

News Edition

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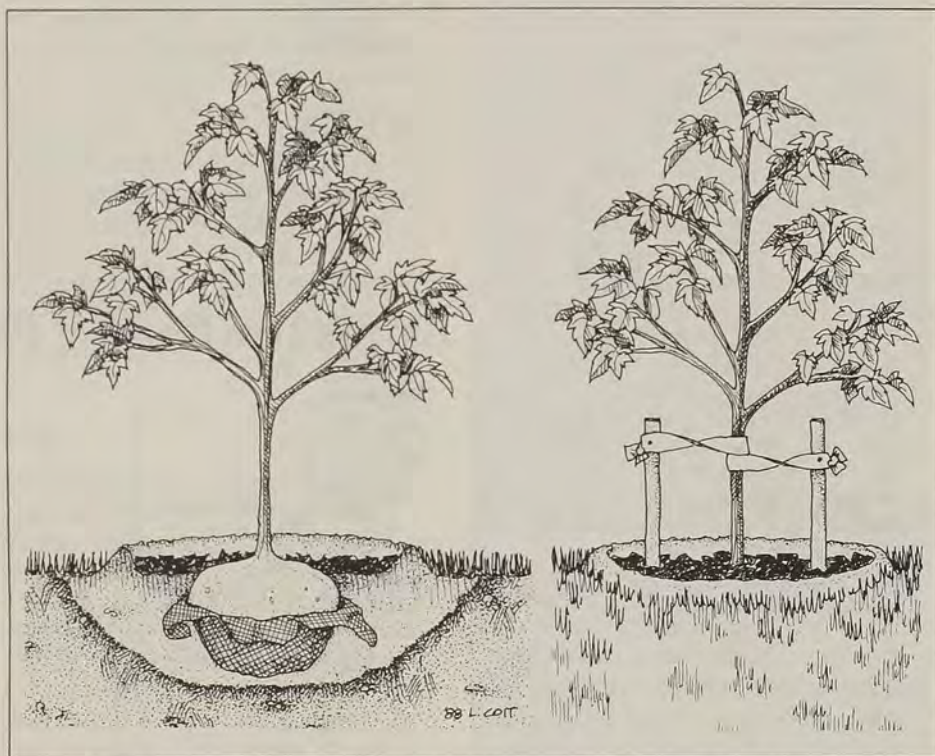
Planning for Healthy Trees

“We’re going through a revolution, not an evolution,” according to Dr. Alex Shigo of Durham, New Hampshire. Dr. Shigo is talking about tree care theories and practices, and he goes on to point out that tree care is moving from the “era of witchcraft into the era of science.” His comments are supported by a host of tree-care experts who agree that much of the traditional wisdom regarding tree care is undergoing an overhaul. We spoke with three tree-care experts and asked for suggestions that home gardeners might use to ensure the health and survival of their newly-planted trees. Here are some of their ideas:

Preparing the Site

Though “planting a tree” may conjure up a picture of digging a deep hole, positioning the tree, and firmly repacking the soil around the roots, this method does not make for healthy, well-established trees, according to most recent studies. In fact, it re-creates a “containerized” nursery-like environment instead of stimulating the development of a wide, broad root system, which is what the tree needs in order to establish itself properly, according to most modern research. A tree’s primary roots are in the top eight to eighteen inches of soil, and a healthy tree’s root system usually extends as far as one-and-a-half to three times the diameter of the dripline.

In preparing the site it is best to loosen the soil for a considerable area beyond where the tree will be planted. Bill Kruidenier, executive director of the International Society of Arboriculture, recommends a “satellite-dish”-shaped hole.



Dig a wide, shallow planting hole for trees. In tight soils, make sure the root ball is six inches above ground level; remove burlap whenever possible. If you must stake, protect trunks with webbing.

“Twice the width of the root ball is good; three times is even better,” according to Kruidenier. The hole doesn’t have to be straight-walled or deep-walled. If you’re planting the tree in turf, you may want to lift the turf and then replace it, leaving a mulched area around the tree (a little clear space around the tree helps prevent mowing injuries).

Many people plant trees too deep, which can cause root problems (roots may grow upward) and watering problems. A tree should be planted at the same depth at

which it grew in the nursery, though a slight mounding (an old English technique called “planting proud”) is acceptable, especially in a clay soil. It’s better to plant on a slight mound than in a valley. If the tree is balled-and-burlapped, untie the burlap and pull it down to the bottom of the ball, or it may girdle the roots. After the tree is planted, press down gently with the palms of your hands around the tree.

Reasonably good soil will probably not have to be amended—in fact, amending the soil may convince your tree that it’s back in

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a pot, and some studies even indicate that most plants perform better when planted in soil that hasn't been amended. Some current research also indicates that fertilizer may not be used effectively by the tree during the first year, though some experts recommend broadcasting a granular fertilizer around the tree, out to the dripline and beyond. Shigo maintains that overstimulation at planting time may defeat the purpose by causing a spurt of growth that the plant can't support; he recommends waiting until after one growth cycle is complete before fertilizing.

Soak your tree down until the whole root ball is soaked, then keep the root system moist, but not wet. Daily watering is usually not necessary. To check for moisture, push a sharpened pencil into the root ball to see if it changes color. Watering properly is mostly a matter of common sense; if your tree has the droops it obviously needs more—or maybe less—water. Good drainage is essential.

When to Plant

Fall is a good time to plant most deciduous trees, though this varies with the type of tree. Broadleaf evergreens usually do better

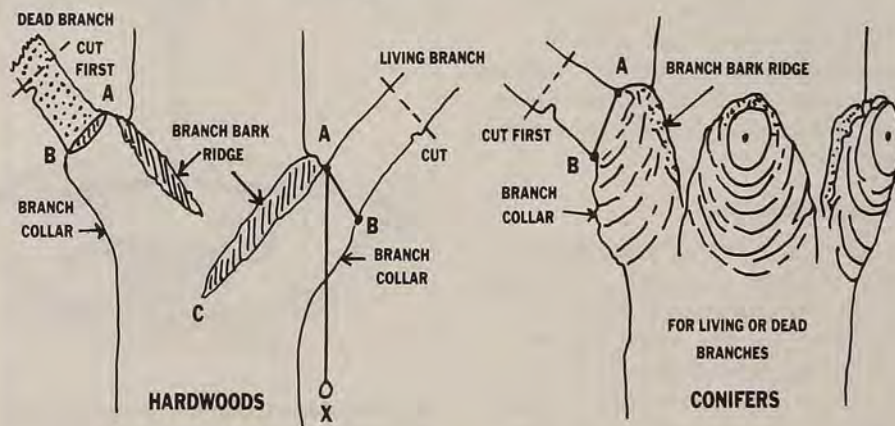
when planted in spring; their root systems sometimes don't develop enough with fall planting and they may suffer from significant dieback.

Pruning and Staking

Conventional wisdom called for extensive pruning at planting time; often the top of the tree was cut back to conform with the size of the remaining root ball. This is no longer considered necessary and can cause serious injury to the tree. Injured, diseased, and broken branches should be cut away, however. Make sure that you don't cut back the leader—in fact, when choosing a tree, avoid trees that exhibit two or more leaders of equal size. If you do get a tree with a double leader, remove one totally or head it back to promote side growth on that branch.

Though your newly-planted tree may need staking, it's best to stake as little as possible. Many bare-root trees will stand by themselves without staking, and an unstaked tree will develop a better taper and a stronger root system, according to Richard Harris, author of *Arboriculture* and professor emeritus of landscape architecture at the University of California, Davis. When you do stake, use flat strapping or webbing

Shigo's Tree Pruning Hints



Dr. Alex Shigo coined the phrase "natural target pruning" to describe a tree-pruning technique that specifically aims to maintain the health of trees. Here are the steps:

- Locate the branch bark ridge, a ridge of bark that forms in the branch crotch.
- Find target A—the outside of the branch bark ridge.
- Find target B—the swelling where the branch meets the branch collar, a swollen area underneath the branch.
- If target B is hard to find, drop a

straight line from target A line to form line AX. Angle XAC is equal to angle XAB.

► Double cut the limb to remove most of the weight and prevent tearing of the bark. Remove the branch, leaving a temporary stub.

► Make the final cut using line AB. Often this line is best cut from below the limb inward toward the trunk.

For a detailed look at Dr. Shigo's work, consult his book, *A New Tree Biology*, available through Shigo and Trees Associates, 4 Denbow Rd., Durham, NH 03824.

instead of wire, and be sure the tree can move at least one inch in either direction. Position the bracing as low as possible on the trunk, and don't pull the tree right up against the stake—leave some space between tree and support. Double bracing is best, says Harris, with a support on each side of the tree.

Examine your ties during the growing season—trees can be girdled if they grow quickly. If your tree is a conifer, low-growing branches may conceal a forgotten tie around the trunk of the tree, weakening it and causing it to break in a storm.

Should you choose a small tree or a larger one? In most cases, according to Harris, the smaller the tree, the easier it is for it to establish itself in its new environment. A healthy small or medium-sized tree will probably catch up to a larger tree in two or three years, given the proper care.

Trees probably add more beauty, stability, value, and even poetry to a property than any other category of plant, and yet they are often the first to suffer neglect or even unwitting mistreatment. For gardeners who are concerned about the health and preservation of trees, though, it's time to rethink traditional methods.

—Kathleen Y. Riley
Editor

Protect Trees from Weed Trimmers

When care is not exercised in the operation of weed trimmers and lawnmowers, both of these tools can damage tree bark, even to the point of girdling the trunks. Consulting arborists agree that it's tough to be called in on a case where a beautiful tree has failed to flower, and to have to tell the homeowner that he himself is the culprit.

To the untrained eye, there may be no apparent cause, but close examination by a professional often reveals scar tissue at the base of the tree. As a weed trimmer or lawnmower strikes a tree it can pierce through the bark and the cambium, that thin layer of living tissue containing the tree's vascular system. Cutting the tree off from life-sustaining resources results first in stress at the affected areas, then in general weakening, and finally in death.

The best remedy to prevent such damage is a mulched area free of grass around the base of the tree. Organic mulches like wood chips or bark are attractive, add nutrition as they decay, and allow air exchange and moisture penetration.

Members' Exchange

Do you have comments, suggestions, or information to share with other AHS members? If so, we'd like to hear from you. Whether it's a response to an item you read here, your own approach to solving a perplexing garden problem, or a comment on a horticultural issue affecting the larger community, your perspective could enrich that of other members.

Editor: I enjoyed the ground cover article in the summer News Edition (See "Versatile Ground Covers," July, 1988). We've discovered, unfortunately, that few ground covers can survive a severe drought such as that we've experienced this summer! I assumed that wild ginger, so prolific and hardy, would not be affected; however, it has withered and died, even in densely shaded areas. Vinca is yellowing and losing its leaves. The violets are reduced to a dry, composted appearance, and lamium is sparse. However, the euonymus looks fantastic thus far, even without supplemental watering, and epimedium has survived rather well, certainly a most refreshing discovery.

—Peg Clark
Freeport, Illinois

Editor: Based upon my experience as co-owner of Picadilly Farm, one of the Southeast's largest producers of hostas (see "Versatile Ground Covers," *American Horticulturist* News Edition, July, 1988), I'd like to offer the following comments:

If one wishes to be an organic gardener and use seaweed, manure, and rock phosphate, that's fine, but chemical fertilizers will *not* burn hostas, if used at the proper levels and not allowed to remain on the leaves. I recommend a soil test prior to any fertilization of hostas, but in the absence of such a test, a general recommendation would be to apply three to five pounds of 10-10-10 (or 6-8-6) per 100 square feet of bed space in the early spring prior to the emergence of the plants. In our potting mix at Picadilly Farm we use dolomitic limestone, superphosphate 10-10-10, and a granular slow-release 13-13-13 product at the rate of one four-inch pot per wheelbarrow of soil. We have had no burning due to chemical fertilizers among our hostas.

—Samuel B. Jones
Athens, Georgia

Editor: I'm most interested in seeing the AHS continue and strengthen offerings of seed members could not readily obtain from the usual seed catalogs. They do their job well, but AHS has the unusual advantage of contacts with arboreta, botanical gardens, etc., which have propagation programs.

I've used the AHS Seed Program to expand my own horticultural horizons. Past successes that have worked especially well for me include the Chinese elm now shading our lawn, the Japanese tree lilacs in bloom for the second year now and reaching for the top of our porch, my golden barrel cactus and azalea schlippenbacchi, and the blue Indian corn we use for tortillas.

I encourage AHS to expand on native plant offerings of various regions of the country, and it would be nice to find old-fashioned varieties of flowers no longer offered in the seed catalogs. Newness is in with them, and many old varieties just aren't available except from private gardeners.

—Jane A. Lawrence
Muncy, Pennsylvania

Send letters to: Editor, *American Horticulturist* News Edition, P.O. Box 0105, Mt. Vernon, VA 22121. Letters may be edited for length or clarity.

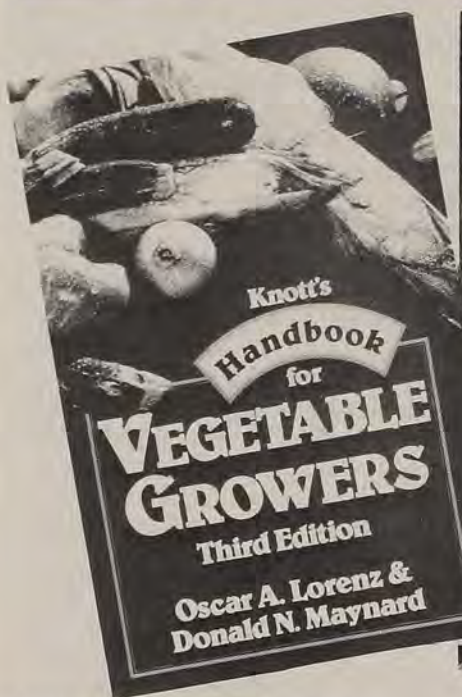
New Member Service

Our newest *members-only* service is a toll-free number to make selected benefits more accessible; these include our Gardener's Information Service and membership information. If you have garden hints or information to pass on to other members, we'd welcome hearing from you about those, too. Write it down: 1 (800) 777-7931.

Member-to-Member Garden Hints

We're interested in passing along seasonal "hands-on" gardening hints from our members. Our question for this issue: **Do you have an approach to pest and slug control that has worked well for you?** Please share your experience with other members by sending a note to: Editor, *American Horticulturist* News Edition, 7931 East Boulevard Drive, Alexandria, VA 22308.

Gardener's Bookshelf

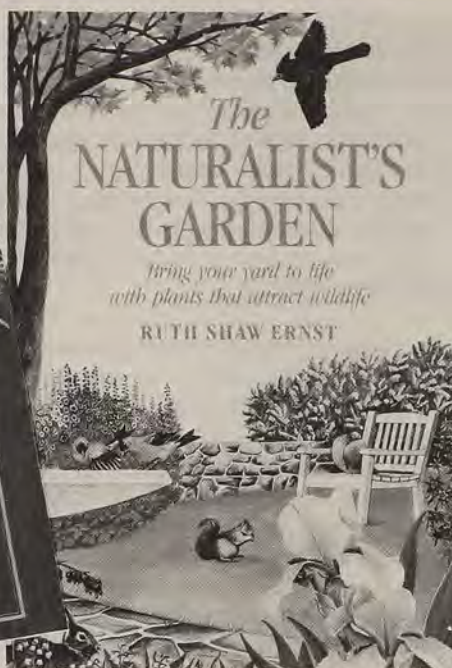


Successful Perennial Gardening

The strong surge of interest in perennial care and cultivation is often tempered with a bit of apprehension—the myriad plant varieties and their growing requirements can present quite a challenge to the home gardener. This book, which presents itself as a “user-friendly” guide to the joys of perennial gardening, takes aim against this sea of confusion with easily accessible information that tells the gardener how to divide and propagate perennials, how to keep them pest and disease free, how to maximize enjoyment by cutting and drying them, and even how to design and grow a child's garden. Illustrated with full-color photographs and species illustrations and containing a glossary of gardening terms, this book will become a well-used addition to the home gardener's library. By Lewis and Nancy Hill. Garden Way Publishing, Storey Communications, Inc., Pownal, VT 05261. Publisher's price: hardcover, \$29.95; softcover, \$16.95. AHS member price: hardcover, \$26.95; softcover, \$13.55. Code: hc, GARDE 05970; sc, GARDE 05980.

The Naturalist's Garden

Landscapes designed specifically to attract, feed, and shelter wildlife add another dimension of beauty and enjoyment to home gardening. This book features garden plans, charts of bird, butterfly and bee feeding



preferences, comprehensive reading lists for wildlife gardening needs, and a wealth of wildlife lore that will make the reader a better naturalist as well as a more accomplished wildlife gardener. The author describes how to design a moonlit garden of fragrant night-blooming flowers; how to design and build a water garden; how to choose ornamental trees and shrubs; and how to grow pest-free vegetables without resorting to chemicals. By Ruth Shaw Ernst. Rodale Press Books, 33 E. Minor St., Emmaus, PA 18049. Publisher's price: hardcover, \$19.95; softcover, \$12.95. AHS member price: hardcover, \$15.95; softcover, \$10.35. Code: hc, RODAL 05900; sc, RODAL 05910.

Knott's Handbook for Vegetable Growers

The third edition of this very popular sourcebook for vegetable gardeners, featuring comprehensive coverage and a concise format, is clearly designed for the professional or the very serious home gardener. Generously provided with detailed charts, diagrams, and illustrations, the book contains a wealth of technical information on such subjects as integrated pest management, polyethylene mulches, gel seeding, vegetable marketing alternatives, soil solarization, seed priming, row covers, and greenhouse vegetable production. The book is fully indexed and comes in a useful paperback, comb-bind format for easy

portability. By Oscar A. Lorenz and Donald N. Maynard. John Wiley & Sons, Inc., 605 Third Avenue, New York, NY 10158. Publisher's price: \$24.95. AHS member price: \$20.95. Code: JWILE 05820.

Gardening with the New Small Plants

Growing dwarf and miniature plants can be a passion for some gardeners and a necessity for others, especially for city gardeners, condominium owners, and others with small plots of land, who will find this book to be a complete compendium of information on the selection, care, and cultivation of dwarfs and minis. Written by a journalist in close collaboration with horticultural experts, the book contains sections on dwarf conifers, woody ornamentals, miniature roses, miniature bulbs, small vegetables, and dwarf fruit trees, along with a section on planning and designing with miniatures. By Oliver E. Allen. Houghton Mifflin Co., 2 Park St., Boston, MA 02108. Publisher's price: hardcover, \$19.95; softcover, \$12.95. AHS member price: hardcover, \$17.95; softcover, \$11.65. Code: hc, HOUGH 05950; sc, HOUGH 05960.

The Backyard Vegetable Factory

For people with limited time and space, this book makes growing vegetables not just a possibility, but a pleasure. In garden patches of 10 by 10 or less, a cornucopia of tomatoes, peppers, beans, and 60 other vegetables can be harvested each growing season. The book presents innovative techniques such as vertical and container gardening, dynamic plant grouping, and water conservation. Even in the smallest spaces, growing vegetables from seed to supper table is quicker and easier than ever. Extensive charts and step-by-step illustrations make it simple to turn your tiny garden into a “vegetable factory.” By Duane Newcomb. Rodale Press, Inc., 33 East Minor St., Emmaus, PA 18049. Publisher's price: hardcover, \$19.95; softcover, \$14.95. AHS member price: hardcover, \$15.95; softcover, \$11.95. Code: hc, RODAL 05990; sc, RODAL 06000.

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.

Styer Nominations Due

Gardeners and professionals are encouraged to enter plants in the Pennsylvania Horticultural Society's Styer Award of Garden Merit program, which each year recognizes ornamental plants for exceptional garden merit. The award was initiated in 1978 with a grant from nurseryman J. Franklin Styer; its purpose is to promote outstanding plants that are not widely used as ornamentals. The Styer award committee is made up of 16 horticulturists who evaluate entries, select award winners, and encourage wider use of these plants in landscapes and home gardens. The Styer is the only formal selection of its kind in the United States.

Plants must be hardy in the mid-Atlantic states, they should not be widely used, and they should exhibit good garden merit. The plants may include species or cultivars, new plants resulting from breeding or selection, or those recently introduced to the area from other parts of the United States or abroad. To qualify, a minimum of three landscape-sized specimens must be available for evaluation within 50 miles of Philadelphia. Propagation and distribution of candidate plants must be in progress at the time of entry to ensure availability to growers and retailers. The deadline for entries is November 1.

Financial Times Centenary Rose



To mark the 100th anniversary of the *Financial Times*, David Austin Roses of Albrighton has named one of his new roses 'Financial Times Centenary'.

The rose has large, deeply cupped blooms with something of the character of an old Bourbon rose. The blooms are colored a deep clear pink, with a powerful fragrance, and are produced freely on a plant of strong upright growth. The foliage is dark green, and the bush may be expected to grow to three and a half feet in height.

For more information, a brochure, and/or entry form, contact the Pennsylvania Horticultural Society at (215) 625-8250.

The 1988 Styer Award Winners:

► *Hedera helix* 'Buttercup' features a chartreuse to butter-yellow color in young leaves, changing to dark green with lighter veins in mature leaves. It is successful in high shade or full sun, as a ground cover or trained to a wall (hardy to Zone 6).

► *Ilex serrata* x *I. verticillata* 'Sparkleberry' is a large, multi-stemmed deciduous holly with brilliant red winter berries that often last into March (hardy to Zone 5).

► *Itea virginica* 'Henry's Garnet' is a tough, adaptable shrub with wonderful contrast from summer's fragrant white flowers to the purple-red foliage of fall.

► *Magnolia acuminata* x *M. heptapeta* 'Elizabeth' is noted for its glamorous lemon-yellow blooms, new among the magnolias with lily-like flowers.

► *Prunus incisa* x *P. campanulata* 'Okame' with very early, non-fading pink blooms and yellow fall foliage will thrive in many different sites.

► *Zelkova serrata* 'Green Vase' is suitable as a garden or street tree, tolerant of air pollutants and heavy clay soils, with a neat upright habit and very rapid growth.

Predicting the Success of Tree Grafts

City-tough, decorative trees in greater variety are possible by the 21st century thanks to the first scientific method to predict the success of tree grafts. Previously, there was no reliable way to know if a stem from one tree could graft well to the root of another. This has limited the varieties of high-quality trees available to landscape planners. An Agricultural Research Service scientist found that each tree has unique enzymes for making lignin, the strengthening glue that binds the cell walls of woody plants. By matching similar sets of enzymes from different trees, nursery growers can, for the first time, predict if a stem and root will grow into a solid graft. Grafted trees, unlike those grown from seeds, can be grown to market size three years sooner and tend to be more uniform in size and shape.

—U.S. National Arboretum, Washington, DC
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Planting for Wildlife Attraction



Black-capped Chickadee

Robert C. Simpson

Most of us share our gardens with a wide variety of wildlife, from the rabbits and mice that nibble surreptitiously on seedlings to the just-glimpsed rare butterfly or red-shouldered hawk that we've waited for years to attract. Though our relationship to wildlife can sometimes turn into an uneasy truce, most would agree that birds,

especially, add immeasurably to our gardening enjoyment. For those who get caught up in the delights of watching these colorful and fascinating visitors, careful planning can add a rich dimension to gardening. The following is a list of trees, shrubs, and vines that provide food and cover for butterflies and birds.

Name	Birds Attracted
American beech (<i>Fagus</i> spp.)	Bluejay, towhee, titmouse, cardinal
Allegheny serviceberry (<i>Amelanchier laevis</i>)	bluebird, cardinal, catbird, flicker, mockingbird, oriole, scarlet tanager, thrush, woodpecker
American cranberry (<i>Viburnum trilobum</i>)	bluebird, cardinal, cedar waxwing, mockingbird, robin, white-throated sparrow, 28 other species
Azalea (<i>Rhododendron</i> species and hybrids)	hummingbird, also bees and butterflies
American holly (<i>Ilex opaca</i>)	bluebird, brown thrasher, catbird, cedar waxwing, flicker, mockingbird, thrush



Lent Lily Narcissus pseudo-narcissus

This is the wild daffodil of English woodlands about which Shakespeare wrote in *A Winter's Tale*. It is a charming deep yellow daffodil, growing about a foot in height and flowering very early. The flower is very distinct and recognizable from a distance.

A vigorous grower, particularly suitable for naturalizing in grass or open woodland where it will maintain itself longer and spread more freely than many of the larger garden varieties. It is considered the parent of the great range of modern garden varieties.

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Name	Birds Attracted
Birch (<i>Betula</i> spp.)	black-capped chickadee, goldfinch, grouse, redpoll, siskin, tanager, titmouse, vireo, warbler, woodpecker, butterflies
Black haw (<i>Viburnum prunifolium</i>)	bluebird, cardinal, cedar waxwing, mockingbird, robin, white-throated sparrow, some game birds
Elderberry (<i>Sambucus canadensis</i>)	Bluebird, bluejay, brown thrasher, cardinal, catbird, mockingbird, robin, rose-breasted grosbeak, butterflies
Grapes (<i>Vitis</i> spp.)	blackbird, bluejay, cardinal, cedar waxwing, cuckoo, finch, game birds, grackle, oriole, tanager, thrush, vireo, warbler
Hall's honeysuckle (<i>Lonicera japonica</i> 'Haliana')	bluebird, brown thrasher, cedar waxwing, evening grosbeak, goldfinch, hummingbird, junco, mockingbird, robin, bees, butterflies
Maple (<i>Acer</i> spp.)	bobwhite, cardinal, goldfinch, grosbeak, oriole, pine siskin, purple finch, robin, vireo, woodpecker, yellow-bellied sapsucker, yellow warbler, bees
Mimosa (<i>Albizia julibrissin</i>)	hummingbird, butterflies
Morning glory (<i>Ipomoea tricolor</i>)	hummingbird, bees
Oak (<i>Quercus</i> spp.)	blue jay, brown thrasher, crow, grackle, nuthatch, titmouse, woodpecker
Privets (<i>Ligustrum</i> spp.)	catbird, waxwing, thrasher, robin, mockingbird
Pyracanthas (<i>Coccinea</i> spp.)	waxwing, brown thrasher, mockingbird
Raspberry (<i>Rubus idaeus</i> ; <i>R. occidentalis</i>)	black-capped chickadee, bluebird, blue jay, brown thrasher, cardinal, cedar waxwing, evening grosbeak, hermit thrush, oriole, phoebe, robin, bees
Rugosa rose (<i>Rosa rugosa</i>)	bluebird, brown thrasher, cardinal, cedar waxwing, evening grosbeak, goldfinch, junco, mockingbird, robin, song sparrow
Snowberry (<i>Symphoricarpos</i> spp.)	bobwhite, cedar waxwing, grosbeak, robin, thrush
Trumpet vine (<i>Campsis radicans</i>)	hummingbird, butterflies, bees
Spruce (<i>Picea</i> spp.)	black-capped chickadee, bluejay, cedar waxwing, evening grosbeak, goldfinch, junco, mockingbird, mourning dove, pine siskin, purple finch, robin, sparrow, yellow-bellied sapsucker, warbler
Sweet gum (<i>Liquidambar styraciflua</i>)	cardinal, chickadee, goldfinch, junco, mourning dove, purple finch, towhee, white-throated sparrow
Virginia creeper (<i>Parthenocissus quinquefolia</i>)	woodpecker, flycatcher, tree swallow, chickadee, white-breasted nuthatch, catbird, mockingbird, vireo, warbler, scarlet tanager, finch

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Gardener's Dateline

► **September 6-9. American Greenhouse Vegetable Growers Association Annual Conference.** Orlando, Florida. Information: Carol A. Laymon, American Greenhouse Vegetable Growers Assn., P.O. Box 20145, Columbus, OH 43220, (614) 442-1822.

► **September 9-10. Workshop: Topiary for the Home, Garden, and Business.** Longwood Gardens, Kennett Square, Pennsylvania. Information: Longwood Gardens Education Division, P.O. Box 501, Kennett Square, PA 19348-0501, (215) 388-6741, ext. 516.

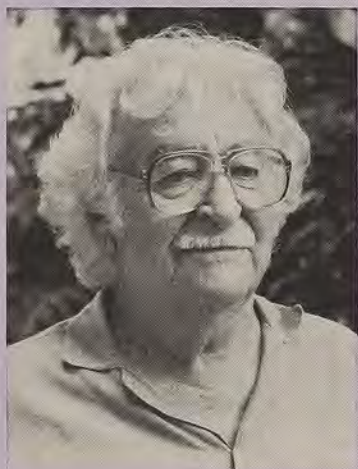
► **September 11. Lecture: Planting Winter Vegetables Now.** South Coast Botanic Garden, Palos Verdes Peninsula, California. Information: South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 772-5813.

► **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.



Seiya-en, the Missouri Botanical Garden's Japanese Garden, will be the center of attention at the Japanese festival, August 27-September 5. The garden is the largest in North America and one of the most authentic outside the Orient.

Roberto Burle Marx to Speak



The George Washington University and the American Horticultural Society will jointly sponsor a lecture by Roberto Burle Marx, the renowned Brazilian landscape architect, painter, and author, on **September 13, 1988 at 7:30 p.m. at George Washington University's Marvin Theater, 800 21st St., NW, Washington, DC.** A reception will follow the lecture. Registration fee is \$25.00; for more information call (202) 994-5758.

► **September 18. Arnold Arboretum Plant Sale and Auction.** The Case Estates, 135 Wellesley St., Weston, Massachusetts. Information: Jo Procter, The Arnold Arboretum, Arborway, Jamaica Plain, MA 02130, (617) 524-1718.

► **September 23-25. Grow Texan: Symposium of Natural Landscaping and Plant Sale.** Armand Bayou Nature Center, 8600 Bay Area Blvd., Houston, Texas. Information: Gary Freeborg, (713) 474-2551.

► **September 24-25. East-West Orchid Show.** Otani Hotel and Garden, 120 South Los Angeles Street, Los Angeles, California. Information: Thea Uota, (213) 485-1177.

► **September 25. Lecture: Late Summer and Fall Care of Roses.** South Coast Botanic Garden, Palos Verdes Peninsula, California. Information: South Coast Botanic Garden, 26300 Crenshaw Blvd., Palos Verdes Peninsula, CA 90274, (213) 772-5813.

► **September 30-October 2. Potomac Bonsai Association Annual Symposium.** U.S. National Arboretum, 3501 New York Ave., NE, Washington, DC. Information: Chris Yeapanis, 4228 Berritt St., Fairfax, VA, 22030 (703) 591-0864.

► **October 1-2. Ohio Gourd Show.** Morrow County Fairgrounds, Mt. Gilead, Ohio. Information: O. C. Stevens, 4761 Twp. Rd. 116, Mt. Gilead, OH 43338, (419) 946-3302.

► **October 1-2. Morton Arboretum Bonsai Society Show.** Morton Arboretum, Thornhill Bldg., Route 53, Lisle, Illinois. Information: Ross Clark, The Morton Arboretum, Lisle, IL 60532, (312) 968-0074.

► **October 2-4. Construction Injury and Tree Evaluation Clinic.** Ramada Inn, Syracuse, New York. Information: Beth Seme, Executive Secretary, New York State Arborists, ISA Chapter, P.O. Box 58, Latham, New York 12110, (518) 783-1229.

► **October 2-4. The Third International Flower Trades Exhibition.** Great Hall, Alexandra Place, London, England. Information: Florida International Trade Service, Inc., 300 West America St., Orlando, FL 32801, (305) 843-3487.

► **October 5-6. The Garden Club of Virginia Annual Rose Show.** Lynchburg Hilton, Lynchburg, Virginia. Information: Mrs. David A. Vaughan, 1117 Rugby Rd., Lynchburg, VA 24503, (804) 384-2177.

► **October 8. Symposium: The Edible Landscape.** Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, California. Information: Bonnie Busenberg, Education Dept., Rancho Santa Ana Botanic Garden, 1500 North College Ave., Claremont, CA 91711, (714) 626-1917.

► **October 8-10. National Capitol Orchid Society Annual Show.** U.S. National Arboretum, 3501 New York Ave., NE, Washington, DC. Information: Richard D. Grundy, 8905 Linton Lane, Alexandria, VA 22308, (703) 360-6920.

► **October 8-10. Ladew Topiary Gardens Exhibit and Sale.** 3535 Jarrettsville Pike, Monkton, Maryland. Information: Ladew Topiary Gardens, 3535 Jarrettsville Pike, Monkton, MD 21111, (301) 557-9570.

► **October 8-9. New Jersey State Chrysanthemum Society Chrysanthemum Show.** Passaic Township Community Center,

Warren Avenue, Stirling, New Jersey.
Information: Dorothy M. Holmes, 91 Evergreen Ave., New Providence, NJ 07974, (201) 464-3108.

► **October 16, 23, 30. Rhododendron Species Foundation Fall Foliage Festival.** Weyerhaeuser Corporate Headquarters, Federal Way, Washington. Information: RSF, P.O. Box 3798, Federal Way, WA 98063-3798, (206) 838-4646.

► **October 16-19. Society of Municipal Arborists Annual Meeting and Trade Show.** Detroit, Michigan. Information: Leonard E. Phillips, Jr., P.O. Box 364, Wellesley, MA 02181.

► **October 16-20. American Community Gardening Conference.** Quality Inn on the Plaza, Asheville, North Carolina. Information: Mountain Area Gardeners in Communities, P.O. Box 168, Asheville, NC 28802, (704) 251-5666.

► **October 17-19. New England Greenhouse Conference.** The Sheraton Sturbridge Inn, Sturbridge, Massachusetts. Information: Richard J. Shaw, Department of Plant Sciences, University of Rhode Island, Kingston, RI 02881-0804, (401) 792-5996.

► **October 23-26. American Society for Horticultural Science Symposium: New Crops: Research, Development, Economics.** Adam's Mark Hotel, Indianapolis, Indiana. Information: Jules Janick, Dept. of Horticulture,

Purdue University, West Lafayette, IN, 47907, (317) 494-2758.

► **October 23-26. Southern Region of the International Plant Propagators' Society Annual Meeting.** Mobile, Alabama. Information: David L. Morgan, Dept. of Plant and Soil Science, Texas Tech Univ., Lubbock, TX 79409, (806) 742-2837.

► **October 29-30. Chrysanthemum Show.** Atlanta Botanical Garden, Atlanta, Georgia. Information: Lisa Frank, ABG, Box 77246, Atlanta, GA 30357, (404) 876-5858.

► **October 29-30. Old Dominion Chrysanthemum Society Annual Show.** Falls Church Community Center, Falls Church, Virginia. Information: Joan Seeger, 7334 Pinecastle Road, Falls Church, VA 22403, (703) 560-6274.

► **November 5. Garden Plans Native Plant Sale.** Rancho Santa Ana Botanic Garden, 1500 North College Avenue, Claremont, California. Information: Bonnie Busenberg, Education Dept., Rancho Santa Ana Botanic Garden, 1500 North College Ave., Claremont, CA 91711, (714) 626-1917.

► **November 5-6. African Violet Show.** Atlanta Botanical Garden, Atlanta, Georgia. Information: Lisa Frank, Box 77246, Atlanta, GA 30357, (404) 876-5858.

► **November 6-9. International Irrigation Exposition.** Bally's Las Vegas, Las Vegas, Nevada. Information: Irrigation Association, 1911 North Fort Myer Drive, Suite 1009, Arlington, VA 22209, (703) 524-1200.

► **November 6-27. Fall Flower Show.** Phipps Conservatory, Schenley Park, Pittsburgh, Pennsylvania. Information: Phipps Conservatory, Schenley Park, Pittsburgh, PA 15213, (412) 622-6915.

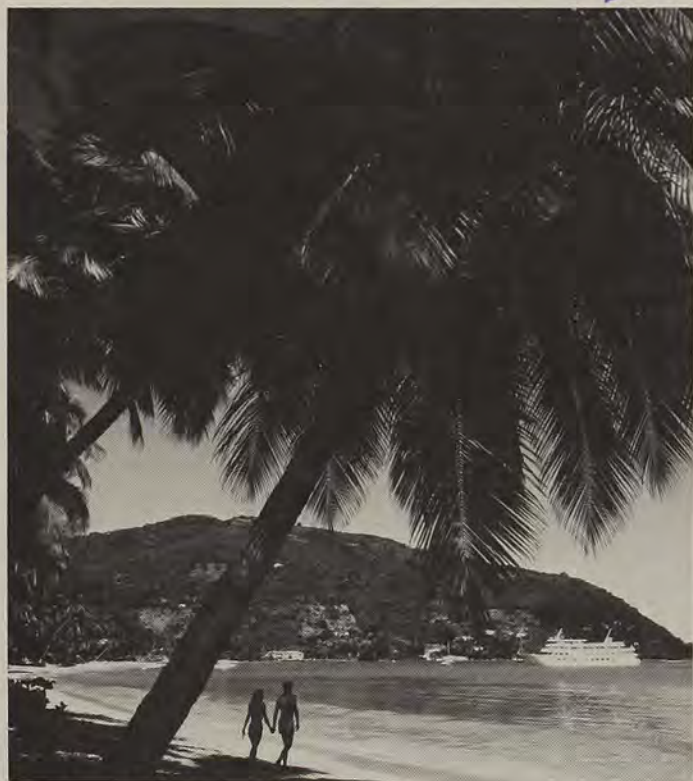
► **November 7-10. Professional Lawn Care Association of America Conference and Show.** Superdome, New Orleans, Louisiana. Information: PLCAA, 1225 Johnson Ferry Rd., NE, Suite B-220, Marietta, GA 30068, (404) 977-5222.

► **November 9-10; 19-20. Autumn Walk.** Old Westbury Gardens, Old Westbury, New York. Information: Old Westbury Gardens, 71 Old Westbury Rd., Old Westbury, NY 11568, (516) 333-0048.

► **November 12. Georgia Organic Growers Association Fall Conference.** Atlanta Botanical Garden, Atlanta, Georgia. Information: GOGA, P.O. Box 15324, Atlanta, GA 30333, (404) 373-7843.

► **November 12-30. Mum Festival.** Cypress Gardens, Florida. Information: Public Relations Dept., Cypress Gardens, P.O. Box 1, Cypress Gardens, FL 33884, (800) 237-4826.

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Regional Notes



► Megan McCarthy-Bilow of the Chicago Botanic Garden reminds Chicago-area gardeners that September is still part of the growing season with the first frost probably not occurring until mid- to late October or even November. This is a good month for fertilizing lawns with a balanced fertilizer containing more potassium and phosphorus than nitrogen, in order to stimulate root development rather than leafy growth.

McCarthy-Bilow recommends core aeration as an excellent treatment for lawns at this time of year. Though core aeration machinery can be rented it is difficult for one person to handle; it's best to hire a lawn service to perform the procedure, which lifts plugs of soil from the ground creating better air movement, meshing the layers on newly-sodded areas, making established lawns more vigorous and less susceptible to disease problems, reducing compacted-soil problems, and even creating holes for reseeding. This procedure must be done on moist soil; water for a few days before core aeration if your soil is dry.

Fall is also the time to control broadleaf weeds such as dandelions in your lawn and to dig up dahlias, begonias, and gladioli (after the first frost). Another idea to prolong the colors of summer: take cuttings from your annuals, root them, pot them up, and enjoy blooms on your windowsill for part of the winter.

► Virginia Clark, of the Tennessee Botanical Garden and Fine Arts Center at Cheekwood in Nashville, Tennessee, reminds gardeners in the Southeast that they would do well to choose plants with the harsh drought conditions of the last four years in mind. Two excellent underused natives that she recommends are *Cotinus obovatus* and *Oxydendrum arboreum*, good all-around tree choices that exhibit gorgeous fall colors. She suggests planting

chrysanthemums, which are available now, to brighten up your garden and your spirits. Lack of naturally-available seed will have local birds hungry; they will probably be especially grateful to have well-filled feeders ready a little early this year.

► Julie Morris of Blithewold Gardens in Bristol, Rhode Island, recommends buckwheat and cocoa bean hulls as good, lightweight mulches that allow rain to get through but have enough substance not to blow away in the first strong wind, "though they don't do much in the way of nutrients." Dig them in at the end of the season. The cocoa bean hulls are an attractive dark brown color, though "they make the garden smell like a chocolate bar for the first week or so." Buckwheat hulls have less trouble with mildew. Use two to four inches.

Berberis thunbergii var. *atropurpurea* 'Crimson Pygmy' is a striking plant to use near gray stone walls or in seaside landscapes, according to Morris. "Its lovely maroon-red foliage shows up especially well in misty, foggy weather."

► Paul D. Drew of the John A. Finch Arboretum in Spokane, Washington, reminds gardeners to continue to water evergreens even after the first frost; roots remain active until the ground is completely frozen. This extra watering will carry the plants into the dry winter with less dessication. Japanese anemone (*Anemone japonica*) does well in this area and is still blooming in September; remember to plant some next spring for beautiful blooms next year. Fall is the time to prepare the soil for spring-blooming bulbs; Drew recommends mixing fertilizer into the soil with a rototiller before planting. "Don't shear evergreen hedges when a hard frost is due," he cautions, "it exposes the wood to the exceptionally hard winds we have in this area, causing it to dry out."

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. Highlights of this delightful autumn excursion will include a visit to The Mount, Edith Wharton's former home, and a tour of the Shelburne Museum on Lake Champlain, with its extensive and fascinating collection of Americana. Serendipity Tours, Three Channing Circle, Cambridge, MA 02138 (617) 354-1879.

October 20- November 6, 1988 Fall Into Spring

This trip to the lovely island nation of New Zealand will feature a visit to a specialized miniature rose nursery, a wildflower walk on the slopes of Mt. Cook, and a tour of the colonial gardens at Holmslee.

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.



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.

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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.

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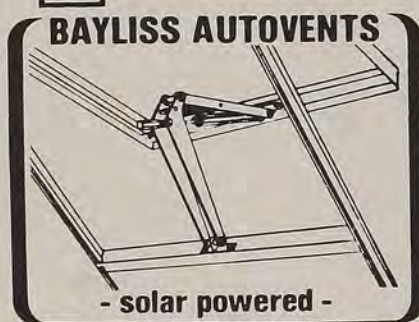
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Gardener's Q & A

Q: Can parsley be dug up before frost and potted up for inside use in the winter?

—B. D., Wilmington, North Carolina

A: Parsley can be grown indoors, but digging up an established plant from your garden is not recommended. Parsley plants form taproots which resent disturbance. It is better to plan ahead by starting plants in pots and bringing the pot-grown parsley inside. Parsley can be grown from seed in the summer (transplant to pots when seedlings develop their first true leaves) or from small transplants purchased from an herb nursery.

Parsley grows slowly inside. If you can't provide considerable natural light, consider installing a few fluorescent "grow" lights. Harvest leaves from the outside of the plant, cutting them off cleanly at the base. You'll probably need more than one plant to meet an average family's culinary needs.

Q: My recent move from a suburban home to a town house has necessitated a change to container gardening. I miss my roses, though. Can they be adapted to container culture?

—S.C., Lexington, Kentucky

A: Roses in containers are a possibility for gardeners who have restricted space or a limited amount of open ground for planting. Floribundas and polyanthas are better suited to containers than hybrid teas, as their cluster flowering gives better show and their habit is bushier and more compact. The container chosen should be boxlike to allow more room for root growth, and amply sized. Fourteen inches square would be the smallest size suitable for polyanthas and smaller floribundas. Larger floribundas and hybrid teas should have a container 16-18 inches wide by at least 16 inches deep. Drainage holes are imperative.

The soil for container culture should be well-drained and non-compacting. Commercially packaged "soiless mixes" work well. Garden soil amended with sphagnum peat and coarse sand is also suitable, although sterilized soil is preferred as unsterilized soil may carry disease organisms and weed seed.

Roses should be planted in the spring. Roots may be bent slightly to fit into the container, but long roots that would coil

around the bottom should be shortened. At this point, floribundas should be pruned to three buds from the base and hybrid teas to two buds. Pruning cuts should be made to an outward facing bud. In subsequent years container grown roses should be shortened by one-third in the fall. In the spring remove old and spindly canes, and prune remaining canes to 6-8 inches.

As with all container plants, closer attention must be paid to cultural demands. Watering is crucial; the roses should not be allowed to wilt. This may mean daily watering during the summer. Containerized roses should be fertilized every two weeks with a water soluble fertilizer. A vigilant watch must be kept for insect and disease problems and remedial action taken when necessary. Prompt attention should also be paid to deadheading and sucker removal.

Winter protection is important in most parts of the country. In USDA Zone 7 and below it is best to store dormant plants in a cellar or similar frost-free location where the plants can be kept at a fairly constant cold temperature.

Q: In an attempt to achieve all-season bloom in my perennial border, I planted early-, mid-, and late-flowering plants throughout. This year I was dissatisfied with the spottiness. Is there a better way?

—J. W., Janesville, Wisconsin

A: The best way to avoid spottiness but still have a long season of bloom is to plan for plant combinations that work together, as opposed to dotting about perennials and surrounding them with green foliage. Using this method, you will have sections of your border where a lot is happening, while other areas are either gearing up or winding down.

For example, instead of placing mid-season plants throughout the border, plan three or four (as many or as few as space will allow) "pockets" of peak bloom where a well-composed group of plants are blooming together. This will allow you to create beautiful associations of plants, the real purpose of garden design. Also, it allows you to experiment with color schemes without having to devote your entire garden to them.

There is no need to be rigid in using this system. Provide some interest in other areas as well, but avoid uniform "dotting." A few

fall-blooming Japanese anemones could considerably enliven an area that peaked in the early summer.

A few other pointers: Plant in masses (single specimens as accents may work handsomely) in drifts and natural shapes. Use plants with good quality foliage throughout the season, and consider foliage interest when doing your initial planning. Gray, purple, yellow, or variegated foliage can provide interesting contrast, as well as foliage with an unusually fine or coarse texture. Try to use some plants with a long season of bloom (catmint, *Coreopsis* 'Moonbeam'), to maximize display.

Q: I am intrigued with the lovely green-and-white striped bark of the striped maple or moosewood (*Acer pensylvanicum*) which flourishes in the Shenandoah. Is this plant adaptable to cultivation?

—V. G., Frederick, Maryland

A: *Acer pensylvanicum*, a coarse-foliaged understory tree native to eastern forests, grows in moist rich woodlands along with beech, yellow birch, hemlock, firs, and sugar maple. The smooth branches striped with jagged white lines are distinctive, giving rise to the common names striped and snake bark maple. The young twigs and leaves are browsed by deer and moose, which explains the name moosewood.

Given the appropriate conditions, the striped maple can make an interesting, trouble-free addition to the home landscape, but it is by no means adaptable to all gardens. Conditions similar to its native

habitat (shady woodlands) are preferred. Soil should be moist, well-drained, and slightly acidic. At least partial shade *must* be provided. Although *A. pensylvanicum* (USDA Zone 3-7) would make a poor choice for a street tree or sunny front lawn, if you can meet its needs, it would be an appropriate choice for a woodland garden, a shady moist border, or as an unusual specimen for shade.

There are other maples which exhibit the same beautiful smooth striped bark. These species, native to China and Japan, are less hardy but often more tolerant of sun, making them somewhat more useful in a garden with more typical growing conditions. Most have a finer-textured foliage, and some have attractive red petioles as well. This group includes *A. capillipes*, Japanese striped maple (Zone 5-7), *A. rufinerve*, red-veined maple (Zone 6-8), *A. grosseri*, snake skin maple (Zone 7-9), and *A. tegmentosum*, Manchurian striped maple (Zone 5-7).

These maples are uncommon in cultivation (usually seen only in botanic gardens, where the bark always excites interest), but are available from some nurseries, particularly in the Pacific Northwest. Forest Farm (900 Tethrow Road, Williams, OR 97544-9599) sells many of these maples, including *A. pensylvanicum*, in very small sizes. Ordering very small trees is an inexpensive way to acquire rare trees that deserve to be planted more frequently. The Asian snake bark maples are certainly in this category.

—Laura E. Coit
Assistant Editor, Horticulture

Dethatch Lawns this Fall to Prevent Disease

With the current drought, many homeowners may find they have a problem with patch disease, a condition formerly called "Fusarium blight." Patch disease can devastate lawns, particularly sodded ones. Symptoms are patches of yellow and dead or dying grass.

Patch disease is only a problem on lawns that have a thick—over ½ inch deep—thatch layer, says Cynthia Ash, assistant plant pathologist with the University of Minnesota's Extension Service. "Thick thatch reduces the rooting depth of the grass, leaving it open to drought stress during warm, dry weather," she explains. "When the grass becomes drought-stressed, the disease organisms are able to invade and colonize its crown and roots."

Ash says the best way to avoid patch disease or help a lawn recover from it is to reduce the thatch layer by power raking and aerating in the spring or fall and to encourage good rooting through proper fertilization, watering, and maintenance.

1989 AHS Seed Program Underway

Members are urged to start planning now for the 1989 American Horticultural Society Seed Program. If you have unusual seeds, hard-to-find cultivars, a rare old-fashioned plant, or just a favorite plant that you'd like to share, keep us in mind. Send your seeds to Tony Halterlein, Curator, American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308.

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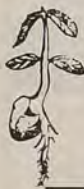
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When is Arbor Day?

Here's a list of the current Arbor Day dates for all 50 states and U.S. territories.

Alabama-Last full week in February

Alaska-Third Monday in May

Arizona-Friday following April 1

(Appache, Navajo, Coconino, Mohave, and Yavapai counties);

Friday following February 1 (all other counties)

Arkansas-Third Monday in March

California-March 7-14

Colorado-Third Friday in April

Connecticut-April 30

Delaware-Last Friday in April

District of Columbia-Last Friday in April

Florida-Third Friday in January

Guam-First Friday in November

Georgia-Third Friday in February

Hawaii-First Friday in November

Idaho-Last Friday in April

Illinois-Last Friday in April

Indiana-Second Friday in April

Iowa-Last Friday in April

Kansas-Last Friday in March

Kentucky-First Friday in April

Louisiana-Third Friday in January

Maine-Third week in May

Maryland-First Wednesday in April

Massachusetts-April 28-May 5

Michigan-Third week in April

Minnesota-Last Friday in April

Mississippi-Second Friday in February

Missouri-First Friday after the first Tuesday in April

Montana-Last Friday in April

Nebraska-April 22

Nevada-Southern-February 28; Northern-April 23

New Hampshire-Last Friday in April

New Jersey-Last Friday in April

New Mexico-Second Friday in March

New York-Last Friday in April

North Carolina-First Friday following March 15

North Dakota-First Friday in May

Ohio-Last Friday in April

Oklahoma-Last full week in March

Oregon-First full week in April

Pennsylvania-Last Friday in April

Rhode Island-Last Friday in April

South Carolina-First Friday in December

South Dakota-Last Friday in April

Tennessee-First Friday in March

Texas-Third Friday in January

Utah-Last Friday in April

Vermont-First Friday in May

Virginia-Second Friday in March

Virgin Islands-Last Friday in September

Washington-Second Wednesday in April

West Virginia-Second Friday in April

Wisconsin-Last Friday in April

Wyoming-Last Monday in April

National Arbor Day-Last Friday in April

Conservation News

The following rare plants have been recently listed or proposed for listing under the U. S. Endangered Species Act:

Hexastylis naniflora—dwarf-flowered heartleaf

Saracenia rubra alabamensis—Alabama canebreak pitcher-plant

Solidago albopilosa—white-haired goldenrod

Thalictrum cooley—Cooley's meadowrue

Trillium reliquum—relict trillium

Project To Document Vascular Plants

The Flora of North America Project, based at the Missouri Botanical Garden in St. Louis, will be the first synthesis of current information about the characteristics, relationships, and distribution of the vascular plants (flowering plants, gymnosperms, ferns, and fern allies) of North America north of Mexico. The twelve-year project recently received a grant of \$225,900 from the National Science Foundation; it will result in 12 published volumes and a computerized database. There is no current all-encompassing collection of information on plants in North America such as exists in the U.S.S.R. and Europe.



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