARDENERS Four on staff: Gregory Bujarski, Cecelia Buck, Mary Evans, Thad Gilbert

CERTIFIED ARKANSAS

NURSERYMEN Three on staff

NEW/BEST SELLING Black mondo grass, antique roses, tropical plants in flower beds, native plants, impatiens, pansies and mums

SPECIALITY Decorative concrete statues, roses, unusual plants and perennials, landscaping service (but not maintenance)

FROM THE MANAGEMENT

Cantrell Gardens boasts that one of its best assets is its knowledgeable, helpful and friendly staff. "We enjoy herbs and perennials and have a good selection of indoor and outdoor plants, gift items, large and small trees and shade plants."

February Checklist for Gardeners

— Libby Thalheimer

BIRDS

Fill feeders and supply birds with water and shelter. To attract a variety of birds, offer suet, cracked corn, sunflowers, chopped fruit, doughnuts or corn-meal mixed with peanut butter.

FERTILIZING ORNAMENTALS

For roses, apply a top dressing of cottonseed meal and bone meal under a generous layer of compost or rotted manure. If lawns need lime, apply if needed if not done in December/January. Apply a high nitrogen fertilizer to trees if not done in January. For annuals, apply a slow-release fertilizer according to package directions.

PRUNING ORNAMENTALS

February is the time to prune crape myrtles: Cut back dwarf forms to within six inches of the ground; shrub forms can be trimmed to maintain size; tree forms should be thinned every 3 to 5 years. Prepare fruit trees for production with thinning cuts: remove undesirable limbs, tip terminals and thin out crowded shoots. Mow or shear ground covers to 4 to 6 inches — English ivy, vinca minor, pachysandra, Japanese honeysuckle, winter creeper, euonymus, crown vetch and monkey grass. Santolina, lavender cotton and junipers should be cut back to 6 to 8 inches.

FORCING INDOORS

Make sure bulbs purchased for forcing (daffodils and hyacinths) have been pre-chilled. Harvest cut stems of flowering shrubs such as forsythia and place in one gallon of warm water with two table-spoons ammonia. Enclose the container and stems in a tightly closed bag to encourage the buds.

INSECT AND WEED CONTROL

Apply dormant oil spray such as Sun Oil to trees, shrubs, evergreens, roses and perennial borders to control borers, mites, aphids and scale later in the year. Check the label for optimum weather conditions (usually a calm day when the the temperature will be above 40 degrees for three days and not rain is expected for 24 hours). Spray plants before leaf buds open to avoid burning them. Do not use oil spray on sugar and Japanese maples, walnut, beach or magnolia trees. Inspect cool-season annuals and vegetables plants for aphids which can easily be controlled with insecticidal soap. Apply a pre-emergent herbicide to lawns to prevent warm-season weeds.

PLANTING

Plant balled and burlapped trees and shrubs and bare-root plants. Only buy bare-root plants that are completely dormant. Soak the roots overnight before planting. If you cannot plant these ornamentals right away, heel them in by covering the roots with moist soil or compost and store in a shady location. After Feb. 15 is an ideal time to plant roses, dogwoods and broad-leaf evergreens like magnolias and hollies. Sow candytuft, cornflowers, larkspur and phlox drummondii directly in the soil. Relocate dormant trees and shrubs. Transplanted ornamentals benefit from a root stimulator such as Superthrive.



What Works!

— Shalah Brummett

Valentine's Day brings us a bit of cheer and romance to February. And crocus and daffodils promise happy blooms later in the month. Our gardens may be sleepy now, but good weather this short month presents an opportunity to plant bare root roses or transplant dormant trees and shrubs. Here are some other ideas for February:

PLANNING

Last month, I worked out my resolutions. This month, I plan my yard. I have friends who use an overlay of three sheets of paper for their three-year plan. I like that idea, but a plan on grid paper works too.

It's not too late to start keeping a garden journal of daily or weekly activities, garden observations and weather. You can add sketches — some garden journals even have printed grid pages. A bigger journal with heavy pages can press blooms and leaves.

UPSCALE TOOLS

Has anyone else seen the spring 1998 Smith & Hawken catalog? Gorgeous tools and accessories. We like all the old-fashioned, sturdy (and expensive) metal implements. A "French wheelbarrow" has a deep and narrow galvanized metal tray; \$159. The "French Galvanized Watering Can" boasts, "Made in France of hot-dipped galvanized steel. Brass rose included; holds 2 1/2 gallons; \$55." "Wrought-Iron Garden Gates" offer four styles at \$139. The Victorian gate has gentle scrolls within its arched top. Smith & Hawken also offers matching wrought-iron "Victorian Border" panels that are to be



"sunk into the ground on 6-inch stakes, the foot-high border demarks lawn from garden." Thirty inches long; \$19 each.

Smith & Hawken has also published a very handsome coffee-table book about "Tools." If you ever wanted to know the difference between an English spade, a Cornish spade and an American shovel, this is the book. And it really is pretty enough to leave out. The graphic cover has large vertical shovels and bold text on a white background.

VALENTINE POTPOURRI

1/2 cup rose buds or rose petals

1 1/2 cups old-fashioned rose geranium

1 1/2 cups true rose geranium leaves

1/2 teaspoon ground cloves

Notes on rose potpourri: Florist roses won't have the scent that home-grown roses do, so you may want to add a little rose oil, especially later. Rose buds, because of their thickness, need to dry thoroughly and away from loose petals or they will rot. The clove spice is optional, but it adds an indescribable depth to the rose scent an clove increases the longevity of the fragrance.

Potpourri has been used universally for centuries and is an integral and intimate part of the human heritage. Early explorers were commissioned to seek herbs from foreign lands. Herbs and spices were used in food, bedding, medicine and romance. With the streamlining of this century, herb lore had become relegated to rural society. But in the last 20 years, there has been a huge resurgence of interest and experimentation. At the beginning of the 20th century, Victorians used flowers to communicate messages and sentiments. For Valentine's Day, the following



flowers and colors are of particular significance:

White signifies protection, peace and happiness. Likely available flowers are pansy, baby's breath, rose, statice and phlox.

Pink means love, fidelity and friendship. Look for astilbe, globe amaranth, rose and statice.

Red signifies strength, courage and most certainly, love. Think rose, salvia, celosia and strawflower.

Here's a Valentine's idea adapted from Martha Stewart's *Great American Wreaths* book: Make a miniature rose wreath for your very special Valentine with miniature dried rose buds, a small wire wreath form (4 to 6 inches wide), florist wire and green florist tape. Pierce the base of the bud with wire and affix roses to wreath form. Wrap and secure with the green florist tape; the key is to wrap and finish the wreath with the tape for a professional look.

What Works! is a forum for gardening, design and craft ideas. Call Shalah with cool ideas from magazines, HGTV, friends and neighbors. We'd love some fun ideas for Easter projects and spring celebrations! Call Shalah with hints and ideas at 666-8180. Or write What Works! c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.

Pulaski Count Master Gardeners

1998 Committee Chairmen and Officers

OFFICERS

Bettye Jane Daugherty, President, 60 Robinwood Drive, Little Rock 72227, 221-2865.

Connie Ruth Smith, First Vice President, No. 6 Barber Cove, Maumelle 72113, (W) 753-3810, (H) 851-8234.

Martha Jones, Second Vice President, 1117 North Bryan Street, Little Rock 72207, 663-2373.

Kevin Allis, Treasurer, 3110 Happy Valley Drive, Little Rock 72212, 228-7007.

Patty Wingfield, Secretary, 17 Portland, Little Rock 72212, 225-5758.

Project Chairmen and Co-Chairmen

GOVERNOR'S MANSION GARDEN

Fred Henker, Co-Chairman, 14300 Chenal Parkway, No. 7016, Little Rock, AR 72211, 223-0665

Mildred Walton, Co-Chairman, 120 No. Spruce, Little Rock, AR 72205, 663-7331

JACKSONVILLE CITY HALL

Rebecca Camp, Chairman, P.O. Box 622, Jacksonville, AR 72078, (W) 982-0434, (H) 835-8285

PINNACLE STATE PARK

Martha Whitehurst, Chairman, 28 Yacht Club Drive, Little Rock, AR 72212, 868-4517

Jeanne Lizar, Co-Chairman, 47 Cato Road, North Little Rock, AR 72120, 835-5431

BAPTIST REHABILITATION

Aleta Newell, Co-Chairman, 724 N. Coolidge Street, Little Rock, AR 72205, 666-0991

Hilda Boger, Co-Chairman, 33 River Ridge Road, Little Rock, AR 72227, 225-0434

Mildred Walton, Co-Chairman, 120 No. Spruce, Little Rock, AR 72205, 663-7331

ART CENTER

Suellen Roberts, Co-Chairman, 49 Tallyho Lane, Little Rock, AR 72207, 225-2362

Mary Ann Francis, Co-Chairman, 32 Nob View Circle, Little Rock, AR 72205, 225-5384

CONTEMPLATION GARDEN

Kelly Quinn, Chairman, 18 Coolwood Drive, Little Rock, AR 72202, 661-4642

Lisa Hanson Mantle, Co-Chairman, 6 Yellow Stone Cove, Maumelle, AR 72113, 851-4414

MOUNT HOLLY

Nancy Wade, Co-Chairman, 3623 Hill Road, Little Rock, AR 72205, 664-8460

Ruth Parker, Co-Chairman, 41 Pine Manor Drive, Little Rock, AR 72207, 666-4200

STATE HOSPITAL

Connie Panos, Chairman, 50 Wingate Drive, Little Rock, AR 72205, 225-4920

Marion Berry, Co-Chairman, 480 Ridgeway Drive, Little

Rock, AR 72205, 663-1693

OLD MILL

Wincie Hughes, Chairman, 4 Pine Tree Point, North Little Rock, AR 72116, 758-5271

Sue Anderson, Co-Chairman, 6418 Rolling Hills Drive, North Little Rock, AR 72118, 771-2447

PULASKI COUNTY EXTENSION OFFICE

Jane Guley, Chairman, 3103 Imperial Valley Drive, Little Rock, AR 72212, 225-2072

Boon-Nam Blackwell, Co-Chairman, 3425 Imperial Valley Drive, Little Rock, AR 72212, 224-7557

GREENHOUSE

Lois Corley, Chairman, 7409 West Markham Street, Little Rock, AR 72205, 666-2498

Mary Evans, Co-Chairman, 1724 Lilac Circle, Little Rock, AR 72202, (W) 225-1030, (H) 664-7863

RIVER MARKET DOWNTOWN

Kathy Scheibner, Chairman, 714 Parkway Place Drive, Little Rock, AR 72211, (W) 225-7776, (H) 225-0478

Pat Petkoff, Co-Chairman, 13526 Saddle Hill Drive, Little Rock, AR 72212, (W) 370-3335, (H) 224-3741

CAMMACK UALR FRUIT GARDEN

Ann Ward, Chairman, 7216 Rockwood Road, Little Rock, AR 72207, (W) 340-6650, (H) 666-1303

VICTORIAN COTTAGE

Anne Jarrard, Chairman, 1700 S. Spring Street, Little Rock, AR 72206, (W) 375-4249, (H) 375-3903

WAR MEMORIAL PARK

Terri Bonner, Co-Chairman, 2009 Beechwood Street, Little Rock, AR 72207, 663-4633

Martha Chisenhall, Co-Chairman, 3 Ridgeview Court, Little Rock, AR 72227, 221-2018

SOCIAL COMMITTEE

Anita Chamberlin, Chairman, 3400 North Hills Blvd., North Little Rock, AR 72116, 758-1959

TRAVEL COMMITTEE

Linda Holbert, Chairman, 4 Gibson Drive, Little Rock, AR 72227, 225-6806

Ray Sarmiento, Co-Chairman, 6909 Flintlock Road, North Little Rock, AR 72116, 835-2890

PROGRAMS

Martha Jones, Chairman, 1117 N. Bryan Street, Little Rock, AR 72207, 663-2373

NEWSLETTER

Laurie Pierce, Editor, 618 Asbury Road, Little Rock, AR 72207, (W) 378-3471, (H) 954-9605

Lisa Hanson Mantle, Managing Editor, 6 Yellow Stone Cove, Maumelle, AR 72113, 851-4414

SPEAKERS BUREAU

Linda Dantzler, Chairman, P.O. Box 6212, North Little Rock, AR 72124, 771-0844



March 1998

Volume 9 / Issue 2

Early spring beckons busy bees to the garden

by Laurie Pierce and Libby Thalheimer

Have early daffodils and crocus inspired you to plant, prune and dig? An early wet spring — we suspect El Nino — has things popping up all over, and Master Gardeners are itching to get out and play.

But Cooperative Extension Horticulture Specialist Janet Carson reminds us to use caution with tender ornamentals in her March calendar published Feb. 28 in the Arkansas Democrat-Gazette:

“Many plants are budding or blooming earlier than normal this year. Since we can’t predict the weather ... we need to be prepared for all possibilities,” she writes. “In central Arkansas, we could have a frost as late as April 10. ... While you can’t easily protect fruit trees or larger plants from late frosts, smaller plants and perennials can be protected with mulches or other protective coverings.”

A year ago, we had six inches of snow on Feb. 15, horrific tornadoes on March 1 and two late, light freezes on March 14 and 15. In the second half of March 1997, we had temperatures in the low 70s.

For this March, Janet warns, “Even though the weather has been mild, avoid planting warm-season plants too soon. Think back to last spring. We had a mild March, but a cool April and May.”

WEEDS

Janet suggests a quick strike against cool-season weeds. “Winter weeds are growing and many will begin blooming soon. If you want to wipe them out with herbicides, do so

soon. Other wise, hand pull or mow to keep them low and prevent them from setting seeds.”

IMAGE is a selective herbicide for use in established Bermudagrass, Zoysiagrass and Centipedegrass plus selected ornamentals such as lirioppe, pachysandra, mondograss, Lancifolia hosta, confederate jasmine and Asiatic jasmine. Follow directions from the one-pint jug of concentrate exactly. It’s hard to find IMAGE at the big-chain home centers — we get it from our neighborhood nursery.

ROSES

On her Feb. 28 “Garden Show” radio program, Janet mentioned that Extension offices have already seen rose leaves with black spot and that many roses never went dormant this year. Last year, we had excellent control of black spot with Fertilome Liquid Fungicide with Daconil on an old-fashioned climbing Blaze. Follow mixing, spraying and disposal instructions exactly according to package directions. Fertilome Liquid Fungicide comes in a one-pint brown bottle and is easy to find at large garden centers and local nurseries.

MORE FUNGUS

Apply fungicide on cool-season grasses to control brown patch and dollar spot. If fungus has been a problem on ornamentals, remove mulch, replace with fresh mulch, spray with Daconil once and again in two weeks.

FERTILIZE

Cool season grasses like Rye, Fescue and Bluegrass can be fertilized in March. Also feed houseplants, perennials and trees that have been stressed in the last year. Remember not to move houseplants outside too soon. Move them out in May and inside in September — most

In this issue ...

- 2 Plant of the Month
- 2 Nursery of the Month
- 2 Trading Post
- 3 Master Gardener News and Notes
- 4 What Works!

Early spring, continued from Page 1

houseplants are tender below 55 degrees.

SNIP SNIP

Prune glossy abelia, acuba, shrub althea, beautyberry, butterfly bush, chaste tree, summer blooming clematis, crapemyrtle, euonymus, hollies, juniper, privet, St. Johnswort and summer-blooming spireas in March.

ANNUALS

Sow most seeds indoors near a bright window (or under a grow light) or outside in a cold frame. Some annuals can be planted outside now — snapdragons, dianthus, calendulas, sweet peas, alyssum, pansies and lobelia.

PERENNIALS

Plant seedlings at the proper depth now for maximum root establishment. Divide established perennials. If planting the divisions in the same site, amend the soil with organic matter or fertilizer.

FRUITS

One-year-old strawberry plants and grape vines may be set out three or four weeks be-

fore the average last frost date (April 10) Trim grape vine roots to six inches, prune to a single cane and head it back to two buds. Root cuttings of blueberries, raspberries and blackberries may be set out anytime before the soil warms. Prune bare-root blueberry plants back one-half. Prune raspberry canes back at or below the ground line to reduce the spread of disease.

VEGETABLES

Plant one-year-old asparagus crowns, beet seedlings, broccoli plants, carrot seeds, cauliflower seedlings, collard seeds, sweet corn kernels, leek seedlings, lettuce seeds, radish seeds, peas, potato seed pieces and turnip seeds. Start Brussels sprouts, chard, cucumber, pepper, summer squash and tomato seeds in the hot house or cold frame.

ARBOR DAY

Arkansas celebrates Arbor Day the third Monday in March. Remember, balled-and-burlapped trees can be transplanted almost any time of year.

Plant of the Month: *Melampodium*

by Helen Hronas

Melampodium is an exciting annual from Mexico that is quickly rising in popularity for its neat, mounding habit and showy display of small sunny yellow blooms from early summer to frost. *Melampodium paludosum* is a full, bushy plant with healthy, dark green leaves that compliment the tiny daisy-like flowers. Coming from Mexico, it is exceptionally heat tolerant.

"Derby" is the dwarf version which grows 8 to 10 inches tall. "Million Gold" is a new, golden-yellow variety for 1998 which blooms continuously until first frost. According to the National Garden Bureau, "Million Gold" does particularly well in hot and humid climates and it grows somewhat taller here in central Arkansas than cooler parts of the country.

Melampodium is very easy to grow, even in poor soils and is sure to thrive in that sunny "hot spot" where less hardy plants shut down in summer heat. Although it's an annual, it will reseed itself. Seeds are available through major seed catalogs like Park Seed; plants will be available at local nurseries. Melampodium will quickly fill in and look great planted in drifts toward the front of beds in full sun. Its perky yellow blooms and rich green leaves will pick up your spirits on the hottest of summer days.

Trading Post

by Frances Young

Lois Corley and the Greenhouse Committee, 666-2498 or 664-7863, want **unusual seeds or cuttings** for the spring sale. Marie Flickinger, 663-9146 has **vinca minor**. Breck Campbell, 666-9195, has **garlic chives**. Marge Van Egmond, 224-7632, has **four o'clock seeds**. Annette Hurley, 221-1878, has **aloe vera**.

Nursery of the Month

LAKWOOD GARDENS

3101 North Hill Blvd., North Little Rock
(501) 753 7800

MANAGER Mike Wallace

MASTER GARDENERS ON STAFF Barbara Johnson, Sharon Carr, Mike Carter, Sue Engstrom

CERTIFIED ARKANSAS NURSERYMEN Four on staff

NEW ITEMS/BEST SELLING PLANTS *Chimneas* (Clay pottery outdoor fireplaces), a new selection of native plants, planters, wind art and lawn sculptures.

MOST UNIQUE THING ABOUT NURSERY All of their trees are now container grown and can be transplanted any time of the year.

SPECIALITIES Lakewood Gardens has an expanded selection of perennials, especially hostas. They have an in-depth selection of herbs, also expanding.

WHAT MASTER GARDENERS SHOULD KNOW ABOUT YOUR NURSERY Lakewood Gardens is happy to take special orders. Its staff is very willing and able to help customers with information and with any problems they have. The staff members are also gardeners and are excited about new varieties.

Master Gardener News and Notes

By Laurie Pierce

MARCH

The Home Builders Association of Greater Little Rock's annual Home Show will feature more than 150 exhibitors **March 6-8** at Barton Coliseum. Admission is \$3, free for children under 12. 758-3646.

Russellville Recreation and Parks Department will host a Spring Garden Fair from 10 a.m. to 4 p.m. **March 7** at the Hughes Community Center. Seminars include "Butterflies in the Garden" at 11 a.m., "Lawn Care" at noon, "Arkansas Wildflowers" by Carl Hunter at 1 p.m. and "Roses and Companion Plantings" at 2 p.m. (501) 968-1272.

The 67th annual convention of the Arkansas Federation of Garden Clubs will meet at the Arlington Hotel, Hot Springs, **March 9-11**. June Wood of Albuquerque, N.M., will present a program about flower design from 2-4 p.m. **March 11**. Call Hazel Cameron at (501) 785-1063.

The Camden Daffodil Festival features 4 million daffodils plus live music, children's activities, historic home tours, garden tours, yard and garden vendors, food and an antique car show 10 a.m. to 5 p.m. **March 13-14** and 1 to 5 p.m. **March 15**. Call (870) 836-6426.



The Ozark Folk Center State Park in Mountain View will host a Medicinal Herb Seminar and Luncheon from 9 a.m. to 5 p.m. **March 14**. The cost is \$40; call (870) 269-3851.

The Arkansas River Valley Lawn & Garden Show will be **March 20 - 22** in Fort Smith. Landscaped gardens, commercial exhibits and seminars are planned. Call 501-782-4947.

Learn about greenhouse propagation and organic pest control at the Beginners Organic Greenhouse Workshop from 10 a.m. to 4 p.m. **March 28** at the Ozark Folk Center State Park in Mountain View. The cost is \$35; preregistration is required. Call (870) 269-3851.

The Home Builders Association Greater Little Rock's 1998 concept home will be open to the public **March 28-April 26**. Designed by Jim Johnston and built by Fred Stancil, the home is located at 1500 Loyola Drive in the Village of Wellington development. Hours will be 1-6 p.m. Tuesday-Friday, 10 a.m.-5 p.m. Saturday and noon-5 p.m. Sunday. Admission is free; 758-3646.

APRIL

The Old Mill Committee will have a two work days for bedding

plants at 9 a.m. **April 2 and 16**. May workdays will be 9 a.m. **May 14 and 28**. Rain dates are the following Thursday. Call Wincie Hughes, 758-5271, or Sue Anderson, 771-2447, for more information.

The Mid-America Regional Lily Society spring lily bulb sale will be 9 a.m. to 5 p.m. **April 4-5** at the Missouri Botanical Garden, St. Louis. Free with regular garden admission (\$5, \$3 ages 65 and older); (314) 577-9400.

The Missouri Botanical Garden will celebrate spring with its GardenExpo on **April 18-19 and 25-26**. Garden tours, hands-on workshops, demonstrations, guest lectures, children's activities, vendors and children's activities from 9 a.m. to 5 p.m. Free with regular garden admission (\$5, \$3 ages 65 and older); (314) 577-9400.

Southeast Region Master Gardener Conference will be hosted by the Florida Cooperative Extension Service **April 20-22** at the Clarion Suites Resort and Convention Center at Pensacola Beach, Fla. Tours and lectures such as "Shrubs for Southern States" and "Landscaping With Ornamental Grasses" are featured. Other topics include bees, plant diseases and weed control in turfgrass. Call or fax the Florida Cooperative Extension Service at (850) 477-0953 or (850) 477-2893 (fax).

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Managing Editor	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Claude Epperson
	Rose Hogan
	Helen Hronas
	Julia Loyall
	Libby Thalheimer
	Frances Young

What Works!

by Shalah Brummett

March greets us with an early, wet spring and the promise of the vernal equinox, shamrocks and weather that inspires us to get down to some serious outside gardening. A tip of the trowel to all of you who sent contributions to What Works at the February meeting. How about some ideas from the Flower and Garden Show at our March meeting? Also, if you see a cute one- or two-page idea from your favorite gardening magazine, rip it out and bring it to the meeting. Much of interior and garden decor is the art of adapting others' ideas. Just make sure you include the name and date of the magazine — we want to accurately credit our sources!

BY THE LIGHT OF THE MOON

Do you plant by the phases of the moon? When I have, my beds have been at their best, so I'm a believer. Here's what the *Farmer's Almanac* says about planting times in March:

Plant above ground crops on March 2-4, 7-8, 27, 30-31; plant root crops on March 14-18, 21-23 and 26; plant seed beds on March 7-8 or 17-18; transplant on March 1-4, 27-31; plant flowers on March 7-8, 14-16.

TAMING DAFFODIL FOLIAGE

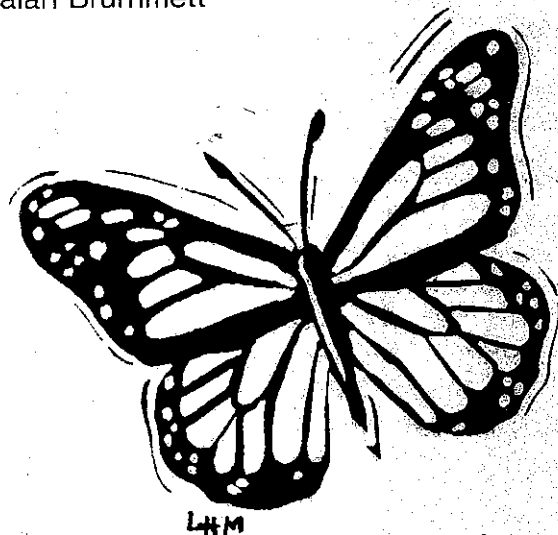
Once-welcome daffs will get scraggly and floppy as they fade. But we can't cut the leaves until six weeks after bloom. For a tidier bed, try using six-inch landscaping "companion pins" or "garden staples" to anchor leaf tops to the ground between other plant leaves and new growth. These are available at any garden store and can be reused many times. Master Gardener Mary Evans even uses them to hold down soaker hoses.

SCOOTER SEAT

How about a skateboard to sit on while gardening? it saves knees and allows movement with having to get up and down. Often, the skateboard is wider and roomier than the specially garden catalog's roller seat.

STARTING SEEDS

When you buy clear plastic sweater boxes for storage, buy extras for a head start on seeds. Turn them upside down and use as your own "biosphere" seed starter. Place flats of seed or small soil pots on the lid, water, then cover with



the bottom. Keep it closed until the seeds germinate and you won't have to water again. These can also be stacked to conserve space — just be sure the seeds get enough sunlight. And when planting those tiny seeds, use a large salt shaker to spread them more easily.

CULINARY AMENDMENT

Master Gardener Laurie Brown says to add chicken or oyster grit along with other additives to your soil. The amount differs with your soil type, so you have to experiment a little. This practice slowly releases calcium into the soil and adds texture for aeration.

LIVING SCULPTURE

Mary Evans uses tomato cages upside-down for topiary frames. The top can be woven together with florist wire and anchored at the bottom with companion pins. You can use your imagination with an annual such as Heaven! Blue Morning Glories or go traditional with perennial such as ivy.

What Works! is a forum for gardening, design and craft ideas. We want to share unique ideas from your own experience, magazine, HGTV friends and neighbors. We'd love some fun ideas for Easter projects and spring celebrations! Call Shalah with hints and ideas at 666-8180 or write What Works! c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, Ark. 72204.



Carpet your shady garden with trillium and foamflower

These dainty natives make themselves right at home in the woods

By Julia Loyall

The shadow of my neighbor's willow oak has made the porch a cool oasis on summer afternoons, but plants — other than baby willow oaks — have to be pretty special to prosper in that shade. The tall fescue grass likes the shadow for the most part but plays out where my twin oaks double the shade. The result is a compacted area of acid soil that sees little sun.

Maybe some shade-loving plants will help me convert this eyesore into a woody garden spot. I've added some ground leaves and compost, but much more is needed. When the bed is ready, dwarf holly, baby azaleas, lilies of the valley, wood hyacinths, Solomon's seal, hardy fern and variegated liriope will occupy it. But to be really woody, there must be ground cover. There must be some of the beautiful little low-growing wildflower surprises you see along rocky woodland paths, such as trillium and foamflower.

The foliage and flowers of these perennials are fascinating. Trilliums have whorls of three leaves and three of each flower part. Carl Hunter

lists five trillium species in Arkansas, varying in flower color from white through pink, red, purple or even touched with green. Heights vary from 12 inches to the two-foot green trillium. These perennials grow on fertile soils of hilly areas with a good moisture supply and should multiply well if their needs are met. They are members of the Lily family.

Two of the Arkansas varieties are called "Wake Robin." Of these, *Trillium sessile* has erect flowers and mottled leaves without petioles. The petals of the Ozark Wake Robin flower are flat, and become pinkish to red as they fade. Trilliums flower in early spring before the trees leaf in. The rhizome is partially on the soil surface. Flowers may have a disagreeable odor but are very pretty.

The foamflower belongs to the Saxifrage ("rockbreaking") family, genus *Tiarella*. It has basal heart-shaped leaves with slender spikes of small white flowers which bloom in late spring and may reach 12 inches. Leaves are toothed and suede-like. They become tinged with red over the winter. The name *Tiarella* means "little tiara" but does not refer to a Miss-America-type of small crown. "Tiara" originally was a tall, tapered, turban-like crown worn by Persian kings, which perhaps resembles the

In this issue ...

- 2 Trading Post
- 3 MG Calendar and Notes
- 4 Year of the Geranium
- 6 February Garden Checklist
- 7 What Works!
- 8 Garden of the Month

shape of the foamflower pistil.

This is an American native with six species here and only one in Asia. We do not have a native Arkansas tiarella, but we have a Saxifrage cousin called "miterwort" or "bishop's cap," from the peaked shape of the seed capsule. Foamflower is also called "false miterwort" and is similar in appearance.

Foamflower is hardy in zones 5 to 9 and is best propagated by division. Some varieties spread by rhizomatic stolons (underground stems) and can form colonies. This property makes it an excellent ground cover for a shady, wooded site.

If you have moss, it will serve as a growing medium for these wildflowers in your rock garden or rocky spot.

Reader's Digest 1001 Hints and Tips for Your Garden recommends rolling seeds of these wildflowers in a bit of soil and pressing them into a patch of moss. Then you place the moss between the rocks, and mist to keep moist until germination.

Help a rhododendron or other shrub survive dry summer heat with a colorful mulch of low-growing foamflower, trillium, creeping phlox or ferns to keep roots cool.

If the foamflower multiplies, as it can, keep a watchful eye for "rockbreaking" about to occur and divide it as needed. If you need a less-invasive plant, *Tiarella wherryi* does not have stolons and is more compact.

I recently found both trillium and foamflower varieties available at local nurseries which advertise native plants.

.....
MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Rose Hogan
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Libby Thalheimer
	Frances Young
	Claude Epperson

.....

Trading Post

The Greenhouse Committee, 666-2498 or 664-7863, wants old stepping stones for the greenhouse and unusual seeds and cuttings. The committee also is selling 40-pound bags of its high-quality potting soil. Marie Flickinger, 758-4202, has common vinca.

Jane Gulley, 225-2072, has black-eyed Susans.

Jan King, 758-3446, has pale lilac Monarda, pinky red mornarda and old-fashioned double-triple orange day lily.

Suzanne O'Donoghue, 661-9650, has common white yarrow.

Mary Ann Francis, 225-5384, has hyacinth bean vine.

Martha Whitehurst, 868-4517, wants Rudbeckia.

Master Gardener Calendar and Notes

APRIL

The Old Mill Committee will have a two work days for bedding plants at 9 a.m. **April 2 and 16.** May work-days will be 9 a.m. May 14 and 28. Rain dates are the following Thursday. Call Wincie Hughes, 758-5271, or Sue Anderson, 771-2447, for more information.

Lichterman Nature Center, Memphis, will conduct Medicinal and Edible Plant Walks on **April 5, 11 and 26 and May 2, 10, 16, 24 and 30.** Participants will learn to identify, collect and prepare medicinal and edible plants that are native to the Mid-South. The cost is \$8; reservations are recommended. Call (901) 767-7322.

The Mid-America Regional Lily Society spring lily bulb sale will be 9 a.m. to 5 p.m. **April 4-5** at the Missouri Botanical Garden, St. Louis. Free with regular garden admission (\$5, \$3 ages 65 and older); (314) 577-9400.

Study insect and disease control and soil science in depth at the Intermediate/Advanced Level Organic Greenhouse Workshop from 10 a.m. to 4 p.m. **April 11** at the Ozark Folk Center State Park in Mountain View. The cost is \$35; preregistration is required. Call (870) 269-3851.

Lichterman Nature Cen-

ter, Memphis, will host its annual Spring Plant Sale from 9:30 a.m. to 6:30 p.m. **April 17 and 9:30 a.m. to 4:30 p.m. April 18.** Plants include natives and wildflowers, shrubs and trees and other landscape ornamentals, all grown by Lichterman greenhouse volunteers. Call (901) 767-7322.

The Missouri Botanical Garden will celebrate spring with its GardenExpo on **April 18-19 and 25-26.** Garden tours, hands-on workshops, demonstrations, guest lectures, children's activities, vendors and children's activities from 9 a.m. to 5 p.m. Free with regular garden admission (\$5, \$3 ages 65 and older); (314) 577-9400.

The Florida Cooperative Extension Service will host the Southeast Region Master Gardener Conference **April 20-22** in Pensacola Beach Fla. Call (850) 477-2893.

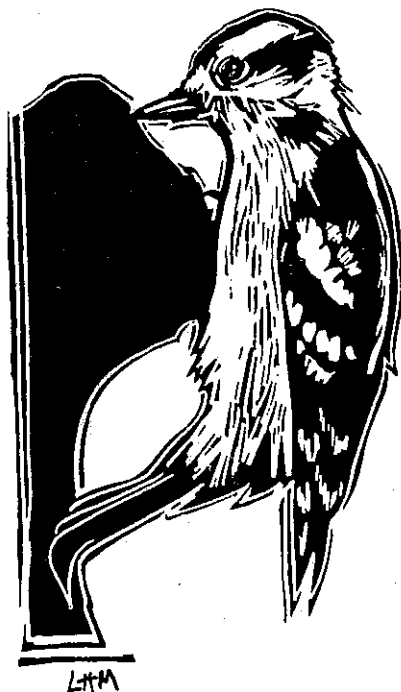
The 4-H Center in west Little Rock will host a Native Plants Seminar on **April 22.** Registration costs \$20. Call 671-2000.

The Home Builders Association Greater Little Rock's 1998 concept home will be open to the public through **April 26.** Designed by Jim Johnston and built by Fred Stancil, the home is located at 1500 Loyola Drive in the

— Laurie Pierce
Village of Wellington development. Hours will be 1-6 p.m. Tuesday-Friday, 10 a.m.-5 p.m. Saturday and noon-5 p.m. Sunday. Admission is free; 758-3646.

MAY

The Ozark Folk Center State Park, Mountain View, will host its 10th annual Heritage Herb Spring Extravaganza **May 7 through 9.** Marge Clark, author of *The Best of Thymes* and *Christmas Thyme at Oak Hill Farm*, will be the featured speaker. Festivities will kick off at 7 p.m. May 7 with Lavish Herbal Feast and Reception (\$20). The May 8 and 9 seminar costs \$50 for both days or \$33 for one day. Call (870) 269-3851.



Sun-loving geraniums for color and form

By National Garden Bureau

The National Garden Bureau celebrates 1998 as the year of the geranium. Here are excerpts from a fact sheet published by the National Garden Bureau about tender perennial geraniums:

Should we call them geraniums or pelargoniums? By any name, they are definitely as sweet. The familiar geranium that gardeners buy in abundance at garden centers each spring (or raise from seeds in their homes) is Pelargonium. It's a tender perennial in the same family as the hardy perennial Geranium, and it's one of the most useful and varied plants you can cultivate, whether your garden is a large border or a collection of containers on a deck.

The first plants — *Pelargonium triste* — were brought from South Africa to England by famed plantsman John Tradescant in the early 17th century. In 1760, seed of pelargoniums were sent to John Bertram of Philadelphia, marking the arrival in America, and plants were brought back from France by Thomas Jefferson in the 1770s and 1780s.

MISNOMER

Mistakenly called geraniums, it wasn't until the end of the 18th century that pelargoniums were placed in their own genus. For decades they were listed as species of Geranium, the European perennial. Separation finally was based on the shape of the floret, which is really an umbel made up of a cluster of florets, and the seed capsule. But the common name has

remained — at least in North America. Many gardeners consider a geranium to be an annual because the plants die at the end of the growing season.

There are more than 200 species of geraniums, only a few of which are widely grown. The annual geraniums we grow most often in our gardens and homes are divided into four basic types: zonal or common (*Pelargonium hortorum*), ivy-leaved (*P. peltatum*), regal or Martha Washington (*P. x domesticum*), and scented-leaf (*P. graveolens*, *P. tomentosum* and others). Within those type, some can be propagated by seed, some only from cuttings.

AT THE NURSERY

What do you look at first when you purchase a geranium? Color, probably. The look of the flower itself — whether the florets are single, semi-double or double — may influence you when you consider how you're going to use it: massed in a garden bed or spilling from a hanging container, for instance. Geranium flowers are composed of a cluster of florets, and each floret is either single, semi-double or

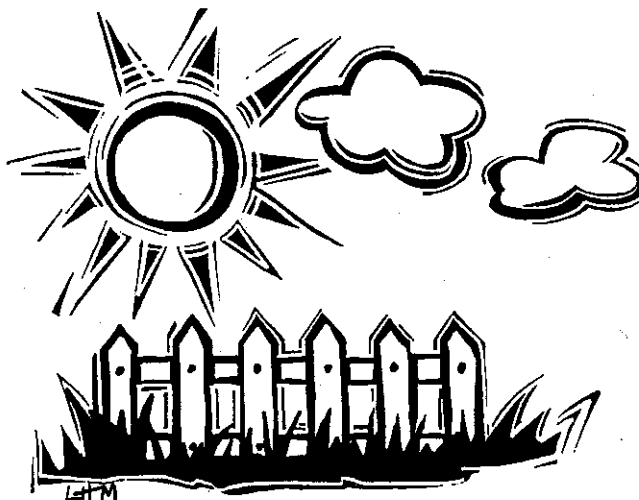
double. One color or bicolor.

Chances are you may not know if the geranium you're buying was grown from a seed or a cutting. There are advantages and disadvantages to both.

Geraniums from seed are primarily available in single-flowered form only. Their flowers tend to shatter — a drawback for growers, but an advantage for gardeners because there's no need to pinch off dead blooms. The colors can be spectacular and include a wide range: bright red, scarlet-and-white, orange-salmon, coral, pink-and-white, white and lavender. Zonal and ivy geraniums are two types successfully grown from seed.

Geraniums grown from cuttings can have single, double or semi-double florets. The flower umbel also helps identify cutting-grown geraniums: If the umbel does not tend to shatter, it probably is a cutting geranium. Gardeners usually remove the dead umbel from the plant for cosmetic reasons and to reduce the risk of fungal disease. In addition

See GERANIUMS, Page 5



to zonal and ivy types, regals (Martha Washington) and scented-leaf types are cutting-grown geraniums.

For those shopping for flowering plants, garden centers offer many choices in growth habit and flower color. When you buy, look for healthy, dark green leaves with no discolored spots, fairly compact growth (no straggly stems that indicate poor light), and no pests. It's helpful if the plant is labeled with its cultivar name.

Ivy geraniums are most often preplanted in hanging containers. You shouldn't need to repot them when you get home. If you don't intend to plant container geraniums the day you bring them home, water them well and set them in a shaded spot outside.

TRANSPLANTING AND CARE

The best time to transplant is on a cloudy day or late in the afternoon so the can settle with out the drying effects of the sun. Set the geraniums in the ground at the same depth or slightly below the level they were growing in the pots. Set the plants 8 to 12 inches apart so that each plant will have good air circulation around it.

Although geraniums are care-free, they do need some attention. They're heavy feeders, so you should fertilize them every two weeks or at least once a month. Use a balanced, water-soluble fertilizer such as 10-10-10 or 20-20-20. Or feed them once for the season when you plant them by using a time-release fertilizer. Follow label instructions exactly.

Feed container-grown geraniums once a month with fer-

tilizer diluted to half strength.

Toward the end of the growing season, cooler nights and still-warm days of fall perk up geraniums. They often produce more blooms than they did during the summer. Give them an extra boost of fertilizer to extend their beauty.

Water regularly, if it doesn't rain. Check the soil in containers daily during hot summer weather and water if it's dry to a depth of 2 inches or more. Watch for signs of disease, and if you spot any, remove the affected part.

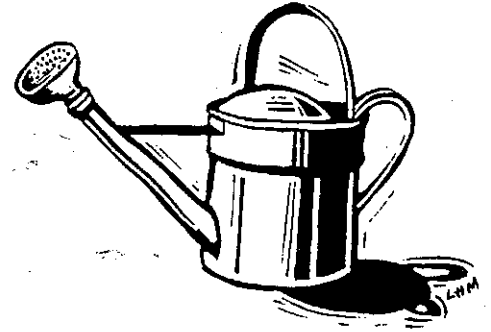
Geraniums grow well — and look so good — in containers on decks, porches and along walks, so if you don't have a garden site in full sun, you can still enjoy the plants. Geraniums don't grow well and flower in the shade. All geraniums grow well in pots. Combine them with other plants such as lobelia, vinca vine, parsley, petunias, verbena, dusty miller and ageratum.

If you want to plant in window boxes, select windows that face south and are unobstructed by trees. And watch for overhanging eaves, which can produce some shade and may prevent the plants from getting enough rain water.

Ivy geraniums are naturals for hanging containers, but have a tendency to become a little bare in the center as the season progresses. Consider planting them with other annuals. Do not use the saucers under hanging containers. Allow water to fully drain from the pot.

PROBLEMS

Relatively pest free, geraniums can fall prey to a few diseases in the home garden. The most likely problem is



botrytis.

Botrytis is an airborne fungus that tends to show up when days are warm but nights are coll enough to create heavy dew in the morning or when days are overcast and rainy. Blooms first look moldy. Then they will get brown and mushy. Remove the affected blooms and if necessary, the whole plant. This fungus spreads rapidly from flower to flower and from plant to plant.

Xanthomonas is a bacterial disease that attacks the vascular system and causes plants to wilt — especially in the heat of the sun. One of the first symptoms of xanthomonas is leaf spot; eventually the lower leaves yellow and brown, but they don't drop off. This disease is host specific and lives in the soil for only three months. But if you hold over a plant that has it, you can perpetuate it; dispose of affected plants.

Chances are, you may never encounter either of these diseases. Geraniums are on of the easiest prettiest and most adaptable flowering plants in the garden.

For more information, write the National Garden Bureau at 1311 Butterfield Road Suite 310, Downers Grove, Ill. 60515 or call (630) 963-0770.

April Checklist for Gardeners

By Libby Thalheimer

VEGETABLES

Plant cool season crops through the month of April. After April 10, plant seeds and transplants of warm weather vegetables. Crops to sow include cucumbers, beans, melons, squash and sweet corn. Set out young plants of tomatoes, peppers and eggplant. Note on tomatoes: If an unexpected late freeze is forecast after you have planted, cover tomato plants with paper bags, baskets, straw or anything that will hold the warmth of the day around the plants. If you cover with plastic, support the covering so that it does not touch the leaves. Remove the plastic during the day or vent it so it will not collect too much heat from the sun. Remove all covering as soon as the weather warms up again.

BULBS

Remember to let leaves of Spring blooming bulbs remain until they decline, in early to mid-summer. Summer bulbs such as agapanthus, caladiums, dahlias and tuberose can be set out now. In addition, winter hardy bulbs such as alstroemeria, amaranth, amaryllis, belladonna, anemone coronaria (windflower), *bletilla striata* (Chinese ground orchid), cannas, *colocasia esculenta* (elephant ears), *convallaria majalis* (lily of the valley), crinum, crocosmia, *dracunculus vulgaris* (dragon arum), eucomis (pineapple lily), galtonia, gladioli, gloriosa lilies, hemerocallis (daylilies), hymenocallis (spider lily), incarvillea (hardy gloxinia), liatris, liliun asiatic, liliun oriental, liliun species, orinthogalum (star of Bethlehem), oxalis, *sauromatum venosum* (Voodoo lily), schizostylis coccinea, sparaxis tricolor (harlequin flower), *triteleia laxa* (triplet lily), tritonia crocata, zantedeschia (calla lily) and zephyranthes (fairy lily) can also be planted now if mulched heavily.

PRUNING

All Spring flowering shrubs may be pruned after they have finished blooming. Prune old lavender wood hard to stimulate growth.

MULCH

Mulch all new plants, shrubs or trees at the time of planting to keep the surrounding ground from caking on top. Mulching also reduces the need to weed and hoe. Wood chips are not the only options for mulch. White sand, or crushed egg shells are used as mulch around lavender, lemon verbena and other plants that are sensitive to fungi. Pine needles and peat moss are used around acid-loving shrubs and trees. Gravel and stones are used with alkaline-loving plants. Grass clippings, hay, straw,



aluminum-coated plastic and foil are used around vegetables and fruit.

ROSES

Chemical control of black spot should begin in spring as the foliage starts to grow. Additional spray should be applied at two-week intervals throughout the growing season. The best fungicides for black spot control are Benlate, Funginex or Daconil. Benlate, Funginex, Phaltan or Topsin M will control powdery mildew (may require up to 20 applications per season). Do not plant dormant roses after April 15. Potted roses can be planted until May 15.

ANNUALS

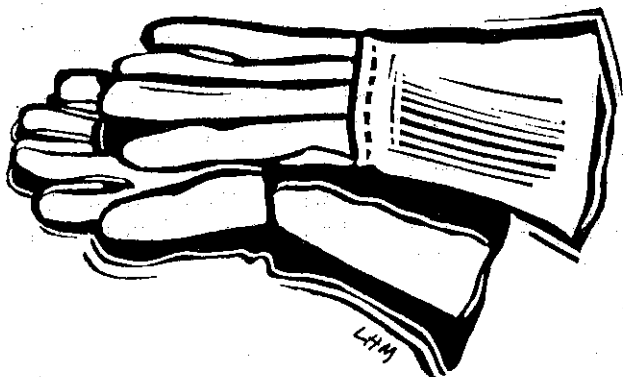
Many flowers can be sown directly into a prepared garden bed. Sow seeds thinly in a well-prepared bed and cover as directed on the seed packet. Seeds that perform well at this time include abelmoschus, cleome, cosmos, dill, gomphrena, marigolds, melampodium, morning glories, sunflowers, tithonia and zinnia. Set out basil seedlings after the last frost date. Take cuttings of pelargonium just below the leaf node; put in potting medium; water and keep in shaded area for two to three weeks; transplant into medium pots. For the pansies, calendula and other fall planted annuals, an application of foliar feed fertilizer and deadheading will help prolong the vigor of your plants. Inspect the buds and undersides of leaves for signs of aphids and treat with malathion, diazinon or Orthene.

PERENNIALS

Divide and replant perennials at this time, making sure new shoots are present with each division. Replant at the same depth and water with Superthrive. As shoots emerge from those unlabeled perennials, try to identify and label them now. Plant perennial phlox. Transplant seedlings or root divisions of lemon balm, tarragon, sweet woodruff and yarrow. Take cuttings of new tender growth of lavender, lemon verbena and semiwoody stock of rosemary to root in potting medium.

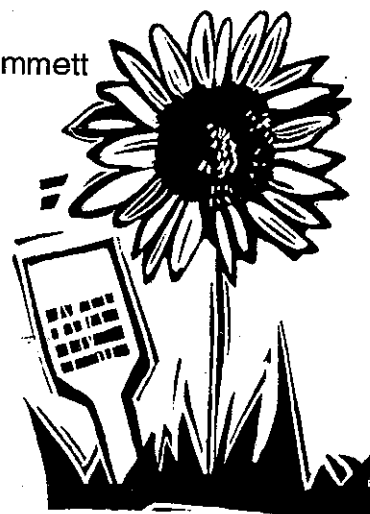
HERBS

Most herbs require full sun and sweet soil on the limey side. A few, like bergamot, salad burnet, chervil, cress, lemon balm, marjoram, mints and pennyroyal will toler-



What Works!

By Shalah Brummett



April! Daylight savings time finally brings us longer days and warm weather which allows us into our gardens in earnest. After April 10 (the latest recorded frost), we can plant our seedlings with confidence and begin to actually see the fruits of our labors. April brings a potpourri of handy ideas. Thanks to all contributors — keep your suggestions coming!

WAX AND WANE

Let's start with the *Farmer's Almanac* planting times:

Above ground crops:
11,12,13,14,18,19,22,23

Seed beds: 3,4,5,13,14

Transplant: 1,2,26,30

Flowers: 3,4,5,11,12

The moon is full on April 11, from 4:23 p.m., just in time for Easter, April 12.

ALL AFLUTTER

To attract butterflies to your yard supply the following:

Think color! The brighter the better, especially purple, yellow, orange and red. Select varieties that bloom at different times to continue the color.

Full Sun is needed for most butterfly attracting plants (with some notable exceptions such as impatiens).

Offer water. A birdbath is fine or you could create a smaller butterfly-sized version.

Butterflies need a host plant for their larvae. Don't cringe—they won't eat much, besides this is a spot just for them, isn't it? Here are just a few recommended butterfly favorites: azalea, butterfly bush, coreopsis, dianthus, marigold, salvia, zinnia, basil, bee balm, dill, lavender, parsley, sage and thyme.

MARY ROCKS!

Another tip from Pulaski County Master Gardener Mary Evans! She says that if you're building a rock wall, instead of using mortar, use landscape fabric behind rocks to prevent wash-

out. Landscape fabric can also be used with mulch in stone pathways to deter weeds as well as for frost protection because it breathes.

LEMON DROPS

Here's yet another way to keep animals out of the garden from *Southern Living* magazine: Spread citrus peels through the soil. Animals seem to be repelled by the smell and the peels are biodegradable. Let us know how this one works!

IMPLEMENTS

If you are a beginning gardener — or just taking inventory of your tools — *Weekend Gardening* magazine offers this list of the 12 basic hand tools: round-point shovel, bow rake, lawn rake, wheelbarrow, hand pruner, grass shears, hedge shears, hose reel caddy, garden spade, garden hoe, trowel and cultivator. Investing in quality implements is ultimately worth the expense and if you need to do it in increments, it can be a treat you give yourself.

BONNY BASKETS

Here's a contribution from Libby Thalheimer for spring and summer hanging baskets: Consider planting a mixed basket using several different kinds of flowers or foliage to give variety in color, texture and form. For a large full basket, use a wire one instead of the plastic type. Begin by soaking sheets of sphagnum moss in a bucket of water. Then press the wet moss along the inside of the wire frame to form a lining. Wrap the moss over the rim and fill the basket with sterile potting soil. Set transplants in the center of the basket. For extra fullness, cut additional slits in the moss and set transplants in to the sides of the basket.

LETTUCE EAT

Monthly Gardening magazine

says to try "designer greens." Have you read a salad's ingredients and noticed the word *mesclun*? Mesclun is actually a variety of greens relatively unknown to most American gardeners. But lots of gourmets know about these tasty sprouts. These can include purslane, arugula, chicory, fennels and dandelions. These loose-leafed lettuces are very high in Vitamin A and potassium and are calorie and fat-free. They are also easy to grow, even in containers. From sowing in rich loose soil to harvest takes only about five weeks and you can make successive plantings about every 10 days through fall. Begin cutting leaves as soon as plants are two inches tall. Pick early before strong sun wilts it, but if it is wilted, crisp in cool water. Use scissors to harvest. Try mesclun with a sprinkle of fresh Parmesan, toasted nuts, and raisins with your choice of fat-free dressing. It's a feast!

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write *What Works!* c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.

Missouri Botanical Garden

By Shalah Brummett

Arkansas is a wonderful gateway to several geologic and geographic regions of the United States: Mid-South, Mid-West, Delta and Plains. A wide variety of public and private gardens beckons gardeners to share their glory and gather ideas for their own gardens.

Beginning this month, Master Minutes introduces a new feature. We will highlight showplace gardens throughout the country and begin with the renowned Missouri Botanical Garden. Located in St. Louis, it contains nearly 80 acres and more than thirty gardens.

The Botanical Gardens mission is "to discover and share knowledge about plants and their environment in order to preserve and enrich life." Over 380 employees join with a 900-person volunteer base not only on site, but providing community outreach as well. One such program, Gateway Greening, is a "gardening part-

nership" serving over 150 community and school gardens. Its research department is used by scientists world-wide to supply critical information to save and utilize plants for future generations.

Introduced this year are several new gardens, including more than 20 "showcase" residential-scale gardens at the Kemper Center for Home Gardening. There are boxwood, Chinese, and Victorian gardens as well, and a new Victorian observation tower which overlooks a popular maze.

All proceeds from the Garden Gate shop support the Missouri Botanical Garden's museum of research, education and horticultural display. The shop offers distinctive items focusing on the community and environment from "crystal to compost, silk scarves to luffa scrubs," Hen-Feathers statuary, Santa Barbara clocks and pottery by local artists. Since March 1, the Garden

Gate has begun offering a bridal registry specializing in unique horticulturally-oriented bridal gifts.

Thirty-five miles southwest of St. Louis in Gray Summit, Mo., the Shaw Arboretum branch provides environmental education, ecological research and public enjoyment of the natural world. This less structured part of the Missouri Botanical Garden is open every day from 7 a.m. until a half-hour past sunset.

Located at 4344 Shaw Boulevard, the Missouri Botanical Garden is open from 9 a.m. to 5 p.m. with extended summer hours until 8 p.m. through Labor Day. Admission is \$5 for visitors aged 13-64, \$3 for adults 65 and older, and free to children 12 and younger. Some special events may require additional charges. There is free parking on the premises. For more information call the GardenLine at 314-577-9400.

Checklist, continued from Page 6

ate light shade. French tarragon and sweet woodruff will be happy in full or partial shade.

AZALEAS

Feed after flowering with a fertilizer that contains iron and other elements. (Follow package directions carefully.) Azalea roots are compact, fibrous and shallow (Granular or foliar feedings both work well.) Because they grow near the surface of the soil, they are very sensitive to drying. Water regularly during periods of drought and insulate them with a two to three inch layer of mulch before hot weather arrives.

EASTER LILIES

After lilies fade, plant the bulbs in a sunny, well-drained location. Let the foliage remain all summer, then cut it back with the perennials as they die in the fall. Next year the bulbs will sprout again. Although they will not bloom for Easter, you will have flowers in late Spring or early Summer.

LAWNS

If centipede and Bahia lawns yellow even after they have been fertilized, they probably need an extra shot of iron. To turn the grass green again, spread iron sulfate granules over the lawn at the rate of 10

pounds per 1,000 square feet. Use a fertilizer spreader to distribute the materials and water well after applying. Or you can spray the lawn with a solution of liquid iron, such as Greenol, at the rate recommended on the label. Start mowing this season with good sharp blades on your mower. The quality of cut is much better and it will eliminate the ragged, brown tips on the grass blades. This year, consider a mulching mower or a mulching kit for your old mower. The benefits of mulching your grass clippings are a big plus toward the overall health and appearance of your lawn.

WEEDS

The appearance of dandelions, pennywort and other unwanted warm season wildflowers begins. An early application of a post-emergent herbicide can help control these weeds before they take over your lawn. Be sure and use chemicals specifically for your type of lawn.

PESTS

Many people are already experiencing white fly, aphids, lacebugs and other insects. Control with insecticidal soap or pesticides (follow directions exactly) as soon as you notice them — before they get out of control.



MASTER MINUTES

May 1998

Volume 9 / Issue 4

Green Team foster stewardship of the Earth

by Margaret Fizer

Green Team is a six-week garden club program at Immaculate Conception School in North Little Rock. The mission is to encourage young people to explore all aspects of gardening while fostering stewardship of the Earth and its beauty. The parish grounds in need of beautification during the active spring gardening period respond beautifully to the tender care. A variety of gardens and experiences teach young gardeners to develop patience, foster a belief in their own abilities and create a respect for all living things.

The Green Team program, developed by Master Gardener Margaret Fizer, is in its fourth year. It is structured on a six-week period with adult volunteers and third to eighth grade gardeners participating. The six-week format is perfect for adult volunteers, busy parents and active third- to eighth-graders who participate.

A "team" of children and parent volunteers is assigned to each garden. With a ratio of one adult to three children, small teams of up to six children are formed and team names are cho-

sen. This year's teams at Immaculate Conception are the Impatiens, the Cauliflowers, the Lazy Crazy Daisies, the Spice Guys, the Ladybugs and the Trumpet Vines. The seventh- and eighth-graders on



each team serve as mentors to the younger gardeners and assist the adult volunteers.

The Green Team is responsible for five gardens on the grounds of Immaculate Conception: three flower, one herb and one vegetable. Each garden is unique. The three flower gardens, designed by Pulaski County Master Gardener Margaret Breen, are a mix of perennials, annuals, bulbs, shrubs and trees designed to enhance the gardening experience of the children. The herb garden teaches an interesting aspect of full-sensor gardening with taste, touch and smell of the herbs encouraged.

Herb interaction is continued throughout the six-week program by a weekly herb lesson. Herbs will be used at graduation ceremonies to decorate and chocolate mint cookies will be served. The vegetable garden consists of vegetables, herbs and flowers grown for Father

In this issue ...

- 2 Plant of the Month
- 2 Nursery of the Month
- 3 MG Calendar and Notes
- 3 Trading Post
- 4 Planting a public garden
- 5 Public Garden of the Month
- 6 May Garden Checklist
- 7 What Works!

Francis Malone and the administration staff. This garden is a "Square Foot Garden" planned by Pulaski County Master Gardener Margaret Fizer. One special vegetable in the garden is "Little Leaf Cucumber," developed by the University of Arkansas. It's excellent for small gardens.

Speakers enhance the gardening experience. Dr. Armail Chudy, Pulaski County Master Gardener, presented Bonsai concepts in a visual presentation that interests all children. Parents Joe and Sandy Fitzpatrick explored the world of birds at one program. Each child constructs a bird feeder to use at home to continue their learning experience with birds. Forthcoming speakers include Bob Cushing, Regional Coordinator for the Arkansas Game and Fish Commission, who will speak on wetlands and wildlife conservation.

In order to teach recycling and responsibility, Green Team members participate both individually and as teams in the Green Team Recycles program. Aluminum and steel cans, plastic and glass bottles and newspapers are collected at home and then recycled at the nearest recycling center.

Parents and grandparents are invited to graduation at 3:15 p.m. May 14 when certificates, awards and flowers will be presented. A reception and garden tour will follow. For more information about Green Team program, call Margaret Fizer at 834-3217.



Plant of the Month: *Echinacea purpurea* Magnus

by the Perennial Plant Association

Echinacea purpurea "Magnus" has been selected as the 1998 perennial plant of the year by the Perennial Plant Association. Magnus was selected for its long ornamental season, adaptability and ease of production. Its bold, mid-summer blooms love sun and last for weeks.

FAMILY TREE

Purple coneflower is a member of the *Asteraceae* (*Compositae*) or sunflower family. In the 1950s taxonomists separated it from the genus *Rudbeckia*.

Echinacea purpurea, a native to the midwestern plains of North America, grows upright and forms clumps of hairy, coarsely-toothed basal leaves up to 6 inches long. Flowers are borne in heads set on stalks up to 4 feet tall. The flower head is made of a raised central cone of bronze disk flowers surrounded by highly colored, downward curving ray flowers. Colors in the species range from white to pale purple, fuchsia to crimson. Magnus was selected at the

See ECHINACEA, Page 8

Nursery of the Month

by Guy Baltz

GREEN THUMB GARDEN CENTER

Kanis and Bowman Roads, Little Rock
(501) 227 5454

OWNER/MANAGERS Jerry and Juanita Gibson & son Mark Gibson

CERTIFIED ARKANSAS NURSERYMEN One on staff

NEW ITEMS/BEST SELLING PLANTS Perennials are coming in fast. They have some new varieties of verbenas, a whole lot of sedum and hardy ferns.

NURSERY HIGHLIGHTS Green Thumb may have been the first nursery in town to sell Bradford Pear and had to really persuade people to try them. They carry a lot of odd plants and strange items. Someone called recently and asked if they had vitamins for iguanas. And they did!

SPECIALITIES Green Thumb carries a lot of varieties that are suited to this growing area. And they specialize in water gardens with pond liners, filters, pumps, water plants and fish in stock. They have a computer program which calculates pond capacity and suggests plants, fish, filter size and chemicals.

WHAT MASTER GARDENERS SHOULD KNOW ABOUT YOUR NURSERY Juanita says she buys any plant she hasn't heard of before just to try it out. They got into the nursery business long ago just to support their interest in new things. Green Thumb buys only the best varieties and they check out desirable qualities, e.g. varieties with the most blooms and fewest diseases. Their motto is "Our Quality is Your Best Value".

Master Gardener Calendar and Notes

by Laurie Pierce

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues.

Cecelia Buck will present a program about container gardening at the next Pulaski County Master Gardener meeting on May 12.

MAY

The Ozark Folk Center State Park, Mountain View, will host its 10th annual Heritage Herb Spring Extravaganza May 8-9. Marge Clark, author of *The Best of Thymes* and *Christmas Thyme at Oak Hill Farm*, will be the featured speaker. The seminar costs \$50 for both days or \$33 for one day. Call (870) 269-3851.

Floral designer Carolyne Roehm will present a lecture and book signing at 2 p.m. May 9 at the Missouri Botani-

cal Garden. Roehm will share ideas and techniques from her book *A Passion for Flowers*. The lecture is free with regular garden admission: \$5, \$3 for ages 65 and older, free for children 12 and younger. (314) 577-9400.

Lichterman Nature Center, Memphis, will conduct Medicinal and Edible Plant Walks on May 10, 16, 24 and 30. Participants will learn to identify, collect and prepare medicinal and edible plants that are native to the Mid-South. The cost is \$8; reservations are recommended. Call (901) 767-7322.

The Old Mill Committee will hold work days at 9 a.m. May 14 and 28 and June 18. In case of rain work days will move to the following Thursday. Call Wincie Hughes at 758-5271 or Sue Anderson at 771-2447.

The Ozark Folk Center State Park, Mountain View, will host its annual Garden Glory Days May 29 through June 6

with garden tours, herbal demonstrations and afternoon tea. (870) 269-3851.

JUNE

The Memphis Botanic Garden will host its annual Perennial Plant Symposium on June 6. Call (901) 685-1566 or fax (901) 682-1561 for registration information.

The Arkansas State Daylily Society will hold its 1998 Garden Tour from 8 a.m. to 3:30 p.m. June 13 at five private central Arkansas gardens. The tour costs \$15 and includes lunch at Bowen's Restaurant in Ramada Inn, Conway. Call Elwanda Baker at (501) 470-0754.

The Ozark Folk Center State Park, Mountain View, will teach propagation techniques, pest control, soil nutrition and more at its Organic Herb Gardening Workshop on June 19. The hands-on class costs \$35. The class will be repeated July 31, Aug. 7 and Sept. 4. (870) 269-3851.

Trading Post

by Frances Young

Adam Hawkins, 228-2236, has three 6-foot-tall yaupons and one 6-foot "Sieryu" Japanese maple and wants perennials and flowering trees.

Nancy Casey, 227-7854, has feverfew and wants eight to 10 1-inch diameter bamboo poles.

Martha Jones, 663-2373, has tall yellow flag that likes wet feet.

Mildred Walton, 663-7331, has goldenrods.

Martha Whitehurst, 868-4517, wants feverfew.

Bonnie Cargile, 868-5404, has sun drops.

Wincie Hughes, 758-5271, wants hostas.

Jan King, 758-3446, has pink monarda and *Coreopsis zagreb*.

Mary Evans, 664-7863, has mondo grass and orange daylilies.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Rose Hogan
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Libby Thalheimer
	Frances Young
	Claude Epperson



The business side of a public garden

How to plant a legacy with your own public garden by Julia Loyall and Celia Storey

Begin with an unusually passionate and steadfast individual who has a dream and yet is willing to compromise that dream to bring it to fulfillment. This person must have a "doer" personality, wide name recognition, known high character, excellent communication skills and the ability to avoid conflict — except in situations in which confrontation will aid the project.

Mary Courville of Lafayette, La., is such a person. Her dream of building a botanical garden to honor the memory of her late father grew from the comments of customers visiting her family's nursery. After years of hearing them remark that a stroll through the Orchid Gardens greenhouse was "better than therapy," Courville began to dream of a public garden for southern Louisiana. Here anyone, including students, could relax in the beauty of nature and observe native and rare plants and waterfowl in natural settings.

At first Courville sought support for her plan from family and the wide circle of friends which her locally televised gardening program had brought her. Their response was enthusiastic; but in retrospect, Courville says, she lost time. Too large a group impedes decision-making. She now thinks her first step toward achieving her dream should have been to form a small committee of three to five people, including a lawyer and a certified public accountant. Before she went to the general public for support, this group could have helped her hone her idea, choose a marketable name and obtain tax-exempt status for fund raising. And members could have visited sites with her to select the location, preferably on donated land.

She didn't begin with a small

committee, and so several of these important steps took longer than they might have. She was fortunate, however, to obtain early the services of a lawyer who filed for tax exempt status "pro bono."

A NAME AND A MISSION

The first name she chose for her project was Lynch Botanical Gardens and Bird Sanctuary. Her father, John J. Lynch, was an internationally respected wildlife biologist and a pioneer in efforts to save the whooping crane from extinction.

As fund raising began, Courville's original plan was forced to expand to include items of interest to her donors. The expanded plan included a garden for children, a conservatory for rare plants, a waterfowl observation area, a bird sanctuary and a research center that would cooperate with state universities. The research center's library would give students access to John Lynch's scholarly papers on waterfowl and plant propagation. These additions were just the beginning, as we shall see.

ARTIST'S CONCEPT

At this point, Courville needed a conceptual layout illustrated with diagrams and drawings to make her goals clear to potential backers. She joined the American Association of Botanic Gardens and Arboreta. She and a member of her committee attended the organization's conferences in various states, where workshops and publications supplied useful information.

She was fortunate to have an artist friend draw artwork for her conceptual plan. He designed a beautiful cover with a drawing of a whooping crane. Inside was a pencil portrait of John Lynch and drawings of the garden's proposed layout.

Final architectural plans were

not needed yet — or practicable, because Courville had not yet secured a site. A conceptual plan allows for design changes, which are inevitable. Potential contributors or land donors will request additional facilities or a memorial name change.

Several years passed in which Courville's committee held many fund-raising events. These involved a broad cross-section of the community and raised seed money. Meanwhile, they searched for a charitable foundation or an estate that might donate land.

SITING THE GARDEN

The first sites she considered in Lafayette did not allow enough room for parking. She had settled on one site, a run-down park in a poor neighborhood, but gave it up after a political candidate opposed the plan. Shaking off discouragement, Courville kept pushing — contacting donors, making presentations, befriending influential people — and in the spring of 1995, the St. Martin Land Co. donated a 100-year lease on more than 100 acres in the Atchafalaya Basin. The donation served the company's interests, Courville notes. It let the company convey to the public its desire to preserve the environment. The unspoiled wild spot is located near the community of Henderson not far from Lafayette and Lake Henderson, convenient to Baton Rouge and New Orleans.

If she had it all to do over, at this point — after the site had been nailed down — she would have expanded a small steering committee to embrace professional and technical people, respected community members, someone politically connected, such as the governor's wife (an important ally), architects, garden club enthusiasts and knowl-

edgeable community observers who could recommend the most effective people to recruit (usually very busy people). But if she's learned anything, she's learned that the order in which the various stages of a project will be realized cannot be guaranteed. One learns as one looks for help.

For instance, she looked to the local university. Based on what she learned, she recommends trying the horticulture department rather than botany or biology. Watch out for funding competitors who will "sandbag" you and lure your benefactors away. Nevertheless, trusted university people can offer excellent advice on funding sources and help you find idealistic wealthy people.

FINANCIAL FEASIBILITY

Having found her land, Courville now needed a feasibility analysis to set target amounts for a capital campaign and endowment. To obtain the land, Courville needed to share the cost of St. Martin Land Co.'s feasibility study, which was prepared by a company that has drawn designs for Disneyland. The new, improved plan now includes an environmentally sensitive golf course (Audubon-type), a marina and a Cajun entertainment center.

The name of the botanical garden has also changed. Although she was at first adamant that she would never compromise on the name, Courville says, an expert on capital campaigns convinced her that "Lynch Botanical Gardens" did not suggest an important enough facility to attract the millions of dollars it would require. She agreed to a new name: "John J. Lynch American Natural Heritage Park." The expert also recommended the campaign title "Handled With Care," which suggests environmental concern and the project's fiduciary reliability.

Another important fund-raising tool is a business plan. Large donors want to know how the

organization they support will be administered. Courville suggests that if you have the needed political help, you could obtain state funding for a conceptual design, feasibility analysis and business plan. Alternatively, a university architecture department and business college might donate these planning tools as part of their involvement in your project.

In September 1997, Louisiana state Rep. Sydnie Mae Durand and state Sen. Tommy Casanova announced that Gov. Mike Foster had signed a bill allocating \$500,000 to Courville's project for planning and design. Project designs and land-use master plans will be developed when the funds are received.

IN TOUCH

Community support continues. More donations from corporate and private sponsors are reported in each "Von Whooper's Scoop," a semi-annual newsletter about the project which keeps donors informed. "Professor Von Whooper," a cartoon whooping crane with spectacles and a bowtie, is the newsletter mascot.

Courville notes that helpful donations aren't necessarily monetary. In-kind help has included office space, a Jeep and printing services. She also gives her time to help her backers' pet projects and finds that to be another way to cement support and make friends for the garden.

Fundraising can become a full-time job. If necessary, Courville says, hire a professional fundraiser. She notes that paying this employee a salary is less productive than paying a percentage of money raised — but pay no more than 7 percent.

After years of work, Courville's plans are well under way, and yet she sees years of work ahead. To learn more about the John J. Lynch American Natural Heritage Park, write Mary Courville, 1393 Henderson Highway, Breaux Bridge, La. 70517. Or visit <http://www.speedoflight.com/lynch/>



Public garden of the month

Hodges Gardens graces eastern Louisiana

by Shalah Brummett

In 1930, pioneer conservationist A.J. Hodges began a 4,700 acre experimental reforestation project halfway between Shreveport and Lake Charles, La. Hodges Gardens, now known as the "garden in the forest", was formally dedicated in 1959 and is owned and operated today by the not-for-profit Hodges Foundation.

The heart of the Gardens is a 225-acre lake encircled by a 10-mile drive, but points of interest along the way include the Louisiana Purchase Memorial, scenic overlooks, natural areas and wildlife pastures. There is also a Lookout Tower, conservatory and several greenhouses with tropical collections. Sixty acres of formal gardens offer tulips, dogwood, azaleas, annuals and roses. Abandoned stone quarries lend picturesque settings enhanced by lake-pumped waterfalls and streams. This area, once considered the most barren in the state is now one of Louisiana's most spectacular and popular attractions.

Hodges Gardens is located on U.S. 171, 18 miles north of Leesville, and 12 miles south of Many, Louisiana. It is open daily from 8 a.m. to sunset except Christmas Eve, Christmas Day and New Year's Day. Admission is \$6.50, \$5.50 for age 65 and older, \$3 for ages 6-17. A AAA discount of \$1 is available on request. Groups of 20 or more are \$5 each. (800) 354-3523 or (318) 586-3523.

May Checklist for Gardeners

by Libby Thalheimer

ORNAMENTALS

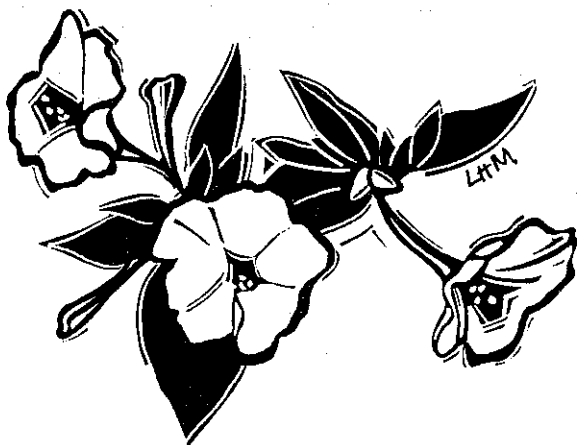
Spray red tip photinia with Daconil to prevent fungal disease: Spray two to three times for complete control. Prune spring-flowering trees and shrubs after bloom. Spirea, weigela, quince and wintersweet do need occasional shaping, but azaleas, rhododendrons, Japanese andromeda (Pieris) and Loropetalalum are some that seldom need shaping. All roses need help fighting black spot: spray every seven to 10 days with a fungicide such as Daconil. If suckers grow from beneath a rose graph, do not cut with pruners. Instead, push a trowel down beside the trunk of the rose bush so that the sucker is torn away (suckers that sprout below the rose graph will not produce the desired bloom).

LAWNS

The first application of fertilizer can be made this month. 2,4-D can be used on most types of turf grass a post-emergent herbicide once the grass has completely turned green. Always read pesticide labels completely and follow directions exactly.

INSECTS

Watch for **spider mites and lacebugs** on azaleas. Lacebug eggs hatch in May and may produce tiny sap-sucking nymphs which congregate on the underside of the leaf. As nymphs and adults feed, they leave brownish specks caused by fecal deposits. Leaves of affected plants have a grayish or brownish cast at first followed by yellow mottling. Control with Dursban or Orthene. Two or three applications every 10 days beginning June 1 is a good guideline to follow for the control of lacebugs on infected plants. An



organic strategy for insect control on azaleas is the use of dormant oil. Spray azaleas with dormant oil to suffocate mites, lacebugs and their eggs without killing beneficial insects in the area. Carefully follow directions on the dormant oil label because some dormant oil sprays have temperature restrictions (you don't want to fry your azaleas with an oil that is too heavy!). Also be sure to spray the undersides of the leaves. Distorted new growth and a lack of flowers or fruit is a sign of **aphids**. Kill aphids with insecticidal soap being sure to spray the undersides of leaves and stems.

Slugs strike at night often stripping whole stems of leaves and nibbling fruits and vegetables. Use diatomaceous earth or beer traps to kill slugs. Beer traps have to be emptied, though. Ugh! There are commercial slug baits, too, but they are toxic to children and pets.

You will spot **thrip** damage before your spot the **thrips**. Signs of thrips are discolored blotches on petals, bud failure and deformed flowers. They are a common problem on roses. If thrips are suspected, cut off affected flower then pull apart or shake over a white piece of paper. Thrips move quickly when disturbed. Remove affected flowers immediately and apply insecticidal soap, Orthene or Orthonex. Spray three times allowing seven to 10 days between treatments. To prevent thrips, correct drainage and remove weedy patches where thrips breed.

FRUIT AND VEGETABLES

Fertilize established blueberry plants this month with a formula for acid-loving plants. Blueberry bushes need fertilizer regularly throughout the growing season. Spray fruit trees with a general purpose mix to combat brown rot, scab, codling moth, curculio and other bugs. Spray every seven to 14 days from petal fall to harvest.

Cool weather vegetable crops can be harvested now. Begin to plant seeds or transplants of green beans, squash, melons, cucumbers, tomatoes, eggplants or peppers. When the soil gets warmer, soak okra seeds overnight before planting on the north side of the vegetable garden so the tall stalks won't shade other plants in the bed.

MULCH

Lawn clippings make a good, readily available mulch during the summer mowing season. Mulch keeps soil cooler, conserves moisture, contributes nutrients to soil and helps to prevent weeds. Make sure manure is well rotted before using; avoid mixing wood chips with soil: It ties up nitrogen in the soil.

What Works!

by Shalah Brummett

Hello fellow gardeners! After a gorgeous and frost-free spring, we have head starts on all our gardens and should expect a perfect summer to look forward to. May is probably Arkansas' most nearly perfect month, so enjoy!

FARMER'S ALMANAC

Let's begin with "Farmer's Almanac" planting times. The full moon occurs on May 11.

Above ground crops: 1, 2, 8, 9, 10, 25, 28, 29

Root Crops: 11, 12, 15, 16, 19, 20, 23, 24

Seed beds: 1, 2, 11, 12, 18, 19

Transplant: 1, 2, 25-31

Flowers: 1, 2, 8, 9, 10, 28, 29

Kill plant pests: 3, 4, 5, 6, 7, 17, 18, 30, 31

PRUNING

If you haven't already, now's the time to prune azaléas, dogwoods and other spring-blooming trees and shrubs. Eliminate straggling stems by cutting them at a 45-degree angle just above a strong outward-facing shoot or bud.

MULCH

Continue to mulch. Summer mulch retards water loss, keeps out weeds and keeps soil intact during rainstorms.

WATER

Water new plantings in the mornings for the first few days until they take hold. Midday sun evaporates water before plants can absorb it.

TRAIN FOR SPRING

According to an article in April 1998 "House & Garden," master gardeners should 'train for spring' according to the

following tips:

Start by investing in long-handled digging tools, which provide better leverage turning soil. Switch back, however, to short-handled shovels when throwing mulch, soil or gravel. All this reduces strain.

Hire or barter with someone to till your garden area. Breaking ground is hard work.

Keep a cart or wheelbarrow nearby so it'll be handy when you need to move something heavy. That way you won't be tempted to save a trip and injure your back. When you do lift, bend your knees and rise with a straight back, putting the strain on your legs.

Build up rather than dig down. "Double-digging", (turning the soil to about two feet) was the original way to prepare a bed. Of course, it's now more popular -and gets the same results- to dig only about a foot and mix in lots of compost.

If you've got a bad back or just want to avoid one, kneel while digging. This way you use arm strength rather than back strength and it's more fun than working out in a gym.

ANIMAL REPELLENT

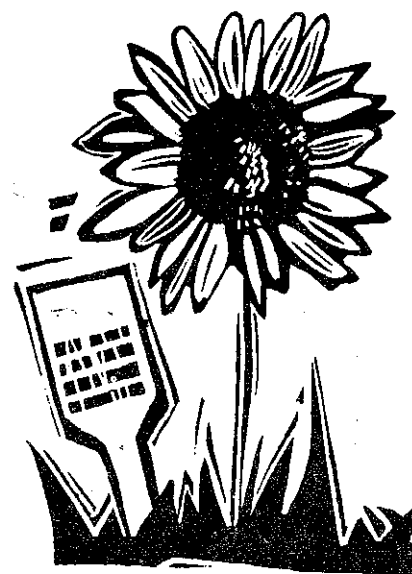
Peeling (citrus) works in gardens. Citrus peel in one to two inch pieces keeps animals out. You do have to replenish, as it dries up and goes away.

MAINTAIN MOISTURE

Kitty litter in a potato trench helps to keep even moisture, promoting a better crop.

SAVING THE FIGS

For next winter: This March when temperatures took that



nasty dive into the teens, a couple searched for a way to save their fig tree. They wrapped the branches in Christmas lights, hoping that the small amount of heat would save the greening buds. Eureka! They now have several figs on their tree!

MINI GREENHOUSE

Make a "mini greenhouse" on your patio to overwinter geraniums and other potted outdoor plants by covering a table with an old sheet - hanging down on the north and west farther than the south and east. Then cover the table with a big sheet of plastic and weigh it down with 4 x 4's. You can also hang an automotive light under the table to add heat during the cold nights. Seeds can be started outside under this protection. It helps plants by not dragging them inside the house or in the garage and back out in Spring. Then you can fold up the greenhouse and put it away after frost dangers or use it until seeds are up.

See WHAT WORKS!, Page 8

TOMATO GROWING

Don't you start starving for tomatoes this time of the year? Use these handy tips from *Southern Living* to grow bushels.

1. Wet three or four layers of newspaper and place around plants. Then cover with at least two inches of pine straw, etc. to hold down the paper to keep moisture in.

2. Check on daily to head off problems.

3. Stop removing suckers when fruiting begins. Extra foliage blocks the sun and prevents sun scald.

4. Maintain the correct lime balance. Adding lime helps prevent blossom-end rot. If this occurs, spray with calcium chloride according to directions.

5. Water evenly and avoid overhead watering if fungus appears. A soaker hose is excellent in use here.

6. Don't over-fertilize or you'll have lush, leafy plants and no tomatoes. When sprinkling fertilizer one to two feet around plants, try to avoid the stems and foliage. Newly planted tomato plants should be fertilized with 20-20-20 liquid food, then after fruit appears, use 10-10-10 granular fertilizer and repeat in four weeks. Water after fertilizing.

7. Pick and make tomato sauce and salsa, etc.—and bring me some!

SALSA

Speaking of that, here's a good basic salsa recipe. For hotter sauce, add chili peppers to taste.

1 1/2 lbs. (about 10 medium) tomatoes peeled, seeded and coarsely chopped

1 small white onion, peeled and diced

1 fresh green chili pepper, seeded and chopped

Juice of two lemons

2 Tsp chopped fresh cilantro

Salt and pepper to taste

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write What Works! c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt road, Little Rock, AR 72204.

Echinacea, continued from Page 2

nursery of Magnus Nilsson near Paarp, Sweden, just across the straits from Hamlet's legendary Danish castle at Helsingor. Nilsson was long enamored of the *Echinacea purpurea*, but unhappy with the shuttlecock appearance of the reflexed ray petals. He selected flowers that had strong carmine and crimson colors and wide, flat petal displays.

CULTIVATION

Magnus may be propagated by basal cuttings, root cuttings, or divisions, but seed propagation is the main method. This coneflower is easy to grow and its season of bloom lasts up to six weeks. Bare-root or containerized plants should be planted in partial to full sun. Bare-root plants or divisions should be planted so the emerging buds are just below the soil surface. Magnus is well adapted to dry sites, but good drainage in the winter is recommended. Purple coneflower is slow to start in the spring, but grows rapidly with the onset of hot summer weather. Bothered by few insect pest, Magnus is frequented by butterflies and birds.

LANDSCAPE USES

Purple coneflower can be used in native gardens or in more formal settings. It looks great as a single specimen plant or planted in mass at the back of the perennial border. Magnus is very

effective in combination with the delicate blues of *Perovskia*, and complements the upright habit of another native, *Liatris* (gay feather). Other common cultivars of *Echinacea* include Bravado (large, rosy-red flowers), White Swan (nearly white with a brown cone), White Lustre (off-white with reflexed petals), Robert Bloom (red-purple), Bright Star (rose-pink with drooping petals), and Springbrook Crimson Star (crimson flowers with bronzy foliage). *The Perennial Plant Association is an international association of growers, retailers, educators, writers and landscape professionals. Write to the association at 3383 Schirtzinger Road, Hilliard, Ohio, 43026, or call (614) 771-8431.*





MASTER MINUTES

June 1998

Volume 9 / Issue 5

Lilies light up the landscape

By Julia Loyall

When daffodils and tulips leave center-stage, wise choice of varieties of lilies can provide drama for your garden throughout the summer.

Lilies are striking accents against a background of evergreens or shrubs. Their spikes grouped behind mounding perennials visually tie together foreground and background plantings.

Lilies have been loved and cultivated for at least 3,000 years. They appear in the art of ancient Egypt, Rome, Greece, China and Japan, and were used as medicine by Greeks and Romans.

However, for centuries, gardeners knew only a few lilies. The white Madonna lily (*Lilium candidum*) from the eastern Mediterranean area was a symbol of purity in Medieval religious art. European gardeners knew *Lilium martagon*, a species lily with nodding, dark-spotted pinky-mauve flowers.

The species lilies were difficult to transplant to a regular garden. Madonna and Easter lilies (*L. longifolium*) are not hardy and had to be lifted before frost.

Only within the past century have wild lilies drawn the interest of hybridizers. The varieties produced were often far more vigorous and hardy than the parent plants. The wild species lilies usually cross easily with only a few others. However, hybridizers individually working in the United States, Canada,

New Zealand and Japan have developed excellent named lily varieties with varied forms, seasons of bloom, fragrance and disease resistance in all colors except blue.

Lily forms vary.



The Easter lily typifies the trumpet shape, facing outward. "Enchantment" and "Connecticut King" are saucer-shaped and face upward. The Imperial strain of hybrid lilies face their saucer outward. The orange Turks' Cap Lily (*L. superbum*) native to parts of northern Arkansas, has petals which curve out and backwards.

Improvement of propagation and production methods have made these varieties available to home and commercial growers.

Lilies can be propagated from their bulbils, from bulb scales or from seed. Hybrids will breed true only from vegetative methods, but seeds of selected crosses produce lilies which differ little, perhaps only in color, from the parent plant or one another. Seed-produced lilies, known as "strains," are much less expensive. Some strains are the Burgundy, Golden Splendor and Imperial, sold as "mixed colors."

There are now approximately 80 species lilies and hundreds of named hybrid *Lilium* varieties. Asiatic and Martagon hybrids bloom early in June. Asiatics

In this issue ...

- 2 MG news and notes
- 3 June Garden Checklist
- 4 What Works!

have the most widely varied color and form. Height may be three to four feet; their blooming period is longest, lasting until mid-summer. Martagons are used chiefly in natural settings at the edges of wooded areas. They may not rebloom for two years after transplant.

American hybrids are derived from native American species. Best-known are the "Bellingham" hybrids. "Backhouse" hybrids were produced before 1900 in England from *L. martagon* and *L. hansonii*. They have many small flowers, which like shade! Trumpet hybrids are from Chinese species, grow four to six feet tall, and are less hardy than Asiatics. Aurelian hybrids result from crosses of trumpets with Chinese *L. henryi*, bloom in mid- to late summer, and their willowy stems often need support. Orientals have magnificent red, pink or white flowers but are susceptible to bulb-rot and virus disease. Devotees often treat them as annuals or biennials.

The most reliable species lilies are *L. davidii*, *L. henryi*, *L. regale* and *L. speciosum*.

CARE OF LILIES

- Soil should be slightly acid and well-drained, except for Madonna, which likes neutral to slightly alkaline soil. To make the light soil needed, add peat moss or fine compost. Very heavy soil can be lightened with coarse sand or light gravel. Subsoil must drain well. A raised bed or slope is fine.

- Fresh manure will damage bulbs and roots. Superphosphate should be well mixed in.

- Plants must not be crowded in planting. Good air circulation and drainage prevent rot.

- Full sun is best, but partial shade will do.

- Plant three times as deep as

the height of the bulb. North American lilies are stem-rooting; the tip of the bulb should be three to four inches below soil surface (except for *L. madonna*, which needs one inch).

- Lilies three feet tall or more require staking from the wind.

- In summer, conserve moisture with three to four inches of pine needles, oak leaves, etc.

- Use 5-10-10 fertilizer as the nose appears in spring, as buds are forming and after bloom.

- To use lilies as cut flowers, remember to cut only the top third or half of the stem. Allow the bulb to rebuild for two or three years.

- Dead-head to prevent seed formation; trim off dried parts. If desired, save one or two pods for seeds. Harvest pods when yellow and allow to open indoors.

- If your lily has little bulbils on the stem or underground, plant them for more lilies.

Low-growing, early blooming "Mid-century" hybrids, like "Enchantment" and "Cinnabar," are best for containers.



Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues.

JUNE

The next monthly meeting of Pulaski County Master Gardeners will be **June 9**. Carl Hunter will be our guest speaker.

The Arkansas State Daylily Society will hold its 1998 Garden Tour from 8 a.m. to 3:30 p.m. **June 13** at five private central Arkansas gardens. The tour costs \$15 and includes lunch at Bowen's Restaurant in Ramada Inn, Conway. Call Elwanda Baker at (501) 470-0754.

The Quapaw Quarter Home and Garden Club has planned a garden shopping excursion to Damascus for perennial plants and garden sculpture at 11 a.m. **June 13**. Meet at the parking lot next to Modern Woodman of America, Broadway and 20th Street. Bring newspapers and a sack lunch. Reservations are required. 375-1701.

TRADING POST

The Greenhouse Committee, 666-2498 or 664-7863, wants old stepping stones for the greenhouse and unusual seeds and cuttings. The committee also is selling 40-pound bags of its high-quality potting soil. Marie Flickinger, 758-4202, has common vinca.

Jane Gulley, 225-2072, has black-eyed Susans.

Jan King, 758-3446, has pale lilac Monarda, pinky red monarda and old-fashioned double-triple orange day lily.

Suzanne O'Donoghue, 661-9650, has common white yarrow.

Mary Ann Francis, 225-5384, has hyacinth bean vine.

Martha Whitehurst, 868-4517, wants Rudbeckia.

June Checklist for Gardeners

By Libby Thalheimer

ANNUALS

Dead-head your plants to keep them flowering. Fertilize monthly by sprinkling a teaspoon of 5-10-10 around annuals. It is not too late to plant quick-growing annuals (nasturtium, nicotiana, portulaca, zinnia) in bare spots.

FRUITS

Renovate strawberries after they've finished producing. Remove all grass and weeds, and thin plants out if necessary. Space plants six inches apart in rows not more than 18 inches wide. Blackberry season starts later this month. Due to being in a transitional zone, blueberries may be harvested in Little Rock from the end of May until late July depending on the variety planted.

HERBS

Pinch back annual herbs. Thin basil. Sow fennel seeds, but not near dill, as they will cross-pollinate.

INSECTS AND DISEASE

Aphids and lacebugs are out in full force, attacking everything from azaleas to tomatoes. Use insecticidal soap or malathion to control them. Be sure to read the label! Get good coverage on the underside of the leaves. Hose off any plant with water about two hours after application if you are not certain the plant cannot be damaged by the insecticide used. Placing aluminum foil about the base of the tomatoes, peppers and eggplants will reflect more light on the plants, and also confuse aphids which seek out the darker underside of the leaf. Flea beetles, unfortunately enjoy bright, dry and hot places, and the foil will encourage them. Plant chives or garlic between roses to eliminate aphids there.

Slugs can be controlled by using pyrethrum, diatomaceous earth, crushed eggshells, gum balls, or beer traps.

Whitefly can be controlled using insecticidal soap or a strong water spray. Make a trap by cutting strips of a bright yellow plastic bottle. Coat the strips with petroleum jelly, then suspend them around the yard. The whitefly is attracted to the

color yellow and will get stuck. Clean and replenish the petroleum jelly as needed.

To control Blackspot, continue spraying roses and red-tipped Photinias with a fungicide, such as Benlate, Funginex, Topsin-M or Phaltan. Clean up and destroy any diseased foliage falling to the ground. Do not put it in the compost pile!

Fireblight of fruit trees is a bacteria spread by bees and windblown rain, causing affected parts to blacken and die. Make pruning cuts several inches below obviously infected parts (sterilize instruments between cuts with bleach). Sprays which include streptomycin may be used during bloom periods to reduce damage.

LAWNS

Lawns can be fertilized with a high nitrogen fertilizer now. Fertilize monthly. Watch for chinch bugs and lawn fungi.

MULCH

Keep a 3" layer of mulch on your beds, ornamentals and vegetables. Mulch keeps the soil cooler, conserves moisture, helps to prevent weeds, and some even contribute nutrients to the soil.

ORNAMENTALS & PERENNIALS

Iris should be left alone for 6 weeks after blooming, then they can be lifted and divided. Wait until the foliage of spring-flowering bulbs turns yellow before cleaning up the bulb bed.

Peonies and roses are heavy feeders. Fertilize then regularly and keep them watered. Cut roses just over a five leaf cluster to ensure more growth. Do not let roses die on the vine.

Continue to pinch back your chrysanthemums and asters until mid-July. Fertilize monthly.

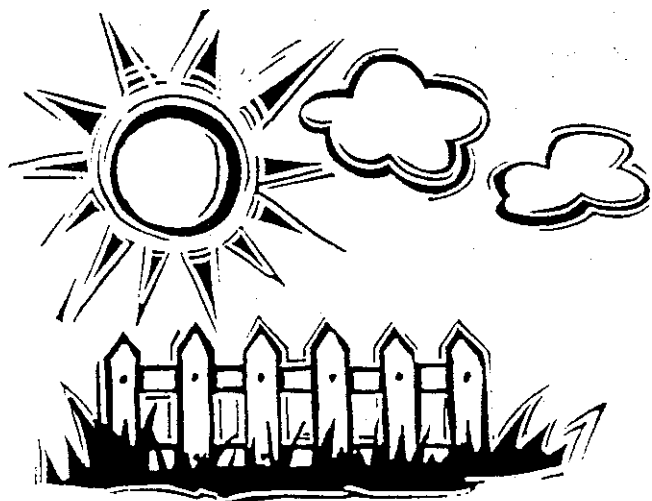
You can still plant cannas and gladiolus.

VEGETABLES

All seeds and seedlings should be planted by now. Mulch plants to keep the moisture level constant and to protect the plants from soil borne diseases. Harvest vegetables at the peak of their maturity in the mornings. Watch for insects and diseases. If you are growing corn, dust with sevin dust or use mineral oil on the silks as soon as they appear and continue until they turn brown. This will prevent the corn earworm. Once a month, add lime to the soil around your tomatoes. Blossom end rot on tomatoes is caused by a calcium deficiency. A product called "Stop Rot" may be sprayed on.

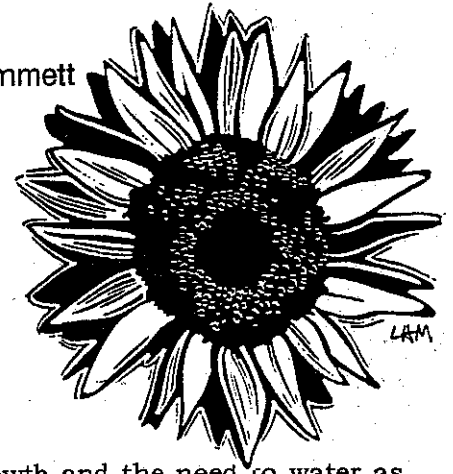
WATERING

Lawns, ornamentals, fruits, and vegetables need one to one and one-half inches of water per week. If it doesn't rain, don't forget to water! Use soaker hoses where possible to conserve water and to keep drops off foliage. Watering early morning is best.



What Works!

By Shalah Brummett



June is bustin' out all over! Summer officially arrives this month and we begin to have the kind of weather to make those bright flowers and healthy vegetables thrive. Here are the latest suggestions for making it all a bit easier.

Let's start with the Farmers' Almanac gardening dates.

Above ground crops: 7, 8, 24, 25, 26

Root crops: 11, 12, 15, 16, 17, 20, 21

Seed beds: 24, 25, 26

Transplant: 23, 24, 25, 27, 28, 29, 30

Flowers: 24, 25, 26

The moon is full on the ninth at 11:18 p.m. and summer begins June 21 at 9:02 a.m.!

RACCOON DETERRENT

A reader plagued for a month by a raccoon family finally tried a "large quantity of pepper," working it into the ground and sprinkling above too. The raccoons returned only once more.

Another reader successfully tried blood meal around corn plants.

INNOVATIONS

Try a pizza cutting wheel for edging in narrow cramped areas. They come in several sizes and the choice is all yours!

PLASTIC EQUALS HEAT

If you've been using plastic containers for miniature roses and keeping them exposed to direct sunlight, rethink. During hot summer days, plastic absorbs and retains heat easily pushing the temperature to above 100 degrees, killing the roots.

For protection, line an empty container with several layers of newspaper filled with potting soil, toss in about one cup of peat moss and perlite. The newspaper protects soil from the heat and the peat and perlite absorb and retain the moisture. Wrap-

ping the newspaper outside the pot also prevents heat absorption, but if you're worried about appearances, brown paper works as well.

GIFT IDEA

A reader suggests expanding rakes at Wal-Mart for a clever Fathers Day tool. They sound interesting for anybody.

R.I.P.

Here are some non-chemical remedies for getting rid of aphids. To make your own insecticidal soaps, just mix 3/4 ounces of dishwashing liquid (Murphy's Oil Soap is better than many other harsher detergents.) with 1/2 ounce of cooking oil and one ounce of baking soda. Mix well and add to one gallon of warm water. Put in a sprayer and soak the leaves. Spray at least once a week in warm weather and after rain.

For each rose bush, take a clove of garlic and bury it in the soil next to the rose and kiss those aphids good-bye.

Next, slugs. Don't kiss them goodbye, electrocute them! Martha Stewart says to twist copper wire around pots several inches off the ground, making sure that leaves don't touch the ground or they'll take the 'escalator' up. Dawn Jackson offers this helpful hint and says she uses this technique with the dog food/water dish. "The bowls sit on top of pots with the copper wire, and it works beautiful," she says.

Mary Evans says to buy hostas with many tough veins and slugs won't like them. Then it'll be mutual.

EASING THE PAIN

From 'Arthritis Today' magazine come these tips on making gardening easy on you.

1. Mulch, mulch, mulch. It's the gardeners' mantra. This cuts down on work by reducing weed

growth and the need to water as often. It will also help plants by improving the soil. Choose from many kinds sold in all nurseries.

2. Consider replacing high-maintenance lawns with lush, tough, low-growing ground cover plants. Dense growth reduces weed infiltration and requires less effort to maintain than a lawn.

3. Plant fragrant flowers conveniently near windows and along paths, so you can enjoy them easily. Cut fresh flowers to bring indoors so you're in the garden even when taking it easy.

4. Look for relatively maintenance-free plants. 'Embrace' shrubs like camellias, lilacs, hydrangeas and rhododendrons that require little care but provide a show.

5. When possible, replace annuals with hardy perennials. Hosta, rudebeckia, day lilies and ferns are some well-known standys.

That's it for this month. See you next time.

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write What Works!c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.



MASTER MINUTES

July/August 1998

Volume 9 / Issue 6

Many magnolias grace the South

By Julia Loyall

We cherish our beautiful, fragrant magnolias as uniquely Southern treasures, but there are native species of magnolias in India, China and Japan. China has cultivated the yulan (*Magnolia denudata*) for more than a thousand years.

The family Magnoliaceae and the genus *Magnolia* draw their names from Pierre Magnol, an early 18th century French professor of medicine and botany.

The many native magnolias of the southeastern and eastern United States can be divided into three groups: evergreen; late-blooming deciduous; and early blooming deciduous.

Carl Hunter tells us Arkansas has four native magnolias, characterized by large simple leaves and large flowers with many parts. Fruits are cone-like and bark is bitter and aromatic. Size varies from shrubs to tall trees. Species magnolias may not flower for as many as 15 years, but grafted varieties may bloom in two to three years.

This state has native Cucumber Trees (*Magnolia acuminata*), our tallest species magnolia. The six-inch flower is light green with six petals; the young green cone resembles a cucumber. Mature cones turn purplish red and may reach four inches in length. *Acuminata* prefers moist sites.

The endangered Big Leaf Magnolia of Clay County (*M. macrophylla*) is a small, deciduous tree with leaves up to three feet long and six-petaled flowers often a foot across.

Umbrella Magnolia (*M. tripetala*) is



small with two-foot leaves clustered like an umbrella at the end of the branch. The ten-inch flowers have six to nine petals and are evil-smelling.

The south Arkansas swamp-loving Sweet Bay Magnolia (*M. virginiana* or *M. glauca*) can reach 20 feet and has leaves to seven inches long. It is often evergreen in Arkansas. The fragrant flowers are four inches across with eight to 12 white petals. Deer love the leaves, and beavers eat and use the wood.

Our two favorites in Arkansas are imported, the evergreen Southern Magnolia from the American South and the Japanese Saucer Magnolia.

The Southern Magnolia or Bull Bay (*M. grandiflora*) is the one most commonly planted here. The undersides of the leaves have rust-colored hairs. The fragrant flowers have six or more petals. This tree may reach 75 or 80 feet.

The spreading Japanese Saucer Magnolia (*M. soulangiana*) reaches about 25 feet. Its flowers appear in early spring, before the leaves. This tree should not be planted in a sheltered spot where late frosts can ruin the lovely tulip-shaped, pink-and-

In this issue ...

- 2 Garden of the Month
- 3 MG News and Notes
- 3 Trading Post
- 4 Urban Seeds of Life
- 5 Blueberries
- 6 Garden Checklist
- 7 What Works!
- 8 Organic Recipes

white flowers.

The Star Magnolia (*M. stellata*) is shrubby with double star-like white, pink or rose blossoms.

Bloom time of magnolias varies from February to July, but *Soulangiana* might repeat bloom.

Plant magnolias in spring in full sun for best flowering. Transplanting should be done when new growth has begun. Soil should be deep, moist and fairly acidic, about 5.5 pH. Water new transplants regularly. Young plants can be pruned lightly after flowering, but tradition dictates that magnolias should maintain their natural pyramidal shape. Mulch to preserve moisture. To keep rabbits and other pests from nibbling on a young tree, wrap the trunk with a wire-mesh sleeve or plastic collar.

Give the large Southern Magnolia plenty of space, at least 30 feet from house, trees or other structures.

Care: If the tree does not make backing out of your driveway hazardous, it is well not to cut off the bottom limbs. Almost nothing will grow under your magnolia anyway. Unpruned, the branches sweep the ground like a hoop skirt, hiding the highly visible and delicate roots. As the country folks say, "A lady never lifts up her skirts."

It is normal for the leaves to roll and drop from November to May, but water thoroughly during droughts.

Bean-size white or tan bumps on the twigs are magnolia scale, which weakens the tree. Combat the over-wintering adult scales in early spring just before new growth begins by spraying with dormant oil, or use regular insecticide in late August or early September to kill the crawler stage of the scale insect.

Yellow or brown edges on the leaves indicate iron chlorosis,

which can be corrected with appropriate fertilizer.

Best strategy for healthy magnolias is to be sure soil is not too alkaline. Water, fertilize and spray only as your nurseryman recommends. If magnolias are in the right spot they're going to be healthy.

Propagation: Layering or grafting are common methods. Seeds must be stratified for three to six months at 32 degrees to 41 degrees F.

Southern Magnolia seeds are housed in the cones and mature in early fall. The red waxy layer (called subirin) preserves their moisture. When the red tips of the seeds start to show through the cones, put them in a warm shady place safe from rodents for four or five days to allow opening. Remove the seeds; soak for 24 hours in warm water with a teaspoon of baking soda per gallon. Drain, place on regular screen wire and rub gently by hand to remove the red coating until the seeds appear white. Put seeds in moist, not wet, peat moss in a plastic bag and store in the vegetable section of the refrigerator until soil warms in spring. Plant outside about one inch deep. Keep seed moist.

Uses: Once upon a time magnolia cones and bark had many uses in tonics. Alleghanians (and adventurous herbalists) steep in spirits the cones of the Cucumber Magnolia to make a tincture pick-me-up.

Wood of the various magnolias is pretty but not durable, but a Magnoliaceae cousin, the beautiful Tulip Tree, has wood prized for furniture.

"A Modern Herbal" reports that ex-smokers recommend chewing the bark of the Umbrella Magnolia to cure your smoking habit.



Nursery of the month

By Susan Crisp

ARKANWOOD

30603 Highway 300, Roland
(501) 330 2893

OPEN Friday 10-5; Saturday 9-5; Sunday 12-5

OWNER Dr. Marge Brewster, Certified Arkansas Nurseryman

NEW ITEMS/BEST SELLING PLANTS *Houttuynia* is an easy care ground cover, looks much like English ivy - use in place of cilantro. Have a good selection of perennials and shade plants.

NURSERY HIGHLIGHTS Sell native plants, organic grown. Each May and October the Nursery has a festival, with earth day programs. This is a great nursery to bring children because of the bunnies, cats, dogs, and chickens on the grounds.

SPECIALITIES Southern heritage plants. American native annuals, such as corn poppies from Texas; Five Spot from California and even corn plants from Europe.

WHAT MASTER GARDENERS SHOULD KNOW ABOUT YOUR NURSERY We give tours for families, friends and garden clubs. Spring is the best time, so book in advance. Tours are 45 minutes to one and a half hours.

Arkanwood will consult with you on your landscaping for a \$50.00 fee which may be discounted off future purchases. This is one beautiful drive in springtime. Try route Highway 10 to Highway 113 to Wye Mountain to Arkanwood. In the spring, owners may arrange to open seven days a week if you call ahead to request it.

Master Gardener Calendar and Notes

By Laurie Pierce

1998 DUES

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues.

AUGUST

The Ozark Folk Center State Park, Mountain View, will teach propagation techniques, pest control, soil nutrition and more at its Organic Herb Gardening Workshop on Aug. 7. The hands-on class costs \$35. The class will be repeated Sept. 4. (870) 269-3851.

A Family Night Hike through the forest at the Lichterman Nature Center, Memphis, is part of the Summer Nights series on Aug. 21. Gates open at 6 p.m. for picnicking; programs start at 7. (901) 767-7322.

The Ozark Folk Center, Mountain View, will conduct an Herb Container Gardening Workshop on Aug. 21. The cost is \$35. (870) 269-3851.

The Greater St. Louis Iris Soci-

ety show will be from 9 a.m. to 8 p.m. Aug. 26 at the Missouri Botanical Garden in St. Louis. (800) 642-8842.

SEPTEMBER

An Adult Night Hike for ages 12 and over will wander the trails of Lichterman Nature Center, Memphis, on Sept 11 at 8 p.m. Gates open at 6 p.m. for picnicking. (901) 767-7322.

The Lichterman Nature Center, Memphis, will conduct a Nocturnal Wildlife program at 7 p.m. Sept. 25. Gates open at 6 p.m. for picnicking; programs start at 7. (901) 767-7322.

Mark Your Calendars. The Pulaski County Master Gardeners are hosting the statewide Master Gardener Retreat Sept. 28-29 at the C.A. Vines 4-H Center in Ferndale. There will be lots of jobs and volunteers will be needed. Registration materials and volunteer opportunities will be in the mail.

OCTOBER

The 10th annual Herb Harvest Fall Festival, Oct. 2-3 in Mountain View, will begin with the 10th annual Herb Harvest

Fall Reception and herbal Feast on Oct. 1. The herbal festival will include nationally-known lecturers speaking on culinary, medicinal and decorative uses of herb products. The cost is \$55 or \$33 for one day. The fall reception and herbal feast costs \$20. Reservations are required.

The Greenhouse Committee needs flats. The pansies have been ordered for the Oct. 10 sale.



Trading Post

By Frances Young

Suzanne O'Donoghue, 661-9658, has Vinca minor.
Carolyn Newbern, 663-1222, has winter jasmine (Jasminum nudiflorum).
Marge Van Egmond, 224-7632, wants wild flower seeds such as cone flowers.
Nita Cross, 225-5105, has Schefflera and wants ferns.
Pat Wallace 753-8781, has columbine seeds.
Mary Evans, 664-7863, has columbine seeds (Aquilegia canadensis).
Marie Flickinger, 758-4202, has Vinca minor and wants Carolina jasmine.
Laurie Brown, 223-3714, has cardinal strawberry plants.

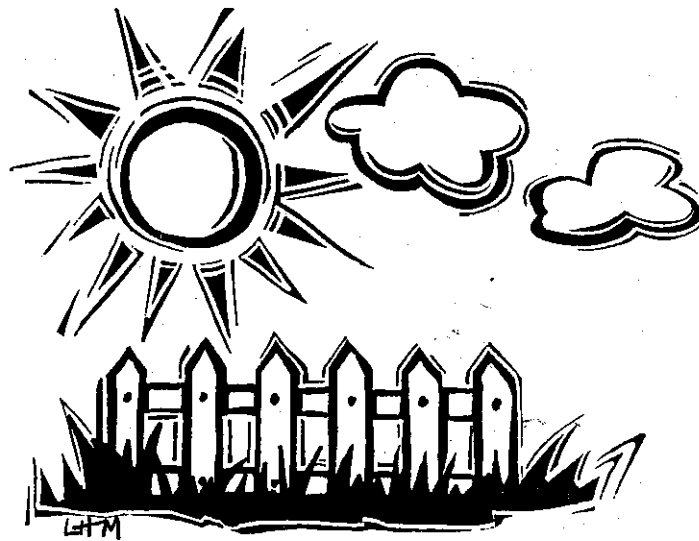
MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson

SEEDS OF LIFE

Master Gardener blossoms at LTCare Urban Garden Project

By Dawn Jackson, Pulaski County Master Gardener



Mention "Urban Garden Project" and a flood of images may come to mind: inner-city location, government sponsored, "us" versus "them" mentality. Located behind Central High School at 15th and Jones, Seeds of Life is certainly in the inner-city. Seeds of Life, however, conveys a totally different message.

Our mission is to build relationships in the inner-city and thereby rebuild our community. It is not a doing "for" model but rather doing "with." As one of the outreach ministries of the non-profit organization, LTCare, we believe that we demonstrate God's LOVE by sharing the TRUTH and by being there to CARE.

This summer the garden will serve as a community and relationship building resource for the children of the Central High neighborhood. Each Friday from 10 a.m. to noon, the children will learn about the fascinating world of garden-

ing. They will have lots of hands-on opportunities and have their own plot to tend. Here are some of the ways YOU can be involved with this extremely rewarding service this summer:

GARDEN PARTNERS

A garden partner attends the Friday programs and assists up to four children with planned activities: a field trip to Pinnacle Mountain on July 24, a sun power program on July 31, a trip to a restaurant kitchen on Aug. 7, and an end of summer party on Aug. 14. Gardening expertise is not as necessary as is a willingness to build relationships and share your time. Minimum requirement is one hour per week.

GARDEN DONATIONS

Our sample gardens are always in need of plant and seed donations. Their themes include: butterflies and hummingbirds, herbs, pizza ingredients, plants mentioned in the Bible and kid's corner complete with a vine teepee. We are also looking for short pro-

grams geared toward a young audience on Friday mornings. Remember, any in-kind or financial donations are tax-deductible.

ADOPT A PLOT

The garden consists of 33 raised beds, most measuring 4 feet by 8 feet. There is no charge for adopting a plot. An irrigation system is in place and will provide regular watering for all adopted plots. In addition to the sample gardens, there are hybrid tea roses, apple and pear trees and herbs that need to be adopted and cared for this summer.

Won't you join us in some manner this summer? I promise it will be a "growing" experience for all!

Dawn Jackson is the Garden Manager at the LTCare Urban Garden Project. For more information, write to Seeds of Life, 2615 W. 15th St., Little Rock, Ark. 72216 or call 374-8477.



Blueberry season tempts berry-loving MGs

Arkansas blueberries will soon be in full season. Look for them at farmer's markets, roadside stands and central Arkansas U-pick operations.

Paul S. Ballantyne publishes a state-wide U-pick produce book each year. Call him at 671-2000 for his 1998 edition. Here are a few of the growers in central Arkansas who produced U-pick blueberries last year. Call first to check availability.

In Pulaski County, call Donald Armstrong at 821-3706 or Hilltop Berry Farm at 330-2576. In Lonoke County call Barnhill Orchards at 676-2305, Danny Glover at 676-3415 or Spradley Farms at 676-5502.

To keep blueberries for use at a later date, carefully freeze them. Use a cookie sheet to freeze a single layer of berries at a time, then transfer to a big zipper bag after berries have frozen individually. Here are two recipes to get Arkansas berry lovers ready for summer. Both take a twist away from the traditional, two-crust berry pie.

Blueberry Tart

Crust:

1 egg
1/2 cup heavy cream
8 tablespoons unsalted butter
2 1/2 cups all-purpose flour

Filling:

6 cups fresh blueberries
1/2 cups sugar (or enough to cover the berries)

1/2 cup crushed sugar cookies

Heat oven to 375 degrees. Mix egg, cream, butter and flour in food processor. Dough will be sticky. Wrap in waxed paper and chill 30 minutes.

Roll out dough on floured surface. Line a 12-by-18-by-1-inch cookie sheet with dough, reaching halfway up the sides. Spread with berries, sprinkle with sugar

and cookie crumbs. Bake 20 minutes.

Recipe from Just Like Grandma Used to Make (1998).

Appalachian Blueberry Pie

1 9-inch pastry

Filling:

4 cups blueberries
1/2 cup sugar
3 tablespoons flour
1/4 teaspoon almond extract

Topping:

1/2 cup flour
1/2 cup packed brown sugar
2 tablespoons butter or margarine

Heat oven to 375 degrees. For the filling: Mix berries, sugar, flour and extract in a bowl. Transfer to a pastry-lined 9-inch pie plate. Prepare topping by combining flour and brown sugar; cut in butter until mixture resembles course crumbs; sprinkle over filling.

Cover edge of pie with foil. Bake for 25 minutes; remove foil and bake for an additional 20 to 25 minutes. Crust should be golden and fruit tender.

Recipe by Matt Miller of Indianapolis, Ind., via the internet website of Gingerich Farms, Canby, Ore.

Still can't get enough of our most American berry? Consider one of several varieties for your home landscape or orchard. Blueberry's shrubby cane-producing habit offers four seasons of interest and great fall color. Here are some growing ideas from W. Keith Patterson, Extension Horticulturist for Fruits:

Northern Arkansas has the distinct advantage of being the southern-most area of adaptability for the high bush blueberry. In the higher elevations of Croweley's Ridge and the Ouachita Mountains (including

Pulaski County), highbush blueberries are also cultivated. Rabbiteye blueberries are grown in the southern and southeastern regions of the state.

Blueberries require a site free of bermudagrass and johnsongrass with good air drainage to prevent winter injury and frost damage. Blueberries need soil that is acid, well-drained and medium-to-poor in fertility. Blueberries also need irrigation or they will die during summer drought.

Treat blueberry's shallow roots with the same care used for tender azalea roots: plant no deeper than the pot level and/or mound up the planting row up to 12 inches high to avoid poor drainage.

The University of Arkansas Cooperative Extension Service recommends these varieties for Arkansas in its "Growing Blueberries" fact sheet. Try more than one because cross-pollination is very beneficial!

Highbush

Duke, Collins, Blueray, Bluecrop, Coville, Elliot.

Rabbiteye

Premier, Climax, Brightwell, Tifblue, Baldwin.

Southern Highbush

Cape Fear, Georgia Gem, O'Neil, Cooper.

See What Works! on page 7 for more berry ideas from Shalah Brummett.



July/August Checklist for Gardeners

By Libby Thalheimer

WHO'S BUGGING YOU?

Use insecticidal soap or malathion to control aphids, gall insects, leaf beetles, leafhoppers, leaf miners, mealybugs, some spider mites, thrips and whiteflies. Diazinon is used to control aphids, chiggers, chinch bugs, leaf miners, spider mites, ticks, and whiteflies.

Control aphids to control mold: it grows on the aphids' honeydew.

Use diatomaceous earth or pyrethrum to control slugs, fleas, ticks, chinch bugs, roaches, crickets, and fire ants.

Continue the fungicide spraying schedule for black spot and powdery mildew. Use a registered fungicide such as Benlate, or Funginex. An organic fungicide to use on black spot, powdery mildew, brown patch, or other fungal problems is made by mixing four teaspoons baking soda, and one teaspoon liquid soap or vegetable oil into one gallon of water. Spray lightly on affected foliage (try not to spray the soil).

Cucurbits are susceptible to vine borers now. Treat weekly during fruiting season with a recommended insecticide, such as Bacillus Thuringiensis (BT). Or, try placing moth balls around the base of the plants as the adult borer is a moth.

Cannas can be attacked by corn earworms. Try BT as a control.

A calcium deficiency causes tomatoes to suffer from blossom end rot. It can be controlled by keeping the moisture level constant and by spraying three times with Stop Rot.

Blossom drop will be a problem as daytime temps soar into the upper 90's and night temperatures do not fall below 75.

SOW WHAT?

Sunflowers, okra, eggplant, tomatoes, Irish potatoes, summer squash, southern peas, and sweet corn can be planted for fall harvest.

Later in the month, plant broccoli, cabbage, cauliflower, collards, gourds, pumpkins and other

fall vegetables.

Plant more gladiolus July 1, July 15 and July 30.

NEED TO WEED & FEED

Apply a three inch layer of mulch around shrubs, in the vegetable garden, and in your flower beds. Mulch thickly to retain moisture and to keep out weeds.

Aerate the soil: compacted soil is one of the main reasons for weeds.

Control crabgrass and other grassy weeds in Bermuda and Zoysia by spraying with MSMA. Be sure to water well before application.

Fertilize your lawns with a 15-5-10 complete fertilizer for mature turf, 5-5-10 for turf establishment, and water it in well.

Fertilize four-year-old asparagus plants, flower beds and roses with a complete fertilizer, such as 13-13-13.

Water annuals with a salt-free club soda (fresh or stale) to brighten and intensify their colors. Keep tomatoes supplied with lime and calcium. To help moss spread, put equal parts of moss and beer, or buttermilk, or yogurt into a blender. Pour mixture onto soil.

Water more deeply and less often to combat drought-stress. Early morning is the best time to water. Use soaker hoses where possible to conserve water and to avoid getting water on foliage which can encourage diseases. Even moisture will help prevent catfacing, fruit cracking and blossom end rot on your vegetables.

SHEAR HERE

Dead head spent annual and perennial blooms to prevent seed production and to ensure continued blooms. Continue to pinch back chrysanthemums to shoots five inches long.

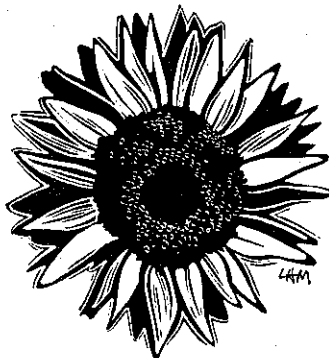
Pinch back annual herbs. Thin basil. Harvest garlic, onions, new potatoes.

Cut roses late in the day, leaving thorns on to prolong vase life. Cut the blossom a quarter inch above the first five leaflet leaf. If not cutting for indoor display, remove blossom as soon as petals fade.

Remove a few older canes of your hydrangeas at ground level to limit its size.

It's blueberry, blackberry and peach season. You shouldn't have to pull, or tug, at the fruit when it is ripe. Contact the Extension Office for locations of you-pick growers.

Set your mower height at least at two and one half inches for the summer. Longer grass also interferes with weed seed germination. Mow at least once a week. Sharpen mower blades monthly.



What Works!

By Shalah Brummett

July! It's midsummer, and we like to celebrate with picnics bursting with the fruits of our labors. Berries are still ripe, Arkansas watermelons and peaches and tomatoes are coming in. Yum!

U-PICK-'EM

I love picking berries, but in the last few years, too many of my picking spots are now subdivisions, so I've resorted to U-pick-'em places. The trade-off to paying for your fruit is harvesting huge, juicy, clean and delicious fruit virtually snag-free, so you don't have to bundle up in this heat (except to protect from sun). Here are some suggested sites:

B.E.S. Berry Farm, Mabelvale.

7:00 a.m. to 7:00 p.m. Monday-Saturday

557-5695

Blackberries, raspberries, blueberries

Donald Armstrong, Ferndale

7:00 a.m.—call for times

821-3706

Blackberries

Connell Berry Farm, Benton

7:00 a.m. until picked out

778-6382

Blueberries

U-Pick Collins/Round Mountain Orchard, Conway

Friday and Saturday

327-0450

Peaches

FREEZING BLUEBERRIES

1. Gently tip berries directly from the container onto a cookie sheet (or pan that will fit into your freezer), arranging them gently with your fingers for a single layer.

2. Do not wash, but pick out any leaves, twigs, and stems.

3. Freeze until the berries are hard, for an hour or so.

4. Spoon the frozen berries into heavy-duty freezer bags or other air-tight containers and return to the freezer.

5. That's it. This way the berries dry individually, so you can use the exact amount, and without liquid, berries retain their taste better and for longer.

ANY FRUIT COBBLER

1 stick butter or oleo

1 Cup sugar

1 Cup flour

3/4 Cup milk

1/8 Tsp. salt

1 Tsp. baking powder

3/4 Cup Sugar

2 Cups fruit (or one can), slightly mashed, with juice

Melt butter in 8"x8" pan. Let set while you mix dry ingredients and stir in milk. Make a batter and pour over butter, then pour the fruit and juice over this. Sprinkle 3/4 Cup sugar over fruit. Bake at 450 degrees for ten minutes, then reduce to 350 degrees until done, about 30 minutes. Serves four to six.

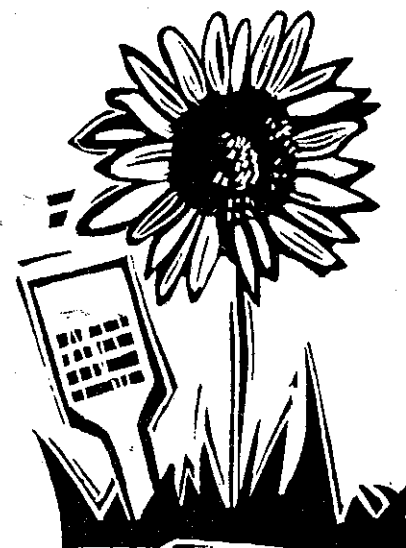
LIVE TO GARDEN ANOTHER DAY

Here are some more very helpful ideas from "Arthritis Today" magazine to help you minimize body stress to live to garden another day.

1. Avoid stiffness and injury by gardening during the time of day you feel most flexible and do some easy stretches to loosen up your muscles and joints before you start.

2. Pace yourself and change positions often. Alternate between weeding and pruning, for example.

3. Wear gloves to protect your hands as well as to improve your grasp on tools.



4. Water before weeding since softened damp ground makes weed pulling lots easier.

5. Scoop fertilizer, mulch, and manure, from heavier containers into smaller lightweight ones you can more easily carry.

6. Keep your tools well-sharpened so you'll need less effort to use them.

7. If a sprinkler system is out of your budget, try either lightweight soaker hoses you can easily move, or buy multiple hoses and leave them by the faucets so you don't have to drag them all over the garden.

8. Replace twist hose connectors with simpler, snap-on connectors that are easier on your hands.

9. Get a nozzle sprayer that you can set to maintain a constant pressure and flow to eliminate constant squeezing.

A GOOD THING

Many of your vegetable gardens are just getting started, however, all vegetable gardeners know there will soon come a time when you can't eat any more zucchini! The Arkansas

See WHAT WORKS!, Page 8

Organic Recipes for controlling pests

by Annette Hurley,
Positive Growth Natural Lawn Care

ROACH KILLER

8 oz. powdered Boric Acid
1/2 cup flour
1/8 cup sugar
1/2 small onion, chopped
1/4 cup shortening or bacon drippings

Enough water to form soft dough

Cream the sugar and shortening, then mix in the boric acid, flour and onion. Blend well, then add just enough water to form balls. Place the roach balls throughout the house in places normally inhabited by roaches. When the dough becomes brick hard, replace with a new batch.

Caution: Keep out of reach of children and pets. Call the poison control center if any boric acid is eaten.

FUNGICIDE

For Black Spot, Powdery Mildew Brown Patch and Fungal Problems

Mix 4 teaspoons (about 1 rounded tablespoon) of baking soda and 1 teaspoon of liquid soap or vegetable oil into one gallon of water. Spray lightly on foliage of plants affected. Avoid over-using and try to keep out of the soil. Do

not mix baking soda with other sprays.

GARLIC-PEPPER TEA

Liquify 2 bulbs (not individual cloves, the whole bulb) of garlic and 2 hot peppers in a blender one-third full of water. Strain the solids and add enough water to the garlic/pepper juice to make 1 gallon of concentrate. Use 1/4 cup of concentrate per gallon of spray. For added strength, add 2 tablespoons of vegetable oil for each gallon of water in the sprayer. (Use for aphids, whiteflies, other destructive insects).

OTHER SOLUTIONS

Caterpillars and bagworms: Bt (or *Bacillus thuringiensis*)

Slugs, snails, fleas, ticks, chinch bugs, roaches, crickets: Diatomaceous Earth or Pyrethrum

Fire ants: Growth regulator baits for large areas (Logic or Award), Pyrethrum/Diatomaceous Earth on individual mounds. Soapy water.

Grubworms: Beneficial nematodes and milky spore. Also molasses.

Squash and stink bugs: Sabadella

What Works!, continued from Page 7

Hunger Coalition is asking gardeners with extra produce to help in efforts to feed Arkansas' hungry. In Pulaski County you can take extra fresh produce to:

1. Arkansas Rice Depot, 8400 Asher Avenue, Little Rock. It is just west of the Asher and University intersection. Open Monday through Friday from 7:00 a.m. to 4:00 p.m., the phone number is 565-8855.

2. Helping Hands of Greater Little Rock, 1601 Marshall St. It is just down the street from Children's Hospital. Deliveries can be made Monday-Thursday from 9:00 a.m. to 5:00 p.m. and their number is 372-7257.

EXCUU-U-U-SE ME!

Julia Dame has addressed an interesting subject—the burpless cucumber. She says that most cucumber varieties contain a bitter or sharp-flavored compound called cucurbitacin. Since it seems to cause indigestion in some people a few 'burpless' varieties have been developed that lack the chemical. These are "Jazzer" and "Marketmore 86".

The absence of cucurbitacin is a mixed blessing, however. Cucumber beetles hone in on the chemical, while spider mites and rabbits seem to find the 'burpless' type mighty tasty, so keep an eye out either way.

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write What Works!c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.





MASTER MINUTES

September 1998

Volume 9 / Issue 7

Arkansas blossoms with abundant plant associations

By Julia Loyall

The gardening interests and specialties of Pulaski County Master Gardeners are individual and varied. Here's a compilation of central Arkansas and statewide associations and plant societies.

Central Arkansas Audubon Society: President John Holleman (501-847-6955), Treasurer Barry Haas (501-225-5096; babirder@aol.com). Monthly meeting at 7 p.m. second Thursday, board room of Arkansas Game and Fish on Natural Resources Drive, Little Rock. Monthly programs on environmental topics, frequent bird-watching field trips. Introductory membership \$20, full-time student/senior \$15, basic annual membership \$35. Visitors welcome. It's important that new members join the National Audubon Society through Barry so ASCA will benefit. Members receive the bimonthly newsletter *The Snipe* and the *Audubon* magazine.

Central Arkansas Beekeepers' Association: President Donald Little (501-868-1097), Treasurer Winston Horton (501-843-0545), or contact Aleta Newell (501-666-0991) or Ray Robbins (501-227-6565). Meets at 6 p.m. second Monday at Books-a-Million, Markham and Bowman, with educational program, questions and discussion. Group shares information and displays hives and equipment at the Flower and Garden Show booth and the State Livestock Show. Beekeeping classes begin soon with always many applicants. Call the Apiary Section of

Arkansas Analytical Lab, 11701 I-30 (across overpass at Otter Creek Business Park behind Michael's). Informal educational program and discussion. Membership (\$10 a year) includes newsletter, *The Transplant*. Annual sale of early spring flowering plants is held at the Arkansas Flower and Garden Show. Group is an affiliate of the Cactus and Succulent Society of America, which provides bimonthly *Cactus and Succulent Journal* and yearly technical publication.

Arkansas Daffodil Society: President J.A. Strauss (501-332-2109), Treasurer Char Roush (870-942-7957). Meetings twice a year, slides, seminar, lunch in February, 10:30 a.m.-12:30 p.m.; and a lunch 11 a.m. Saturday, Oct. 3 with slides and bulb sale at Great American Steak House and Buffet, North Little Rock. Membership \$5 a year, with three newsletters; \$20 membership in National Daffodil Society includes quarterly *Daffodil Journal* with pictures, sources, information about culture and conventions. Arkansas Daffodil Society sponsors Daffodil Show in late spring, usually at Hulen Hall at Hendrix College.

Arkansas Daylily Society: State organization, affiliate of national organization American Hemerocallis Society. State President John Holland (501-636-1374), regional vice president for Arkansas and Louisiana, Tom Flammang, Region 13 secretary-treasurer, Nancy Martin (870-356-2754), Regional publicity director, Jerry Martin. Membership \$5 a year with two issues of the newsletter, spring and fall. Two meetings: June meeting includes state tour, lunch and board meeting; October plant auction, sale of daylilies, educational program, lunch. National membership American Hemerocallis Society \$18 single or \$22 family, with the *Daylily Journal*. State meeting 8 a.m.-2 p.m. Saturday, Sept. 26 at St. Vincent's. Plant auction with sale table, lunch, business meeting.

Arkansas Gourd Society: President Christy Dillard (870-365-3949 in Harrison). Mission is to bring together people of common interests to further

Arkansas Plant Board to register for fall classes at 225-1598 (Little Rock).

Central Arkansas Cactus and Succulent Society: President Roy James (501-821-5644). Monthly meeting 2 p.m. on second Sunday at Arkan-

In this issue ...

- 3 MG Calendar and Notes
- 4 Plant of the Month
- 5 Public Garden of the Month
- 6 September Garden Checklist
- 7 What Works!
- 8 MG Project Profile

knowledge of the history, uses, growing, crafting and marketing of gourds and the exchange ideas among members through meetings and networking. Membership, \$5 a year and American Gourd Society, \$15 a year. Group has more than 100 members. To expedite get-togethers, four state quadrants have been formed. Southwest: Mitch LaGrone (870-777-3350 in Hope); Southeast: John Bohannon (501-843-2040 in Ward); Northeast: Susan Moss-Logan (501-327-1510); Northwest: Christy Dillard or S.D. Youngwolf (870-665-4173 in Kingston). Little Rock gourdheads, contact Susan Moss-Logan, area secretary-treasurer.

Arkansas Unit of the Herb Society of America: State organization Chairman Beverly Fennell (501-221-3144), membership chairman, Martha Whitehurst (501-868-4517). Provisional membership first year - \$15, thereafter national membership \$45, which includes local quarterly newsletter, bimonthly national newsletter and national annual journal *The Herbalist*. Except in June and December and occasional off-site garden meetings, group meets at 11:30 a.m. third Thursday at the Little Rock Garden Center. Fund-raising events are held in spring and fall. Fall educational workshop will be held Nov. 7. New evening unit of herb society's first meeting will be 7 p.m. Sept. 17 at the Garden Center. Call Beverly Fennell if interested. Larry Lowman spoke on medicinal and native plants at the August meeting. Herb Society is proud of Mary Wollheb, former president, who is current vice president of Herb Society of America and will be national president in July 2000.

Central Arkansas Horticulture Society: Chairman Ann Sarmiento (501-835-2890), vice chairman, Betty Pagan (501-663-7983). Evening meetings usually, last Tuesday, at Garden Center. Meetings begin at 5:30 p.m. in March and April, 7 p.m. in October and February; all other meetings

begin at 6:30 p.m. Summer meetings are garden tours. No winter meetings. Membership \$10 a year single or couple, with two newsletters. This casual group encourages pursuit of gardening and is not affiliated with a national organization.

Arkansas Hosta Society: President Joe Dickens (501-315-3039). Meetings are 2:30 p.m. second Sunday, Christ Episcopal Church, Capitol and Scott, with guest speakers. Visitors welcome. Group had four garden trips this year, visiting Tom Flammang, Betty Ann Seely in Mayflower, Springdale and Hot Springs Village. Membership \$5 per year. Group is loosely affiliated with the Dixie Regional Hosta Society. Lucia Bjorkman of the National American Hosta Society will speak at Hosta Society meeting in Hot Springs in October.

Central Arkansas Iris Society: President Lucie Burley (501-666-9160), membership, Shirley Kitchin (501-225-9394), treasurer Bettye Shaver (501-835-7476). Meetings 2 p.m. third Sunday monthly except January at Little Rock Garden Center. Visitors welcome, educational program, business meeting, refreshments. Activities are the iris show, May garden tour, July rhizome sale, booth at Flower and Garden Show. Group maintains the iris beds at the State Capitol. Local dues of \$3 include quarterly newsletter and yearbook. American Iris Society (\$18) provides regional newsletter and quarterly bulletin. CAIS hosted the Region 22 meeting and judging school at Greenleaf Plaza Hotel in North Little Rock in August and will host the national convention of the Society for Louisiana Irises on May 14-16, 1999, Doubletree Hotel in Little Rock. Events include national juried iris show, Louisiana iris test gardens, tours, education. Call Tom Dillard for details (501-666-7882).

Arkansas Mycological Society: Contact President Jay Justice for membership or information (501-794-2669). Annual dues are \$10 (single) or \$15 (family). Bimonthly newsletter *Arkansas Fungi*. Mission of the society is to teach independent identification

of Arkansas wild mushrooms. Group sponsors numerous forays on public land throughout the mushroom-fruiting season from April through November, usually on Saturday mornings, weather permitting. Mushroom identification workshop will be held 10 a.m. Saturday, Nov. 7 at Pinnacle Mountain State Park. Workshop will include an early-morning foray, slide presentation with display of native plants with taste-testing at the end of the day. No advance registration necessary. Fee for attendees over 18 is \$8.

Arkansas Native Plant Society: President Don Crank (home 501-262-1571, work 501-623-1035), past President John Pelton (794-1883). Membership, student \$10, regular \$15, family \$25, contributing \$30, life member under 55, \$300, over 60, \$150. Quarterly editions of a newsletter, general meetings in spring and fall, field trips during spring, summer and fall. There are three area chapters, Ozark Area, Northeast Area and Ouachita Area. For Little Rock area, contact secretary-treasurer Yvonne Becker of Ouachita Chapter (501-922-3296). Purpose of this society is conservation, preservation and education concerning Arkansas native plants. Society sponsors scholarships, awards and grants at the college level. Seeds, plants and used books are auctioned at the fall meetings. Society recently cooperated with Natural Heritage Commission and the U.S. Forest Service in sponsoring the Rare Plant Conference in Hot Springs, organized by Wayne Owens, botanist with the USDA. This assemblage, mostly of professionals countrywide, updated information on 140 species of rare and endangered native plants. Some Master Gardeners attended.

Orchid Society: President Mike Saar (868-6666), treasurer Leah Lasley (614-9451). Meets at 1:30 p.m. third Sunday at Christ Episcopal Church, Capitol and Scott. Visitors welcome. Local dues \$10, single or family, include monthly newsletter. Membership in American Orchid Society is optional (\$30) and brings monthly

Master Gardener Calendar and Notes

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues. Bring your check book to the Sept. 8 meeting!

MG RETREAT

The Statewide Master Gardener Retreat is fast approaching, September 28-29. Pulaski County Master Gardeners are hosting and the planning committees have been working hard. If you have an item(s) you'd like to donate to the Silent Auction please give Jane Druff a call, 821-2531. The money raised by the Silent Auction goes to help defray the cost of registration and provide the five and ten year pins. If you'd like to volunteer to help during the Retreat please give Beth or Mrs. McKinney a call, 340-6650. Arkansas

1998 TRAINING

Wed. Sept. 30: Tour of Master Gardener Projects

Wed. Oct. 7: Basic Plant Science, Soils and Pesticide Safety

Wed. Oct. 14: Composting - Suzanne Hirrel, Extension Specialist; Successful Water Gardening - Dr. David Heikes, Extension Specialist; Vegetable Gardening - Dr. Craig Andersen, Extension Special-

ist

Wed. Oct. 21: Fruit Crops, Attracting and Living with Wildlife in Your Garden

Wed. Oct. 28: Trees - Cecelia Buck, Master Gardener; Shrubs, Annuals and Perennials - Janet Carson, Extension Specialist; Plants in Interiors - Tina Shelby, Plantation Services

Wed. Nov. 4: Pruning, Fire Ants and Household Pests - Beth Phelps; Plant Pathology - Dr. Steve Vann, Extension Plant Diagnostic Clinic; Herbs - Dorothy Veirs, Master Gardener

Thurs. Nov. 12: Turfgrass - Dr. John Boyd, Extension Specialist

Experienced Master Gardeners are welcome to attend any of these sessions and receive continuing education points. We will start at 8:30 a.m. everyday and be done by 4:00 p.m. If you'd like to join us for lunch please contact Beth Phelps at 340-6650 by noon on the Monday before the Wednesday training. The cost of lunch will be \$6.

SEPTEMBER

Arkansas Daylily Society: State meeting and plant sale 8 a.m.-2 p.m. Saturday, Sept. 26 at St. Vincent's. Plant auction with sale table, lunch and business meeting.

Arkansas Unit of the Herb Soci-

ety of America: New evening unit of herb society's first meeting will be 7 p.m. Sept. 17 at the Garden Center. Call Beverly Fennell if interested (501-221-3144). Fall educational workshop will be held Nov. 7.

Arkansas Rose Society: Annual Rose Show 1:30-5 p.m. Sept. 27 at University Mall by the food court, Little Rock. Public invited. For more information, call Paula Adlong (501-329-6996). Cut roses and rose calendars will be sold. Rosarians will be available to answer questions about rose problems.

MG APRONS

You can get your own Master Gardener gardening apron for \$15 at the September Master Gardener Meeting. They feature big pockets for your pruners, cellular phone and other small gardening tools you want to keep handy. Best of all they were made by your fellow Master Gardeners. The funds raised go into the treasury to be used to help on our garden projects, buy books for the Master Garden Library, etc. The aprons also will be for sale at the Statewide Master Gardener Retreat. The supply is limited — so get yours early!

magazine *Orchids*. Southwest Regional Growers Association Newsletter quarterly. Orchid shows are held on an 18-month basis. Next show will be fall 1999. An orchid plant auction will be held at 2 p.m. Oct. 18, 1998, at North Little Rock Community Center, Pershing Boulevard. There will be a range of plants offered, from very unusual and expensive to more common orchids at reasonable prices. Orchid Society will sponsor a booth at Flower and Garden Show, February 1999.

Arkansas Rose Society: President Carol Shockley, Conway. Contact Martha Meyer (501-455-1513). Associate membership is \$12.50 a year, \$20 for full membership, which includes the American Rose Society membership and the monthly newsletter. Meetings 7 p.m. second Monday, Garden Center. Yearly pruning demonstration at the State Capitol in February and annual Rose Show this year from 1:30-5 p.m. Sept. 27 at University Mall by the food court, Little Rock. Public invited. For more information, call Paula Adlong (501-329-6996). Cut roses and rose calendars will be sold. Rosarians will be available to answer questions about rose problems. Every year a member of the Rose Society here judges the roses in the American Rose Society and Jackson Perkins test garden at the State Capitol.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson



Plant of the Month:

Veronica — more than just a pretty name

By Julia Loyall

Lately I've been admiring a quietly beautiful little plant in a garden I visit often. As you arrive, you see a tall pink rose with creeping red dianthus beneath it; then a striking wine-red abelmoschus leads to more lovely perennials. It takes a while to realize that the blue spikes and dark green leaves of veronica here and there are providing much of the contrast that makes this garden's star performers such standouts. When I inquired, my talented friend showed me other veronicas in her various beds including a very tall one which required staking.

I steamed off to shop for one of these blue beauties to flatter all that yellow in my back yard, but came home instead with a dainty little rose-colored veronica I just loved. It definitely won't make music with the coreopsis and black-eyed susans, but it should complement the pink phlox and the tall blue ageratum — when I make room for it.

Veronicas belong to the family *Scrophulariaceae* or Figworts. Scrofula was a horrid type of tuberculosis characterized often by swollen neck glands. The tuberos flowers of this family have swollen throats, like snapdragons, foxgloves and children with mumps.

The genus name, Veronica, is perhaps derived from the Latin *verus* (true) and *iconicus* (image). Legend reports that this name, feminized to Veronica, was given to the unknown woman who offered Christ her linen veil to wipe his face as he passed her on the way to Calvary. This veil,

preserved in Rome and several other Italian towns, is said to carry still the imprint of Christ's face. This lady later was made St. Veronica, and the little blue wild-flower is supposed to have been named for her.

Veronicas were widely used in medicinal teas in times gone by. Another theory gives a Greek origin for the name Veronica from the words *phero* (I bring) and *nike* (victory) because of the flower's reputed success in curing many diseases. The medicinal use is certainly the source of the common name, "speedwell."

The genus includes about 250 species of annuals, perennials (including some near-aquatics) and mostly deciduous sub-shrubs; but it no longer includes the shrub Hebe.

Carl Hunter reports that eight speedwell species have been identified in Arkansas, some probably immigrants from Europe or Asia. Most are low-growing and are found in open spaces, like your lawn. Flowers are veined with dark blue and have white centers. The flowers have only two stamens, which protrude horizontally from the wheel-shaped corona of four unequal, spreading lobes.

Veronicas commonly found in local nurseries are perennials varying in size. They have a creeping, branched rootstock from which arise erect stems with pairs of spear- or heart-shaped leaves. The stems end in tightly packed flower spikes. The plants soon form clumps.

Bloom begins in Zone 7 when

roses flower and continues throughout the summer if you don't deadhead faithfully. The first spikes branch when their flowers fade, and bloom continues. The seed capsules are small and heart-shaped. Veronicas are long-lasting as cut flowers.

These perennials need good drainage, especially as seedlings, but water them in dry periods. They do well in poor soil and like full sun or partial shade.

When planting, space 12 to 24 inches apart. Sow seeds in spring or early summer. Divide only when bloom becomes unsatisfactory, or for propagation in spring or fall. Veronicas are hardy in zones 4 to 8.

These three varieties are ideal for rock gardens:

- *Veronica filiformis* is the creeping, wild blue-flowered speedwell.

- *V. incana* has gray foliage and blue flowers and grows 12- to 18-inches tall. *V. incana rosea* is the pink form.

- *V. prostrata* is a blue spreading variety only 3 to 8 inches tall.

- *V. latifolia* is 1-5 feet tall with lavender blue, rose or white flowers.

- *V. spicata* has very tapered blue, white or pink spikes on 24-inch stems. 'Red Fox' is rosy-red and 12 to 15 inches in height.

- *V. longifolia subsessilis* is a two-foot royal blue form.

- *V. beccabunga* is grown in wet soil or in water to 5 inches deep in full sun.

- *Beccabunga* would be a poor choice, but try less-thirsty veronicas next to orange butterfly weed.

Garden Profile:

Longwood Gardens, Philadelphia

From the June 1998 issue of *Sky* magazine

Longwood was originally land owned by the Pierce family since 1700 with an arboretum that was considered one of the finest in the country in its day. In 1906, Pierre S. du Pont, then just an interested amateur, bought it along with gardening and horticulture books. Next he traveled through France and Italy, visiting and studying gardens there. On his return, he used colored pencils to sketch the beginnings of today's spectacular park.

Du Pont's first creation, the Flower Garden Walk, was created in 1907. Its 600-foot-long boulevard changes with the seasons and is laid out by color: One third is cool purples and blues; one third warm reds, oranges and yellows; and one third crisp whites and creams. In April and May, the beds boast the best of spring bulbs; hyacinths, daffodils, crocuses and 90,000 tulips. From early summer to October other imaginative mixes create vivid colors throughout. There is lantana, yucca, ornamental peppers, scarlet Texas sage, a variety of cannas, butterfly bush, smokebush, dusky lavender Russian sage, miscanthus, mums and salvia.

Also beginning with the Flower Garden Walk was a fountain that began what might be called du Pont's obsession with water in gardens. In 1914 he built a 2100-seat Open Air Theater, then in 1915 he installed fountains in the stage floor. With the 1926 renovation, he created a six-foot high illuminated water curtain that could be 'raised' between acts. The Italian Water Garden has six blue-tiled pools, a dozen basin fountains, limestone carvings and a spectacular curving water staircase taken by du Pont and his wife, Alice, from a similar garden near Florence, Italy. The "wildest hydraulic fantasy", begun in 1931, recirculates 10,000 gallons of water per minute. There are 1700 fountain jets which propel water as high as 130 feet, complemented by colored lights.

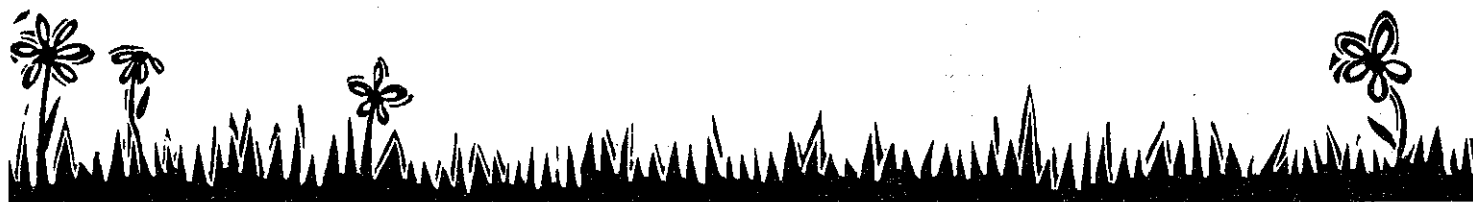
In November, there is the Chrysanthemum Festival in the Exhibition Hall. The sunken marble floor

is often filled with water to create an indoor reflecting pool to display thousands of blooms mounted on the columns and walls, hanging baskets and topiary. There are 1,050 acres of outdoor gardens, woodlands and meadows and the Conservatory complex houses another four acres of indoor displays as well.

Until his death in 1954, Pierre du Pont remained lead designer and visionary at Longwood, all the while continuing the family's long tradition of gardening and entertaining on a lavish scale. He held his first garden party in the Flower Garden Walk in June 1909 and the event became an annual tradition through 1931 (except during World War I.) This became the impetus for later grand additions, to be showcased during the social season in Gatsby-style evenings of live music, sumptuous food and spectacular fireworks displays.

For all its grandeur, however, amateur gardeners can appreciate Longwood because from the beginning du Pont experimented, often with hit-and-miss results, much as we all do. In 1898 he bought a bankrupt florist business in the hope of making it a success but failed and sold it in 1904. Possibly this is what prompted the Idea Garden. It was originally the vegetable plot that supplied food for the family and employees. Now its five acres are divided into eleven different experimental plant groups: ornamental grasses, herbs, fruits, berries, vegetables, annuals, perennials, roses, vines, and ground covers.

From April through October, the outdoor gardens are open 9:00 a.m. to 6:00 p.m. The Conservatory complex is open from 1:00 p.m. to 6:00 p.m. There are also "fountain nights" with concerts and specially ticketed evenings. Admission for adults is \$12 (\$8 on Tuesdays); youths 16-20 are \$2; and children under 6 are free. For more information, call 610-388-1000 or www.longwoodgardens.org. Brochures are available and include bloom calendars.



September Checklist for Gardeners

By Libby Thalheimer

COOL SEASON CROPS

The first half of September is the ideal time to plant lettuce, radishes, mustard, turnips, spinach and kale for fall harvest. Cress matures in 2 to 3 weeks, leaf lettuce and spinach in 6 weeks, mustard in 4 to 5 weeks, and radishes 3 to 4 weeks.

Mums and asters can be planted now. Plant varieties that bloom at different times during the season. Fall flowering bulbs should be set out immediately, before these eager bulbs flower unnoticed in a paper bag. Good choices for fall color include colchicums, crocuses, baby cyclamen and white swamp lilies. For a fragrant surprise in late autumn, plant paperwhite narcissus outdoors now.

Spring flowering bulbs should arrive at your garden center by midmonth. For the best selection, buy early. Select firm bulbs with no signs of mold. Store in a cool, dry location until ready to plant in late September through November.

Plant perennial herbs now to allow development of a good root system that will support growth next spring. Sage, oregano, lemon balm, cloves of garlic, thyme and winter savory are some good choices.

REMIEDIATION

Have you had a problem with...

Poison ivy, poison oak, or poison sumac? Apply Roundup now to keep them from storing up nutrients for winter, and reduce their chances of surviving until spring. Or... cover yourself up from head to toe. Pull out the plants carefully to get as much of the root as possible. Clean yourself and everything you touched within four hours of starting. Repeat as needed.

Grassy weeds? Use Poast over the top.

Powdery mildew on crape myrtles, roses, squash, lilacs or other plants? Benlate can be used to control it. Black spot on roses? Funginex, Phaltan, Topsin-M, and Benlate are all effective controlling black spot.

Aphids? Use Malathion or Orthene. Lacebugs on azaleas or pyracanthas? Apply Malathion 2 or 3

times, spaced a week or 10 days apart.

If you have taken your plants outdoors for the summer, bring them in when temperatures are predicted to drop below 55 degrees. Be sure and check for "pests" and take care of them before you bring them in.

NOTE: Before using any kind of pesticide, whether fungicide, insecticide, or herbicide, be sure plants to be treated contain plenty of moisture.

TURF GRASS

Whether it's organic, or combined organic and chemical:

St. Augustine, Bermuda or Zoysia need one more application of 3-1-2 fertilizer to be healthy and cold tolerant during the winter in early September. Cool season grasses, i.e. Fescue, need a complete fertilizer (1-1-1 or 1-2-1) in mid September.

Feed annuals with liquid 20-20-20 fertilizer. Continue fertilizing poinsettias through December 1. After replanting divided perennials, apply fertilizer such as 5-10-5.

Do not use only chemical fertilizers over a period of time without adding humus to your garden. All living, breathing organisms in your soil can be burned up by the chemicals alone.

Remember that compost is one of the most effective fertilizers and soil conditions in existence. If you haven't already done so, make plans to add composting to your list of gardening chores, ideally, a spadeful of compost would be added to each square yard of garden surface every two weeks from spring to fall.

CUTTING CLASS

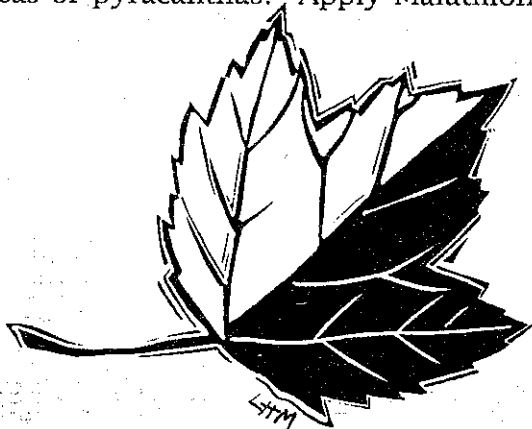
Light pruning (heading off) of evergreens can be done at any time. Don't prune your spring blooming plants at this time. Avoid heavy pruning of others, also, or they may not have time to harden off before frost.

Cuttings of perennials, such as phlox and Shasta daisies, may be rooted at this time.

When it's cooler, rejuvenate tired annuals by removing faded flowers and cutting back long, leggy stems. If they are too far gone, pull them out and replace with new fall annuals. Continue deadheading perennials. Cut back poinsettias to the desired height, leave 3 or 4 leaves per stem.

Remove the green tops when harvesting carrots, parsnips, turnips, radishes, etc. and leave on top of the soil to make fresh green manure, or add to the compost heap.

DIVIDE AND MULTIPLY



What Works!

By Shalah Brummett

September - here in Arkansas, it's a time of transition, between dying summer beds and later season preparation. The height of summer is past, but it's not yet fall. As blooms and blossoms play out, we are compensated by the bounty of ripening fruits and vegetables from our 'other' gardens. Here's what to do about it all.

ANCIENT TRADITION

Because mankind has always depended on what we've planted and harvested, ancient traditions developed around the moon's phases and possible influences on what we grow. For those of you interested in this idea, here are some general bits of information.

* During the first and second quarters, the New Moon to Full Moon, it increases, thus it's called the waxing moon and is thought to be a time of beginnings and increase. Plant, graft or transplant annuals with above ground crops then. Growth can also be simulated by cutting during that time.

* Following the Full Moon is the Waning Moon, and the third quarter is best for pruning, planting of biennials, perennials, and bulb and root crops. The fourth quarter is best suited for tilling and destroying weeds and pests. It's also best for cultivation and harvesting.

* Bruised areas of fruit picked in the first and second quarters will rot more easily whereas the bruised areas of fruit picked in the third and fourth quarters will dry.

* Now whether you believe this, it's fun to think about and possibly experiment with, isn't it? The moon is full September 6 at 6:21 a.m.

FARMER'S ALMANAC

Here's what the Farmer's Almanac has to say about planting:

Flowers: 14,15,16,22,23
Aboveground crops:
1,2,5,22,23,24,25,29,30
Root crops: 6,10,11,14,15,16
Seed beds: 14,15,16,24,25
Transplant: 20 - 27
Kill plant pests:
3,4,17,18,19,20,21

BASIL

Now who likes basil? Just about everybody, and almost every gardener has some variety of it in abundance in the garden, flowerbed, or patio pot. Below are some ideas on preserving this delicious herb.

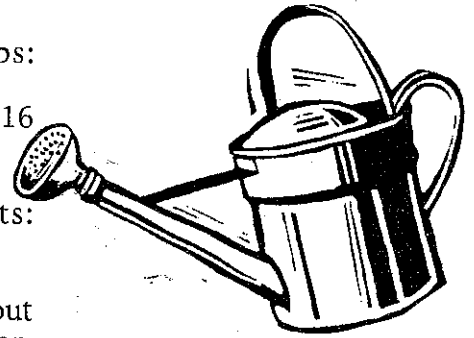
* Harvest just as flower buds begin to form. That's when the leaves contain the most concentrated oils, thus providing the best flavor and fragrance. Cut or pinch just above a leaf or pair of leaves taking no more than a quarter of the plant. The plant will stay healthy and produce more.

* To hang dry, rinse leaves in cool water and gently shake off extra moisture. When thoroughly dry, tie a handful of stems firmly into a bundle. Place that in a paper bag, gathering the top of the bag with stems and tying again. Hang in a dry place where the temperature stays below eighty degrees. Date it. After two to four weeks it should be dry and crumbly.

* To oven-dry, place leaves on a cookie sheet and put into a 180 degree oven for three to four hours, leaving the door ajar. Then, in the microwave, heat the herbs on a paper towel or paper plate for 30 second intervals for a total of one to three minutes. Turn or mix as needed until dried.

* Once dried, store in an airtight container in a cool, dark closet or pantry. Keep the leaves whole if possible to preserve the oils. Crush or grind only when using them.

* For fresher flavor, freeze in



water or olive oil. Process about two cups of washed leaves in a food processor with enough oil or water to be sloppy. When processed, pour into ice cube trays, making sure each cube has enough water to cover chopped leaves. Freeze, then when frozen, turn out cubes and store in freezer containers.

Basil Vinegar:

Fill a jar with washed leaves and pour cold cider vinegar over them. Tighten the lid and set in a warm pantry or sunny window side three to four weeks. Strain into decorative bottles with a sprig of fresh basil for effect.

Pesto:

1 Cup fresh Basil
1-2 cloves garlic
1/4 Cup olive oil
1/4 Cup freshly ground parmesan cheese

Salt and pepper to taste

Process basil and garlic until well chopped. Add oil and process about five seconds, then add parmesan and process five more seconds or until mix is well blended. Season with salt and pepper. Refrigerate until you're ready to use it. It easily lasts a year.

FREEZING PRODUCE

* Fruits that darken when exposed to air (peaches & apples): Sprinkle with ascorbic acid before freezing. To last longer, freeze in either their own juice or watered sugar.

Project Profile: St. Vincent-North Rehabilitation Hospital Community Garden

by Debbie Cummings, Pulaski County Master Gardener



Checklist, continued from Page 6

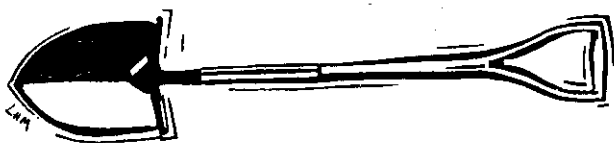
It's not too late to dig, divide and replant iris if overcrowded. Make sure each 2-4 inch division contains a part of the rhizome, some roots and foliage. Cut foliage back to about 6 inches and replant not more than 2 inches deep in well-prepared soil.

You can still divide overcrowded daffodils, daylilies, and Madonna lilies as well. Carefully dig and lift clumps and break apart. Coneflowers, yarrow, pinks, lambs ear, phlox and many other spreading or clumping perennials can be similarly divided.

Mid-September through October is the ideal time to divide and replant peonies. Herbaceous crowns are set 1-2 inches below soil level; tree peonies at 4-7 inches deep. Extra care should be taken to insure correct planting depth, as it greatly affects bloom performance. Mulch is also important the first winter after division to prevent their heaving out of the ground.

BLOOMING SCHEDULE

Ageratum, althea, asters, hardy begonia, buddleia, calicarpus, campsis, cannas, caryopteris, celosia, chrysanthemums, clerodendron, coral vine, crape myrtle, crotalaria, dahlias, dianthus, echevera, eupatorium, gaura, ginger lily, gladioli, hibiscus, ironweed, jacobinia, kerria, linaria, liriope, lantana, lycoris radiata, marigolds, blue morning glory, nierembergia, ornamental grasses, oregano, oxalis, petunias, phlox, physostegia, rose pink polygonum, rosemary, roses, sage, salvias, sedum, solidago, spirea, tansy, torenia, tricyrtis, verbena, veronica, vinca, viola, vitex, yucca, white zephyranthes, and zinnias.



The 4-H Angels of Sherwood and St. Vincent - North Rehabilitation Hospital's Therapeutic Program have developed a Community Garden Program designed to provide a garden for residents of the Rehabilitation Hospital and increase awareness in the community regarding the need to provide active leisure involvement after discharge. Although the residents provide daily care to the garden, the 4-H children also participate.

This program gives a structured gardening program for the residents of Sherwood. Residents may volunteer in the garden program and will be a volunteer and take care of their own plot with the assistance from the therapist and 4-H volunteers.

Debbie Cummings is the Coordinator of the Therapeutic Recreation Service of the St. Vincent North Rehabilitation Hospital.

What Works!, continued from Page 7

* **Vegetables:** Most need to be blanched to avoid losing flavor and color. Simply hold them in boiling water or steam for a minute or two then plunge in cold water. For corn, first remove husks and use within three months.

* **Green peppers:** Simply slice and place in freezer bags and date.

* **Tomatoes:** Freeze whole and unblanched, but remember to drain when defrosted because they'll tend to be mushy.

MISCELLANEOUS

* This is a good time to reseed damaged lawn patches.

* **Deadhead and Mulch, mulch, mulch.**

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write What Works! c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.



MASTER MINUTES

October 1998

Volume 9 / Issue 8

Early bulbs are a treasure for the Spring garden

By Julia Loyall and Shalah Brummett

Colorful, easy spring bulbs are early jewels for gardeners. Start shopping and planting now for brilliant colors that start as early as late February.

Spring-flowering bulbs must be planted in the fall to have a sustained dormant period of cold temperatures to stimulate root development. Plant bulbs as soon as possible after bringing them home. Mid-October to mid-November is a good time to plant spring bulbs. Store them, keep dry and cool, between 50 and 60 degrees. For long storage periods a refrigerator vegetable compartment may be used but be sure to keep them away from ripening fruit which emits a gas that can destroy bulbs.

Plant crocus for a early splash of purples, blues and yellow. Daffodils offer sunny cheer in white, yellow, gold and even pinky peach. It's always better to plant slightly deeper than shallow and with bulb fertilizer or bone meal to help rooting.

Daffs naturalize well, but tulip hybrids struggle to come back at all. But tulips' vibrant rainbow of colors are worth it. Shop for hardy species tulips or splurge on the hybrid bulbs each year.

Indoors, Pulaski County Master Gardener Carolyn Newbern plants paperwhite narcissus bulbs now to bloom in December and says hers bloomed into February. Another winner for forcing is the sweet perfume of hyacinth.

Independent local nurseries carry plants suited

to this area and can provide information on culture. Also see Libby Thalheimer's October Checklist for her favorite bulbs.

Here are some other early spring-flowering bulbs for your central Arkansas garden in



order of bloom:

Snowdrops: Plant in large patches, three inches deep in sun to part-shade where they can naturalize.

Winter Aconite (Eranthis): Plant under deciduous trees and shrubs and they will also naturalize.

Glory-of-the-snow (Chinodoxa): Plant in well-drained moderately fertile soil in clumps or large

See BULBS, Page 2

In this issue ...

- 3 MG Calendar and Notes
- 3 Trading Post
- 4 Flavor-infused Vinegar
- 5 Master Gardener Humor
- 6 October Garden Checklist
- 7 What Works!

Bulbs, continued from Page 1
drifts to naturalize.

SHOPPING FOR SPRING BULBS

Crocus: Corm, large spring-blooming "Dutch Garden" crocuses, plant five inches deep in fall, two to three inches apart, very hardy, 2- to 4-inch-tall grass-like leaves with white central vein. Many smaller species, assorted colors, different bloom times.

Erythronium (Trout lily or Dog-tooth Violet): Corm, well-drained soil, much water while growing, very hardy, plant early fall four to five inches deep, grows four to 14 inches tall, many species, white, yellow, purple, pink flowers.

Convallaria majalis (Lily of the Valley): Can be forced, shade or part-shade, mulch, beautiful, fragrant, rich organic soil, acid-to-neutral best, feed after first frost. Needs winter freezing to naturalize.

Chionodoxa (Glory of the Snow): Hardy early bloomer, needs good drainage, good for forcing. *C. luciliae*, three to six inches, white or white-eyed blue or pink flowers, to one and three-quarter inches wide, six to 10 per stem. Flowers two to three months before the leaves appear, in winter or spring. *C. sardensis* sky blue flowers.

Hyacinth orientalis (garden hyacinth): Water generously while growing and blooming, fragrant, medium-size bulbs are best for formal plantings, lasts several years, spikes become less dense with time, good for forcing, blue and purple varieties readily available, white or light blue harder to find.

Galanthus (Snowdrop): Amaryllis family, blooms late winter to early spring, soil cool, moist, organic, neutral to alkaline, light shade, very hardy, good for forcing. *G. elwesii* "Giant Snowdrop" six to 12 inches tall, nodding 1.5-inch flowers with white rounded outer petals and three smaller inner petals marked with green.

Takes hot weather better than other snowdrops.

Muscari (Grape hyacinth): Lily family, sun or light shade, usually blue, plant five inches deep, one to four inches apart. *M. armeniacum* 9 inches tall, blue spike, has double blue flowers. "Early Giant," cobalt flower with white fringe.

Narcissus (Daffodil): Amaryllis family, widely available, easy to grow here except perhaps for doubles. Plant tall varieties eight inches deep, smaller five to six inches deep. Very hardy. Favorites are "Ice Follies" (lemon yellow that fades to cream with yellow cup), "King Alfred" (solid yellow, nodding flower), "Tete a Tete" (short, dainty with two little yellow flowers). Paperwhite narcissus are fragrant.

Tulips: Need sun, don't have enough chilling most winters here. Repeat bloom poor. These species tulips do well here: *Tulipa kaufmanniana* varieties and hybrids, 4- to 8-inch stems, flowers open wide. *T. fosteriana* varieties, 8- to 20-inch stems, flowers to eight inches wide. *T. gregii* varieties, 10 to 14 inches tall, mid-season bloom. Dutch Gardens Nursery is a good source for species tulips not available locally. Darwin hybrid tulips are supposed to do better here. Deep planting of tulips, nine to 10 inches, is said to produce more flowering and less foliage by keeping bulbs cooler. "Lady Tulip" or "Candy Tulip" *T. clusiana*, pink and white, more permanent for the South, 12- to 14-inches tall, needs limey soil, well-drained, with gritty compost.

BULBS AROUND THE YEAR

Alium: ornamental onion, reliably hardy. Many sizes and colors available.

Alstroemeria: Should be hardy here if planted deep, about eight inches, and mulched in winter. *A. aurantiaca* is easier to dig and separate than other varieties,

hardier, many variegated colors except blue.

Amaryllis belladonna (Naked Lady): blooms late summer or fall, pink, red or white, plant deeper than six inches, mulch for better cold protection. Spring foliage, fall flowers. Won't bloom for several years if moved.

Anemone (Windflower): Don't buy *Anemone nemorosa*, it dislikes our hot, dry summers. Other species and species hybrids are better-adapted to the South and to summer dryness.

Bellamcanda chinensis (blackberry lily): Rhizome, full sun best, winter mulch, orange flower and other colors available. Naturalized Arkansas wildflower.

Bulbous irises: Dutch iris, 4-inch flowers, 15- to 25-inch stem, many colors available, need sun. *Iris reticulata*, three to eight inches, bloom early, violet and blue with yellow markings. *I. danfordiae*, yellow. Plant bulbous irises three to five inches deep, five inches apart.

Bulbocodium vernum (spring meadow saffron): Corm, Lily family, extremely hardy. Four-inch flowers come first, 6-inch leaves later, blooms with crocus.

Calladium: Arum family, readily available, varicolored leaves, easy to store in pots or knotted nylons over the winter.

Camassia: Lily family, grassy leaves to two or more feet with starry blue flowers, very hardy, tolerant of various cultural conditions, lovely in mass plantings.

Canna: Rhizome, not good below 10 degrees F, mulch heavily at 20 degrees, safest to lift for the

See BULBS, Page 8



Master Gardener Calendar and Notes

DUES

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues. Bring your checkbook to the Oct. 13 Pulaski County Master Gardeners' meeting!

1998 MG TRAINING

Wed. Oct. 7: Basic Plant Science, Soils and Pesticide Safety

Wed. Oct. 14: Composting - Suzanne Hirrel, Extension Specialist; Successful Water Gardening - Dr. David Heikes, Extension Specialist; Vegetable Gardening - Dr. Craig Andersen, Extension Specialist

Wed. Oct. 21: Fruit Crops, Attracting and Living with Wildlife in Your Garden

Wed. Oct. 28: Trees - Cecelia Buck, Master Gardener; Shrubs, Annuals and Perennials - Janet Carson, Extension Specialist; Plants in Interiors - Tina Shelby, Plantation Services

Wed. Nov. 4: Pruning, Fire Ants and Household Pests - Beth Phelps; Plant Pathology - Dr. Steve Vann, Extension Plant Diagnostic Clinic; Herbs - Dorothy Veirs, Master Gardener

Thurs. Nov. 12: Turfgrass - Dr. John Boyd, Extension Specialist

Experienced Master Gardeners are welcome to attend any of

these sessions and receive continuing education points. We will start at 8:30 a.m. everyday and be done by 4:00 p.m. If you'd like to join us for lunch please contact Beth Phelps at 340-6650 by noon on the Monday before the Wednesday training. The cost of lunch will be \$6.

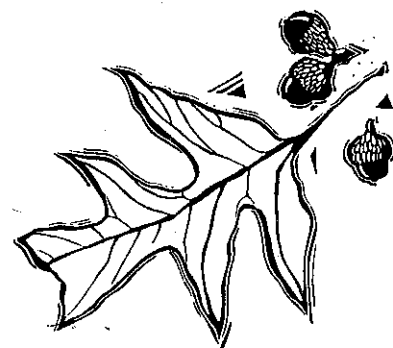
OCTOBER

The Pulaski County Master Gardener annual greenhouse sale will be at 8 a.m. Oct. 10 at the greenhouse. Featured plants will be pansies, violas, columbine, cone flowers and snap dragons.

The central Arkansas Hosta Society will meet at 2:30 p.m. Oct. 13 at Christ Episcopal Church, Capitol Avenue and Scott Street. The speaker will be Carl Hunter. Call Joe Dickens at 315-3039.

Oct. 13 is the deadline to sign up for the Pulaski County Master Gardener fall foliage shopping tour to Northwest Arkansas. The Coach USA bus will depart Second Presbyterian Church at 7:30 a.m. Oct. 29 and will visit Terra Studios, Holland Wildflower Farm and Ames Fruit Orchard. The cost is \$38 and includes bus transportation, lunch and entrance fees. Call the Coach USA office in Little Rock or the Pulaski County Extension Office for more information.

The 25th annual Harvest Festival will be Oct. 10-24 at the



Ozark folk Center State Park in Mountain View. Call (870) 269-3851.

Trees by Touliatos, a nursery in Memphis, will conduct a seminar for pond winterization Oct. 24. The cost is \$10. Call (901) 346-8065.

NOVEMBER

The annual Herbal Elves Holiday Workshop and Luncheon will be Nov. 21 at the Ozark Folk Center State Park in Mountain View. This intensive seminar is designed to build creative confidence and inspiration for using plant materials from your own garden and environment — and you take home a completed project. Paid preregistration is required. The cost is \$40 and includes materials and lunch. (870) 269-3851.

1999

Dawn Jackson, class of 1996, is

See NEWS AND NOTES, Page 8

Trading Post

By Frances Young

Ruth Jones, 664-8977, has Jewel of Oprah.

Mary Flickinger, 758-4202, wants Jewel of Oprah.

Linda Murphey, 224-5216, has Datura (Angel's Trumpet-Burgmansia).

Marilyn Wheeler, 835-9649, has Mondo Grass (short).

Marie Jordan, 961-9974, wants Mondo Grass.

Mary Evans, 664-7863, wants sweet gum balls.

Judy Cass, 834-7588, wants purple coneflowers.

Joanna Willson, 758-6635, has Autumn Haze Sedum.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson

Infused vinegars bring joy of herbs indoors

By Jan King

Vinegar has been preserving foods for centuries. Today flavored vinegars are much more fun! We have an almost unlimited variety of herb and spice combinations with which to experiment. There are also a multitude of ways to make flavored vinegars. Here's the story of how I make mine.

First there are a few important things to know:

Never use pesticides on your herbs or herbicides in your herb beds!!! Garden pests do not bother most herbs. Safe and easy ways to deal with pests taking more than their share in an herb garden are: (a) spray the pests off with the hose, (b) hand pick them, (c) spray the bothered plant early in the morning or during a shady time with a mild mixture of one half to one teaspoon Ivory liquid soap and a quart of water. Leave it on for an hour or two, then spray off with clear water. Basically, don't use in food or vinegars herbs or edible flowers that have been treated with pesticides or grown in beds treated with herbicides.

Never boil your vinegar because it spoils the tannins imparted from the oak barrels the vinegar was originally made in.

Never use metal lids or caps to seal. They can corrode and taint your flavored vinegar.

Always use clean and thoroughly dry jars, bottles, utensils and fresh herbs (dry from rinsing) when preparing your vinegar to prevent the growth of mold.

Do not use plastic strainers, funnels, or utensils when preparing and/or storing your herb vinegar. The oils from herbs may cling to plastic leaving your vinegar with less flavor.

Recycle your clear glass bottles for your vinegars. There are so many wonderfully shaped bottles that we just toss out. Keep a keen eye out at the market and buy that olive oil with the neat bottle. Browse the liquor store for neat beer or wine bottles and use the contents for cooking. I also reuse the corks from wine bottles on my own personal vinegars, but new ones are nicer if you plan to use them for gifts.

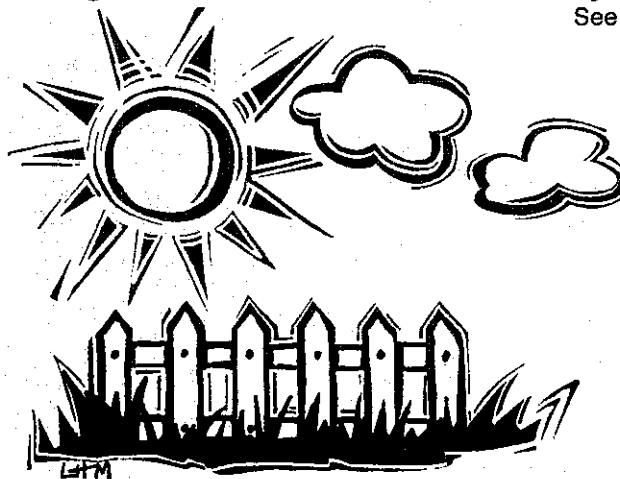
Let's prepare our potion: Thoroughly wash by hand or in the dishwasher all the bottles/containers you plan to use, rinse them extremely well (rinsing the dishwasher bottles again by hand) and set them aside to drain and dry. Bottles can be put back in the clean dishwasher to drain and dry and run through the drying cycle again. For those bottles that just won't dry place them on their sides in a 150 degree F. oven (lowest heat setting and no hotter) with the door ajar for twenty minutes or so until they are dry. Turn the oven off and let them cool. **Caution:** Do not have the oven above 150 degrees F. and do not take the bottles out until they have cooled because the glass could explode with the sudden temperature change. When I make

my herb vinegars I use a big sun tea jar, but I do not put it in the oven.

Add the herbs. To harvest fresh herbs that will flavor the vinegars pick lots of them in the morning when the oils are rich — after the dew has dried, but before the hot sun evaporates the essential oils, and before they bloom (unless you use the blooms in the vinegar). If you don't grow your own you can buy fresh herbs or use dried (1 teaspoon dried equals 1 tablespoon packed fresh herbs). You need not separate all the leaves from the stems unless the stems are large, just break the smaller stems off. Rinse the fresh herbs well in cool water checking for damaged leaves and any little hitchhikers. Shake the water off, pat dry and spread out to dry thoroughly. To hurry drying shake and turn the stems a few times as you pass by. It may take an hour or two. Drying racks help speed drying by increasing air circulation.

I encourage you to experiment with flavors in small containers writing down what you put in. I use less of the base (strong) herbs like oregano and rosemary, and more of the softer herbs like parsley and thyme, and lots and lots of basil. You have your choice of

See VINEGAR, Page 5



At the Intersection of flowers and faith By Jack Singleton

I was at the Old Mill, doing some weeding and deadheading, and was dressed appropriately for such an effort. We'd had a rain the day before and the weeds were a joy to pull. I tend to be a messy, barehanded weeder, and the soil was still damp, so after an hour of work, my hands, face and jeans were stylishly grunge.

A young couple arrived dressed in their Sunday best, and was soon joined by a dozen friends. It was obvious they had come for an Old Mill wedding, and they visited with friends, joked and laughed and occasionally looked at their watches. As time passed, they joked less and checked watches more, and finally the young couple, came over to me and she asked, "Do you happen to know a minister?" It seems the pastor who was to help with the wedding had not arrived, and they needed a backup.

"I'm a pastor," I said. Sharing this news, I stood up from the weeding task and watched as the young couple took a step backwards to observe perhaps the grubbiest gardener in the history of their brief lives. I could see disbelief in their eyes. What they really wanted from me was a reputable minister's name or phone number. My vocational authenticity on the line, I washed my hands in the lake, and retrieved my ministerial credentials card from my wallet. The couple moved a short distance away and joined in an animated discussion of the merits of using a gardener - even a Master Gardener - as

a wedding officiant. It's mentally hard to move from weeding official to wedding official on such short notice. I took a break, then returned to my chores. Another ten minutes passed, and the couple conferred, and then approached me once more to see if I would help out.

The wedding was now an hour late, the guests restless, and the dirt under my nails was now less troubling to their spirits. The bride-to-be asked if I didn't need a book or something to do a wedding? "No," I replied, "after 30 years of weddings, I think we can manage it together." So the little late wedding party gathered on the edge of the lake, and with their friends and family standing behind them, and the "grunge officiant" in front of them, the young couple began married life together.

It wasn't the perfect wedding. I learned long ago there is no such thing. But it might have been a good beginning for a life together - with all the surprises and adaptations that any marriage will require. Creating a beautiful marriage is like creating a garden. It takes planning, lots of hard work, a willingness to change, taking care of "weeds," hope in what the future will bring, and looking beyond the failures, so that one day your breath is taken away by the beauty of the endeavor.

Jack Singleton is a Pulaski County Master Gardener and the pastor of First Christian Church, Sherwood.

Vinegar continued from Page 5

types of vinegars — white, real apple cider (beware of flavored ones), white wine, red wine, and champagne, or a mix, all at room temperature. In my sun tea jar I put oregano (a handful), sweet marjoram (a handful), parsley (a handful), thyme (a handful), chives (half a handful), garlic chives (half a handful), lots and lots of basil (three to four handfuls), about five to ten sage leaves, rosemary (eight-six inch sprigs or so), and three or four blanched semi-squashed garlic cloves and a bay leaf on the bottom half of a long bamboo skewer. Then I crush the herb leaves to release the oils. When my jar is at least 1/2 to 3/4 full of loosely packed herbs (the more herbs

the stronger the flavor), I fill the jar 1/2 full of white vinegar, add a small bottle of white wine vinegar and top it off with real apple cider vinegar. I stir gently with a long wooden skewer to bring up any air bubbles trapped among the herbs. I cover the mouth of the jar with a double layer of plastic wrap secure with a rubber band and then screw on the plastic lid carefully so it doesn't tear the plastic wrap. I then set the container aside for four to six weeks out of direct sunlight. Turn the container upside down several times every day or so to mix the flavors and to keep mold from growing on the herbs that may be floating on top or in air bubbles trapped among the herbs.

After six weeks or so you will need to decant the vinegar. Strain it into another wide-mouthed jar or pitcher through an unbleached muslin lined metal strainer to remove the spent herbs, then through unbleached coffee filters (changing filters often) to remove the finer bits of herbs. Using a metal or glass funnel, pour the clear vinegar into the clean, dry bottles. Put fresh sprigs of the herbs used in making the vinegar into the bottles for decoration and identification, cork and label with the kind, the date and your name. Herbal vinegars can also be made directly in the bottles, but be sure to use a lot of herbs cut in appropriate lengths (not too tall) and do not bruise the leaves. Some

October Checklist for Gardeners

By Libby Thalheimer

TURF

If you have been fertilizing your lawn this year, you do not need to use a winterizer fertilizer, a fertilizer with no nitrogen, only phosphorus and potash. You do need winterizer fertilizer if your lawn is severely damaged, or the lawn (such as St. Augustine) was stressed this year, or if you have not been fertilizing regularly, or if you have new sod. Keep the leaves raked! Turfgrass needs sunlight as growth slows before dormancy.

DIVISION

Divide perennials to restore vigor to old and crowded plants. Black-eyed Susan, Chives, Coneflowers, Coreopsis, Shasta Daisies, Hemerocallis, Siberian Iris, Peonies, Phlox, Sweet Woodruff and Yarrow need to be divided every three to four years. Tarragon should be divided yearly.

Dig tender bulbs such as caladiums, fennel and gladioli. Gently remove any soil clinging to the bulb. After drying the bulbs, store in a cool, dark, well-ventilated area. Dust the caladiums and gladioli with Captan. Old potato or onion sacks work well as a storage container.

MULCH

Clean out old mulch before adding new mulch to prevent fungal diseases next spring. Wait until hard freezes are forecast to mulch heavily for the winter.

To keep soils from drying out or washing away during winter, plant a cover crop now in unused parts of the vegetable or cut flower garden.

Legumes such as hairy vetch, crimson clover and sweet clover trap nitrogen from the air, which then becomes available for subsequent crops after the legumes are turned under.

PLANT AND TRANSPLANT

It is time to transplant Canterbury Bells, English Daisies, Daylilies, Forget-me-nots, Foxglove, Lupines, Pansies and Snapdragons. Place one teaspoon of a slow-release fertilizer around each plant.

Sow chard, cilantro (coriander seed), garden cress, kale, kohlrabi, leeks, lemon balm, mustard greens, radishes, spinach, turnips, and winter peas.



INSECT CONTROL

Check broccoli, cabbage, cauliflower and collards for cabbage loopers. These green caterpillars can be easily controlled using any *Bacillus thuringiensis* (Bt) product.

Tropical plants should be moved indoors before nighttime temperatures reach 45 degrees. Remember to check for pests before relocating them.

Fall webworms look unsightly, but do little damage to trees.

As the temperatures cool, horticultural oil should be sprayed to control scale on fruit trees, camellias or other ornamental shrubs. Control white peach scale with oil such as Volck, ornamentals with Cygon. Treat fruit trees again with dormant oil after fall leaf drop.

ORNAMENTALS

Fall is a good time to plant or transplant trees and shrubs. Soil amendments added to the backfill for individual planting holes has been shown to be of no benefit and may actually be detrimental to the establishment of trees and shrubs. If you are planting in a bed, it is a good idea to amend the soil in the whole bed.

SPRING BULBS

When selecting spring flowering bulbs, remember the larger the bulb the bigger the plant will be.

Plant Belamcanda, Chionodoxa, Colchicum, Crocus, Daffodils, Eremurus, Galanthus, Hyacinths, Iris, Lilies, Leucojum, Muscari, Oxalis, Scilla, Spanish Bluebells, Star Flower, Virginia Bluebells, Windflower, Winter Aconite, and Zephyranthes. If you must store your spring flowering bulbs before planting, keep them in the refrigerator away from fruits and vegetables.

Plant garlic and shallot bulbs.

IN BLOOM

Abelia, Ageratum, Sweet Alyssum, Asters, Barberry, Beautyberry, Bittersweet Vine, Buddleia, Ornamental Cabbage, Calendula, Camellias, Cannas, Celosia, Chelone, Chinese Pistache, Chrysanthemums, Clerodendron, Crape Myrtle, Dahlias, Dianthus, Dogwood, Euonymus, Eupatorium, 4:00, Gaura, Ornamental Grasses, Gums, Hibiscus, Kale, Kerria, Lantana, Larkspur, Lobelia, Maples, Marigolds, Mexican Sage, Nierembergia, Sweet Peas, Petunias, Poppies, Roses, Rosehips, Salvia, Scabiosa, Snapdragon, Solidago, Stock, Torenia, Tricyrtis, Verbena, Viburnums, Viola, Virginia Creeper, Wisteria, and Zinnias.

What Works!

By Salah Brummett

How this year has flown! By now our gardens and beds look altogether different from only a few weeks ago and many are wearing their last finery before their winter's nap. Still others are merely shifting gears. Hear are some autumnal garden ideas.

WAX AND WANE

Here are planting tips according to the moon's phases from the *Farmer's Almanac*.

Aboveground crops: 3, 4, 20, 21, 22, 23, 26, 27, 30, 31

Root crops: 7, 8, 11, 12, 13, 19

Transplant: 20-27

Kill Plant Pests: 11, 12, 13, 19, 20

The moon is full Oct. 5. It's also a beautiful Harvest Moon!

MIGHTY MITES

It is not too late to still be fighting the insect wars. Julia Loyall says you can win this way: dilute commercial insecticidal soap with half water to get rid of mites in impatiens and begonias.

HAIR TODAY, GONE TOMORROW

Squirrels wreaking havoc in the fall storing food for winter and if your beds are victims try this. Collect freshly washed, cut hair from your beauty or barber shop floor and place it around plants. Rose Hogan's friend says it stops squirrels in their tracks!

FLAVOR SHAKER

If you still have a few herbs you'd like to harvest before frost, after drying consider mixing them. Use a mortar and pestle, coffee grinder or food processor to pulverize them fine enough to pass through holes

in a salt shaker then keep it on the table with the salt and pepper for variety.

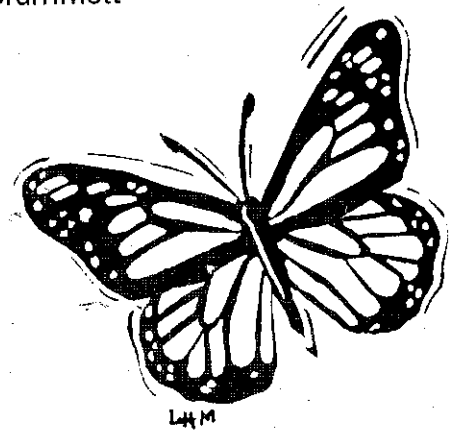
PERFECT POPPIES

Do you pine for poppies? The secret to normally perennial Iceland and Alpine, grown as annuals in the South, is to sow the seeds in late fall. They will come up in late spring for a big show before the heat gets them. Since they suffer from transplanting, dig a bed about eight inches deep. Mix in compost, leaf mold and sand. To disperse them evenly, mix with twice their volume of sand, spread it all and barely cover with 1/8 inch of soil. Keep the soil moist until seedlings are established and thin to six to eight inches between. Before removing spent flowers allow the last blooms to set seed for next year.

TIE ONE ON

Master Gardener aprons cost \$15 and feature big pockets for your pruners, cellular phone and other gardening tools you want to keep handy. Best of all they were made by your fellow Pulaski County Master Gardeners. The funds raised by MG apron sales go into the treasury to be used to help on our garden projects, buy books for the Master Garden Library, etc. There are fewer than 20 left — call the county office soon!

Also available are Master Gardener, T-shirts, sweatshirts and golf shirts. Checks and orders are due at the Pulaski County Extension Office, 2901 W. Roosevelt Road, by Oct 9. Short-sleeve Ts cost \$8, \$9.75 for XXL; long-sleeve Ts cost \$10.50, \$11.75 for XXL; sweatshirts cost \$14, \$17.50 for XXL; golf shirts



in 100 percent cotton cost \$23, \$24.50 for XXL, hats cost \$5. Shirts are available in ash with dark green lettering or in green with beige lettering. All shirts have the Master Gardener logo on the left chest. Shirts come in S, M, L, XL and XXL. Prices include sales tax. Make checks payable to Pulaski County Master Gardener Association.

CLARIFICATION

Master Gardener Jan King, of the Arkansas Unit of the Herb Society of America (see related article), points out an omission in last month's What Works! Make sure to never use metal lids or caps to seal vinegars. They will corrode and taint your flavored vinegar.

What Works! is a forum for gardening, design, and craft ideas. We want to share unique ideas from your own experience, magazines, HGTV, friends and neighbors. Call Salah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write *What Works!* c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.

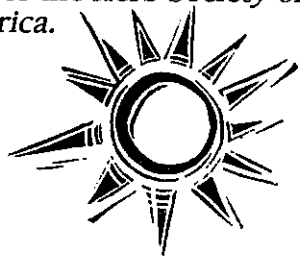
Vinegar continued from Page 5

information says that herb vinegars are good for 12 months, some it doesn't say. I have bottles that are several years old and are still very good. I would suggest that you not put herb sprigs in vinegars you may keep several years or decant the sprigs after a year because they do become mushy.

Experiment! Save the more expensive champagne and wine vinegars for more delicate flavors like chive blossoms and nasturtium flower vinegars. A really pretty vinegar is a whole jar (it doesn't matter what size jar) of purple basil well bruised with 1/2 white vinegar and 1/2 white wine vinegar or use 1/2 real apple cider and 1/2 red wine vinegar or white wine and apple cider. The purple basil turns the vinegar a beautiful deep pink. Colored vinegars will fade if kept in strong light. The way I have learned to make herbal vinegars is a collection of information and experiences from some wonderful ladies in the Herb Society and books and books and more books (each one saying something different) and, of course, trial and error (such as corroded metal lids!). Flavored vinegar is a great way to enjoy culinary herbs.

Try culinary herbs in your own garden — if not for culinary purposes, they smell fantastic in the garden when you brush past.

Jan King is a Pulaski County Master Gardener and a member of the Arkansas Unit of the Herb Society of America.



Bulbs, continued from Page 2

winter, will grow in standing water.

Colchicum (Autumn crocus): *C. speciosum*, very hardy, most popular. *C. album*, white, also "Lilac Wonder" and "Water Lily," a double pink.

Crinum (Crinum lily): Amaryllis family, long, arching leaves form large clumps, clustered white, pink, reddish or bicolored flowers above thick stalks, mulch for winter. *C. bulbispermum* (*C. longifolium*) six to 10 flowers in a cluster, 2- to 4-foot tall. Set large bulbs five to six inches deep, one foot apart, leave undisturbed. Ours have survived the last three winters.

Hardy cyclamen (not the florists' type): Tuberous species cyclamen, winter-bloomer, needs hard frost during winter, light shade, good drainage, patterned foliage, white pink or crimson flowers.

Eranthis (Winter aconite): Sun or part-shade, needs year-round moisture, earliest bulb before crocus, buttercup yellow, needs winter chill to 20 degrees F.

Eremurus (Foxtail lily or Desert Candle): Tuber, sun or part-shade, needs ample water while growing, tapered spikes three to seven feet tall with hundreds of small lily-like flowers above yucca-like foliage. Plant crown four to six inches deep, Shelford or Rutter hybrids best, white, pink, yellow, cream.

Fritillaria (Crown Imperial): Lily family, 2- to 4-foot stem, glossy leaves, cluster of nodding orange, red or yellow flowers

capped with smaller leaves. Other smaller varieties to one foot tall.

Gladiolus: Corm, hardy, shorter glads that don't need staking, suitable for Zone 7, are available.

Hyacinthoides (Bluebell, Wood hyacinth): well-drained, organic, acid to neutral soil, regular watering, part-shade or sun. Often sold as scilla or endymion. Spanish, Italian or English wood hyacinths do well here.

Ixia (Corn lily): Corm, hardy to minus 10 degrees, flower stems 10 to 36 inches tall, narrow leaves, needs sun, plant four to five inches deep, stake as needed, mulch in winter, many hybrids available.

Leucojum (Snowflake): Amaryllis family, like a taller Snowdrop. *L. aestivum* one-foot stems, two to eight white bells. "Gravetze Giant" 18 inches tall, large flowers to 1.5 inches. *L. autumnale*, 2- to 9-inch stems, pink-tinged flowers, fall bloomer.

Lilies: Many varieties readily available, varying heights and bloom periods. Very hardy.

Lycoris (Surprise lily): Amaryllis family, flowers come first in late summer or fall, leaves later, last until spring. *L. radiata* "Spider lily," flowers radiate from top of stem, reddish. *L. africana* yellow flowers. *L. squamigera* "Magic lily" or "Resurrection lily," rose-pink flowers. Blooms best if bulbs are chilled during winter.

Scilla (Squill): early bloomer. *S. bifolia* 6 inches tall, blue flowers, also rose and white. *S. peruviana* 10 to 18 inches, bluish purple. *S. siberica*, "Spring Beauty," very hardy 6-inch flower spikes, sun or shade.

News and Notes, continued from Page 3

already looking ahead to the Arkansas Flower and Garden Show in February. Jackson is the chairman of the children's committee for the annual flower show and already planning lots of fun activities for our children and grandchildren. She's looking for co-chairs to 1) help coordinate children's crafts, 2) organize a children's display garden, 3) lead tours of school children on Friday and 4) plan events for the children's stage. Call Jackson at 224-8958 and help the annual flower show introduce kids to the pleasure of gardening.



November 1998

Volume 9 / Issue 9

What Works!

Autumn hues bring home and garden to life

By Salah Brummett

Now that daylight savings time is over and frost is on the way, it is time to clear out spent beds and clean and store tools. But we also get to ponder and plan next spring. While we're winding up this year and preparing for the next, make time to enjoy the crisp textures, colors and temperatures of the season.

FOLIAGE WITH FLAIR

Gifts From Nature, by Matthew Mead (Random House 1997), is a slim, colorful book that's like a miniature coffee-table book jammed with four seasons of garden creations. The autumn section includes the recipe for glycerin-preserved leaves and instructions for a fall foliage window swag.

Glycerin-preserved leaves:

Leaves dried with glycerine have a soft, supple texture that is long-lasting. This is a good method for leaves that will be used in wreaths, swags and garlands. Leaves dried in glycerine turn a much darker hue, so it is best to start with brightly colored yellow and orange leaves. This process is less effective during humid weather, when glycerin-treated leaves tend to "weep" and discolor.

What you'll need: bucket, 1 gallon water, 4 cups glycerin (available at pharmacies), 8 to 10 cut branches of leaves (see note).

1) Fill bucket with one gallon water and mix in glycerin.

2) Smash the stems of the branches with a hammer and place in the bucket. Keep in a dry, dark place for 3 to 5 days, until the branches have thoroughly soaked up the water-glycerin mixture.

3) You can use the branches as they are or use just the leaves.

Note: Using pruning shears or clip-

pers, cut branches at their peak of color — before there is a frost and too many leaves have already fallen from the tree.

Leafy Window Swag:

Start with 1 1/2 yards of armature wire for the base. Using green florists' wire, attach clusters of 5 to 7 glycerin-preserved leaves to the wire base. Suspend the swag from cup hooks on each side at the top of a window frame.

BRIGHT BULBS

Plant spring bulbs under pansies to have double blooms in spring.

It's possible — and a great idea — to plant lots of bulbs in one large container by planting several layers. Check the blooming period information on the packages to plant in that order. Don't let the bulbs freeze (wrap in burlap or newspaper) and water periodically throughout the winter. Position out of direct sun but avoid dark, heat-trapping containers. Top off with pansies or mulch.

LONG WINTER'S NAP

Last year, Jan King was successful over-wintering plants in her garage by:

- 1) keeping grow-lights on a timer
- 2) watering occasionally
- 3) keeping plants packed closely together, such as placing small pots around the base of larger ones
- 4) draping a sheet across the door to keep out drafts

If you decide to over-winter begonias, leave them in the ground a week or so after frost turns their foliage brown. Dig the bulbs and clip off the leafy tops as close to the bulb as possible. Brush off most, but not all, soil so as not to dry too quickly. Place them in the sun for a week then store loosely and not completely covered in peat moss.

WAX AND WANE

Here are *Farmer's Almanac* dates for planting in conjunction with the moon's phases.

In this issue ...

- 2 Plant of the Month: Coral Bells
- 3 MG Calendar and Notes
- 3 Trading Post
- 4 November Garden Checklist

Plant of the Month: Heuchera

Coral Bells ring and sing in Arkansas shade

By Julia Loyall

Colorful evergreen foliage, a graceful cut flower, at home in the shade—heucheras have it all for Central Arkansas. But keep their roots moist during those hot, dry summer days!

Heuchera is also called alumroot, and there are many species. The name Coral Bells refers to the Mexican native species *Heuchera sanguinea*. It was catalogued by Linnaeus in the family Saxifragaceae (those rock-breakers again!) which tells you right away to tuck it into your rock garden, where it will feel at home — not a sunny rock garden, though.

This beloved plant needs shade here in Zone 7 — and sufficient moisture to prevent drying out in summers like that just gone by.

There are perhaps 50 varied species of heuchera but *H. sanguinea* and its hybrids are those most seen in our gardens.

Arkansas has two native heucheras listed in Carl Hunter's "Wild Flowers of Arkansas." *H. americana*, the rock geranium, has drooping, yellowish flowers with protruding orange anthers, on slender flower stalks. The long petioled leaves have rounded blades. This spring-bloomer is found in rocky places in the Ozark and Ouachita mountain regions.

There are two varieties of the other native species. *H. villosa* and *H. arkansana* have clusters of small white flowers on short stalks. Their leaves are large and somewhat hairy. They like shady, moist spots in the Ozark region and bloom from late August to October.

With their colorful ground-hugging foliage and mounding habit, heucheras are ideal in a shady rock garden or along paths. The delicate bells of the scapes accent a cut-flower bouquet.

That country name, alumroot,

indicates that the root had medicinal uses in times past, probably as an astringent or styptic to stop bleeding.

CULTURE

Heucheras are hardy in Zones 4 to 8 or perhaps 9. In cooler, northern climates, heucheras like full sun with some shade, but need mostly shade in their southern range.

Plant seeds in containers about six weeks before transplant time in late winter (or early fall in Zone 7). Germination requires light and takes approximately 10 days. Heuchera seeds need fluctuating soil temperatures, fairly warm days (86 degrees F) and cooler nights (68 degrees F).

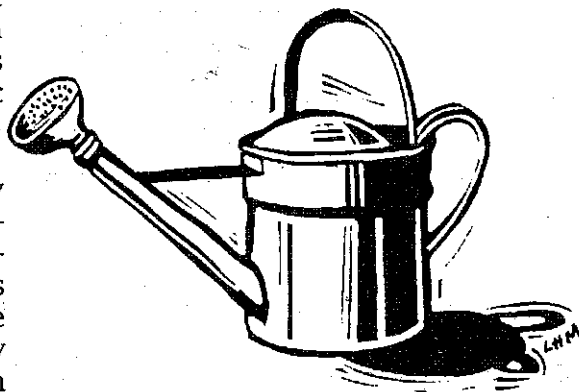
As one expects with hybrids, not all seeds of the hybrid "Palace Purple" will have the bronze, purple-veined leaves. Park's Seed catalog directs you to discard the green-leaved seedlings as they appear if you want the purple leaves only.

Plant heucheras in moist, well-drained soil with high humus content. Space plants one to one and one-half feet apart. Plant crowns one inch below soil level. Trim out spent flower stalks and old leaves as plants mature. In colder areas, mulch to prevent plants from heaving out of the soil during early spring periods of alternate freezing and thawing.

PROPAGATION

Division every three years will improve flowering. If your friends want some of your heuchera and it is not ready for division, stem cutting will not work very well. But a leaf cutting with a little stalk attached will.

Heucheras also respond to root



cuttings, especially in early spring. Choose healthy, mature roots — tan-colored, not white. Cut close to the crown with a sharp knife, sections at least one-quarter inch thick and 5 inches long. You can take up to half of your plant's outer roots without damaging it. Place root sections in a plastic bag to preserve moisture. Replace the plant if you lifted it. Firm soil around the remaining roots, adding soil as needed. Cut root pieces into two-inch sections on a sterilized board, straight across the top, diagonally across the bottom, to assure that you will plant the pieces right-side up. Poke narrow holes two inches deep and two inches apart in your pot or box of growing medium. Set the root segments in soil diagonal side down, with the straight-cut tops just below the soil surface. Tamp the medium gently around the cuttings. Lightly cover the tops with soil. Water and set the container in a cold frame or unheated indoor area, such as a garage. Set out your new plants, hopefully, when soil temperatures are appropriate, after hardening them off for a few days.

VARIETIES

H. sanguinea remains very popular, its red flowers lasting four to eight weeks. Look for some

See HEUCHERAS, Page 4

Master Gardener Calendar and Notes

By Laurie Pierce

OFFICERS SALUTE

Beth sends thanks "for a job very well done!" to our outgoing officers for 1997-98: Bettye Jane Daugherty, Connie Ruth Smith, Martha Jones, Kevin Allis, Patty Wingfield, David Dodson.

Pulaski County Master Gardeners officers for 1998-99 are: Connie Ruth Smith, President
Martha Jones, First Vice President
Carolyn Newbern, Second Vice President
Kevin Allis, Treasurer
Patty Wingfield, Secretary
Bettye Jane Daugherty, Past President

DUES

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007. Graduates of the fall 1997 master gardener class do not pay 1998 dues. Bring your checkbook to the **Nov. 10** Pulaski County Master Gardeners' meeting!

1998 MG TRAINING

The final Master Gardener training class will be Thurs. **Nov. 12**: Dr. John Boyd, Extension Specialist, will talk about turf grass.

Experienced Master Gardeners are welcome to attend any of

these sessions and receive continuing education points. We will start at 8:30 a.m. everyday and be done by 4:00 p.m. If you'd like to join us for lunch please contact Beth Phelps at 340-6650 by noon on the Monday before the Wednesday training. The cost of lunch will be \$6.

NOVEMBER

"Techniques of Birding" will be the topic at the Garland County Audubon Society meeting at 7 p.m. **Nov. 12** at the Garland County Library in Hot Springs.

Susan Barry will talk about "Best and Newest Florists' Roses" at the Fort Smith Rose Society meeting at 2 p.m. **Nov. 15** in the Flanders Building at Westark College.

The annual Herbal Elves Holiday Workshop and Luncheon will be **Nov. 21** at the Ozark Folk Center State Park in Mountain View. This intensive seminar is designed to build creative confidence and inspiration for using plant materials from your own garden and environment — and you take home a completed project. Paid preregistration is required. The cost is \$40 and includes materials and lunch. (870) 269-3851.

Gerald Klingaman will talk about rock gardening at the Lo-

gan County Master Gardener meeting at 7 p.m. **Nov. 24** at the Cumberland Presbyterian Church in Clarksville.

The University of Arkansas Extension Service will conduct a seminar about starting a horticultural business **Nov. 30-Dec. 1**. Call Gerald Klingaman at (501) 575-2603.

DECEMBER

The Hot Springs Council of Garden Clubs will host its Christmas Tour of Homes from 1 to 4 p.m. **Dec. 4-5**. Call Bob Byers at (501) 262-2711.

1999

Dawn Jackson, class of 1996, is already looking ahead to the Arkansas Flower and Garden Show in February. Jackson is the chairman of the children's committee for the annual flower show and already planning lots of fun activities for our children and grandchildren. She's looking for co-chairs to 1) help coordinate children's crafts, 2) organize a children's display garden, 3) lead tours of school children on Fri-

Trading Post

By Frances Young

Marge Van Egmond, 224-7632, has Four O'Clock seeds.

Suzanne O'Donoghue, 661-9658, has Althea.

Jan King, 758-3446, has Coreopsis (the creeping kind), purple coneflowers, old orange daylilies, Valarian, Siberian iris.

Martha Whitehurst, 868-4517, has mint that didn't die this summer — apple, spear, chocolate, orange.

Barbara Green, 835-0195, wants "large" gourd seeds.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson

November Checklist

VEGETABLES

The flavor of greens seems to improve after they have been nipped by frost, so wait to harvest greens and cole crops (such as broccoli, cabbage and kohlrabi) until a hard freeze is forecast. Cole crops will withstand temperatures as low as 26 degrees, collards and kale will tolerate 20 degrees.

FIRST FROST

After the first killing frost, pull out your spent annuals. Cut off tops and dig up your amaryllis, tuberous begonias, caladiums, dahlias, gladiolus, ismene and other tender bulbs. Hang them indoors in mesh bags. When your perennials have finished blooming, cut them back to just a few inches above the ground. Dead stalks and other debris left in the garden provide choice locations for insects and diseases to overwinter. Remove and destroy any infested material. After the first frost, replenish mulch on azaleas, camellias, and gardenias. Half-rotted hardwood leaves are a good mulch for acid loving plants like azaleas and camellias. If ice or snow is expected, cover up your gardenias with a burlap wrap or other similar material. Or, you can surround gardenias with wire mesh and fill with leaves to protect them from the winter.

FLOWER BEDS

When the soil temperature reaches 60 degrees at six inches, it is time to plant spring flowering bulbs. Dig out the entire bed to the recommended depth (three times deeper than the diameter of the bulbs to be planted) and set out bulbs in a staggered pattern. Mix organic matter into the backfill soil. Carefully refill the bed to avoid disturbing the bulbs. Topdress the

By Libby Thalheimer

area with a slow release fertilizer (5-10-20) for daffodils, (9-6-6) for tulips and lilies. For a winter showing, plant annuals: bachelor buttons, Chinese forget-me-nots, English daisies, delphiniums, dianthus, foxglove, Johnny-jump-ups, nasturtium, ornamental cabbage and kale, pansies, poppies, rocket larkspur, snapdragons, stock, violas, and wallflowers. Or perennials: hardy amaryllis, coneflowers, crinums, Shasta daisies, daylilies, African irises, lycoris, liatris, and wreath goldenrod. Apply a three inch layer of pine needles or finely ground bark to keep down weeds. Note: too deep of a layer of mulch can smother your plants.

LAWN CARE

The best length for grass in the winter is 1.75 inches. Fescue lawns need a final application of ammonium nitrate (34-0-0) at three pounds per 1,000 square feet. Keep leaves raked, or mow with a mulching blade to add organic matter to your lawn.

ORNAMENTALS

There is still time to plant or transplant trees and shrubs. Protect newly planted young trees from winter and wildlife with a paper or plastic trunk wrap, available at garden centers and hardware stores. Thanksgiving week is the time to plant rose cuttings. Select a well-drained spot, and cover the cutting with a glass jar — or use wheat straw which lets in light and water but protects from the cold.

NOVEMBER COLOR

Asters, camellias, chrysanthemums, cleorodendron, dogwoods, eupatorium, grasses, hollies, nandina, possum haw, rosehips, solidago, viburnum, violas, and witch-hazel.

Heuchera, continued from Page 2

of its hybrids:

- H. "Bressingham hybrids" have mixed colors, white, pink and red. Their flowers reach two feet in height.

- H. "Chatterbox," deep rose-pink, one and one-half feet.

- H. "Pluie de feu," cherry red, one and one-half feet.

- H. "Rosamundi," coral pink, one and one-half feet.

- H. "White Cloud," white to cream, one and one-half feet.

- H. micrantha, "Palace Purple," bronzed leaves with deep purple veins, white flowers, height 18 inches, spread 18 inches.

The corals and pinks are reputed to flower for longer periods than white and cream kinds, but people who grow "Palace Purple" in Central Arkansas say it flowers a very long time.

What Works!, continued from Page 1

Aboveground Crops: 18, 19, 22, 23, 27, 28

Root Crops: 8, 9, 15, 16, 17

Transplant: 18-25

Flowers: 8, 9, 15, 16, 17

Kill Plant Pests: 10, 11, 12, 13, 14, 24, 25, 26

AUTUMN HARVEST

- * Harvest gourds when the rind is hard and its vines begin to shrivel, or after the first killing frost. Air dry and mist with hair spray or shellac.

- * Harvest sweet potatoes right around the first frost. Store in a cool dry place.

- * Carrots can be harvested as needed all winter long if they are mulched.

- * Don't even consider tasting a persimmon until after the first killing frost. Before that, they are inedible!

What Works! is a forum for gardening, design, and craft ideas. Call Shalah with hints and ideas at 666-8180.



MASTER MINUTES

December 1998

Volume 9 / Issue 10

Foliage, structure and design: Evergreen vines lift garden trouble spots

By Julia Loyall

Plant of the Month: Evergreen screens for central Arkansas

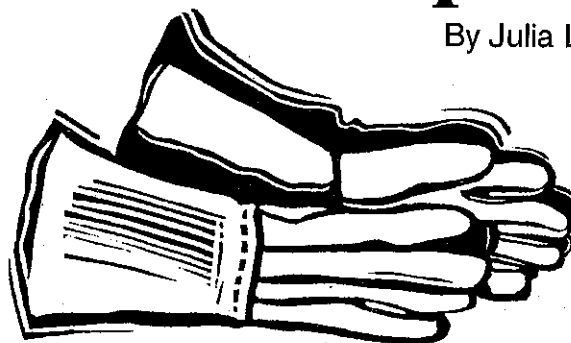
by Julia Loyall

Something in your garden you'd like to hide? Air conditioner, chain link fence, undisciplined compost heap?

Strategically placed, evergreen shrubs will do the job, but the size and number of plants needed might represent much digging and expense. Shrubs might use garden space you'd rather not lose.

Perhaps evergreen vines or climbing shrubs could provide the year-round screen where you need it for less expenditure and effort. Most grow rapidly and take up little space at ground level.

There are climbing varieties of the shrub **euonymus** which reach a height of two to four feet or more. Some are variegated, with cream-colored leaf borders. *Euonymus* flowers are



inconspicuous, but fall leaf colors are often bright, and berries last until frost. *Euonymus fortunei carrierei* may have variegated leaves and bears many berries. It may spread two to five feet. *E.f. vegetus* is similar

in growth habit but less trailing.

These euonymus varieties will grow in full sun or partial shade. They should have good soil and lots of water, especially when young or during prolonged dry spells. *Euonymus* scale and aphids may attack young plants. Apply dormant oil and contact insecticides if needed.

Propagate evergreen euonymus with semi-hard cuttings in summer or hardwood cuttings in fall. Contact your nurseryman for the climbing varieties or get cuttings from a gardener friend.

Akebia is a fast-growing, twining vine with compound leaves, evergreen in central Arkansas. Male flowers are purplish brown, and female flowers are tan. *Akebia quinata* has leaves with five leaflets, three to five inches long. Its inconspicuous flowers open at night and are aromatic. *A. trifoliata* has leaves with three leaflets. Leaves have notched tips and wavy edges. Flowers appear in middle to late spring.

Crossvine is an Arkansas native and makes an excellent screen. The tendrils of crossvine

In this issue ...

- 2 Perennial of the Year
- 3 MG Calendar and Notes
- 3 Trading Post
- 4 Horticulture Societies
- 6 December Garden Checklist
- 7 What Works!
- 8 New Varieties for 1999

help it readily cover a chain link fence, arch or trellis. This vine, *Bignonia capreolata*, or *Anisostichus capreolatus*, has compound leaves with two leaflets, 2-6 inches long. Two-inch, red-orange, trumpet-shaped flowers form in groups at the junctures of leaves and stems. In fall the seed pods may reach eight inches. Flowers and seed pods very much resemble those of the deciduous trumpet vine, but crossvine leaves are quite different.

Fatshedera lizei has shiny, ivy-like leaves which may grow up to seven inches long and 10 inches wide. It will need tying to its supports or trellis. The tiny light-green flowers which develop in early or mid-fall form clusters which may be 10 inches in length.

Don't forget the fragrant **honeysuckle** of the *Lonicera* family. This vining shrub attaches to your chain link fence or trellis with twining stems which have disc-like little pods. The fragrant, tubular flowers appear throughout the summer.

Lonicera heckrottii has coral blossoms. *L. henryii* has small, purplish-red flowers and leaves to four inches long. *L. sempervirens* has trumpet-shaped red-to-yellow flowers from late spring through summer. Butterflies and grandkids like to sip honey from those flowers.

Be sure to keep honeysuckle neat by trimming out stems which have died back from

injury or drought, and prune back wayward growth as needed. Watch out for the Japanese variety of honeysuckle — it is invasive.

There are ivy lovers and ivy haters: You will be better-disposed toward ivy if you make it behave by pruning. Ivy will spread like crazy if its happy in its situation. It is difficult to remove them from your brick house or wood siding.

Ivies like a rough surface for climbing and will disguise a tree stump, cling to a brick mailbox pillar or soften a stone wall. All the ivies send out rootlets along their stems that enable them to attach to rough surfaces including tree bark and concrete blocks. Smooth plastic trellises may not work.

Some of the many ivy varieties are deciduous or semi-evergreen, such as Boston ivy. All the ivies have stalked, alternate leaves. Flowers are tiny and greenish; fruits are black. The decorative foliage makes ivy an attractive choice.

The following ivy varieties are considered evergreen in central Arkansas:

Hedera canariensis (Algerian ivy) has six-inch leaves with dark red twigs and leaf stalks. *H. canariensis variegata* has cream-colored leaf margins. *H. colchica* has dark green, sometimes lobed leaves, which may be four to 10 inches wide. *H. helix* (English ivy) has two- to five-inch leaves with three to five lobes. The foliage is deep green above, yellow green on the underside. There are varieties with purple or yellow leaves. *H. helix baltica* is an especially hardy English ivy with dainty, little leaves.

Goldsturm black-eyed Susan 1999's perennial of the year

Rudbeckia fulgida var. *sullivantii* 'Goldsturm' has been selected by the Perennial Plant Association as the 1999 Perennial Plant of the Year. Acclaimed internationally as one of the most popular perennials for the past 50 years, its bright golden-yellow flowers shine in gardens worldwide. In 1937 Heinrich Hagemann observed a glorious stand of *Rudbeckia fulgida* var. *sullivantii* at Gebrueder Schuetz's nursery in the Czech Republic. Recognizing the superiority over other commonly grown *Rudbeckia* species, Hagemann convinced his employer Karl Foerster of Potsdam, Germany to propagate his discovery. World War II interfered with the planned debut of the plant. It was not until 1949 that the triumphant success of *Rudbeckia fulgida* var. *sullivantii* renamed 'Goldsturm' began. 'Goldsturm' is the German translation of "gold storm".

This plant was selected for its long season of ornamental effect, adaptability to most areas of North America and ease of production. 'Goldsturm' is a reliable performer in hardiness zones three through nine. The golden-yellow flowers supply nectar for butterflies and seeds for birds from July to October in full sun to light shade in well-drained consistently moist garden soil.

Master Gardener Calendar and Notes

By Laurie Pierce

CLASS OF 98

Congratulations to our 1998 class of Pulaski County Master Gardeners. Maybe you'll see the name of someone you know!

Shirley Acchione, Lisa Herrin-Allen, Melissa Clark Bacon, Stewart Bell, Verlene Bowdry, Rose Bradley, Tom Bruce, Jeanie Burton, Becky Campbell, Lois Clifton, Rose Crane, Tweed Culpan, Brenda Curtis, Dan Curtis, Cyndy Daugherty, Nelwyn Davis, Lisa Ferris, Mary Funk, Lee Gershner, Ann Green, Charlene Hardcastle, John Harris, Sandy Harrison, Coy Hively, Diane Holt, Joan Humphries, Lisa Jackson, Ben Jordan, Dee Kelliher, Phyllis Kelly, Nancy Kirsch, Adele Lloyd, Marilyn Mason, Nan Mathews, Peggy Muncy, Linda Murphey, Gena Norris, Jim Oakley, Sylvia Orton, Tammala Pope, Carolyn Prickett, Susan Ritchie, Willas Sayre, Frances Searcy, Beth Shields, Claudia Stallings, Melissa Swope, Bill Trimble, Tim Vinyard, Lynn Wallace, Mary Walton, Gail Weintraub, Cheryl Matteson-Wilson, Laura Ann Wilson, Lynne Woods.

DUES

Pulaski County Master Gardener membership dues are \$10 per year. Send checks to Kevin Allis, 3110 Happy Valley Drive, Little Rock 72212, 228-7007.

Graduates of the fall 1998 master gardener class do not pay 1999 dues. Bring your checkbook to the Jan. 12 Pulaski County Master Gardeners' meeting!

DECEMBER

The Missouri Botanical Garden, St. Louis, will host holiday luncheons in the Victorian tradition Dec. 14 and 16 at the tower Grove House. Tower Grove is the country home of the garden's founder, Henry Shaw. (314) 577-5150.

The Central Arkansas Cactus and Succulent Society will meet at 2 p.m. Dec. 13 at Arkansas Analytical Laboratories in Otter Creek Mall.

The Arkansas Unit of the Herb Society of America will meet at 11:30 a.m. Dec. 17 at the Little Rock Garden Center, Kavanaugh and Lee.

The Arkansas Orchid Society will meet at 1:30 p.m. Dec. 20 at Christ Episcopal Church, Capitol Avenue and Scott Street.

The Garden Gate Shop at the Missouri Botanical Garden, St. Louis, will conduct its annual end-of-the-year sale 9 a.m. to 5 p.m. Dec. 26-28. (800) 642-8842 or (314) 577-9400.

JANUARY

The annual holiday wreath exhibit at the Missouri Botanical Garden continues through

December to Jan. 3. Some of the wreaths are available for sale. Also through Jan. 3 is the annual holiday floral exhibition featuring six interactive vignettes. (800) 642-8842 or (314) 577-9400.

FEBRUARY

A fruit tree pruning workshop will be Feb. 9 at the Experiment Station in Clarksville. The rain date will be Feb. 16. 340-6650.

The Arkansas Flower and Garden Show will be Feb. 19-21 at the Statehouse Convention Center. Lots of committees still need volunteers — call Beth to find out how you can make the 1999 show unforgettable.

SPRING

Janet Carson and Kruger Tours will lead a Master Gardener Tour of Southern Gardens May 2-8. Featured gardens will include the Biltmore Estate, Cheekwood Botanical Gardens in Nashville, Gardens of the Opryland Hotel, Plant Delights in Raleigh, McMinnville Nurseries, University of Tennessee Trial Gardens and the arboretum at the University of North

Trading Post

By Frances Young

Marian Berry, 663-1693, has obedient plant and a tiller that needs a new pull.

Patty Wingfield, 225-5758, wants forsythia bushes, she will dig them up.

Marge Van Egmond, 224-7632, has Four O'Clock seeds.

Martha Whitehurst, 868-4517, has mint that didn't die this summer — apple, spear, chocolate, orange.

Barbara Green, 835-0195, wants "large" gourd seeds.

MASTER MINUTES STAFF 1998

Editor	Laurie Pierce
Art	Lisa Mantle
Photography	Kelly Quinn
Staff	Guy Baltz
	Shalah Brummett
	Susan Crisp
	Jan Gaunt
	Helen Hronas
	Julia Loyall
	Paul McDonnell
	Laurie Pierce
	Libby Thalheimer
	Frances Young
	Claude Epperson

In touch with gardening and conservation —

Earlier this year, Julia Loyall reported on Arkansas' plant societies. Now Bob Byers of Garvan Woodland Gardens, Hot Springs, shares his list of state and local societies, national plant societies, state agencies, and regional gardens.

LOCAL SOCIETIES

Arkansas Federation of Garden Clubs

Jane Kramer
1720 University Ave.
Little Rock, AR 72204
(501) 663-5289

Central Arkansas Beekeepers Association

Donald Little
(501) 868-1097

Classes:

Apiary Section
Arkansas Plant Board
(501) 225-1598

Arkansas Daffodil Society
Char Roush

595 Grant 758
Sheridan, AR 72150
(870) 942-7957

Arkansas Daylily Society
Joel Stout

45 Sunny Gap Road
Conway, AR 72032
(501) 327-7520

Arkansas Hosta Society
Joe Dickens

8215 Crossroads
Benton, AR 72015
(501) 778-6493

Arkansas Native Plant Society
Don Crank

P.O. Box 20116
Hot Springs, AR 71913
(501) 262-1571

Arkansas Nurserymen's Association

Anne Borg, Executive Director
P.O. Box 21715
Little Rock, AR 72221-1715
(501) 225-0029 Phone
(501) 224-0988 FAX
growark!@aol.com
<http://www.arkansasna.org>
Blytheville Rose Society
Freddie L. Robert

1140 Ohio Street
Blytheville, AR 72135
Little Rock Council of Garden Clubs

Jeanne Spencer, President
1501 Kavanaugh
Little Rock, AR 72205

Ouachita Chapter, Native Plant Society

John Pelton
622 River Ridge Lane
Benton, AR 72015

(501) 794-1883
Arkansas Orchid Society
Yvonne Becker

19 Jabali Way
Hot Springs Village, AR 71909
(501) 922-3296

Arkansas Unit: Herb Society of America

Beverly Fennell
1228 Eagle Pointe Road
Little Rock, AR 72211

(501) 221-3144
Arkansas Audubon Society
Sandy Berger

2117 S. M
Fort Smith, AR 72901
(501) 785-1921

Garland County Audubon Society

Wayne and Marti Lynch
472 Rock Creek
Hot Springs, AR 71913

(501) 767-5554



Central Arkansas Rose Society
Carol Shockley
144 E. Siebenmorgan
Conway, AR 72032
Fort Smith Rose Society
Susan Barry
1617 Queensbury Way
Fort Smith, AR 72908-9067
Central Arkansas Cactus and Succulent Society
Roy James
(501) 821-5644
Central Arkansas Horticultural Society
Mrs. Ray Sarmiento
6909 Flintrock Rd.
North Little Rock, AR 72116-5150
(501) 835-2890
Central Arkansas Iris Society
Tom Dillard
12 Normandy Road
Little Rock, AR 72207
(501) 666-7882
Hot Springs Daylily Society
Mike Brown
393 Hidden Valley Rd.
Hot Springs, AR 71913
(501) 525-8573
Hot Springs Iris Society
Lyle Reininger
398 Prichard
Hot Springs, AR 71913
(501) 321-1799
Nature Conservancy
Nancy DeLamar
601 University Ave.
Little Rock, AR 72205
(501) 663-6699, ext 22 Phone
(501) 663-8332 FAX
Northwest Arkansas Rose Society



Local, state and national societies

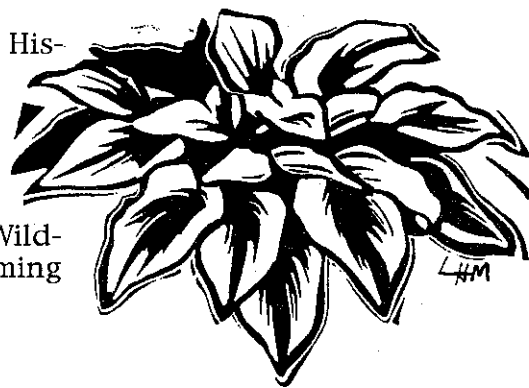
Societies, continued from Page 4

Mrs. Dora Nichols
216 W. Poplar
Rogers, AR 72756
(501) 936-7290
Northwest Arkansas Rose Rustlers
Mrs. Dora Nichols
216 W. Poplar
Rogers, AR 72756
(501) 936-7290
Ouachita Herb Society
Rhonda Ragsdale
2130 S. Moore Rd.
Hot Springs, AR 71913
(501) 525-9120
Sierra Club
Glen Block
2019 N. Arthur Street
Little Rock, AR 72207
STATE AGENCIES
Arkansas Natural Heritage Commission
1500 Tower Bldg. 323 Center Street
Little Rock, AR 72201
(501) 324-9619
<http://www.heritage.state.ar.us/nhc/>
info@dah.state.ar.us
University of Arkansas Cooperative Extension
Janet Carson
P.O. Box 391
Little Rock, AR 72203
(501) 671-2174 Phone
(501) 671-2303 FAX
<http://www.uaex.edu/>
Institutions
Arkansas Arboretum at Pinnacle Mountain State Park
11901 Pinnacle Valley Road
Roland, AR 72135
(501) 868-5806
Eureka Springs Gardens
Rt. 6, Box 362
Eureka Springs, AR 72632
(501) 253-9244
Garvan Woodland Gardens
230 Memorial Hall, U of A
Fayetteville, AR 72701
Tour Information (888) 530-6873
Hot Springs contact Bob Byers
(501) 262-2711

gwg@byers-soft.com
<http://www.byers-soft.com/tcg/>
Ozark Folk Center
Tina-Marie Wilcox or Deborah Redden
P.O. Box 500
Mountain View, AR 72560
(870) 269-3851
Peel Mansion Museum and Historical Gardens
Joan Clifford
400 S. Walton Blvd.
Bentonville, AR 72712
(501) 273-9664
Wildwood Arboretum of Wildwood Park for the Performing Arts
Ann Chotard
20919 Denny Road
Little Rock, AR 72223
(501) 821-7275, ext. 0
<http://www.wildwoodpark.org/>

NATIONAL SOCIETIES

American Horticultural Society
7931 East Boulevard Drive
Alexandria, VA 22308-1300
(703) 768-5700
<http://www.ahs.org/>
American Daffodil Society
4126 Winfield Road
Columbus, OH 43220-4606
(614) 451-4747
<http://www.mc.edu/~adswww/>
American Hemerocallis Society
James R. Brennan
37 Maple Ave.
Bridgewater, MA 02324
<http://www.daylilies.org/daylilies.html>



American Hosta Society
Robert C. Olson
2840 Glenhurst
St. Louis Park, MN 55416
(612) 920-8327
<http://www.hosta.org/>
American Iris Society
8426 Vine Valley Drive
Sun Valley, CA 91352-3656
<http://www.isomedia.com/homes/AIS>
American Rose Society
P.O. Box 30,000
Shreveport, LA 71119-0030
(318) 938-5402
<http://www.ars.org/>
The National Audubon Society
700 Broadway
New York, NY 10003
(212) 979-3000
Memberships (800) 274-4201
<http://www.audubon.org/>
The Nature Conservancy
1815 N. Lynn Street
Arlington, VA 22209
(703) 841-5300
<http://www.tnc.org/>
North American Rock Garden Society
PO Box 67
Millwood, NY 10546
<http://www.nargs.org/>



December Checklist

By Libby Thalheimer

HOUSEPLANTS

Rotate plants from dim locations to sunny ones to keep them in better condition through winter. Remember to avoid placing them near vents: dry heated air will damage the leaves. Check plants weekly to ensure the soil is moist. Bring in a branch of mahonia or acuba for the winter. Placed in water, they both root easily.

ORNAMENTALS

In mid-January, fertilize trees if they don't get fertilized along with the grass. Trees and shrubs may be moved in late January any time soil is friable enough. Spray broad-leaved evergreens — hollies, photina and euonymus — with dormant oil just before bud break, if infested with scale. January is a good time to plant winter-blooming shrubs like winter honeysuckle (*Lonicera fragrantissima*) or winter jasmine (*Jasminum nudiflorum*). The latter part of January is an ideal time to plant sweet peas and poppies. Remember to fertilize pansies regularly all season during any warm spell. Water regularly, especially in cold weather and before a heavy freeze. Don't saturate, they just need to moisture.

PERENNIALS

Cut off dead foliage after frost. Remove fallen leaves that can smother mat-forming plants such as pinks and thyme. Cut back frost-nipped perennials now, but leave two to three inch stalks to help prevent accidental uprooting of dormant crowns when you plant in early Spring. Wait until the first hard freeze to apply mulch to keep the soil an even temperature, and to prevent alternate thawing and freezing. Divide plants when new growth appears. Mulch lilies if this was not done at time of planting. Move perennials anytime in late January as soon as the soil is friable.

LAWNS

Apply Atrazine or Simazine to warm-season turfgrasses for preemergence and/or postemergence control of annual bluegrass and selected winter annual broadleaf weeds from November through February.

VEGETABLES

Add a six to eight inch layer of leaves, pine needles or hay to beets, turnips, radishes, parsnips and other root crops so the vegetables can be harvested as needed. Kale and spinach also overwinter in most areas (mulch with pine straw). Although growth will stop in cold weather, it will resume in spring, producing greens into May. If you are growing cover crops, consider turning it into the soil with a fork or tiller during the middle of January. This will give 6

the green materials time to break down and enrich the soil before planting time. Start broccoli and cabbage seeds indoors in January: Transplant six to eight weeks later.

COLD PROTECTION

To protect cold-sensitive plants from a freeze, cover them with a box, blanket, burlap or sheets. Use wire mesh to surround cold-sensitive plants and fill with leaves. Protect the grafts of tender young fruit trees by wrapping with towels or with newspaper about 10 sheets thick.

COMPOST

Keep adding debris and turning your compost piles. Pine needles do not break down as fast as leaves and other clippings. You may want to consider using the needles this year for a "top" mulch, that is to cover tender plants and dress up any bare areas in your yard.

GARDEN CLEAN-UP

Dead stalks and other debris left in the garden provide choice locations for insects and diseases to overwinter. Remove and destroy any infested material, add the rest to your compost heap. Keep leaves off the lawn. Mow them once without the bag on your mower. Then mow again and collect. You'll use a lot fewer bags this way.

PLANNING

If you can't garden now, you can plan for next season. Winter is a good time to prepare the soil for new beds and amend it. Whether your soil is clay or sand, it will benefit from the addition of compost, manure, or other organic matter. Plan changes, additions or corrections to your garden. Garden catalogs and seed books are a good source for ideas and hard to find items. Order seeds for early planting. This is a good time to take inventory of your tools and to clean, oil and sharpen. Check condition of spraying equipment, hose attachments or pressure sprayers. Make an inventory of flats, stakes, and labels and replenish your supply if necessary. Make necessary repairs to cold frames.

BULBS

After Christmas, stock up on amaryllis bulbs as the price plunges. Put the potted bulbs in a warm, sunny spot, and water sparingly until growth starts; then keep soil moist. The timing will be just right for a show of blooms on Valentine's Day.

WINTER SHOW

Flowers: Acqifolium, camellias, heather, helleborus, osmanthus, tea plant, violas, witch hazel, winter honeysuckle, and winter jasmine. Berries: dogwood, hollies, nandina, possum haw, rosehips, viburnum.

What Works!

By Shalah Brummett

Since winter's frost has been unusually late this year we have had more time to prepare, putter and play in our gardens. The warm weather has also given us more opportunities to bring the outdoors in — perfect timing to brighten living spaces with nature's holiday cheer!

EVERGREEN FOREVER

Buy a live evergreen to plant for posterity after the holidays. It is a great way to remember a new home or dear family member. And children love having their very own tree.

Here are tips for purchasing a living Christmas tree:

* A smaller tree will be cheaper and easier to move and plant.

* Ruffle the branches: If needles fall off, choose another tree.

* Make sure the root ball is solid, free of cracks and doesn't move separately from the stem.

* Before bringing it indoors, spray the tree with an antidesiccant and allow it to dry outdoors.

* For freshest results, place in a cool spot (at or below 66 degrees) in a pot or tray. Water daily and keep the root ball covered in plastic. Keep inside no more than 10 days — fewer preferred.

* If the soil will be frozen at planting time, pre-dig the hole and store the soil in a warmer place until planting time.

* When planting, the hole should be just as deep and twice as wide as the root ball. Position it and backfill with soil, add water and tamp the soil to remove air pockets. Cover the ground with mulch and double wrap the tree with burlap to protect the foliage from wind.

Four favorite evergreens are:

Colorado spruce: very adaptable and more drought tolerant than other spruces. But does best in the higher elevations of Pulaski County (such as Roland).

Norway pine: grows rapidly in youth and slows in maturity. It tolerates a wide range of soils.

Eastern white pine: pyramidal form, transplants easily.

Scots pine: a hardy tree which withstands dry soils.

ROYAL RED

Poinsettia's deep, rich red remains a popular choice for Christmas decorating. But don't forget about other color choices — the champagne-tinged white ones are especially elegant.

Remember that the poinsettia is perennial overwintering indoors. In summer, cut back and leave outside in ample sun with regular watering. It makes a lovely thick and full potted plant. During the winter holidays, it's relatively easy to keep these beauties showy — Mine do well easily into Valentine's Day.

Floral designer Robin Parker, who is on the flower guild at Trinity Episcopal Cathedral, says the guild sets out the potted plants in the traditional fashion, but also arranges with poinsettias. But the ruby red blooms aren't cut for the altar arrangements — the Trinity Flower Guild puts the rootball and soil in a baggie closed with a twist tie.

Here are some tips for buying and maintaining poinsettias:

* Buy plants as early in the season as possible — I've found gorgeous inexpensive plants on delivery day at Wal-Mart.

* Cover with a paper bag when transferring to the car, then go straight home. Remember this plant is tropical.

* Display in a draft-free location in bright but not direct light, with moderate temperatures.

* Water before the plant dries out — but not too much. Over- and under-watering turns the leaves yellow and then they drop off, leaving you with a scrawny plant.



* Perfect timing and lighting at the end of summer and through the fall is required to force poinsettias to rebloom for Christmas. Forget trying to get it to rebloom and just enjoy a nice thick, easy to maintain houseplant the rest of the year!

SMELLS LIKE CHRISTMAS

One of the best and most memorable ways to create a holiday ambiance is to accent nature's scents. This fills your home with warm hospitality.

And fragrance provides a wonderfully subtle basis for even your smallest projects. Here are some easy ideas:

Mix dried oranges, lemons, apples, cinnamon and cloves with wreaths of redolent pine, cedar and holly.

Potpourri is a spicy way to warm up the home. Here are two:

Simmering Christmas Potpourri

1 cup crumbled bay leaves
4 fresh or dried rosemary sprigs
6 three-inch cinnamon sticks
6 cloves

Rind of one orange

Place all ingredients in a saucepan with four cups of water and bring to a boil. Turn down the heat and allow to simmer for as long as you like. Check often to replace evaporated water.

Holiday Potpourri

1 cup fresh or dried cedar tips
1 cup fresh or dried bay leaves
3 small dried pomegranates
1 or 2 dried orange slices
3/4 cup dried orange peel
1/4 to 1/2 cup crushed cinnamon sticks
2 dozen pine cones of all sizes

New for ninety-nine

Here's a report from the National Garden Bureau about new varieties for 1999. For more information about the National Garden Bureau, phone (630) 963-0770.

Gardeners are looking for new plants every year. Here are new flowers and vegetables that will be featured in 1999 mail order seed catalogs, seed packets or as bedding plants at garden centers. Many of the plants are available only wholesale. So if you don't find them listed in your catalogs, ask at your garden center. The varieties are listed alphabetically by class.

FLOWERS

Begonia F1 Hybrid 'Pin-Up Flame' is a unique yellow flower with orange petal edge.

Marigold 'Bonanza Bolero', an improved dwarf French marigold, is distinct because of its irregular gold and red bicolor pattern.

Osteospermum 'Passion Mix' has single, pink, rose, purple or pure white daisy-like flowers with azure blue centers.

Petunia Celebrity Series 'Carmine' is a deep crimson flower with a beautiful white throat.

Petunia 'Misty Lilac Wave' has large light lavender blooms and is extremely free flowering.

Petunia 'Trailblazer' is a vivid violet.

Phlox '21st Century' has a unique color mix, that includes bright solid crimson, scarlet, coral, blue and white.

Snapdragon 'Crown Pink Appleblossom' are plants with many shorter spikes at once instead of the usual one or two tall central flowers.

Sunflower 'Monet's Palette' is a stunning combination of single-colored flowers in shades of yellow with red, orange and yellow bicolor beauties.

Sunflower 'Sundance Kid' is a unique sunflower with four to six inch semi-double flowers in shades of bronze to pure yellow.

Tritoma 'Flamenco', a perennial, is creamy white, orange, yellow or red.

Verbena 'Quartz Burgundy', a deep wine red color has small white eyes.

Verbena 'Romance Lavender Rose' has luminous purple-toned rose blooms.

Viola 'Four Seasons' are non-stop golden yellow bloomers throughout fall, winter and spring.

Zinnia 'Profusion Cherry' and Zinnia 'Profusion Orange' are both disease resistant and heat tolerant plants.

VEGETABLES

Pumpkin 'Wee-B-Little' has true miniature orange pumpkin round shape, perfect for interior fall decorations.

Squash F1 Hybrid 'Eight Ball,' a round summer squash with dark, zucchini-green skin, may be the first squash that you can't get too much of.

Sweet Corn 'Brilliance,' a white sweet corn with elevated sugars, has a wonderful texture.

Sweet Corn 'Sweet Riser' has a unique combination of genetics that puts three different types of sweet corn all on one ear.

Tomato Hybrid 'Bucks County' is an eight-ounce, deep red beefsteak fruit with the same flavor and succulent texture but also has gorgeous crack-free skin and much higher yield potential.

Tomato F1 Hybrid 'Juliet', red, one ounce tomatoes are produced in clusters like grapes on long vigorous indeterminate vines.

Watermelon F1 Hybrid 'New Queen' is a unique, gourmet, ice-box size watermelon with bright orange, sweet flesh.

What Works!, continued from Page 7

1/4 cup dried rose hips
2 tablespoons orrisroot (chips preferably)

4 drops of oil of cinnamon

2 drops of bergamot oil

1 drop of rosemary oil

Combine in a ceramic bowl and when well blended, store in a covered container in a cool, dark place two to three weeks, shaking occasionally. Here's another fragrant idea for holiday entertaining — and you can drink it!

Spicy Cranberry Tea

4 cups water

4 cups cranberry juice

4 orange pekoe tea bags

3/4 teaspoon cinnamon

1 tablespoon sugar

16 cloves

1 Macintosh apple, cut into 8 slices, with seeds removed

16 whole fresh cranberries for garnish

In a saucepan over medium heat, combine the water and juice and bring to a boil.

Place the tea bags in boiling water and juice mixture, remove from heat and let steep for 10 minutes. Remove the tea bags and add the cinnamon and sugar, stirring until the sugar dissolves.

Place 2 cloves in each apple slice and add to the tea. Cover and steep 5 more minutes. Pour into warmed tea cups or mugs and garnish with the apple slices and cranberries.

Makes 8 cups.

Recipe from Gifts From Nature by Matthew Mead (Clarkson Potter Publishers).

What Works! is a forum for gardening, design, and craft ideas. Please pass on fresh ideas from your own experience, magazines, HGTV, friends and neighbors. Call Shalah with hints and ideas at 666-8180, have your ideas ready to jot down at the monthly Master Gardener meeting, or write What Works! c/o Beth Phelps, Pulaski County Extension Office, 2901 W. Roosevelt Road, Little Rock, AR 72204.