

News Edition

VOL. 67 No. 7

A PUBLICATION OF THE AMERICAN HORTICULTURAL SOCIETY

JULY 1988

Versatile Ground Covers



Photos by George Taloumis

Pachysandra and ajuga unify the lines of a home landscape (left), while a combination of ajuga, yew, and evergreen euonymus softens and stabilizes the look of a set of stone garden steps (right).

Long considered the perfect solution for areas where turf is difficult to establish, ground covers have much to offer in their own right, especially when the choice is expanded to include more than just spreading evergreen plants under one foot tall (though there are some excellent plants that fall in this category). Ground covers can unify a landscape, soften a visual effect while other, slower-growing plantings are becoming established, provide seasonal interest, save mowing time, prevent erosion, and tie together a wide variety of other plant

shapes, textures, and colors. Their versatility is mitigated by initial costs, which can be high if you have a large area to cover, and by a labor-intensive period while the ground cover is being planted and becoming established, but ground covers will eventually provide a beautiful, low-maintenance addition to most landscape designs.

The ideal ground cover, according to Gary Koller, supervisor of the Living Collections at The Arnold Arboretum of Harvard University, is "dense, aggressive, and persistent over time." A plant's usefulness

as a ground cover is usually a product of its horizontal growth habit, accomplished by the plant's sending out suckers or underground rhizomes, or sometimes by the plant's low branching habit. Many ground covers also flourish in partial to complete shade, in contrast to turf, which often will not grow well in shade. And quite a few plants not usually considered to be ground covers, such as ferns, ornamental grasses, and many perennial plants, make excellent ground covers as well for selected areas, even when they don't fit the usual pattern of being low, spreading, and evergreen. With

American Horticultural Society

OFFICERS 1988-1989

PRESIDENT:

Mrs. Carolyn Marsh Lindsay, Rochester, NY

FIRST VICE PRESIDENT:

Mrs. Harry J. Van de Kamp, Paso Robles, CA

SECOND VICE PRESIDENT:

Mrs. John M. Maury, Washington, DC

SECRETARY:

Mr. Richard C. Angino, Harrisburg, PA

TREASURER:

Mr. Richard J. Hutton, West Grove, PA

IMMEDIATE PAST PRESIDENT:

Mr. Everitt L. Miller, Kennett Square, PA

BOARD OF DIRECTORS

Mr. Richard C. Angino, Harrisburg, PA

Gerald S. Barad, M.D., Flemington, NJ

Mrs. Benjamin P. Bole, Jr., Cleveland, OH

Mr. J. Judson Brooks, Sewickley, PA

Dr. Henry M. Cathey, Washington, DC

Mr. Russell Clark, Boston, MA

Mrs. Erastus Corning II, Albany, NY

Mrs. Ann Lyon Crammond, Atlanta, GA

Mr. Edward N. Dane, Boston, MA

Mrs. Beverley White Dunn, Birmingham, AL

Mr. Richard J. Hutton, West Grove, PA

Mr. Stephen F. Keating, Minneapolis, MN

Mrs. Carolyn Marsh Lindsay, Rochester, NY

Mrs. John M. Maury, Washington, DC

Mr. Everitt L. Miller, Kennett Square, PA

Mr. John C. Mitchell II, Denver, CO

Dr. Julia W. Rappaport, Santa Ana, CA

Mr. Frank L. Robinson, Charlottesville, VA

Mrs. Philip Temple, Little Compton, RI

Mr. Roy G. Thomas, Woodstock, VT

Mrs. Harry J. Van de Kamp, Paso Robles, CA

Mr. Andre Viette, Fishersville, VA

Mr. John H. Whitworth, Jr., New York, NY

Mrs. Jean Verity Woodhull, Dayton, OH

AMERICAN HORTICULTURIST

PUBLICATIONS DIRECTOR: Virginia W. Louisell

EDITOR: Kathleen Y. Riley

ASSISTANT EDITOR, HORTICULTURE:

Laura E. Coit

ASSISTANT TO THE EDITOR: Martha Palermo

DESIGN DIRECTOR: Rebecca K. McClimans

MEMBERSHIP DIRECTOR: Sallie Hutcheson

ADVERTISING: American Horticultural Society

Advertising Department, 80 South Early Street, Alexandria, Virginia 22304. Phone (703) 823-6966.

Address all editorial correspondence to: The Editor, American Horticulturist, American Horticultural Society, Box 0105, Mount Vernon, Virginia 22121. AMERICAN HORTICULTURIST, ISSN 0096-4417, is published monthly by the American Horticultural Society, 7931 East Boulevard Drive, Alexandria, Virginia 22308, (703) 768-5700. The American Horticultural Society is a nonprofit organization devoted to excellence in horticulture. Botanical nomenclature in AMERICAN HORTICULTURIST is based on HORTUS THIRD. National membership dues are \$30; two years are \$55. Foreign dues are \$40. \$12 of dues are designated for AMERICAN HORTICULTURIST. Copyright © 1988 by the American Horticultural Society. Second-class postage paid at Alexandria, Virginia and at additional mailing offices. Postmaster: Please send Form 3579 to AMERICAN HORTICULTURIST, Box 0105, Mount Vernon, Virginia 22121.

an imaginative approach, the list of ground covers expands to include an exciting array of possibilities in addition to the usual reliable standbys.

Planting Time

Careful soil preparation is essential before planting ground covers, just as it is when establishing a fine lawn. Often the first step is the elimination of noxious weeds or the elimination of turf, which can be either physically lifted or, in the case of very large areas, eliminated with an herbicide.

Depending on weather conditions it may take up to two weeks for the area to brown off after the application of an herbicide; it will then be ready to be prepared (by rototilling) and planted. Add six to eight inches of organic matter and a balanced fertilizer if necessary. You may need to add extra phosphorus or lime, depending on your soil's composition and your plants' needs. Once established, ground covers will spend many years in the same location, making it well worth the effort to spend some time in the beginning preparing the soil and providing for additional care and irrigation needs for the period while the plants are settling in.

Once the area to be planted is cleared, lay plants out over the area in pots, moving them around in various configurations until you arrive at a pleasing design. (If you are planting bare-root plants, don't lay them out in large amounts — they will begin to dry out). Staggered rows usually look best and provide the most effective protection against erosion. The best time to plant depends on your location: where winters are cold, plant in spring to allow plants to settle in over a long growing season; where winters are mild, plant in fall. The long, cool growing season will help plants get established before the onset of summer heat. It is a good idea to mulch your plants, since they will need a moist soil to enable runners or stems growing on the surface to take root. Mulching also helps keep down weeds.

Secrets of Success

Koller has these comments about establishing ground covers: "Consider site conditions (dry, wet, sun, deep shade) when choosing a ground cover plant. One of the most common causes of failure is choosing the wrong plant for your location. Another cause of failure with ground covers is neglect during the crucial period when they are getting established. Though most ground covers are ultimately low-maintenance plants, they usually need careful irrigation and weeding during the time they're getting established, usually two

Different ground covers can be used together for interesting effects: combine evergreens with deciduous ground covers, or woody and herbaceous types, taking care not to use an overly aggressive plant.

to three years." Koller also suggests spending a little more in the beginning and placing plants closer together. In the long run, the purchase of superior plants, well suited to your site, will pay off handsomely, even if it means doing small areas at a time or propagating your own plants from divisions. This works much better than a "quick fix" of inexpensive but less-than-ideal plants.

A Wealth of Possibilities

One of the sturdiest, most reliable, and most-used evergreen ground covers is also one of the best for very large areas. Ivies (*Hedera* spp.) beautifully fulfill some of the most basic requirements of a ground cover: they spread rapidly, require little maintenance, and thrive in both sun and shade. An undulating carpet of ivy can serve to unify a varied selection of plants that would otherwise appear chaotic. Ivies should normally be planted in well-prepared soil on about a 12-inch center, closer if the area slopes steeply. Careful mulching and frequent watering during the first season or two will usually result in a completely-covered area within two growing seasons.

Hedera helix 'Baltica' is a popular and handsome choice, with dark-green, triangular-shaped leaves and prominent white veins; *H. helix* 'Buttercup', which was awarded the Pennsylvania Horticultural Society's Styer Award of Garden Merit for outstanding new plants earlier this year, provides exciting color interest with chartreuse leaves that change to butter-yellow and then to dark green as the plant matures. 'Buttercup' has been successfully grown in full sun; its color is less prominent when it is planted in shade.

Creeping myrtle or periwinkle (*Vinca minor*) is another favored standby that performs well in shady areas. The plant is evergreen with long, dark-green leaves and a trailing habit; small, light-blue flowers appear in the spring. Mary Hirshfeld, curator at Cornell Plantations in Ithaca,



Stachys byzantina (lamb's ears), universally loved for its "touchable" texture and silvery-gray color, is a good choice for sunny areas. Here, it gently encircles the harsher contours of a rock.

New York, also recommends a white cultivar, 'Miss Jekyll's White', that she has used with success in mass plantings under hickories and with rhododendrons; she commends the cultivar for tolerance to sun and to exceptionally wet or dry conditions.

Pachysandra terminalis, or Japanese spurge, is an ideal candidate for shady spots; its unusual leaf texture and uniform growth height make it a versatile design element that can either stand alone or unify other plant groupings. This plant, which truly lives up to its low-maintenance designation, produces a thick mat whose glossy-green leaves contrast with white flowers in spring. *P. terminalis* 'Variegata' is especially effective in brightening shady areas, though it is not as vigorous as the species. *Pachysandra* will thrive in deep shade where little else would survive.

Ajuga reptans, the blue bugleweed, is an easy-to-grow ground cover that is tolerant of shade. Preferred cultivars include 'Bronze Beauty', with bronze foliage and blue flowers, and 'Burgundy Glow', with green, white, and dark pink-to-purple foliage.

Special Selections

Clayton R. Oslund of Shady Oaks Nursery in Waseca, Minnesota, recommends *Epimedium* spp. for their dainty leaves and beautiful early spring blooms, though they spread relatively slowly and require conscientious watering while they are getting established (they will tolerate dry conditions later). *Epimedium* competes well with tree roots (few other plants will),

according to Oslund, and does well in fairly deep shade. He recommends *Epimedium* × *rubrum*, *E.* × *youngianum* 'Niveum' and 'Roseum', which spread evenly, and *E. grandiflorum*.

Peter Ruh of the Homestead Division of Sunnybrook Farms in Chesterland, Ohio also puts in a good word for epimedium for its attractive flowers and foliage, its noninvasive habit, and its ability to tolerate shade, though he confirms the fact that the plant is a relatively slow spreader. He recommends *Epimedium* × *warleyense*, *E. grandiflorum* 'Rose Queen' and 'White Queen', *E.* × *versicolor* 'Sulphureum' (this plant spreads a bit faster), and *E.* × *rubrum*. Ruh warns that if excess leaves aren't raked out of epimedium beds in the spring, the plants will tend to mat rather than rising above the leaves. Epimediums are easily increased by divisions in spring or fall.

Gallium odoratum (syn. *Asperula odorata*), or sweet woodruff, is becoming more popular, according to Oslund, for its unique leaf arrangement and texture; it thrives in shady gardens with moist soil. He also recommends bishop's weed (*Aegopodium podagraria*) as a beautiful plant, though it tends to be invasive. "if you have a tough site, this is the one to choose—it will grow anywhere." A strong caution is in order with this plant—it should only be used in situations with poor, dry soil and never in a site where it might get into other parts of your garden; neither should it be used in a design with other ground covers. It is highly

invasive and very difficult to get rid of once it is established.

European ginger (*Asarum europaeum*) is another effective ground cover, according to Ruh, with very shiny green leaves that form a glistening carpet. The plant is shade-tolerant and self-seeds very readily.

A Host of Hostas

Hosta makes an impressive ground cover. Of the many excellent hostas Ruh singles out the cultivars 'Royal Standard' (a medium-sized all-green-leaved hosta), 'Krossa Regal' (a blue-leaved type), 'Antioch' (a variegated hosta with green leaves and gold borders), 'Gold Standard' (green-edged with a yellow-to-gold center), 'Sugar and Cream' (variegated green leaves with white borders), 'Honeybells' (a tall, fast-growing, fragrant, green-leaved hosta), and 'Blue Cadet' (with small, heavily-textured blue leaves). He also recommends the "Tardiana group," hybrids of *H. tardiflora* and *H. sieboldiana*; a group of medium and small blue-leaved hostas.

Ruh describes hostas as heavy feeders and recommends working one to one and a half inches of compost into the soil in the spring—he uses leaf mold, peat moss, or aged horse or sheep manure. In fall Ruh gives the plants a dose of combined rock phosphate and glaucomate (one tablespoon of each per plant); he waters the plants in summer with a seaweed fertilizer. He avoids chemical fertilizers, which he says tend to burn hostas. Though hostas rarely need to be divided, for increase they do divide easily in the spring.

A Taste of the Unusual

Kurt Bluemel of Kurt Bluemel, Inc., Baldwin, Maryland, recommends the small shrub *Sarcococca hookerana* var. *humilis*, or sweet box, as an underused but excellent evergreen ground cover for deep shade. Sweet box, which spreads by rhizomes, is virtually maintenance-free, according to Bluemel, and its abundant white late-winter blooms and sweet scent are one of the first ambassadors of spring. Other suggestions are *Lamiastrum galeobdolon*, or yellow archangel, *L. galeobdolon* 'Herman's Pride', and *Lamium* 'White Nancy' and 'Beacon Silver', all of which will perform well in deep shade. For a sunny location try *Ceratostigma plumbaginoides*, a semi-prostrate plant with deep blue flowers and reddish autumn foliage; or try *Hypericum calycinum*, an evergreen subshrub that performs well in sandy soils. Bluemel recommends this plant for problem areas.

Bluemel suggests ornamental grasses as excellent ground covers providing subtle and interesting effects. For wet, problem areas

he suggests *Carex flacca*, or blue sedge; he recommends the extremely hardy *Carex morrowii* 'Variegata' in plantings with ferns. *Luzula nivea*, the snowy wood rush, and *Luzula sylvatica*, the greater wood rush, adapt well to shade. *Pennisetum incomptum* is a good performer in a sunny location. And for a dry, full-sun location, the chartreuse September-blooming *Ceslyria autumnalis* is a lovely and effective alternative.

Going Native

Koller provides a list of native American ground covers: *Xanthorhiza simplicissima*, a taller plant (up to two feet), has a less managed look than most ground covers and is tolerant of wet, dry, sunny, or shady conditions; *Asarum canadensis*, with attractive, heart-shaped leaves, works well in dry shade and spreads rapidly. *Paxistima canbyi*, an 8- to 12-inch evergreen, withstands extreme shade or drought and produces a wonderful, dense, year-round mat that turns a nice bronze color in the fall. *Arctostaphylos uva-ursi*, the bearberry or kinnikinnick, sports red fruit and bronze foliage in winter. It grows in full sun to partial shade.

Ferns as Ground Covers

Judith Jones of Fancy Fronds Hardy Ferns in Seattle, Washington, tells us that

Blechnum penna-marina, the alpine water or little hard fern, is a wonderful, compact evergreen creeper, six to eight inches tall, that prefers early morning and late afternoon sun in the Pacific Northwest, and light shade in general in the rest of the country. It makes an impenetrable mat of lustrous, brownish-green fronds. *Onoclea sensibilis*, the sensitive or bead fern, is a very rapid colonizer with beaded, fairylike wands that stay up all winter. It prefers moist conditions. Jones cautions that most *Onoclea* is wild-collected, so it's important to ask the origin of plants before buying them. *Athyrium goeringianum* 'Pictum', the Japanese painted fern, is sturdy and will continue growing "until frost knocks it down." *Polypodium vulgare* holds beautifully all winter but in summer looks like "death warmed over," according to Jones.

She recommends maidenhair fern (*Adiantum venustum*) as a versatile choice that will adapt well in diverse areas of the country. Care should be taken to plant this fern very shallowly. *Cystopteris fragilis*, though it is not showy, is a very good deciduous plant, an aggressive colonizer that is "fantastic for dark, shady corners that might get a little dry."

Jones cautions that many people mistakenly think ferns grow where nothing else will; i.e., in deep, dry shade with severe

root competition. This isn't the case, and dry shade is particularly a problem for ferns. She recommends a minimum of three years' conscientious care while ferns are becoming established, with an annual light top dressing of compost or manure. For problem areas she suggests buying a good-quality ground cloth made of propylene or very high-quality plastic and topping it with eight inches of soil. This discourages weeds and prevents tree roots from coming through while it allows good drainage. Ferns prefer an open and moisture-retentive soil; Jones incorporates pumice, chicken grit, or pea gravel to open it up, along with well-rotted manure or compost and peat moss. Residents of areas with very hot summers may have to take care to compensate for excess heat without creating overly wet conditions.

Combination Plantings

Ground covers can be combined with a host of other plants, yielding interesting and delightful effects. Bulbs are an excellent choice with ground covers, especially some of the autumn-flowering plants such as colchicums or fall-blooming crocus; they can be planted at the same time as the ground cover plants. Some other suggestions from Gary Koller are bleeding-heart, trillium, and Jack-in-the-pulpit. Different ground covers can also be used together for interesting effects: combine evergreens with deciduous ground covers, or woody and herbaceous types, taking care not to use an overly aggressive plant.

Ferns combine well with a wide variety of plants to form interesting ground cover combinations, according to Jones. Some possibilities are hostas, astilbes, primulas, uvarias, trilliums, dicentras, and anemones, which can even be worked under the ferns as they rise up and arch over gracefully. She points out that while people seem to be very concerned about heights when choosing a ground cover, some taller ferns, such as *Dryopteris dilatata*, provide a graceful, weeping structure with an almost skeletal effect that can lead the eye down through the planting.

Ground covers are enjoying a definite resurgence of interest, but their variety, versatility, and design potential are probably still undervalued by a large number of home gardeners who continue to see them as a stopgap solution for difficult sites. Though they can and do perform this function with admirable sturdiness and grace, their potential is far greater; it deserves to be maximized by imaginative gardeners who are exploring new horizons as well as solving garden "problems."

—Kathleen Y. Riley, Editor

Experimenting with Native Crops

Home gardeners can now grow crop varieties developed by native Americans—corn, beans, squash, and other vegetables—from seeds distributed by a nonprofit group whose mission is making sure these specially adapted plants don't disappear.

The 1988 Seedlisting, distributed by Native Seeds/SEARCH in Tucson, Arizona, lists more than 200 types of native crops and is available by sending \$1.00 to Native Seeds/SEARCH, 3950 West New York Drive, Tucson, Arizona 85745.

The colorful selection of corn spans the spectrum and includes types that were grown for specific purposes, such as popcorn. Unusual crops include amaranth (a high-protein grain), chiltepinos (a wild, very hot chile), yellow-meated watermelons, and white-seeded sunflowers. Some of the crops, having been collected from tribes farming under widely-differing growing conditions in the southwest, show tolerance to heat and lack of water. Tepary beans, for example, produce a bumper crop under the hot sun of the desert summer. Other crops are resistant to specific pests, grow well at high altitudes, or have special uses.

The catalog includes planting information, recipes, information about the Indian tribes, and advice for arid-lands gardeners. Native Seeds/SEARCH also returns these seeds to native American farmers free of charge.

Native Seeds/SEARCH is five years old and has 1,400 members; it is a nonprofit seed conservation organization dedicated to seed collection, increase, distribution, research, and education. Activities are focused on traditional native crops of the U.S. Southwest and northwest Mexico. Members of the organization receive a quarterly newsletter and are eligible for the growers network and a ten percent discount on all items sold by Native Seeds/SEARCH. All proceeds and donations go toward continued efforts to preserve these plants in their native habitats and in seed banks, and to study their benefits for humanity. Write to: Native Seeds/SEARCH, 3950 West New York Drive, Tucson, Arizona 85745.

Flowers for Cutting



Interested in something more than zinnias and asters for your cut flower garden?

Whether you have a separate cutting garden or some space in your vegetable plot, or if you just enjoy having flowers for cutting throughout your landscape, consider trying something a bit different when planning next year's garden. Always plant more than you think you will need, as—unlike tomatoes—too many flowers is never a problem. Flowers in your home, on the kitchen table, in the living room, or in the bedroom, are mood improvers, cheering you by bringing the outside in. As a gift, a home-grown bouquet is always appreciated, and unlike zucchini bread or a bottle of wine, lasts almost a week!

Trying something new is exciting, and not necessarily any more difficult than growing old standbys. The following list contains both annuals and perennials which are not commonly seen, though they are easy to cultivate and make long-lasting cut flowers. A small investment in plants or seeds can lead to armfuls of beautiful, unusual flowers for arranging or giving away.

Some Unusual Annuals for Cutting

Ammi majus (white lace flower)—flat-topped clusters of white flowers similar to the common roadside Queen Anne's lace.

Asclepias curassavica (bloodflower)—umbels of milkweed-type flowers, each intricately shaped and colored both scarlet-red and orange.

Centaurea moschata (sweet sultan)—a frilly bachelor's button on long stems; comes

in shades of pink, purple, white, and yellow.

Chrysanthemum × *spectabile* (hybrid daisy)—large daisies with white ray flowers and golden centers.

Emilia javanica (tassel flower)—scarlet or yellow tassel-like flowers on tall wiry stems.

Iberis amara (rocket candytuft)—fragrant snow-white flowers in conical clusters which elongate with age.

Salvia viridis—grown for its leafy bracts in watercolor shades of pink, purple, and white with prominent veining.

Some Unusual Perennials for Cutting

Asparagus officinalis var. *pseudoscaber*—dwarf version of the garden asparagus; provides delicate feathery foliage for cutting all season long.

Astrantia major (masterwort)—delicate heads of flowers surrounded by a "collar" of bracts, making each bloom resemble a Victorian nosegay in shades of silvery white, pink, and rose.

Cephalaria gigantea—a garden giant, to six feet, producing large creamy yellow scabiosa-type flowers with greenish centers.

Eryngium spp. (sea holly)—all of the sea hollies have long-lasting, thistle-like flower heads in shades of gray, blue, or purple, often with a metallic luster.

Scabiosa ochroleuca—great masses of primrose yellow flowers all summer and into fall.

Thalictrum speciosissimum (meadow rue)—fluffy yellow flowers on tall plants; the glaucous blue-green foliage is useful for cutting throughout the growing season.



SUNDIALS
WEATHERVANES
WEATHER INSTRUMENTS
FREE CATALOG

Wind & Weather

PO Box 2320-AH
Mendocino, CA 95460
(707) 937-0323

FIRST & ONLY Greenhouse/Screenhouse Year-Round Combination!

UNIQUE!
ENERGY-SAVING
SUN-PORCH™
INSULATED
WINTER SUN SPACE CONVERTS
TO A SUMMER SCREEN ROOM!



- ☐ Bronze aluminum ☐ Shatter-resistant glazing
- ☐ No foundations required ☐ Easy do-it-yourself assembly
- ☐ Ideal spa/hot tub room.

Send \$2 for Color Catalogues, Prices,
SENT FIRST CLASS MAIL.

Dealer Inquiries Welcome

**SUNBEAM
STRUCTURES
DIVISION**

VEGETABLE FACTORY, INC.
P.O. Box 2235, Dept. AHO
New York, NY 10163

Crape Myrtles Sport Dazzling New Colors

Gardeners are advised to keep their eyes open for some glitzy new colors in crape myrtles in the coming seasons, largely as a result of work done by Agricultural Research Plant Breeder Donald Egolf. Seventeen cultivars have been developed in the last several years by the U.S. National Arboretum, sporting new color variations as a bonus along with an increased resistance to powdery mildew, a disease that encrusts and kills the flowers and leaves of the South's most widely-cultivated summer-flowering tree.

The plants are hybrids bred from the common crape myrtle (*Lagerstroemia indica*), a southeast Asian species brought to America by European colonists, and a mildew-resistant Japanese species (*L. fauriei*). The first cross-breeding was done in 1962 at the Arboretum. The new flower colors include blue-reds, peach-blush reds, and shades of new pinks and purple lavenders—a richer and more diverse color palette than the basic red, white, pink, or lavender flowers of common crape myrtles. Many of the new plants also boast “magnificent bark characteristics,” according to Egolf, which appear on some of the hybrids when they reach about five years old. As the bark peels from the trunks, sinuous mottled patterns of brown, cinnamon, and tan emerge, taking the tree from the category of summer-flowering plant to a plant with year-round interest.

The hybrids range in size from dwarfs to 35-foot trees. They have better tolerance to cold weather than the common crape myrtles; in fact, according to Egolf, some hybrids at the National Arboretum withstand temperatures well below zero degrees Fahrenheit, although he still does not recommend crape myrtle north of Baltimore. “These new hybrids will do much better in the northern edge of the South,” says Egolf. The hybrids have been released to wholesale nurseries in 18 states for further propagation; three of the 17 cultivars have reached retail nurseries and garden centers.

Each cultivar has been given the name of a native American tribe in order to give the plants a distinctive American identity. Here are some of the new cultivars:

Lagerstroemia ‘Biloxi’, ‘Miami’, and ‘Wichita’, mildew-resistant small trees whose sinuous, mottled trunks begin peeling at about three to five years old. These cultivars flower profusely in early summer and continue to flower through September. ‘Biloxi’ has pale-pink flowers, orange-red to dark-red leaves in autumn, and a mottled



Lagerstroemia ‘Biloxi’ (left) provides year-round interest with clear pink flowers in summer, orange-red to dark-red leaves in autumn, and a beautiful mottled gray-brown to dark-brown trunk. Right: *Lagerstroemia* ‘Lipon’.



gray-brown and dark-brown trunk. ‘Miami’ has red-purple flowers, orange to dark russet leaves in autumn, and a dark chestnut trunk color. ‘Wichita’ has light magenta to lavender flowers, russet to mahogany leaves in autumn, and a mottled dark-brown trunk.

Lagerstroemia ‘Acomi’, ‘Hopi’, ‘Pecos’, and ‘Zuni’, with densely branched mounds of finely textured leaves. They are suitable as container plants, foundation plants, or border hedges. ‘Acomi’ has pure white blossoms from late June to September and dark purple-red leaves in autumn. ‘Hopi’ is the most cold-hardy, withstanding temperatures of -24° F. without winter injury. Flowers are clear pink; leaves are bright orange-red in autumn. ‘Pecos’ has pink flowers, maroon leaves in autumn, and peeling dark brown bark in winter. ‘Zuni’ has lavender flowers, with autumn leaves which turn orange-red to dark red.

Growing Tips

These growing hints are taken from *The Lagerstroemia Handbook/Checklist* by Donald Egolf and Anne O. Andrick:

Crape myrtle, which has a shallow, branched, fibrous root system, does not require special care and is best planted in late spring or early summer. It thrives in a warm, sunny location and will flower only

sparsely in partial shade and not at all in heavy shade. The planting site should be well-drained, slightly elevated, and with a southern exposure to promote flowering and control mildew and avoid winter damage. The plant does not have exacting soil requirements and prefers a reasonably good soil of a heavy loam to clay texture, with a pH of 5.0-6.5. Nutrient requirements are minimal, though a light application of a 5-10-5 fertilizer in late spring might be indicated for larger plants or for those with poor soil. Choose an older plant if you live in a marginal hardiness zone; to further ensure survival, use a mulch over the roots or wrap the trunks with straw, burlap, or bamboo matting. Provide periodic deep watering during dry periods. It is better to surface-water the area under the plant than to use sprinklers, which may lead to wet foliage and subsequent mildew problems. Take particular care to thoroughly soak recently transplanted plants when they are planted and to maintain the moisture content of the soil throughout the plant's first two seasons. Don't water excessively in mid- to late-season, though—this may encourage vegetative growth and later winter injury of unhardened wood.

Pruning should be done from late autumn to spring. In areas where serious winter injury occurs, pruning is best delayed until late spring.

Regional Notes



Experts from across the country share notes and knowledge on gardening issues affecting specific regions.

► Steve Cohan of Rancho Santa Ana Botanic Garden in Berkeley, California, reminds gardeners who plant California natives that these plants have special cultural requirements that may make them difficult to integrate into some of the subtropical landscaping designs common in California. Overwatering can be a problem with these plants, leading to root decay, and though they need some supplemental watering while they are getting established, they will do best without watering from June to October. Plant California natives in fall so they can benefit from winter rains; when planted in spring they tend to put out summer growth and suffer from insect problems. They don't need much fertilizer; Cohan suggests a granular slow-release product. They like a well-drained, gritty soil. Two popular California natives that perform well: *Ceanothus* and *Arctostaphylos* (manzanita).

► Kenneth Asplund of The Arboretum at Flagstaff in Flagstaff, Arizona, reminds mountain-area gardeners that August is the best planting time for trees and shrubs, especially in places where the weather is starting to get cooler. Difficult winters make it especially important to give root systems time to get as big as possible. Fall vegetable gardens should also go in during the first week in August.

► Bob Brackman of the Dallas Botanical Garden in Dallas, Texas, encourages Texas gardeners to consider the use of plant materials not normally used as bedding plants. "Tropics work beautifully as

summer bedding plants," suggests Brackman. He recommends *Hibiscus*, *Hamelia*, "super for this area and very underused," and *Mandevilla*, "which is beautiful in summer and thrives in hot weather." These can still be planted in July.

► Karen Smith of the Holden Arboretum in Mentor, Ohio, recommends that herbs be harvested before they begin to get overgrown in August. Midsummer is also a good time to sow seeds of perennials indoors in flats or in containers; put them outdoors in shade and overwinter in a cold frame. Divide and transplant oriental poppies and iris (check iris for borer infestation). Though Ohio tends to be wet in spring it can get very dry in summer; Smith recommends that lawns and newly-planted shrubs be given at least one inch of water a week (measure with a few strategically-placed containers in your yard).

► Chris Pfeiffer of the Washington Park Arboretum at the University of Washington in Seattle reminds Pacific Northwest gardeners that plants native to this region tend to be tolerant of dry summer climates. She describes the Pacific Northwest as a modified Mediterranean climate, with most rainfall occurring in winter when plant evapo-transpiration levels are lowest; she recommends that gardeners concentrate on plants that are adapted to this, and suggests that they will have to compensate with extra summer irrigation when they are using plants native to other regions. This is a conservation issue as well as one which affects horticulture: the over-dependence on plants that require compensatory summer irrigation may put a strain on the resources of the region in especially dry summers.

Plants which adapt well to this climate include: *Arctostaphylos uva-ursi* (kinnikinnik), *Arbutus unedo* (strawberry tree), *Prunus laurocerasus* (cherry laurel), *Cotinus coggygria* (smokebush), and *Myrica californica* (California bayberry).

NOW... BY MAIL!
UNUSUAL, HARD-TO-FIND FLOWER ARRANGING SUPPLIES:
TOOLS, TECHNIQUES, TRICKS OF THE TRADE!

SPECIAL ROSE KIT

To add longer life to roses, we have put together a DELUXE ROSE KIT which includes:

- 1 Stem Stripper
- 1 Swiss Rose Scissor
- 1 Dozen Florever Rose Preservatives

ONLY
24.95
INCLUDING POSTAGE & HANDLING
(CA Residents add 6% sales tax)

The Keth Company
P.O. Box 645
Corona del Mar, CA 92625

OUR LATEST CATALOGUE
1.00



Membership Services

Your satisfaction with our service is very important to us. If you have a question about your membership, please refer to the mailing label on your monthly magazine. It has the information we need to solve the problem as quickly as possible.

Your Membership Expiration Date
8801 = January 1988
Your Membership Number
22303HUTCHS262X
Your Name, Address, Zip Code

Membership Department
American Horticultural Society
P.O. Box 0105
Mt. Vernon, VA 22121
(703) 768-5700.

Gardener's Dateline

► **July 8-12. American Association of Nurserymen's Annual Convention and Pacific Horticulture Trade Show.** Disneyland Hotel, Anaheim, California. Information: AAN, 1250 I St. NW, Suite 500, Washington, DC 20005, (202) 789-2900.

► **July 9-10. Lotus Blossom Festival.** Lilypons Water Gardens, Lilypons, Maryland. Information: Lilypons Water Gardens, P.O. Box 10, Lilypons, MD 21717-0010, (301) 874-5503.

► **July 10. Lecture: African Violets from A to Z.** South Coast Botanic Garden, Palos Verdes Peninsula, California. Information: LuAnn Munns, South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 772-5813.

► **July 12. Sports Turf Seminar and Field Day.** College of the Holy Cross, Worcester, Massachusetts. Information: Professional Grounds Management Society, 12 Galloway Ave., Suite 1E, Cockeysville, MD 21030, (301) 667-1833.

► **July 15. Meadow Walk.** U.S. National Arboretum, Washington, DC. Information: U.S. National Arboretum, 3501 New York Ave., NE, Washington, DC 20002, (202) 475-4857.

► **July 15-17. North American Lily Society Annual International Lily Show.** Royal Botanical Gardens, Hamilton, Ontario, Canada. Information: Royal Botanical Gardens, P.O. Box 399 Hamilton, Ontario, Canada L8N 3H8, (416) 527-1158.

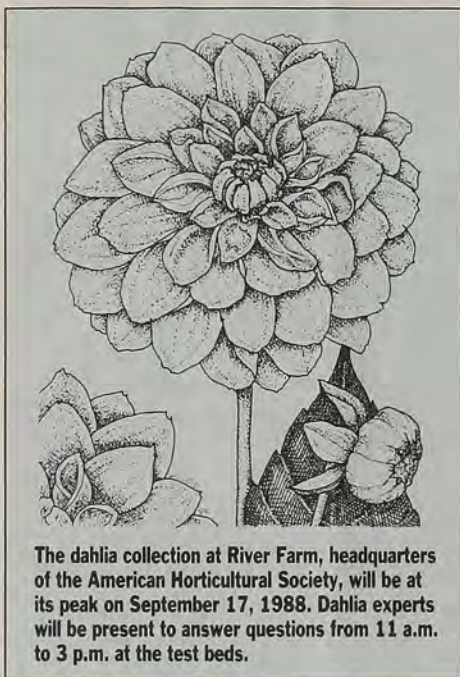
► **July 16-19. Twenty-fifth World Congress of the International Federation of Landscape Architects (IFLA).** Boston, Massachusetts. Information: ASLA Membership Dept., 1733 Connecticut Ave. NW, Washington, DC 20009, (202) 466-7730.

► **July 17. How to Grow and Use Herbs.** South Coast Botanic Garden, Palos Verdes Peninsula, California. Information: LuAnn Munns, South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 772-5813.

► **July 17-20. Third International Herb Growing and Marketing Conference.** Hyatt Regency Hotel and Commonwealth Convention Center, Louisville, Kentucky. Information: Tom Robertson, Room 116 Stewart Center, Purdue University, West Lafayette, IN 47907, (317) 494-7220.

► **July 18-22. Study Course: Deciduous Flowering Shrubs.** Longwood Gardens, Kennett Square, Pennsylvania. Information: Education Division, Longwood Gardens, P.O. Box 501, Kennett Square, PA 19348-0501, (215) 388-6741.

► **July 20-23. Society of American Florists Annual Convention.** Reno, Nevada. Information: SAF, 1601 Duke St., Alexandria, VA 22314, (800) 336-4743.



The dahlia collection at River Farm, headquarters of the American Horticultural Society, will be at its peak on September 17, 1988. Dahlia experts will be present to answer questions from 11 a.m. to 3 p.m. at the test beds.

► **July 23. Garden Symposium: The Garden Adorned.** Old Westbury Gardens, Old Westbury, New York. Information: Old Westbury Gardens, P.O. Box 430, Old Westbury, NY 11568, (516) 333-0048.

► **July 30-31. Begonia Show.** Los Angeles State and County Arboretum, Los Angeles, California. Information: LuAnn Munns, Los Angeles State and County Arboretum, 301 N. Baldwin Ave., Arcadia, CA 91006-2697, (818) 446-8251.

► **July 25-27. International Lawn, Garden, and Power Equipment Expo.** Kentucky Fair and Exposition Center, Louisville, Kentucky. Information: Expo '88, P.O. Box 70465, Louisville, KY 40270, (502) 582-1672.

► **July 26-28. 1988 Penn Allied Nursery Trade Show.** Valley Forge Convention and Exhibition Center, King of Prussia, Pennsylvania. Information: Dennis R. Calabrese, PNA, 1924 North Second St., Harrisburg, PA 17102, (717) 238-1673.

► **July 27-29. American Sod Producers Association Summer Convention and Field Days.** Sheraton Inner Harbor, Baltimore, Maryland. Information: ASPA, 1855-A Hicks Rd., Rolling Meadows, IL 60008, (312) 705-9898.

► **August 3-5. National Meeting of the American Conifer Society.** Longwood Gardens, Kennett Square, Pennsylvania. Information: Longwood Gardens Education Division, P.O. Box 501, Kennett Square, PA 19348-0501, (215) 388-6741.

► **August 6-7. Bromeliad Show and Sale.** South Coast Botanic Garden, Palos Verdes

Peninsula, California. Information: Norma Cantafio, South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 544-1948.

► **August 7-9. 1988 American Horticultural Therapy Conference.** Kellogg West Conference Center, California State Polytechnic University, Pomona, California. Information: Steven H. Davis, AHTA, 9220 Wrightman Rd., Suite 300, Gaithersburg, MD 20879, (301) 948-3010.

► **August 7-12. American Society for Horticultural Science Annual Meeting.** Michigan State University, East Lansing, Michigan. Information: ASHS, 701 North St. Asaph St., Alexandria, VA 22314-1998, (703) 836-4606.

► **August 8-11. 1988 CAN-AM Horticultural Exhibit Show.** Michigan State University Campus Plant and Soil Sciences Building, East Lansing, Michigan. Information: CAN-AM Horticultural Exhibit Show, 2920 W. St. Joseph St., Lansing, MI 48917, (517) 485-2309.

► **August 14-17. International Society of Arboriculture Conference and Industrial Trade Show.** The Pan Pacific Hotel, Vancouver, British Columbia, Canada. Information: Jerri Moorman, ISA, 303 W. University Ave., Urbana, IL 61801, (217) 328-2032.

► **August 13-14. Cactus and Succulent Society of Greater Chicago Show/Sale.** Chicago Botanic Garden, Glencoe, Illinois. Information: Judith A. Sandberg, 6347 S. Richmond St., Chicago, IL 60629, (312) 434-7631.

► **August 20-21. Dahlia Show.** South Coast Botanic Garden, Palos Verdes Peninsula, California. Information: Norma Cantafio, South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 544-1948.

► **August 26-28. San Francisco County Fair Flower Show.** San Francisco County Fair Building, San Francisco, California. Information: Betty de Losada, 428 Hill St., San Francisco, CA 94114, (415) 558-7962.

► **August 27-28. Seattle Flower Show.** Seattle Center Exhibition Hall, Seattle, Washington. Information: Jay Gusick, The Fearey Group, Inc., 1111 Tower Bldg., Seventh and Olive, Seattle, WA 98101, (206) 343-1543.

► **August 28-September 2. Garden Holiday Week.** Mohonk Mountain House, New Paltz, New York. Information: Faire Hart, Mohonk Mountain House, Lake Mohonk, New Paltz, NY 12561, (914) 255-1000.

► **September 11-15. Association of Zoological Horticulture Annual Conference.** The Arizona-Sonora Desert Museum, Tucson, Arizona. Information: George Montgomery or Meg Quinn, c/o Arizona-Sonora Desert Museum, 2021 North Kinney Road, Tucson, AZ 85743.

The Great Escape: AHS Travel for 1988-89

October 2-8, 1988 New England Autumn Display

Visit the great houses, gardens, and museums of New England as we follow the breathtaking foliage trail from Stockbridge, Massachusetts to Shelburne, Vermont.

Serendipity Tours, Three Channing Circle, Cambridge, MA 02318 (617) 354-1789

October 15-21, 1988 Gardens of the Chesapeake

Join us for a spectacular fall cruise to see the gardens of the Chesapeake aboard the M.V. *Nantucket Clipper*.

Leonard Haertter Travel Company, 7922 Bonhomme Avenue, St. Louis, MO 63105 (800) 942-6666

October 20- November 6, 1988 Fall Into Spring

This trip to the lovely island nation of New Zealand will feature a wildflower walk on the slopes of Mt. Cook.

Passages Unlimited, 14 Lakeside Office Park, Wakefield, MA 01880 (617) 246-3575

January 21-28, 1989 Gardens of the Leeward Islands of the Caribbean

This exciting garden cruise adventure takes us to the tranquil islands of the Caribbean Leeward Chain. Visit tropical rain forests, botanic gardens, and private estates never open to the public, as we stop at such secluded islands as Montserrat, St. Kitts, St. Martin, and Antigua.

Leonard Haertter Travel Company, 7922 Bonhomme Avenue, St. Louis, MO 63105 (800) 942-6666

March 22-29, 1989 Pacific Coast Gardens

Travel from San Diego to San Francisco on this horticultural visit to botanical and private gardens of California, with excursions to the Hearst castle and the San Miguel Mission.

For further information contact Liz Smith, AHS Special Events, (703) 768-5700.



New Zealand

May 2-17, 1989 The Gardens of Coastal Iberia

Ports of call on this cruise from Lisbon, Portugal, to Folkstone, England, will include Guernsey, the Channel Islands, and New Haven. Experience a most unique program of sightseeing ashore that will include exceptional public and private gardens.

Leonard Haertter Travel Company, 7922 Bonhomme Avenue, St. Louis, MO 63105 (800) 942-6666

June 2-5, 1989 Seaside Gardens of Rhode Island

Tour members will visit historic homes and gardens in Providence and the secret gardens of Newport, as well as Blithewold Arboretum and other outstanding gardens of Rhode Island.

Triple A Travel, Polo Center, 700 Aquidneck Avenue, Middletown, RI 02840 (401) 847-6393

August 1-21, 1989 U.S.S.R. and the Caucasus

Highlights of this special tour to the

Soviet Union will include the botanical gardens of Moscow, Kiev, and Leningrad, as well as the alpine plants of the Teberda Nature Preserves on the northern slopes of the Caucasus. Leader of the tour will be Erastus Corning III, fluent in Russian and a specialist in travel to the U.S.S.R. The group will be accompanied by a botanical expert familiar with the flora of the U.S.S.R.

Corning Tours, Box 431, Albany, NY 12201 (518) 463-2160

October 7-14, 1989 Cruising the Hudson River

Timed to coincide with spectacular fall foliage, this cruise will feature some of the most important homes and gardens along the Hudson River—America's Rhine—all the way to Albany. Included will be private entertainment and visits to Wave Hill, the New York Botanical Garden, and Sleepy Hollow Restorations.

Bellinger Davis Company, Inc., 150 East 58th Street, New York, NY 10155 (212) 759-1590

THE BREATH OF LIFE. OXYGEN PLUS®



Most container plant failure — and death — comes from over-watering. The drowning roots can't absorb water or the nutrients they need. The plant suffocates.

But when you use Oxygen Plus, you deliver vital oxygen and essential nutrients right to the roots. No other plant food, no emulsion, no spike, no ordinary fertilizer can match the performance of Oxygen Plus.

Proven in university tests, and praised by professional horticulturists and happy gardeners all over the country, Oxygen Plus helps your plants look better, grow better and *thrive*.

Oxygen Plus. It's the breath of life for your plants.

Look for Oxygen Plus at your quality lawn and garden retailer, wherever garden products are sold—or send for your FREE brochure: *The Truth About Plant Foods*.

PLANT RESEARCH LABORATORIES
P.O. Box 3976
Laguna Hills, CA 92654
1-800-221-2589
In California: (714) 721-0153

Plants Wanted

Members who are growing or who have access to any of the plants or seeds listed below are invited to help fellow members locate seeds, plants, or cuttings. Those who can provide such information should write directly to the persons listed below.

► *Ptychandra barbata* (pyxie or flowering moss). Creeping evergreen shrublet, native to sandy pine barrens from New Jersey to South Carolina. Also,

► *Polygonella polygama* (October flower). Perennial herb with jointed stems, closely related to *Polygonum*, native to southeastern United States. George K. McLeccan, Route 3, Box 702, Gloucester, VA 23601.

► *Kalopanax pictus* (castor-aralia). Deciduous tree with palmately lobed leaves, native to China, Manchuria, and Japan. Robert J. Boklund, 612 Weller Ave., La Porte, IN 46350.

► *Paeonia obovata* (peony). Perennial herb, flowers rose to white (only the white form commonly in cultivation), golden stamens around a crimson center, blue seeds, native to China and Japan. Rosemary C. Mancuso, P.O. Box 411, 162 Essex Road, Williston, VT 05495.

AARS Designates Two Miniatures

For the first time in the 50-year history of the All-America Rose Selections, Inc., two miniatures are among the outstanding roses selected to receive the AARS designation for 1989. This is good news for the increasing number of home gardeners who want hearty flowering plants but have space limitations, since these miniature roses are particularly suited to container growing on balconies, patios, and window ledges.

The two miniature rose cultivars are 'Debut' and 'New Beginning'. 'Debut' is a showy red-blend miniature rose featuring rich scarlet buds which open to double blooms of 20 large petals. The blooms, which may reach two inches across, are deep red at the outer edge, softening to creamy white and almost yellow at the petal base. 'Debut' was introduced by the Conard-Pyle Company of West Grove, Pennsylvania, and was hybridized by Jacques Mouchette of Selection Meilland, Antibes, France.

'New Beginning' is a colorful orange-red and yellow blend that blooms profusely through the summer and into late fall. It exhibits excellent vigor and disease resistance. 'New Beginning' was developed by Harmon Saville, president of Nor'East Miniature Roses, Inc., of Rowley, Massachusetts.

In addition to their container-growing capacities, both miniature roses are described as excellent for overall garden

decoration, including borders and specimen plantings. Their long, continuous blooming cycles make them particularly attractive for home gardeners.

Elliotta racemosa Now Available

The superb *Elliotta racemosa*, or Georgia plume, long unavailable because of difficulties in propagation and germination and very sparse seed production, is now becoming more available thanks to experiments conducted by researchers at The Arnold Arboretum of Harvard University. This rare Georgia native is a deciduous ericaceous shrub that reaches 10 to 35 feet and is hardy to -10° F.; it blooms for six weeks, from mid-June through July in the Southeast and later in the North. The plant bears slightly fragrant pure white flowers in upright racemes at the branch tips; it requires humus-rich, well drained, sandy, acid soil and does best in full sun to light shade. Discovered in 1773 by William Bartram and finally grown from wild-collected seed by Alfred J. Fordham of The Arnold Arboretum in 1969, this choice native is now offered by some commercial nurseries.

AHS Bulletin Board

Report from the Annual Meeting



Jim Fitts

Mrs. Elisabeth Carey Miller (left), the 1988 recipient of the Liberty Hyde Bailey Award, receives congratulations from Carolyn Marsh Lindsay, president of the American Horticultural Society.

The largest attendance in recent years marked the American Horticultural Society's 1988 Annual Meeting, held April 14-16 in Atlanta, Georgia. Members and friends from across the country and around the world gathered to listen, learn, and exchange ideas with horticultural experts and, most important, with others of similar interests and background. Enthusiasm ran high as this very cohesive group of avid gardeners from varied walks of life celebrated and enjoyed a common passion: plants. The 1988 meeting truly offered something for everyone, from the advanced horticulturist to the home gardener.

The meeting was shorter than it has been in previous years to allow members to attend without leaving their gardens for too long at one of the busiest times of the year; sessions were shortened as well, to permit a more comprehensive selection of topics. Attendees were especially appreciative of the variety of choice in subject matter and of the fact that sessions were held one after another in the same room whenever possible. Sessions were not highly technical but were designed to be lively and interesting and to stimulate questions and point out new directions for further exploration.

The Awards Banquet was a beautiful meal, elegantly presented; flower arrangements were designed and executed by the Federation of Garden Clubs, Rome, Georgia, under the direction of Mrs. Grace Brinson. The Georgia Garden Club, Inc., under the direction of Mrs. Deen Day Smith,

created the lovely floral designs for the Gone With the Wind theme dinner.

This was one of the busiest meetings ever, with a wide variety of tours and visits to appeal to every gardening taste. Visitors toured a formal courtyard garden, a garden featuring an eclectic selection of styles, a country estate, a city garden featuring an elegant combination of woodland gardens and formal terraces, and an herb garden laid out in traditional beds.

The AHS Annual Meeting presents a priceless opportunity for gardeners to get together and take advantage on one of the most valuable benefits of Society membership: the chance to share ideas, information, and fun with other gardeners. The 1989 Annual Meeting will be held in July in Minneapolis, Minnesota. See you there!

May Issue Missing?

Members who failed to receive their May issue of *American Horticulturist News* Edition are asked to let us know so that we can send them a replacement copy. Apparently there was some problem with labels falling off the newsletters between the Post Office and final destination; several copies were returned to us here at AHS. Write to us at: American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308.



FALL INTO SPRING OCTOBER 20 - NOVEMBER 6, 1988

Forest primeval and living volcanos—cosmopolitan cities and peaceful farmland—this is New Zealand. There is no place on earth where so many different landscapes and sensations are contained in so relatively small an area.

This October the American Horticultural Society invites you to venture forth to the far reaches of the South Pacific to "Fall Into Spring" on both the North and South Islands of New Zealand and to see what man, as gardener, has contributed to his overwhelmingly beautiful natural surroundings.

In leading his fourth AHS tour, Dick Hutton will have as his local counterpart Mary Burnard, a native of Wellington, author of "Garden Heritage of New Zealand," garden consultant and professional photographer. With her assistance we have arranged visits to many private gardens rarely accessible to the public. We have also timed this trip to take full advantage of the extraordinary profusion of rhododendrons and azaleas for which New Zealand is justly famous.

Please join us on this exciting and surely-to-be-unforgettable journey as we **Fall Into Spring.**

For information on **Fall Into Spring** please check mail this coupon to:

Passages Unlimited, Inc.
14 Lakeside Office Park
Wakefield, MA 01880
or Call 1-617-246-3575

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____

Gardener's Q & A

Our Gardener's Information Service mailbox contains a fund of information to be shared with members.

Q: I was given a *Streptocarpus* as a gift and am very impressed by its fuss-free flowering. Isn't streptocarpus related to the African violet? Can it be propagated in a similar manner?
—M. P., Mount Vernon, New York



A: African Violets and streptocarpus (sometimes called cape primrose) are related; both are members of the Gesneriaceae. The ability of an African violet to grow a new plant from a severed leaf, without a greenhouse or mist bench, has sparked many a gardener's interest in propagation. Streptocarpus has similar regenerative properties, but due to differences in leaf morphology, leaf cuttings rather than leaf petiole cuttings is the preferred method. Two types of leaf cuttings will work, one taking advantage of the prominent midrib of a streptocarpus leaf, the other using lateral veins. For midrib cuttings, slice the leaf widthwise at right angles to the midrib in sections not more than two inches long. For lateral vein cuttings, slice the leaf lengthwise into two pieces, removing the midrib completely and exposing the cut ends of lateral veins.

The procedure for rooting both types of cuttings is the same. Insert cuttings (cut edge side down) into a sterile, moist rooting medium, just deep enough to hold them erect. Use clean, sterilized containers and tools, as sanitary conditions will avoid rot. Spray with fungicide for extra insurance. Place containers of cuttings in a warm, humid environment. Keep the medium moist but not wet, and place in bright but

indirect light. A propagation box would be useful to maintain ideal conditions, or a makeshift alternative such as a plastic pot covered with a clear plastic bag. In two to three months, new plantlets should be ready to pot on.

Q: I have a snowberry on order and read somewhere that it needed others of its kind to produce berries. How can I know if I need more than one shrub in order to get fruit? Shouldn't catalogs tell you if a plant is dioecious?

—M. B., Golden Valley, Minnesota

A: Yes, catalogs should mention this, and most reputable nurseries will inform you if a shrub is dioecious (has male, pollen-bearing flowers and female, fruit-bearing flowers on separate plants) and needs a male pollinator for reliable fruit set. However, this is not *always* the case. The best defense is knowledge—if you know which flowers and shrubs exhibit this trait, you can avoid frustration by obtaining male plants along with the females. Fortunately, the list is not too long and snowberry (*Symphoricarpos*) is not included. When you are choosing plants for your garden, the dioecious characteristics of the following trees and shrubs may influence your decision. In most cases, abundant fruiting will not occur without the presence of a male in the vicinity.

***Aucuba japonica*.** Japanese aucuba. The aucubas have attractive red fruits effective throughout the winter, although the display is often obscured by the thick glossy leaves for which the plant is grown. A few male plants must be planted among the females to obtain these decorative fruits. USDA Zone 7-9.

***Celastrus scandens*.** American Bittersweet. Although not the best vine for garden use due to its vigorous and ungainly nature, many gardeners choose to grow bittersweet for its autumnal fruits, a favorite for dried arrangements. Disappointment occurs when a vine does not produce the characteristic yellow and orange fruits after years of healthy growth. The plants are usually dioecious; you must have a female vine and a male nearby for fruiting. USDA Zone 7-9.

***Chionanthus virginicus*.** Fringetree. The fringetree, an excellent small flowering tree for the home landscape, is not normally

grown for its fruits, but instead for its fringe-like flowers. However, this native tree is dioecious, and the differences between the sexes could make a difference to your garden. Male trees are more decorative in flower, having longer petals than female plants. The blue, fleshy fruits, not showy but of interest nonetheless, are relished by birds. Again, a male plant is necessary to obtain fruit on female trees. USDA Zone 5-9.

***Ginkgo biloba*.** Maidenhair tree. The sex differences of male and female ginkgos have been widely discussed. The major point is reiterated here: Female trees produce fleshy fruits which have a very offensive odor. Unless you desire these fruits for culinary purposes or whatever reason, it is best to seek out and plant male trees. USDA Zone 4-8.

***Hippophae rhamnoides*.** Common Seabuckthorn. This tree or large shrub, particularly useful for sandy soils and areas exposed to salt spray, produces (if female) an abundance of bright orange fruit. A male plant must be present to achieve fruiting. One male to every six females is suggested for mass plantings. USDA Zone 3-7.

***Ilex* spp.** Holly. Most experienced gardeners know that the lack of a male pollinator in the case of hollies can lead to big disappointment come fall. Named male cultivars of many holly species are available to provide necessary pollen. When ordering or purchasing hollies from a nursery, include a few male pollinators to insure a magnificent crop of fruit. For mass plantings of shrubby hollies like winterberry (*I. verticillata*), include one male plant for every 10 to 12 females. An American holly, or any prominently located *Ilex* specimen, will fruit reliably if a male plant is within at least 300 feet. You may be able to take advantage of a neighbor's pollen-bearing plants. A few hollies, like the Chinese holly (*I. cornuta*), will produce fruit without the benefit of pollination. This is an exception to the general rule. Zone 4-9 (depending on species).

***Myrica pensylvanica*.** Bayberry. This adaptable shrub produces small, grayish, waxy drupes on female plants only. The fruit has been used to produce bayberry candles, and all parts of the plant are aromatic when crushed. Male and female plants are required for adequate fruiting. Several other *Myrica* spp. are occasionally used as landscape plants; these are dioecious as well. USDA Zone 3-9.

Skimmia japonica. Japanese skimmia. The bright red fruit of skimmia resembles that of holly, but the evergreen foliage has a softer, less prickly demeanor. Creamy white, slightly fragrant flowers add interest in the spring. At least one male plant is suggested to six females to achieve a good crop of fruit. In some cases the male clones of skimmia are grown for their flowering characteristics, as male plants have larger clusters of flowers. 'Rubella' is a male cultivar selected for its large open panicles of pinkish-burgundy buds, which provide interest all winter long. In the early spring, the buds give way to sweet-smelling white flowers. A somewhat smaller, related species is *S. reevesiana*. This skimmia is *not* dioecious, and a single plant will produce fruit. USDA Zone 7-9.

Taxus spp. Yew. The commonly planted yew is not grown for its fruits, but for its attractive evergreen foliage and general adaptability. However, most people are aware of the fleshy red arils produced by yews, which when crushed between the fingers exude a mucilaginous substance. These fruits occur only on female plants; therefore, knowledge of the plant's sex will help you choose fruiting (female) or non-fruiting (male) yews, depending on your preference. Many named cultivars of yews exist, both male and female. If the sex of the plant is unknown, it can be determined by the morphology of the reproductive structures. USDA Zone 4-6.

The above list is not exhaustive, but includes most of the dioecious plants commonly encountered where the fruiting characteristic is of interest.

Q: I have had trouble establishing oriental poppies (*Papaver orientale*) in my garden. Bare-root planting in August is often suggested by gardening books—is that the best way to treat them?
—B.H., Mentor, Ohio

A: With proper treatment, oriental poppies should not be difficult to establish. The biggest problems are standing water in winter and excessive moisture when plants are dormant in summer; either may cause root rot. Usually the problem is brought about by poor drainage (don't site plants in wet areas) or overwatering. If your poppies are planted in a perennial bed which you water consistently and deeply all summer, an application of fungicide applied as a drench during the dormant stage will prevent rot.

When choosing poppies, obtain named cultivars that have been propagated

vegetatively. Many beautiful cultivars exist in a range of colors, and seed-grown plants will be inferior.

Pot-grown poppies (young plants grown from root cuttings taken the previous year) planted in the late fall or early spring will have a very good survival rate and are more foolproof than bare-root plants. Bare-root poppies planted in late summer when plants are dormant, if shipped fresh and handled carefully, can also be successful, but this is a bit tricky, as bare-root plants are more susceptible to dessication or rot.

The crown of the oriental poppy should be

beneath the soil surface, and this can sometimes cause confusion. Bare-root plants should be planted so that the top of the crown is two to three inches beneath the soil surface. Use the greater depth if your soil is light and sandy. Pot-grown oriental poppies should be at the appropriate depth in their pots, and can be planted in the garden at the same level. If they appear to be planted too shallowly, plant deeper. If you are planning on mulching, however, planting depth should be shallower to compensate.

—Laura E. Coit
Assistant Editor, Horticulture



Lilypons Water Gardens

Begin your water garden today with a Lilypons catalogue featuring page after page of beautiful water lilies, lotus, bog plants, fish, statuary, and the essentials for keeping it all working together.

No pool? Choose a fiberglass or PVC pool from the many sizes shown in the Lilypons catalogue.

☐ Please send the new Lilypons catalogue plus informative newsletters with seasonal sales. Enclosed is \$5.00.
California (30¢), Maryland (25¢) and Texas (35¢) residents please add tax.

☐ Please rush my catalogue by first class mail. Enclosed is \$6.75.

☐ 1500 Amhort Road
P.O. Box 10
Lilypons, MD 21717
(301) 874-5133

☐ 1500 Lilypons Road
P.O. Box 188
Brookshire, TX 77423-0188
(713) 934-8525

☐ 1500 Lilypons Way
P.O. Box 1130
Thermal, CA 92274

Name _____

Address _____

City _____

State _____

Zip _____

Classifieds

Classified Ad Rates:

85¢ per word; \$17.00 minimum per insertion. 10% discount for three consecutive insertions using same copy. Copy must be received two months prior to publication date. Send orders to: American Horticultural Society Advertising Department, 80 South Early Street, Alexandria, Virginia 22304. Or call (703) 823-6966.

AFRICAN VIOLETS

America's Finest—177 best violets and gesneriads. Color Catalog and Growing "Tips" \$5. FISCHER GREENHOUSES, Box A, Linwood, NJ 08221.

THE AVANT GARDENER

DIFFERENT, EXCITING, GREAT FUN TO READ—for the gardener who wants to get more out of gardening! Subscribe to THE AVANT GARDENER, the most useful, most quoted of all gardening publications. Every month this unique news service brings you the newest and most practical on-going information—new plants, products, techniques, with sources, plus feature articles, special issues. 20th year. Awarded Garden Club of America and Massachusetts Horticultural Society Medals for outstanding contributions to horticulture. Curious? Sample copy \$1. Serious? \$10 full year (reg. \$15). THE AVANT GARDENER, Box 489M, New York, NY 10028.

AZALEAS & RHODODENDRONS

SUMMER BLOOMING! Winter Hardy Azaleas & Rhododendrons. Northern grown and acclimated. Proven hardy here without winter protection. Two Year Catalog Subscription: \$2.00 (deductible). CARLSON'S GARDENS, Box 305-AHA788, South Salem, NY 10590. (914) 763-5958.

BONSAI

Bonsai Plants, Pots, Tools, Books, Supplies. Great Hobby or Business. Catalog \$1.00. BONSAI FARM, Box 130, Lavernia, TX 78121.

BOOKS

1985 Edition EXOTICA 4, with 16,300 photos, 405 in color, 2,600 pages in 2 volumes, with Addenda of 1,000 Updates, by Dr. A. B. Graf, \$187. TROPICA 3, revised 1986, 7,000 color photos, now 1,156 pages, \$125. Exotic Plant Manual, 5th Ed., 4,200 photos, \$37.50. Exotic House Plants, 1,200 photos, \$8.95. Circulars gladly sent. ROEHRS, Box 125, E. Rutherford, NJ 07073.

HOW TO BECOME A LANDSCAPE CONTRACTOR. Landscape Contractors' Handbook. First steps and beyond. Complete Book, 150 pages. Send \$39.95 to: HORTICULTURE PROMOTIONS, PO Box 78, Mountainburg, AR 72996.

Out of print, scarce and antiquarian gardening and botanical books. Catalogs issued regularly. Write to WHEELBARROW BOOKS, 22, Brangwyn Avenue, Brighton, Sussex, BN1, 8XG, England.

BROMELIADS

TILLANDSIAS—GROW WITHOUT SOIL. Large selection available on our Free Price List. Distributorships available. Wholesale, Retail, Mail-order. HOLLADAY JUNGLE, Dept. B, PO Box 5727, Fresno, California 93755 (209) 229-9858.

Chinese Garden Scissors



These beautiful, precision scissors are made to last a lifetime. In production for over 300 years. For delicate flower work, or heavy pruning.

Very Sharp. A hardworking beauty.

Send \$6.98 ea. Mt. Rushmore Supply
Box 233 Brooklyn NY 11222-0233

Send in this ad with order. Save \$1.

5 1/2" long

TILLANDSIAS. Nature's true air plants. Introductory offer, 3 different, \$7.95 ppd. LSASE for list. ENCHANTED GARDEN, 1524-A Pike Place, Seattle, WA 98101.

BULBS

Unusual winter and early spring flowering bulbs. Send \$1 for list, deductible with order to: WILLETTTS, P.O. Box 446, Moss Landing, CA 95039.

Choosing flower bulbs? Our unique catalog and planning guide lists over 400 varieties with information to help you make smart choices. Free Copy: McCURE & ZIMMERMAN, Dept. 50, P.O. Box 368, Friesland, WI 53935.

BUSINESS OPPORTUNITIES

Blooming nursery/landscaping business in North Georgia. Real estate, equipment, inventory. Call for brochure. Susan Godbee (404) 536-4370 or Pat Harrell (404) 532-4644. COLDWELL BANKER HERITAGE REAL ESTATE (404) 536-9700.

CARNIVOROUS PLANTS

Carnivorous, woodland terrarium plants and supplies. Book, THE WORLD OF CARNIVOROUS PLANTS, \$8.95 postpaid. Catalog FREE. PETER PAULS NURSERIES, Canandaigua, NY 14424.

DAYLILIES

DAYLILIES GALORE! Carefree, gorgeous, long-lived. Quantity discounts. Send now for FREE informative catalog. LEE BRISTOL NURSERY, Box 5A, Gaylordsville, CT 06755.

DAYLILIES FOR THE COLLECTOR. Many colors-tetraploids, diploids, miniatures. Spuria, Louisiana IRISES. Catalog \$1.00. CORDON BLEU FARMS, Box 2033, San Marcos, CA 92069.

DAYLILIES AND PEONIES FROM THE FAMOUS WILD'S GARDENS OF MISSOURI. With more than 100 years in the business, Wild's brings you experience and quality plants to help you create a beautiful garden display. Send \$2.00 for our 92 page catalog with over 1,300 varieties (\$2.00 deductible on first catalog order). GILBERT H. WILD & SON, INC., AH788 Joplin St., Sarcocoe, MO 64862.

EMPLOYMENT

GARDENING EDITOR'S DREAM. Millions of devoted readers. Industry leader in book club and direct-mail books. Edit how-to books in a creative environment that is 1½ hours from NYC with view of mountains. Smoke-free offices, company gym and more. If you are smart, creative, enthusiastic, and a self-starter, this job is for you. Please send resume, samples of your work and salary requirements to: Maggie Balits; RODALE PRESS, INC., 33 East Minor Street, Emmaus, PA 18098. E.O.E.

EVERGREEN SEEDS

Seeds, free sample and price list of evergreen seeds, WAUKESHA SEED COMPANY, PO Box 1820, Waukesha, WI 53187.

FLORAL SUPPLIES

Purchase the Products Professional Floral Designers have been successfully using in their shops for years, including Floralife Cut Flower Food for extending flower life, designer supplies, plant products, candles and much more. Catalog—FREE. THE FLORAL MAILBOX, PO BOX 235, Lombard, IL 60148-0235.

GARDENING GLOVES

GOATSKIN GLOVES. Tough, lightweight goatskin stretches and becomes form-fitting, giving wearer ultimate in fit, grip, dexterity. Natural lanolin in leather keeps hands soft. Sizes 7-10 or send outline of hand. \$8.50 postpaid. PUTNAM'S, Box 295C, Wilton, NH 03086.

GIFTS

BONSAI TREES, pottery, books, tools, supplies and gifts.

Catalog \$2.50. BONSAI CREATIONS, PO Box 7511AH, Ft. Lauderdale, FL 33338. (305) 463-8783.

GREENHOUSE ACCESSORIES

COMPLETE MIST PROPAGATION SYSTEMS. Get phenomenal propagation results, indoors-outdoors. Environment sensitive controlled. FREE BROCHURES. AQUAMONITOR, Dept. 4, Box 327, Huntington, NY 11743. Tel: (516) 427-5664.

GREENHOUSES

HOOP HOUSE GREENHOUSE KITS FOR UNDER \$299. For colorful brochure and grower's supply catalog, send \$1.00 to: FOX HILL FARM, Dept. A-78, 20 Lawrence Street, Rockville, CT 06066; (203) 875-6676.

HEATHS & HEATHERS

HARDY HEATHERS FOR ALL-YEAR GARDEN COLOR! Send SASE for descriptive mail-order list. Fast Service! HEATHER GROWERS, Box 850, Elma, WA 98541.

HERBS

HERBS—Annual & perennial; extensive collection. Perennials—Large selection for sun & shade. Sedums—Tall, medium, carpeting, many varieties. WRENWOOD, RT. 4, BOX 3561, Berkeley Springs, WV 25411. Catalogue \$1.50.

THE BUSINESS OF HERBS. Comprehensive reporting, business news, marketing hints, sources and resources. Sample issue \$3. Brochure/SASE. From: NORTHWIND FARM, Rt. 2, P.O. Box 246(A) Shevlin, MN 56676.

HOUSE PLANTS

ORCHIDS, GESNERIADS, BEGONIAS, CACTI & SUCCULENTS. Visitors welcome. 1988-89 catalog \$2.00. LAURAY OF SALISBURY, Rt. 41 (Undermountain Rd.), Salisbury, CT 06068 (203) 435-2263.

IRISES

Bearded Irises—7 Mixed Named \$10.00. Postpaid. Catalog \$1.00. Many iris types. COMANCHE ACRES IRIS, Dept. AH, Gower, MO 64454.

ORCHID CACTUS

EPIPHYLLUMS (ORCHID CACTUS), RHIPSA LIS, HOYAS. Quality cuttings at reasonable prices. Catalog \$1.00 (deductible). BEAHM EPIPHYLLUM GARDENS, Dept. AH88, 2686 Paloma, Pasadena, CA 91107.

ORCHIDS

Help! We need room. Mature Cattleya orchid plants, our selection. \$8.00 each. Minimum order five plants. Packed five maximum per box, bareroot. Include \$5.00 per box shipping. FOX ORCHIDS, INC., 6615 West Markham, Little Rock, AR 72205, (501) 663-4246.

PEONIES, TREE PEONIES, DAFFODILS AND HOSTAS

Grown in Michigan's North Country. World famous for herbaceous & tree peonies. Featuring spectacular new introductions and the best time-proven, quality hybrids. Send \$1.00 for our 1988 color catalog. REATH'S NURSERY, Box 521, Vulcan, MI 49892.

PERENNIALS

We offer a good selection of sturdy perennial and groundcover plants. Send \$1.00 for Plant List (refundable). CAMELOT NORTH, R2, Pequot Lakes, MN 56472.

DAYLILIES, JAPANESE IRIS, SIBERIANS, HOSTA and PEONIES. Fall catalog—\$1.00 (refundable with order). CA-PRICE FARM NURSERY, 15425 SW Pleasant Hill, Sherwood, OR 97140. (503) 625-7241.

PLANTERS

TEAK PLANTERS AND WINDOW BOXES. Superior quality, largest line in U.S. Affordably priced for the trade. Free brochure. KINGSLEY-BATE LTD., 4638 Green Place, NW, Washington, DC 20007. (202) 337-2721.

Gardener's Bookshelf

PLANTS—SCARCE AND UNUSUAL

Distinctive plants for your garden and landscape. Scarce, unusual and many old favorites. Well established in 4" pots, ready for you to grow on. FREE catalog. APPALACHIAN GARDENS, Box 82, Waynesboro, PA 17268. (717) 762-4312.

PLUMERIA, GINGERS, HIBISCUS, BOUGAINVILLEAS

ALSO RARE AND UNUSUAL BULBS, FLOWERING VINES, FRAGRANT PLANTS, SPECIALTY FERTILIZERS AND MORE. COLOR CATALOG—\$1.00 HANDBOOK ON PLUMERIAS—\$4.95. PLUMERIA PEOPLE, DEPT. A, PO Box 820014, Houston, TX 77282-0014.

RHODODENDRONS

VIREYA RHODODENDRONS: Adapted to warmer climates. Showy flowers, rich fragrances, year-round bloom. Outdoor, greenhouse, houseplant culture. Mail Order only. Free catalog (long SASE appreciated). VIREYA SPECIALTIES NURSERY, Dept. A, 2701 Malcolm Ave., Los Angeles, CA 90064.

RHODODENDRONS AND AZALEAS

RHODODENDRONS AND AZALEAS—Select from 1,000 varieties with many new exciting introductions. Also Laurel, Andromeda, Holly, Conifers, Rare Plants and Trees. Mail-order catalog \$2.00. ROSLYN NURSERY, Dept. AH, Box 69, Roslyn, NY 11576. (516) 643-9347.

ROCK GARDEN PLANTS

Rare Alpines, Wildflowers, Dwarf Conifers, Groundcovers, colorful Rock Plants, hardy Rhododendrons, Bonsai Books. Catalog \$1. RICE CREEK GARDENS, 1315 66th Ave. NE, Minneapolis, MN 55432. (612) 574-1197.

ROSES

HORTICO ROSES: Hard-to-find varieties, Austin Hybrids (New English garden roses), hardy Canadian Explorer roses. Catalog listing over 350 varieties, available on request, \$2.00. HORTICO INC., Robson Road, RR 1, Waterdown L0R 2H0 Ontario, Canada. (416) 689-6984.

SEEDS

ATTENTION HOUSEPLANT LOVERS!! Grow Beautiful Tropical Houseplants! For Free Exotic Seed List, Write: AMERICAN SALES, P.O. Box 80009, Mesquite, Texas 75180.

SEMPERVIVUM & SEDUM

HEN & CHICKS Over 400 varieties, PLUS 75 Sedums. Sampler 12/\$10.45 Catalog \$.50, FREE with order. ALPINE GARDENS, 15920A S.W. Oberst, Sherwood, OR 97140.

SOLAR POWERED LIGHTING

SOLAR POWERED LIGHTING, for garden walkways, patios, driveways, or any application. NO WIRING, NO DIGGING, NO MAINTENANCE, AND NO UTILITY BILLS. Easy installation, just insert small pole into the ground. Works on cloudy days too. Emits up to five hours of light after dark. Turns off when stored power is depleted. Traditional elegant styling. FIVE YEAR WARRANTY. Send for free catalog. C & E SALES, DEPT-AHS, PO BOX 1130, NASHVILLE, IN 47448, SPECIAL PRICES FOR SUBSCRIBERS.

TETRAPLOID DAYLILIES

Over 700 hybrids, exotic new Tetraploid Introductions. Catalog \$1.00, deductible with order of plants. SEAWRIGHT GARDENS, 134 Indian Hill, Carlisle, MA 01741 (508) 369-2172. Visitors welcome!

WATERLILIES

"WATER GARDENING is our Specialty" Waterlilies, Lotus, Aquatic Plants, everything you need. Pools, Liners, Fountains, Pumps, etc. All new catalog \$2.00. Refundable with first order. WICKLEIN'S WATER GARDENS, Dept. A, 1820 Cromwell Bridge Road, Baltimore, MD 21234 (301) 823-1335.

PETER CHAN'S MAGICAL LANDSCAPE



The Complete Book of Topiary

Billed as an easy-to-use guide to the art of shaping and training plants, this book describes 75 topiary creations that can be tackled even by the beginner. Indoor and outdoor projects include an herbal knot garden, a flowering jasmine bird, espaliered dwarf fruit trees, and a tree tunnel. The book is amply illustrated with line drawings and contains a source guide, glossary, and resource guide. By Barbara Gallup and Deborah Reich. Workman Publishing, 1 West 39th St., New York, NY 10018. Publisher's price: \$10.95; AHS member price: \$8.75. Code: WORKM 05710.

Peter Chan's Magical Landscape

Peter Chan, master gardener, landscape authority, and artist, shares his secrets with the home gardener in this book featuring illustrations from his own award-winning gardens. Chan escorts the reader on a guided tour of his garden, with profuse illustrations and step-by-step instructions that assist the reader in developing a "private paradise" on his own property. By Peter Chan. Garden Way Publishing, Inc., Pownal, VT 05261. Publisher's price: hardcover, \$21.95; softcover, \$10.95. AHS member price: hardcover, \$17.55; softcover, \$8.75. Code: hc, GARDE 05780; sc, GARDE 05790.

101 Home Landscaping Ideas

Does your mind go blank when you think of producing a landscape design for your property? This book is a fund of ideas and graphic hints for those who find it difficult to visualize a landscape plan that fits in with the size of their property and meshes

well with their lifestyle and their personality. The book contains sections on specialty gardens; patios, decks, and pool areas; children and pets; low-maintenance gardening; storage, privacy, and screened views; and shade or sunshine. A great help for the gardener wishing to personalize a home garden. By Joel M. Lerner. Price, Stern, and Sloan Books, 360 North La Cienega Boulevard, Los Angeles, CA 90048. Publisher's price: \$9.95. AHS member price: \$7.95. Code: PRICE 05840.

Landscape Photography: A Kodak Guide

Composition, depth-of-field, lighting, framing techniques, scale, and perspective are a few of the subjects covered in this in-depth treatment of landscape photography, which teaches the photo-hobbyist how to read the land, analyze its visual components, and use them in adhering to a central theme. Over 150 color and black-and-white photographs by leading landscape photographers illustrate this outstanding guide, which also covers the various types of photographic equipment needed to produce top-quality landscape photographs. By Jeff Wignall. McGraw-Hill Book Company, 11 W. 19th St., New York, NY 10011. Publisher's price: \$12.95; AHS member price: \$10.95. Code: MCGRA 05830.

When ordering books from AHS, please include title of book and code number. Make checks payable to AHS, and please include \$2.50 per book for postage and handling. Virginia residents add 4.5% sales tax. Send orders to Robin Williams, AHS, P.O. Box 0105, Mount Vernon, VA 22121.

New Videotape Demonstrates Pruning Techniques

As interest in the pruning of landscape plants increases, due in large part to an increasing awareness of their value in enhancing aesthetic and property values of homes, consumers are looking for more effective ways to learn and apply pruning techniques. A new videotape to be released by the University of Idaho would seem to fill the bill handsomely by demonstrating various pruning techniques for woody landscape plants. Titled "Pruning Your Own Shrubs and Small Trees," the video covers pruning tools, sanitation, diseased plants, and types of pruning cuts. The second part of the tape covers specific pruning techniques for five categories of plants: deciduous shrubs, deciduous trees, coniferous shrubs, coniferous trees, and broadleaf evergreens. The effects of pruning plants at various times of the year are emphasized for deciduous shrubs and trees, and specifics are provided on when to prune plants grown for flowers, fruit, or foliage.

Actual pruning sequences are shown, starting with an overgrown plant and leading to the finished product. A table of contents and an on-screen time clock make it easy to locate various subjects on the tape. The tape is geared to homeowners, horticultural students, cooperative extension agents, and landscape maintenance personnel; it is 51 minutes long and is available in VHS, Beta, and 3/4-inch formats. For more information contact the Agricultural Communications Center, Room 11 Agr. Sci. Bldg., University of Idaho, Moscow, ID 83483.

Perennial Herbs from Seed—Some to Avoid

Thomas DeBaggio of Earthworks, a commercial nursery in Arlington, Virginia, reports in the *Herb, Spice, and Medicinal Plants Digest* on growing perennial herbs from seed. Though this is a good, low-cost way to produce a permanent addition to the garden, there are some varieties to avoid, either because they don't come true from seed or because they are sterile.

If you try to grow tarragon from seed, for

instance, you will get the rank, flavorless plant sometimes referred to as Russian or Siberian tarragon. Culinary (French) tarragon, *Artemisia dracunculus* var. *sativa*, is sterile and must be propagated from cuttings. English thyme, *Thymus* 'Broad-leaf English', is a female plant and must also be propagated vegetatively. DeBaggio cautions against all seed-grown mints, which don't have the quality of cutting-produced plants; peppermint (*Mentha X piperita*) is sterile.

Lavender seed is so variable that it's best grown from cuttings from correctly-named plants. And much of the oregano offered by large seed houses is *Origanum vulgare*, not the culinary version, which is *Origanum vulgare* subsp. *hirtum*, the version usually sold as Greek. Though the Greek version will come true from seed, the seed is difficult to find and sometimes is a mix of varieties.

Rosemary has such a low germination rate (20 percent at best) that it's most effectively grown from cuttings, which is the only reliable way to propagate named cultivars. —Adapted, with permission, from the *Herb, Spice, and Medicinal Plant Digest*, Vol. 5, No. 4, University of Massachusetts Cooperative Extension, Amherst, Massachusetts.



American Horticultural Society

P.O. Box 0105, Mount Vernon, VA 22121

2ND CLASS
POSTAGE
PAID AT
ALEXANDRIA, VA
AND AT ADDITIONAL
MAILING OFFICES

8905 A1 22309CLOGAJ941W
MR+MRS JOHN V CLOGAN
9412 FERRY LANDING CT
ALEXANDRIA VA 22309