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in Your Garden

The American GARDENER

The Magazine of the American Horticultural Society

May / June 2001

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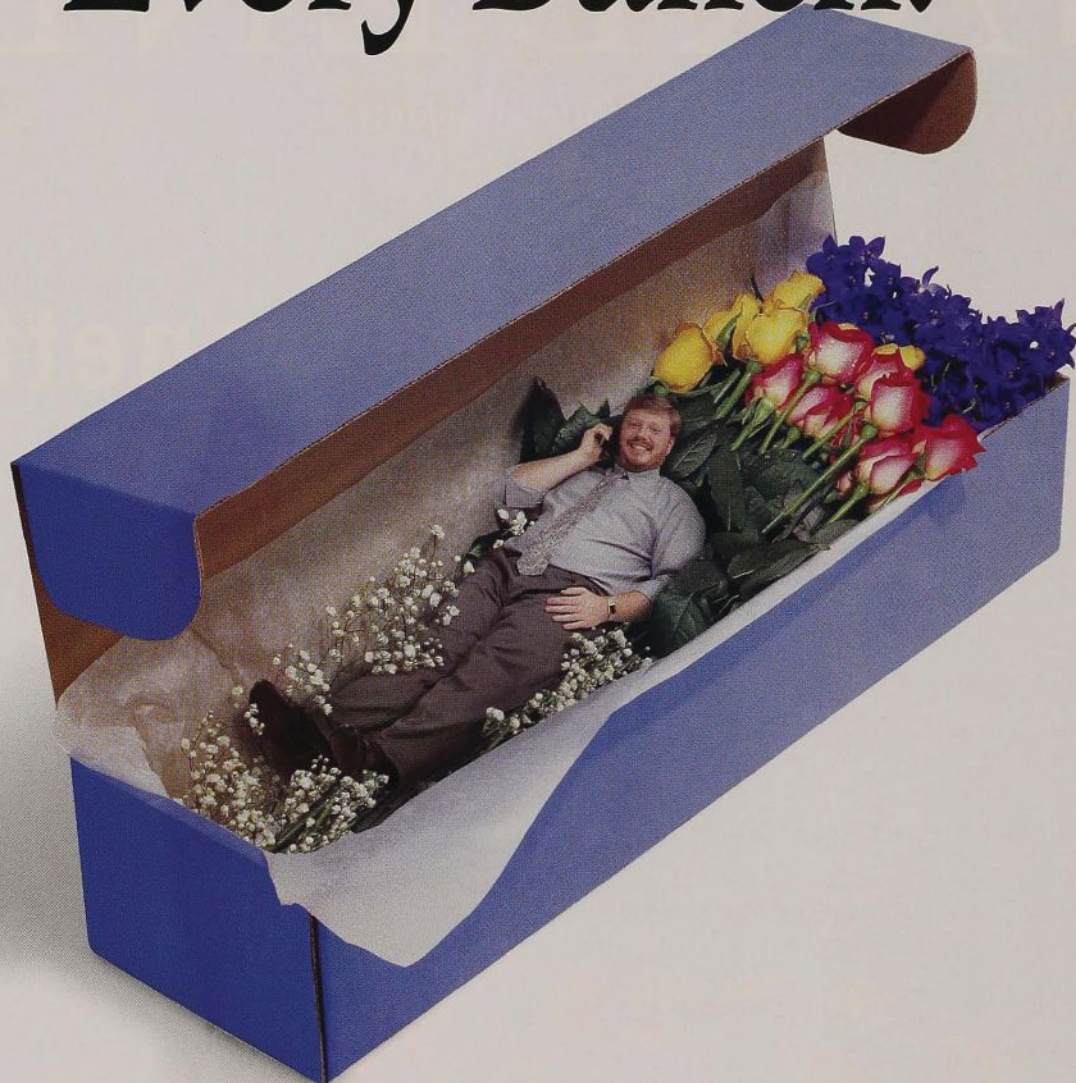
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ON THE COVER: This garden vignette includes a stand of reed grass (*Calamagrostis* sp.), purple coneflower (*Echinacea purpurea*), Russian sage (*Perovskia* sp.), and *Rudbeckia* 'Goldsturm'.

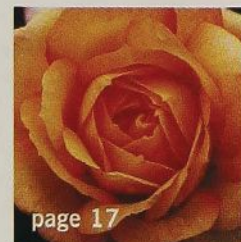
Photograph by David Cavagnaro.

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7931 East Boulevard Drive Alexandria, VA 22308-1300
(800) 777-7931 fax (703) 768-8700 www.ahs.org

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Need help with a gardening problem? Call the AHS Gardeners Information Service at (800) 777-7931 ext. 131 or 124 from 10 a.m. to 4 p.m. Eastern time on weekdays. Or e-mail questions to gis@ahs.org anytime.

INTERN PROGRAM

To receive an application for the Society's Intern Program, write to Janet Walker, director of horticulture, at the address above or e-mail her at jwalker@ahs.org. Intern application forms can also be downloaded from the Society's Web site at www.ahs.org.

RECIPROCAL ADMISSIONS PROGRAM

The AHS Reciprocal Admissions Program offers members free and discounted admission to flower shows and botanical gardens throughout North America. A complete list of participating shows and gardens can be found in this year's *Directory of Member Benefits* and also on our Web site.

TRAVEL STUDY PROGRAM

AHS members and friends can visit spectacular private and public gardens around the world through the Society's exclusive arrangement with the Leonard Haertter Travel Company. For information about upcoming trips, call (800) 777-7931 ext. 121 or view the tour schedule on our Web site.

WEB SITE: WWW.AHS.ORG

The AHS Web site is a valuable source of information about the Society's programs and activities. It is also an important resource for getting the answers to gardening questions, finding out about gardening events in your area, and linking to other useful Web sites. AHS members can reach the members-only section of the Web site by typing in this year's password: smartgarden.

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The American Gardener (ISSN 1087-9978) is published bimonthly (January/February, March/April, May/June, July/August, September/October, November/December) by the American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308-1300, (703) 768-5700. Membership in the Society includes a subscription to *The American Gardener*. Annual dues are \$35; two years, \$60. International dues are \$50. \$10 of annual dues goes toward magazine subscription. Periodicals postage paid at Alexandria, Virginia, and at additional mailing offices. Postmaster: Please send Form 3579 to *The American Gardener*, 7931 East Boulevard Drive, Alexandria, VA 22308-1300.

Botanical nomenclature is based on *The American Horticultural Society A-Z Encyclopedia of Garden Plants*, on *A Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland* and on the *Royal Horticultural Society Index of Garden Plants*. Opinions expressed in the articles are those of the authors and are not necessarily those of the Society. Manuscripts, artwork, and photographs sent for possible publication will be returned if accompanied by a self-addressed, stamped envelope. We cannot guarantee the safe return of unsolicited material. Back issues are available at \$8 per copy.

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Printed in the U.S.A.

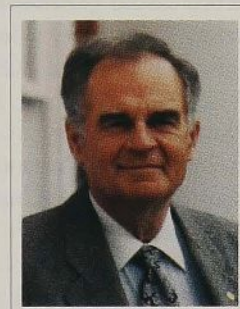
An Inside Look

MY YEARS OF EXPERIENCE with plants and gardening have allowed me to share the joys of gardening with countless people I have met through lectures, radio shows, and in daily life. Sometimes the experience comes back in a most surprising way. Recently, a parishioner in my church asked me to call on Elsie Horn, a church member and avid gardener who had just been moved into a long-term care facility.

Almost 20 years before, Elsie had heard me speak to her garden club about how to care for poinsettias. She had memorized my suggestions for providing an appropriate light and water regimen for poinsettias and had put them into practice each succeeding year. When I visited her at the nursing home this past winter, she was no longer able to walk, yet a poinsettia flourished in her room. In thanks for all she had learned over the years, she gave me the plant and urged me to continue to inspire others with the message that it's possible to garden anywhere.

Inspiration and education are key elements of our mission here at the American Horticultural Society, and nowhere is this more evident than in our magazine. In this issue, Associate Editor Rita Pelczar describes how to design small-scale plantings that have a big impact in the garden.

Plant buffs will enjoy C. Colston Burrell's in-depth profile of meadow rues (*Thalictrum* spp.), an exciting, diverse, and underused genus of herbaceous perennials that includes selections suitable for a range of sites in both sun and shade. In addition, Sonja Nelson writes about rhododendrons that have proven successful in different regions of North America, as selected by members of the American Rhododendron Society.



American gardening reflects the backgrounds of the many immigrants who have arrived here in the last four centuries. Garden writer Susan Davis Price's recent book *Growing Home: Stories of Ethnic Gardening* is a superb chronicle of the diverse gardening traditions in the Minneapolis area, so we have published an excerpt from her book focusing on a remarkable group of Korean gardeners.

Vegetable gardeners will find that plant support can be both functional and attractive. Harold Taylor explains how to create natural-looking supports for beans, cucumbers, and other climbing plants that can be literal works of art.

And for those gardeners who love to share their cultivated habitats with wildlife, there's a special section on attracting hummingbirds to the garden. Hummingbird expert Arnette Heidcamp describes the migration patterns of the various hummingbirds that visit North America and lists the indigenous plants they rely on to survive.

The poinsettia Elsie gave me now sits in my office at River Farm, a daily reminder of the value of sharing information and knowledge. I hope this issue of *The American Gardener* will sow seeds of inspiration that will bear fruit in your own gardens and be passed on to others. Read, learn, share, and enjoy life.

Ever in green,

H. Marc Cathey

—H. Marc Cathey, AHS President Emeritus

Members' Forum

MORE THAN JUST A MAGAZINE

Membership in AHS is one of the best things I've ever done! I've enjoyed and learned from the articles in the magazine. I've grown seeds of all kinds from the annual seed exchange. Since joining the Society, I've added a three-tiered plant stand with grow lights for year-round seed and plant growing and nurturing.

I've loved gardening for years and am now retired on a 10-plus-acre place with horses, dogs, and cats. While I am by no means an expert—although some of my more casual gardening friends think I know more than I do—the seeds, the information, and the motivation that AHS has given me have greatly enhanced my life.

I may never have a show place, but I'll continue to try and improve my gardens every year.

*Harriet Panetta
Eighty Four, Pennsylvania*

INSPIRATIONAL ARTICLE

Thank you so much for Rita Pelczar's article "Inspired Plantings for Walls and Fences" in the January/February issue of *The American Gardener*—particularly her suggestion regarding use of kiwi vines (*Actinidia* spp.) on chain-link fencing. I am now absolutely inspired! We have been wondering how to "soften" such a fence. Thank you for all the blood, sweat, and tears it may have taken to get the article done.

*Joel D. Brown
Camarillo, California*

HOW'D YOU DO THAT?

I was delighted to see step-by-step directions for building Lee Mitchell's arbor in "A Simply Sensational Arbor" (May/June

What's Happening in YOUR Garden After Dark?

Many of us spend most of the sunny hours of the day at work, away from our gardens. This leaves the evening for enjoying the results of our garden labors. As the sun sets, the garden can become a magical place. What is your garden like at night? Do you have a patio or garden spot for relaxing after the sun goes down? Have you planted flowers that open or are particularly fragrant at night? Is your garden home to interesting nocturnal animals? Have you installed special lighting to illuminate your plantings after dark?

We would like to hear about your garden at night: how you have accommodated evening garden enjoyment or memorable nighttime moments you have witnessed. Write or e-mail us with your comments so we can include them in an upcoming article, "After Dark in the Garden."

Include your own name, address, telephone number, and e-mail address so we can contact you. Mail your ideas to *The American Gardener*, 7931 East Boulevard Drive, Alexandria, VA 22308, or e-mail them to editor@ahs.org. You can also fill out and submit a survey form that is posted on the AHS Web site at www.ahs.org. **Submissions must be received by June 22.**

2000). Upon reviewing the directions more closely, I have a question for the author: How did you notch the 1x6 cross pieces (step 3) using a hand or power saw? Two of the three cuts seem simple enough, but how do you make the top

horizontal cut of the notch? My husband speculates that you sawed several small cuts up to the top of the notch mark and then chiseled them out, but that would take an entire weekend! Thanks for enlightening me.

*Adra Brandt
Ewing, Kentucky*



Lee Mitchell's arbor from the May/June 2000 issue of *The American Gardener*.

LEE MITCHELL REPLIES: *Your husband is correct; we did chisel out the horizontal cut after making small cuts with a hand-saw. However, the process didn't take that long, since there were two of us working. Once the notches were completed, the assembly of the arbor was a breeze.*

WRITE US! Letters should be addressed to Editor, *The American Gardener*, 7931 East Boulevard Drive, Alexandria, VA 22308, or you can e-mail us at editor@ahs.org. Letters we print may be edited for length and clarity.



News

AHS Programs and Events

2001 AHS Book Awards

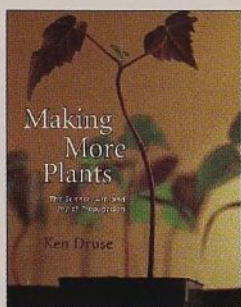
THE FOUR BOOKS honored with the Society's Annual Book Award for 2001 cover widely divergent topics ranging from plant propagation to ethnic gardening, and from a retrospective look at classic American garden writing to inspiring essays from two of America's best contemporary garden writers.

The award winners profiled here were selected by the AHS Book Award Committee from among the dozens of worthy American gardening books published last year. Thomas Cooper, editor of *The Gardener* magazine, chaired this year's book committee, which also included Stephen P. Bender, senior writer for *Southern Living* magazine; Susan Eubank, senior librarian at the Helen Fowler Library of the Denver Botanic Gardens; and Marco Polo Stufano, director of horticulture at Wave Hill garden in New York City.

This is the fifth year for the annual book awards, which debuted in 1997 as part of the Society's 75th anniversary celebrations. Books are judged not only on content and writing style, but on overall quality, including illustration, design, and production.

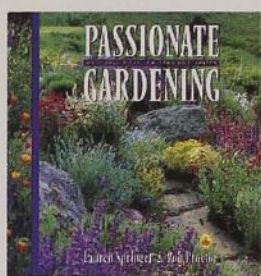
Books that have received the AHS annual award are distinguished on the cover by a gold seal embossed with the Society's name and leaf logo. Look for these books in your local bookstore or order them through a link to Amazon.com posted on the AHS Web site (www.ahs.org).

Making More Plants: The Science, Art, and Joy of Propagation by Ken Druse. Clarkson Potter Publishers, New York, New York, 2000. Publisher's price: \$45.



Books on plant propagation sometimes have a dry, textbookish feel to them; not so with this latest book by award-winning garden writer and photographer Ken Druse. "What really struck me about this book is that the photos are not only educational, but they are done in an artistic way," says Stephen Bender. "The incredibly creative photography really gets you excited about the subject." Druse covers a wide range of propagation techniques, from sowing seeds to dividing, layering, and rooting cuttings.

Passionate Gardening: Good Advice for Challenging Climates by Lauren Springer and Rob Proctor. Fulcrum Publishing, Golden, Colorado, 2000. Publisher's price: \$34.95.



This book of essays and photographs by two top American gardening personalities—both based in the Rocky Mountains—is easy to read, inspiring, and instructive for gardeners in any region. "I thought the way the authors traded off these essays really gave the book a personal touch," notes Bender.

Susan Eubank adds that the authors' "expertise and passion for gardening was evident throughout the book."

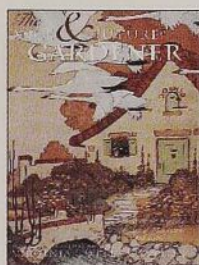
Growing Home: Stories of Ethnic Gardening by Susan Davis Price. Photography by John Gregor. University of Minnesota Press, Minneapolis, Minnesota, 2000. Publisher's price: \$34.95.



The changing face of America is chronicled in this book, which profiles 31 gardeners from a wide variety of cultural and ethnic backgrounds who have been "transplanted" to the Minneapolis area. "The kind of books that are useful to me as a librarian are ones that push knowledge forward," says Eubank, "and this is a wonderful, inspirational book." Noting that ethnic gardening practices are not widely written about, Bender says he enjoyed "learning a little about how people in other cultures garden." (An excerpt from this book starts on page 33.)

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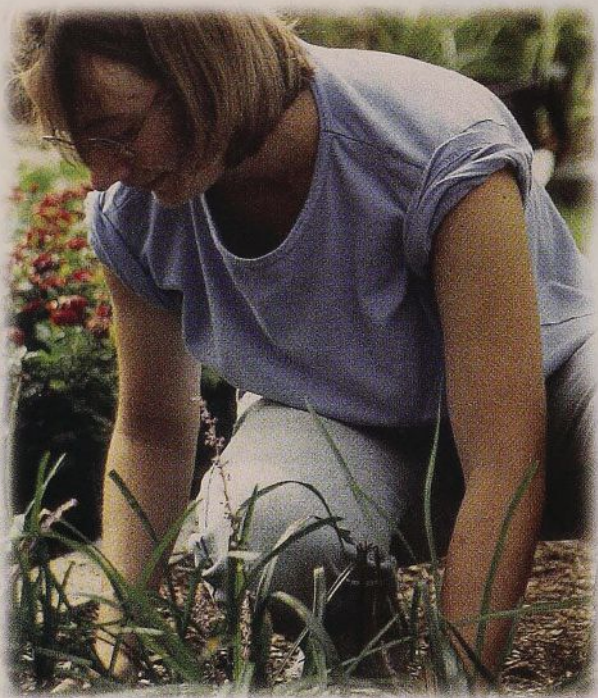
The Once & Future Gardener: Writing from the Golden Age of Magazines 1900–1940 edited by Virginia Tuttle Clayton. David R. Godine, Boston, Massachusetts, 2000. Publisher's price: \$40.



Classic garden writing from popular magazines published in the first four decades of the 20th century is offered in this anthology. Among the writers featured in the book are well-known names such as Louise Beebe Wilder and Fletcher Steele. "What I liked about this book was that it reminded us we have a long history of good garden writing," says Marco Polo Stufano. The book is illustrated mainly with black-and-white period photographs but includes a section of color plates showing magazine covers.

illustrated mainly with black-and-white period photographs but includes a section of color plates showing magazine covers.

EDUCATING THE HORTICULTURISTS OF TOMORROW



Whether students attending college or adults changing careers, generations of horticulturists have benefited from American Horticultural Society internships. At George Washington's River Farm (AHS Headquarters), interns gain experience in:

- Integrated Pest Management—by answering questions in our Gardeners Information Service and scouting the grounds
- Education—through leading activities for children in our Living Lab Program and giving tours of our public garden
- Garden Management—by maintaining our plant collections and working on our grounds
- Interpretation—through developing signs and labels to explain our collections to visitors
- Propagation—by germinating seeds for River Farm gardens and plant sales

Interns gain knowledge from other horticultural professionals by visiting public gardens such as Longwood Gardens and the U.S. National Arboretum, and by attending conferences such as the Perennial Plant Conference, the Millersville Native Plant Conference, and AABGA regional meeting.

AHS internships are not supported by member dues—they are supported through the generosity of people who believe horticultural education is paramount.



FOR MORE INFORMATION ABOUT THE AHS INTERNSHIP PROGRAM OR HOW YOU CAN BE A SUPPORTER, CONTACT TRISH GIBSON AT tgibson@ahs.org.

Join AHS in the Sunshine State

THE ORLANDO AREA will be a rallying point for AHS staff in late May and early June when the Society has an opportunity to publicize two of its most important national initiatives—the SMARTGARDEN™ program and the Plant Heat-Zone Map—while participating at the Epcot International Flower and Garden Festival and the International Master Gardener Conference.

EPCOT INTERNATIONAL FLOWER AND GARDEN FESTIVAL. AHS will once again partner with Epcot during this year's Epcot International Flower and Garden Festival, held in Lake Buena Vista, Florida. Last year, the Society assisted with the design of the Kid's Garden, which was a successful new addition to the festival.



Floral display and monorail at Epcot

This year, AHS and Epcot are co-sponsoring exhibits and lectures as part of the Society's ongoing Great American Gardeners lecture series. Presenters include Ralph Snodsmith, who will share tips on pruning; Kathryn Pufahl, a renowned container garden artist; and Robert Bowden, who will share his knowledge of trees.

"As co-sponsors, we will be providing educational materials relating to the Society's SMARTGARDEN™ program," says Mary Ann Patterson, AHS's director of national programs and public relations. The focus of the SMARTGARDEN™ information will tie into one of this year's Epcot festival themes, "The Gardener's Palette."

The Epcot festival opened April 20 and runs through June 3. The event features displays of more than 1,000 plant species from around the world and a variety of gardening programs presented by nationally known experts. Each weekend has a special theme, including "Plants for Health Weekend" on May 18 and 19, and "I Dig Bugs Weekend" on May 25 and 26. For more information on the festival, call (407) 824-4321 or visit the Walt Disney World Web site at www.disneyworld.com.

MASTER GARDENER CONFERENCE. As part of AHS's ongoing partnership with the International Master Gardeners (IMG), AHS President Emeritus H. Marc Cathey and Director of Horticulture Janet Walker will be guest speakers at the International Master Gardener Conference, which will be held May 28 to June 1 in Lake Buena Vista. They will be discussing the AHS Plant Heat-Zone Map in a presentation titled "Heat Zone Gardening: A New Way to Evaluate Plant Performance."

AHS President and CEO Linda D. Hallman and Mary Ann Patterson will also be attending the conference and will join Cathey and Walker in staffing an AHS-sponsored booth. "Par-

continued on page 10



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GARDENERS UNITE IN CLEVELAND!

Procrastinators take heart. There's still time to register for the Society's Great American Gardeners 56th Annual Conference, which will take place from June 13 to 16 in Cleveland, Ohio. Just added to the panel of scheduled speakers are Stephen Bender of *Southern Living* magazine and Steve Lorton of *Sunset* magazine; other distinguished speakers include garden writers Lee Reich and Michael Pollan, Longwood Gardens landscape designer Tres Fromme, and horticultural therapist Nancy K. Chambers.

Conference attendees will also join these speakers and other AHS members in touring many special gardens in the Cleveland area, including the Holden Arboretum (shown above), the Cleveland Botanical Garden, and Stan Hywet Hall and Gardens. And don't forget that the 2001 AHS awards for excellence in all fields of horticulture will be presented on the last day of the conference.

For more information or to register for the conference, call (800) 777-7931, or visit the AHS Web site www.ahs.org. Registration ends May 31.



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participating in this conference is a wonderful opportunity for us to learn how we can expand and enhance the information about Master Gardeners we already offer through the AHS Web site," says Patterson. Through a special arrangement with IMG, the more than 800 Master Gardeners who are expected to attend the conference will become AHS members.

The overall theme of the conference, which is open only to Master Gardeners and is designed as an opportunity for ongoing training, is "The Magic of Gardening." Further information and registration forms are available on the conference Web site: www.ifas.ufl.edu/~conferweb/mg.

A Legacy for Gardening

LIKE MANY long-time AHS members, Margery Hale Crane's love of gardening was far more than just a hobby. A resident of Bethesda, Maryland, and a member of AHS for more than 15 years, she attended many Society events at River Farm and inspired those around her with her commitment to leave an enduring legacy in support of the Society's educational programs. Before her death last year, she left a \$212,000 gift to AHS through the Society's Horticultural Heritage program, an honor group for people who have chosen to name the Society in their will or trust.

Crane worked for 32 years on the editorial staff at *Changing Times* magazine in Washington, D.C., which is now named

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AHS Gardening Community Listserve



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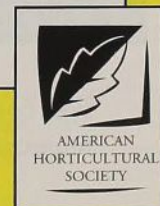


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For more information, call (800) 777-7931 ext. 121, or visit the AHS Web site www.ahs.org

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Kiplinger's Personal Finance. "Her garden was an important aspect of her life, and she was probably the staff authority on gardening," said Marjorie White, a former co-worker at *Changing Times*. While on staff for the magazine, Crane wrote articles on a wide assortment of topics, including many that related to her personal passion—gardening.

H. Marc Cathey, AHS's president emeritus, knew Crane for some 40 years. During that time he assisted her with information for some of her stories, which he says celebrated the "nostalgia, science, and beauty" of plants. "She was always cheerful and enthusiastic—the kind of person who related well to people," recalls Cathey. "She believed strongly in the value of the educational programs sponsored by the Society."

To learn more about the Horticultural Heritage program, call Joe Lamoglia at (800) 777-7931, ext. 115.

New Buzz at River Farm

THE LATEST ADDITIONS to the AHS family are thousands of honeybees that have found a home at River Farm courtesy of Don Truslow, an AHS volunteer and beekeeping hobbyist. Truslow, who is a member of the Beekeeper's Association of Northern Virginia, has kindly moved two of his hives to River Farm so that our flowers, fruits, and vegetables can take advantage of the bees' pollination services.



One of the new bee hives at River Farm, donated courtesy of AHS volunteer Don Truslow.

"This is an exciting development," says AHS Director of Horticulture Janet Walker. "We're looking forward to increased production from our many fruit trees, more berries on our ornamental shrubs, and a better harvest of vegetables."

It is estimated that bees pollinate a third of the world's food crops, but the common honeybee (*Apis mellifera*) and other important pollinating bees have been facing serious challenges in the last few decades. Two types of parasitic mites have been decimating North American honeybee colonies since 1984, and the invasion of this continent by an aggressive strain of Africanized honeybees in the 1990s has taken a further toll.

In early May, Truslow will insert a special sectionalized compartment into the hive that worker bees can use as a foundation for the construction of honeycombs. Although Truslow says there is only a 50 percent chance the bees will produce honey this year, he is planning to conduct a special beekeeping program for AHS staff and volunteers in August at the time he checks the hives for honey.



2001 American Horticultural Society TRAVEL STUDY PROGRAM

Gardens of Carmel and Pebble Beach

October 9–14, 2001



Carmel and Pebble Beach, located in the resplendent coastal area of Central California, are home to many exquisite private gardens that will be open to us: walled gardens, patio gardens, sunken gardens, water gardens and secret gardens—each with their own charms and palette of plantings. As a special treat, the Monterey Bay Aquarium will be opened just for our group so we may dine in front of the spectacular million-gallon aquarium, home to the newly famous "cannibal shrimp!"

Project leader for this program will be AHS Advisory Board Council Co-Chair, Carol C. Morrison from Palatine, Illinois, who has helped to lead numerous AHS Travel Study Programs. She will be joined each day by docents from the Carmel-by-the-Sea Garden Club, who will assist in our garden visits.

For complete details of the exciting 2001 Travel Study Program schedule, visit the AHS Web site at www.ahs.org, or call the Leonard Haertter Travel Company at (800) 942-6666.

No member dues are used to support the Travel Study Program.

Chambers Receives 2001 AHS Horticultural Therapy Award

by Ethne Clarke

HISTORICALLY, horticultural therapy has been adult-oriented: The first therapeutic greenhouse for the mentally ill was built in 1879 in Philadelphia; the development of horticultural therapy



Nancy K. Chambers

programs for the disabled came with the establishment of Veteran's hospitals after World War II; and today, many hospitals and senior-care facilities include healing gardens for their patients. Therapeutic gardening programs for very young, preschool-age children, however, are more recent developments. In this field, much groundbreaking work has been done at the Rusk Institute of Rehabilitation Medicine at NYU Medical Center in New

York City under the guidance of Nancy K. Chambers, this year's AHS Horticultural Therapy Award recipient.

The Rusk Institute's horticultural therapy program is based in the Enid A. Haupt Glass Garden at the New York Botanical Garden. Over the past five years, Chambers, director of the Glass Garden since 1986, and her colleague, Stephanie L. Molen—both registered horticultural therapists and co-authors of *Growth Through Nature: A Preschool Program for Children with Disabilities* (Timber Press, 1999)—have worked to develop a nature education program for the disabled children attending Rusk's pediatric unit preschool. "We offer nature classes as part of the preschool curriculum," Chambers explains, "and a more specialized hort therapy program tailored to the developmental needs of a special part of the community."

Chambers, who was a social worker and counselor and also a buyer for a small garden center, began her horticultural therapy career in the mid-1970s at New Jersey's Essex County Hospital Center. "At that time," Chambers recalls, "hort therapy was in its infancy, but the head of the occupational therapy department hired me to develop a garden-based program—and I'd never heard of horticultural therapy before! It was a steep learning curve. The occupational therapists had a variety of tools and techniques they used to engage sen-

sory responses, so I began by translating the theory of occupational therapy into horticultural activities by bringing in garden objects."

While her work at Essex was with mentally disabled children and young adults, Chambers also gradually began learning more about physical disability and the additional limitations society imposed on the disabled community. Chamber's success and that of her colleagues is based on empathy for the disabled. "They are all people, and if you like them, you want to help," she emphasizes. "It's nonsense to require different tools and different rules for the disabled—to set them apart from the rest of society under the guise of helping them. It is all about inclusion, about *not* making the disabled feel different."

One example of this philosophy in practice is the Children's PlayGarden at the Rusk Institute. A nature-oriented play area, it is the setting for gardening activities that are integrated into each child's individual therapy. "These children are often disconnected from the natural world," Chambers says. "This is especially true of city children, whose parents often do not feel comfortable letting them play outdoors. But it's when they're very young that children are the most open and responsive to all that nature has to offer. As they get older, they start to think

IN RECOGNITION of her important contributions to her profession, Nancy K. Chambers will receive AHS's 2001 Horticultural Therapy Award at the Society's Great American Gardeners 56th Annual Conference, held June 13 to 16 in Cleveland, Ohio. She will also be a featured speaker at the conference, where she will discuss the role plants play in human experience and development.

of soil as unclean, worms as icky, and unfamiliar sensations as threatening." In the PlayGarden, children can enjoy their activities in safety and comfort. There are no specially adapted tools or modified garden practices—it is as close to "gardening as usual" as possible.

Chambers firmly believes that contact with nature benefits children in an even deeper way—by helping them to communicate. "These kids are learning to express themselves through the language of nature; they are working not only with a therapist to achieve a developmental goal, but they are also interacting with the other children in the group. It takes away the sense of isolation so many disabled children experience."



Above: The Children's PlayGarden at the Rusk Institute gives young disabled patients a chance to experience nature amid a highly urbanized setting. **Right:** An intergenerational horticultural therapy group repots house plants in the Enid A. Haupt Glass Garden.



Ethne Clarke is a free-lance writer living in Austin, Texas.



SMARTGARDEN™ — Plants That Suit Your Site

Working with nature to select and grow plants

One of the tenets of the SMARTGARDEN™ is to work with nature whenever possible. Understanding the nuances of your site helps you select plants that will thrive in different parts of your landscape with the least amount of assistance on your part. For example, an area of your yard that drains poorly and remains wet for long periods of the season is a likely site for a bog garden. The sunny strip alongside the street or driveway that is subject to reflected heat and baking sun and is far from the water spigot lends itself to a planting of heat- and drought-tolerant perennials. The shady north side of your house is just the spot for shade-loving shrubs and ground covers.

NATIVES AND NON-NATIVES

One way to increase the odds that the plants you choose are well adapted to the growing conditions in your yard is to select native plants. Native trees and shrubs abound in every region; by incorporating them, your garden will not only reflect its geographic environment, it will also help sustain indigenous wildlife.

If your yard is open and sunny, it may be ideal for meadow wildflowers or rock garden plants; if it is heavily shaded, woodland natives are more appropriate. Regional wildflower and native plant societies can assist you with identifying appropriate natives and finding responsible retail sources. Never collect any plants from the wild without permission.

Non-native plants from regions with similar climates and soils can add diversity to your landscape, but take care to avoid those that are too well adapted. In certain areas, invasive exotic plants such as Japanese honeysuckle (*Lonicera japonica*), Chinese wisteria (*Wisteria sinensis*), Scotch broom (*Cytisus scoparius*), and Russian olive (*Elaeagnus angustifolia*) can choke out less aggressive plants and overtake a garden.

PLANNING FOR GROWTH

Another consideration in selecting plants is to be sure that the expected mature size—both the expected height and spread—of the varieties you choose is appropriate to the planting space. Plants that outgrow their boundaries require a great deal more effort to maintain than plants whose natural size remains in scale with the garden. Furthermore, consider its habit. A tree with a single trunk can often be underplanted with shrubs, while a multiple-stemmed shrub or tree may preclude underplanting.

SITE-SPECIFIC CHALLENGES

Some gardening sites are more challenging than others

and can be a limiting factor in plant selection. The nature of these limitations varies from one location to another. If you live by the seashore, plants that tolerate salt spray and wind—such as ageratum, portulaca, verbena, and rugosa roses—are likely to thrive. Many western gardens have alkaline soils, so plants such as acacias, prickly pear cacti (*Opuntia* spp.), and dropseed (*Sporobolus* spp.) that tolerate alkalinity are logical selections. Trees that have shown tolerance for the stresses of air pollution and compacted soil are the best options for planting alongside busy streets and in high-traffic urban areas. Thornless honey locust (*Gleditsia triacanthos* var. *inermis*) and red oak (*Quercus rubra*) are good choices for such sites.

Your soil's natural characteristics should also influence plant selection. Heavy, clay soils are not appropriate for plants that require sharp drainage. On the other hand, a light, sandy soil will not sustain plants that require abundant moisture. Over time, such soils can be modified by incorporating soil amendments, but if you want to include plants in your landscape that have soil requirements significantly different from your existing soil, consider growing them in raised beds or containers.

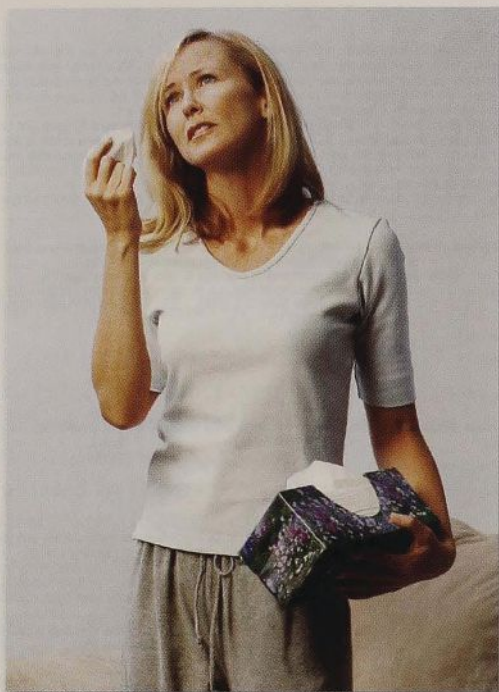
COMPOSTING

One easy way you can work with nature to improve your soil is to build a compost pile. Here the vegetable scraps from your kitchen and organic waste from the garden are converted into a nutrient-rich soil amendment that improves both the drainage and the water-holding capacity of your garden soil. It takes about six months in an active compost pile for raw organic matter to become thoroughly decomposed and to be transformed into nutrient-rich humus, but as long as you turn the pile occasionally, nature—in the form of industrious micro- and macroorganisms—does most of the work for you.

Once the compost is ready, it can be incorporated into the garden soil, used as part of the mixture for raised beds and containers, or applied as a topdressing or mulch for established beds. The heat that is generated by an active compost pile kills most weed seeds, and the few that may survive are easily removed if they germinate in the garden.

By composting kitchen and garden wastes, we are working with nature to improve the growing conditions for our plants while at the same time reducing our contribution of solid waste to local landfills.

Rita Pelczar, Associate Editor



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INDICATIONS AND USAGE

Seasonal Allergic Rhinitis

ALLEGRA is indicated for the relief of symptoms associated with seasonal allergic rhinitis in adults and children 6 years of age and older. Symptoms treated effectively were sneezing, rhinorrhea, itchy nose/palate/throat, itchy/watery/red eyes.

Chronic Idiopathic Urticaria

ALLEGRA is indicated for treatment of uncomplicated skin manifestations of chronic idiopathic urticaria in adults and children 6 years of age and older. It significantly reduces pruritus and the number of wheals.

CONTRAINDICATIONS

ALLEGRA is contraindicated in patients with known hypersensitivity to any of its ingredients.

PRECAUTIONS

Drug Interaction with Erythromycin and Ketoconazole

Fexofenadine hydrochloride has been shown to exhibit minimal (ca. 5%) metabolism. However, co-administration of fexofenadine hydrochloride with ketoconazole and erythromycin led to increased plasma levels of fexofenadine hydrochloride. Fexofenadine hydrochloride had no effect on the pharmacokinetics of erythromycin and ketoconazole. In two separate studies, fexofenadine hydrochloride 120 mg twice daily (two times the recommended twice daily dose) was co-administered with erythromycin 500 mg every 8 hours or ketoconazole 400 mg once daily under steady-state conditions to normal, healthy volunteers (n=24, each study). No differences in adverse events or QTc interval were observed when patients were administered fexofenadine hydrochloride alone or in combination with erythromycin or ketoconazole. The findings of these studies are summarized in the following table:

Effects on steady-state fexofenadine hydrochloride pharmacokinetics after 7 days of co-administration with fexofenadine hydrochloride 120 mg every 12 hours (two times the recommended twice daily dose) in normal volunteers (n=24)		
Concomitant Drug	C _{max} SS (Peak plasma concentration)	AUC _{0-12h} (Extent of systemic exposure)
Erythromycin (500 mg every 8 hrs)	+82%	+109%
Ketoconazole (400 mg once daily)	+135%	+164%

The changes in plasma levels were within the range of plasma levels achieved in adequate and well-controlled clinical trials. The mechanism of these interactions has been evaluated in *in vitro*, *in situ*, and *in vivo* animal models. These studies indicate that ketoconazole or erythromycin co-administration enhances fexofenadine gastrointestinal absorption. *In vivo* animal studies also suggest that in addition to increasing absorption, ketoconazole decreases fexofenadine hydrochloride gastrointestinal secretion, while erythromycin may also decrease biliary excretion.

Drug Interactions with Antacids

Administration of 120 mg of fexofenadine hydrochloride (2 × 60 mg capsule) within 15 minutes of an aluminum and magnesium containing antacid (Maalox[®]) decreased fexofenadine AUC by 41% and C_{max} by 43%. ALLEGRA should not be taken closely in time with aluminum and magnesium containing antacids.

Carcinogenesis, Mutagenesis, Impairment of Fertility

The carcinogenic potential and reproductive toxicity of fexofenadine hydrochloride were assessed using terfenadine studies with adequate fexofenadine hydrochloride exposure (based on plasma area-under-the-concentration vs. time (AUC) values). No evidence of carcinogenicity was observed in an 18-month study in mice and in a 24-month study in rats at oral doses up to 150 mg/kg of terfenadine (which led to fexofenadine exposures that were respectively approximately 3 and 5 times the exposure from the maximum recommended daily oral dose of fexofenadine hydrochloride in adults and children).

In vitro (Bacterial Reverse Mutation, CHO/HGPRT Forward Mutation, and Rat Lymphocyte Chromosomal Aberration assays) and *in vivo* (Mouse Bone Marrow Micronucleus assay) tests, fexofenadine hydrochloride revealed no evidence of mutagenicity.

In rat fertility studies, dose-related reductions in implants and increases in postimplantation losses were observed at an oral dose of 150 mg/kg of terfenadine (which led to fexofenadine hydrochloride exposures that were approximately 3 times the exposure of the maximum recommended daily oral dose of fexofenadine hydrochloride in adults).

Pregnancy

Teratogenic Effects: Category C. There was no evidence of teratogenicity in rats or rabbits at oral doses of terfenadine up to 300 mg/kg (which led to fexofenadine exposures that were approximately 4 and 31 times, respectively, the exposure from the maximum recommended daily oral dose of fexofenadine in adults).

There are no adequate and well-controlled studies in pregnant women. Fexofenadine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

Nonteratogenic Effects. Dose-related decreases in pup weight gain and survival were observed in rats exposed to an oral dose of 150 mg/kg of terfenadine (approximately 3 times the maximum recommended daily oral dose of fexofenadine hydrochloride in adults based on comparison of fexofenadine hydrochloride AUCs).

Nursing Mothers

There are no adequate and well-controlled studies in women during lactation. Because many drugs are excreted in human milk, caution should be exercised when fexofenadine hydrochloride is administered to a nursing woman.

Pediatric Use

The recommended dose in patients 6 to 11 years of age is based on cross-study comparison of the pharmacokinetics of ALLEGRA in adults and pediatric patients and on the safety profile of fexofenadine hydrochloride in both adult and pediatric patients at doses equal to or higher than the recommended doses.

The safety of ALLEGRA tablets at a dose of 30 mg twice daily has been demonstrated in 438 pediatric patients 6 to 11 years of age in two placebo-controlled 2-week seasonal allergic rhinitis trials. The safety of ALLEGRA for the treatment of chronic idiopathic urticaria in patients 6 to 11 years of age is based on cross-study comparison of the pharmacokinetics of ALLEGRA in adult and pediatric patients and on the safety profile of fexofenadine in both adult and pediatric patients at doses equal to or higher than the recommended dose.

The effectiveness of ALLEGRA for the treatment of seasonal allergic rhinitis in patients 6 to 11 years of age was demonstrated in one trial (n=411) in which ALLEGRA tablets 30 mg twice daily significantly reduced total symptom scores compared to placebo, along with extrapolation of demonstrated efficacy in patients ages 12 years and above, and the pharmacokinetic comparisons in adults and children. The effectiveness of ALLEGRA for the treatment of chronic idiopathic urticaria in patients 6 to 11 years of age is based on an extrapolation of the demonstrated efficacy of ALLEGRA in adults with this condition and the likelihood that the disease course, pathophysiology and the drug's effect are substantially similar in children to that of adult patients.

The safety and effectiveness of ALLEGRA in pediatric patients under 6 years of age have not been established.

Geriatric Use

Clinical studies of ALLEGRA tablets and capsules did not include sufficient numbers of subjects aged 65 years and over to determine whether this population responds differently from younger patients. Other reported clinical experience has not identified differences in responses between the geriatric and younger patients. This drug is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and may be useful to monitor renal function. (See CLINICAL PHARMACOLOGY).

ADVERSE REACTIONS

Seasonal Allergic Rhinitis

Adults. In placebo-controlled seasonal allergic rhinitis clinical trials in patients 12 years of age and older, which included 2461 patients receiving fexofenadine hydrochloride capsules at doses of 20 mg to 240 mg twice daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients. All adverse events that were reported by greater than 1% of patients who received the recommended daily dose of fexofenadine hydrochloride (60 mg capsules twice daily), and that were more common with fexofenadine hydrochloride than placebo, are listed in Table 1.

In a placebo-controlled clinical study in the United States, which included 570 patients aged 12 years and older receiving fexofenadine hydrochloride tablets at doses of 120 or 180 mg once daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients. Table 1 also lists adverse experiences that were reported by greater than 2% of patients treated with fexofenadine hydrochloride tablets at doses of 180 mg once daily and that were more common with fexofenadine hydrochloride than placebo.

The incidence of adverse events, including drowsiness, was not dose-related and was similar across subgroups defined by age, gender, and race.

Table 1
Adverse experiences in patients ages 12 years and older reported in placebo-controlled seasonal allergic rhinitis clinical trials in the United States
Twice daily dosing with fexofenadine capsules at rates of greater than 1%

Adverse experience	Fexofenadine 60 mg Twice Daily (n=679)	Placebo Twice Daily (n=671)
Viral Infection (cold, flu)	2.5%	1.5%
Nausea	1.6%	1.5%
Dysmenorrhea	1.5%	0.3%
Drowsiness	1.3%	0.3%
Dyspepsia	1.3%	0.8%
Fatigue	1.3%	0.9%

Once daily dosing with fexofenadine hydrochloride tablets at rates of greater than 2%

Adverse experience	Fexofenadine 180 mg once daily (n=283)	Placebo (n=293)
Headache	10.6%	7.5%
Upper Respiratory Tract Infection	3.2%	3.1%
Back Pain	2.8%	1.4%

The frequency and magnitude of laboratory abnormalities were similar in fexofenadine hydrochloride and placebo-treated patients.

Pediatric. Table 2 lists adverse experiences in patients aged 6 to 11 years of age which were reported by greater than 2% of patients treated with fexofenadine hydrochloride tablets at a dose of 30 mg twice daily in placebo-controlled seasonal allergic rhinitis studies in the United States and Canada that were more common with fexofenadine hydrochloride than placebo.

Table 2
Adverse experiences reported in placebo-controlled seasonal allergic rhinitis studies in pediatric patients ages 6 to 11 in the United States and Canada at rates of greater than 2%

Adverse experience	Fexofenadine 30 mg twice daily (n=209)	Placebo (n=229)
Headache	7.2%	6.6%
Accidental injury	2.9%	1.3%
Coughing	3.8%	1.3%
Fever	2.4%	0.9%
Pain	2.4%	0.4%
Otitis Media	2.4%	0.0%
Upper Respiratory Tract Infection	4.3%	1.7%

Chronic Idiopathic Urticaria

Adverse events reported by patients 12 years of age and older in placebo-controlled chronic idiopathic urticaria studies were similar to those reported in placebo-controlled seasonal allergic rhinitis studies. In placebo-controlled chronic idiopathic urticaria clinical trials, which included 726 patients 12 years of age and older receiving fexofenadine hydrochloride tablets at doses of 20 to 240 mg twice daily, adverse events were similar in fexofenadine hydrochloride and placebo-treated patients.

Table 3 lists adverse experiences in patients aged 12 years and older which were reported by greater than 2% of patients treated with fexofenadine hydrochloride 60 mg tablets twice daily in controlled clinical studies in the United States and Canada and that were more common with fexofenadine hydrochloride than placebo. The safety of fexofenadine hydrochloride in the treatment of chronic idiopathic urticaria in pediatric patients 6 to 11 years of age is based on the safety profile of fexofenadine hydrochloride in adults and adolescent patients at doses equal to or higher than the recommended dose (see Pediatric Use).

Table 3
Adverse experiences reported in patients 12 years and older in placebo-controlled chronic idiopathic urticaria studies in the United States and Canada at rates of greater than 2%

Adverse experience	Fexofenadine 60 mg twice daily (n=186)	Placebo (n=178)
Back Pain	2.2%	1.1%
Sinusitis	2.2%	1.1%
Dizziness	2.2%	0.6%
Drowsiness	2.2%	0.0%

OVERDOSAGE

Reports of fexofenadine hydrochloride overdose have been infrequent and contain limited information. However, dizziness, drowsiness, and dry mouth have been reported. Single doses of fexofenadine hydrochloride up to 800 mg (six normal volunteers at this dose level), and doses up to 690 mg twice daily for 1 month (three normal volunteers at this dose level) or 240 mg once daily for 1 year (234 normal volunteers at this dose level) were administered without the development of clinically significant adverse events as compared to placebo.

In the event of overdose, consider standard measures to remove any unabsorbed drug. Symptomatic and supportive treatment is recommended. Hemodialysis did not effectively remove fexofenadine hydrochloride from blood (1.7% removed) following terfenadine administration.

No deaths occurred at oral doses of fexofenadine hydrochloride up to 5000 mg/kg in mice (110 times the maximum recommended daily oral dose in adults and 200 times the maximum recommended daily oral dose in children based on mg/m²) and up to 5000 mg/kg in rats (230 times the maximum recommended daily oral dose in adults and 400 times the maximum recommended daily oral dose in children based on mg/m²). Additionally, no clinical signs of toxicity or gross pathological findings were observed. In dogs, no evidence of toxicity was observed at oral doses up to 2000 mg/kg (300 times the maximum recommended daily oral dose in adults and 530 times the maximum recommended daily oral dose in children based on mg/m²).

Prescribing Information as of February 2000

US Patents 4,254,129; 5,375,693; 5,578,610

Aventis Pharmaceuticals Inc.
 (formerly Hoechst Marion Roussel, Inc.)
 Kansas City, MO 64137 USA

alib0200m

1. Which Allegra product did you purchase with this offer?

() Allegra 180 mg (once daily) () Other Allegra _____ mg

2. Would you like to be reminded to refill your Allegra prescription?

() Yes () No

3. When did you fill your Allegra prescription?

____/____/____

4. When do you anticipate filling your next prescription?

____/____/____

5. What allergy symptoms do you suffer from?

() Runny nose () Stuffy nose
 () Red/itchy/watery eyes () Itchy nose
 () Itchy throat () Sneezing

6. When are you most affected by your seasonal allergies? (Check all that apply)

() Summer () Spring () Fall () Winter

7. How are you currently treating your allergies? (Check all that apply)

() Prescription medication
 () Over the counter medication () Not currently treating

8. Out of the 365 days in a year how many days do you suffer from your allergies?

() 0 – 30 days (1 month) () 31 – 60 days (2 months)
 () 61 – 90 days (3 months) () 91 – 120 days (4 months)
 () 121 – 180 days (6 months) () 181 – 240 days (8 months)
 () 241 – 300 days (10 months) () 301 – 365 days (year round)

9. Out of the 365 days in a year how many days do you take prescription medication for your allergies?

() 0 – 30 days (1 month) () 31 – 60 days (2 months)
 () 61 – 90 days (3 months) () 91 – 120 days (4 months)
 () 121 – 180 days (6 months) () 181 – 240 days (8 months)
 () 241 – 300 days (10 months) () 301 – 365 days (year round)

Gardener's Notebook

Horticultural News and Research

THREE AARS WINNERS FOR 2001

THE ALL-AMERICA Rose Selection (AARS) Winners for 2001 represent three distinct types of roses: 'Glowing Peace' is a grandiflora; 'Marmalade Skies' is a floribunda; and 'Sun Sprinkles' is a miniature. Among the traits evaluated in the two-year-long AARS trials are disease resistance, hardiness, flower production, color, and fragrance.

'Glowing Peace' is an offspring of the classic 'Peace' rose; it grows to four feet tall and three feet wide. Recommended for use as a hedge or screen, it produces glossy green leaves and large round buds that open to become three-inch blooms, each with 26 to 42 golden yellow and cantaloupe-orange blended petals, and a light tea fragrance.

Bearing clusters of five to eight tangerine-colored blossoms throughout its blooming season, 'Marmalade Skies' is well suited for use as a specimen or as a part

of a mixed border. It has a compact habit, reaching three feet tall and wide, and dark olive leaves that contrast well with the two-and-a-half- to three-inch flowers.

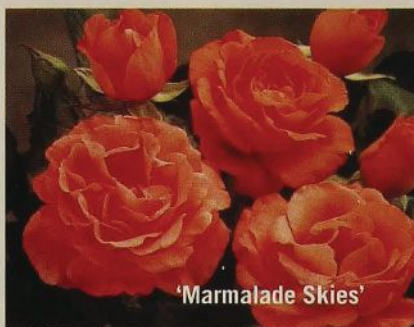
The miniature 'Sun Sprinkles' is exceptionally versatile in its landscape use: At a petite 18 to 24 inches tall and wide, it is perfect for growing in containers, edging beds or paths, or combining in beds with perennials or other roses. Its two-inch double blooms are bright yellow.

These varieties will be available this year at garden centers around the country; 'Glowing Peace' and 'Marmalade Skies' can also be ordered by mail from

Edmunds' Roses, 6235 S.W. Kahle Road, Wilsonville, OR 97070. (888) 481-7673. All three are available from J.W. Jung Seed Company, 335 S. High Street, Randolph, WI 53957. (800) 297-3123. www.jungseed.com.



'Glowing Peace'



'Marmalade Skies'

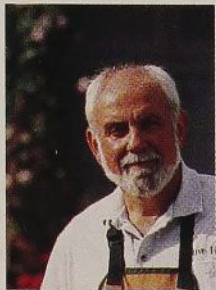


'Sun Sprinkles'

STUFANO AWARDED 2001 SCOTT MEDAL

THE SCOTT ARBORETUM of Swarthmore College presented this year's prestigious Arthur Hoyt Scott Medal and Award to Marco Polo Stufano on March

11, 2001. Stufano is founding director of horticulture at Wave Hill, a public garden and cultural center overlooking the Hudson River in New York. The medal is given annually to a person or organization that has made an outstanding national contribution to the science and art of gardening.



A New York native, Stufano studied art history at Brown University and horticulture at the New York Botanical Garden. In 1967 he was appointed the first director of horticulture at Wave Hill. During his 34-year tenure, Stufano has been instrumental in transforming the property from a private estate deeded to the City of New York by the Perkins-Freeman family to an internationally renowned public garden that is considered one of the most distinctive cultivated landscapes in North America.

Stufano, who plans to retire this fall, has received many other awards, including the American Horticultural Society Professional Award (1999), the Garden Club of America's Distinguished Service Medal (1999), the Achievement Medal of

the Pennsylvania Horticultural Society (1996), and the Thomas Roland Medal of the Massachusetts Horticultural Society (1990).

KUDZU DISCOVERED IN OREGON

KUDZU, THE NOXIOUS weed that has spread to cover an estimated seven million acres in the Southeast, was recently discovered on two separate sites in Oregon. These are the first reported cases of kudzu infestation west of Texas.

The first Oregon site was identified last July, along Highway 99 near Aurora, where the vine covers a quarter acre of ground. "Apparently it has been there 10 years or more," says Tim Butler, manager of noxious weed control for the Oregon Depart-

ment of Agriculture. "We uncovered stalks that were probably three inches in diameter." A second site within the city limits of Portland was discovered in August.

Native to Asia, kudzu (*Pueraria lobata*) was introduced to the United States in 1876 and was promoted for erosion control and as an inexpensive source of livestock forage. It thrives in the hot summers and mild winters of the southeast, but is adaptable to a wide range of conditions. With its vining habit and rapid growth rate—it can grow 50 to 60 feet in a single season—it overwhelms any plants in its path, covering trees and shrubs, and suffocating native vegetation. It has an extensive root system; once established, it is difficult to control.

The Oregon Department of Agriculture's Weed Control Program and the Oregon Department of Transportation are collaborating on an aggressive program to eradicate the apparently limited infestation of the weed. "We won't know until sometime this summer how successful our efforts were last fall," says Butler, but the two

groups are monitoring the sites closely. So far, no further establishment of kudzu has turned up in the state. "We hope we found it soon enough," Butler adds.

PAPER MULCH MAKES SENSE

PAPER COATED WITH vegetable oil may soon replace plastic for mulching commercial and backyard fruit and vegetables. Research has shown paper mulches to be effective, biodegradable, and significantly less costly than plastic.

At the Agricultural Research Service (ARS) National Center for Agricultural Utilization Research in Peoria, Illinois, research chemist Randal L. Shogren coated brown kraft paper—like that used for grocery bags—with vegetable oils such as soybean and linseed. The oil retards the breakdown of the paper. Shogren says that just how long the coated paper mulch lasts in the field depends on the conditions, but in his trials it held up for 13 weeks.

One of the biggest problems with plastic mulches, according to Shogren, is their

disposal. "Farmers have difficulty both removing and disposing it. Some landfills don't take it any more, and farmers end up burning or burying it." This difficulty is avoided with the biodegradable paper, and because the paper is inexpensive compared to plastic, it offers a practical alternative to suppressing weeds around edible crops.

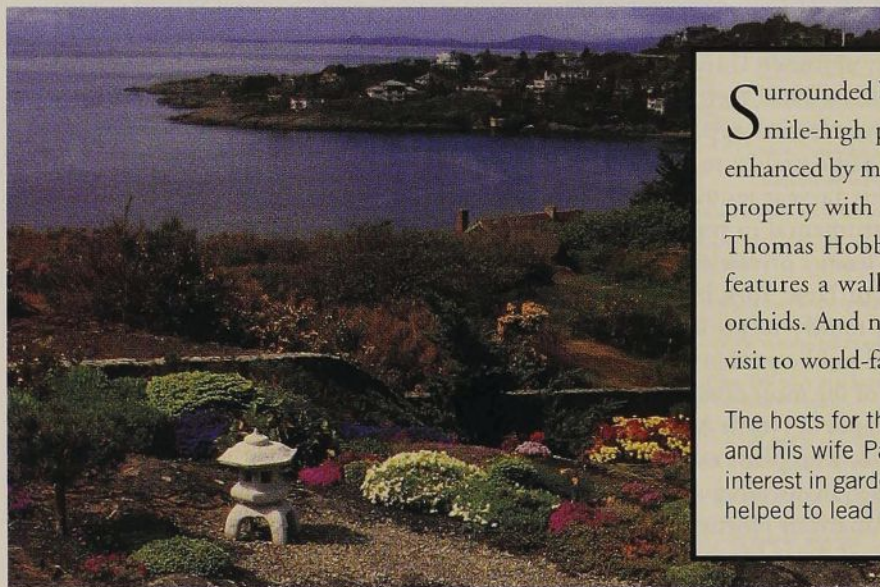
A U.S. patent for the technology has been approved and commercial partners are being sought for production of the paper mulch. Shogren anticipates that it will be commercially available within two years. In the meantime, home gardeners can easily make their own coated paper mulch. Shogren suggests purchasing three- or four-foot-wide rolls of kraft paper and applying boiled linseed oil—available at hardware stores—with a paintbrush or roller. Allow the paper to dry in the sun and air for a few hours. After placing the paper mulch between rows, he suggests anchoring it by burying the edges. And by the time you finish harvesting your beans and tomatoes, the mulch will have nearly decomposed.



2001 American Horticultural Society TRAVEL STUDY PROGRAM

Gardens of Vancouver

August 7–12, 2001



Surrounded by the blue waters of the Strait of Georgia and backed by the smile-high peaks of the Coast Range, Vancouver's natural beauty is enhanced by many spectacular gardens. Stops on this trip include a hilltop property with a full view of the Olympic Mountains and the sea, and Thomas Hobbs's Mediterranean-style garden on English Bay, which features a walk-in conservatory filled with hybrids of *Paphiopedilum* orchids. And no visit to Vancouver Island would be complete without a visit to world-famous Butchart Gardens.

The hosts for the trip will be longtime AHS board member William Pusey and his wife Patti from Arlington, Virginia. The couple share a life-long interest in gardening and involvement in garden clubs. Together they have helped to lead numerous AHS Travel Study Programs.

For complete details of the exciting 2001 schedule, visit the AHS Web site at www.ahs.org, or call the Leonard Haertter Travel Company at (800) 942-6666.

Offshoots

Waiting for My Garden to Smile

By Delores Achenbach

“ARE THE scillas dead?” my mother asked one early spring day when I was visiting her.

I could tell that she expected an affirmative answer. When you’ve been a daughter as long as I have, you know what’s expected of you. “I hope not,” I thought as my mind raced around my house, down the driveway, and to the east side of the garage frantically trying to place what and where the scillas might be.

It was even worse than my mother anticipated. Right away she recognized my dilemma and said, “The little blue flowers on the south side of the house.” My 90-year-old mother had probably grown every flowering plant in existence, and she knew exactly where and when they were expected to thrive.

“Oh, no,” I finally answered. “They’re still there.”

“Are they blooming?” she asked.

“No, not yet,” I ventured cautiously.

“They should be. They always bloom by this time of the year.”

Dumbfounded, I resolved to dig the debris off the scillas the minute I got home. Then maybe I could see the little blue flowers.

Mother’s next question was, “How’s the rhubarb coming?”

This was a safe question; it’s next to impossible to kill rhubarb. I knew that it *had* to be alive. “Oh, it’s coming up,” I replied with a confident smile.

“It’s a heavy eater,” my mother reminded me. “It can stand a lot of manure.”

“Oh, oh,” I thought, “now she’ll ask when I last put manure on the rhubarb.” It wouldn’t do any good to tell her that I had applied some of the commercial fertilizer the state agricultural lab had recommended for my garden. *She* had never sent soil samples to anyone, and as far as she was concerned, manure was the *only* fertilizer worth the time to put in the garden.

“Well,” she finally said while I was con-

sidering all of this, “at least crush the rhubarb leaves down into the ground around the plants every time you cut it.”

I’ve resigned myself to the fact that to Mother I will always be a novice gardener. I think it started the first time I planted peas. Mother went out to the garden about the time that the peas were emerging from the soil and said, “What happened to your peas? They aren’t coming up.”

“Sure they’re coming up,” I proudly assured her.

“It looks like you got some poor seed,”



she went on. Then she looked at me and questioned closely, “How far apart did you plant the seeds?”

“Oh, about an inch apart,” I determined with the aid of my index finger and my thumb.

Mother was momentarily stricken speechless. When she recovered, she said, “No wonder the row looks so sickly. You have to plant peas thick, almost touching. I should have been here.”

One year, Mother planted some onion sets in my garden. She intended to follow through on the onions and to be right in the garden when it was near harvest time. To Mother’s dismay, her sister needed help at that time, and she had to leave the destiny of the onions to me.

At the time I was fairly busy raising six small children, never mind the garden.

Mother’s first letter to me, after she arrived at her sister’s house, read, “Dear Delores Mae, How is the garden? Did you tramp the onions down? You won’t get any size to your onions if you let the tops keep on growing. Do this right away. Let me know how the garden is coming along. Love, Mother.” There wasn’t a word concerning the welfare of anyone in our family. She did have her priorities!

But probably the worst disaster that ever befell my garden was a few years ago when I burned the raked-up leaves in the garden. Somewhere I had heard that ashes were good for a garden’s soil. When the leaves were raked that fall, I lugged them down to the garden and burned them. If a little is good, I reasoned, a lot must surely be better. To my chagrin, I discovered that adage doesn’t apply to burned leaves in the garden.

The most difficult part of the following year was seeing my mother silently viewing my garden, then slowly shaking her head and saying, “Even the weeds won’t grow.”

In desperation, I sent a sample of the soil to the soil-testing laboratory at the local university for first aid. I received a reply recommending the proper amount of commercial fertilizers to apply to the soil to resuscitate it.

Mother was not optimistic.

Viewing the spindly plants struggling in my garden that year, a neighbor remarked, “What you need is a good load of manure. That will make your garden smile!”

My garden was in such a sad state that I decided right then to try for a happy garden the following year. Perhaps Mother was right, after all.

So last fall my son and one of his friends spread the garden with a good covering of manure.

Now my mother and I are waiting for my garden to smile.

Delores Achenbach is a free-lance writer living in Chisago City, Minnesota.

Gardeners Information Service

RELEASING NEMATODES

What time of year is best for broadcasting beneficial nematodes on lawns? I have read that the ground must be wet but have not found information about soil or air temperatures.

—P.C., ARLINGTON, TEXAS

Beneficial parasitic nematodes—microscopic roundworms in the phylum Nematoda—are effective controls for several insect pests of turf and garden plants, including the larvae (grubs) of Japanese beetles. Beneficial nematode products are sold in a dry form to mix with water under several names such as BioSafe, BioVector, and Guardian. Different formulations are designed to target specific pests, so be sure you purchase the appropriate brand for the pest you wish to control.

As you noted, adequate moisture is the most important environmental factor when applying insect-parasitic nematodes; they require free water to move and are susceptible to death by drying. Be sure to water the area

thoroughly before and after releasing nematodes. Soil and air temperature is less critical, but avoid applications when temperatures are unseasonably high or low.

Robin Giblin-Davis, a nematologist at the University of Florida in Fort Lauderdale, says that timing of application depends on the specific pest you are trying to control. Once you identify the pest, learn when its most vulnerable stage occurs. "The nematodes must be available in the highest quantities and in the right place to do the job," says Giblin-Davis. Since nematodes persist for only about two weeks once they are released, it is critical to apply them when the pest is present and vulnerable. Information about timing of application is usually listed on the nematode product label, or consult your local Cooperative Extension service or botanical garden for advice.

An excellent resource for more information is Ohio State University's Web page "Insect Parasitic Nematodes" at www.oardc.ohio-state.edu/nematodes/default.htm.

PERENNIAL CONFUSION

When I started the process of registering flowers at a flower show, I was informed that if a perennial is grown in a zone in which it is not considered hardy, it is then classified as an annual. Can you explain?

—L.R., MOUNTAIN HOME, ARIZONA

True annuals are plants that complete their life cycle and die within a single growing season, while perennials persist from year to year. Herbaceous perennials commonly die back to the ground at the end of the growing season, but their root systems survive, and the plant resumes growth in spring after a dormant period.

In regions where herbaceous perennials are not hardy—that is, where they cannot survive outdoors through winter—they are sometimes grown for a single season in the same manner as annuals. Since these are not true annuals, they are more accurately labeled tender perennials. But where they are not hardy,

AHS Gardening Community Listserve

The following items were part of an AHS Gardening Community Listserve conversation a few weeks ago. All members are invited to join our



Listserve and participate in discussions, pose questions, share gardening experiences, or just tune in and enjoy the banter. To join our Listserve, simply click on the Listserve button on the AHS Web site: www.ahs.org.

I am planning to plant some lilacs this spring. I haven't made my selections yet, but wanted to get your opinion about which varieties you all like best. What are your favorite lilacs?

—M.S., Pittsburgh, Pennsylvania

Lilacs are heat sensitive. While they will grow in my area (USDA Zone 6), they only do well when we have cooler summers. Otherwise,

they struggle and tend to get disease. Maybe someone knows a variety that doesn't mind days of heat in the 90s.

—B.H., Friendsville, Tennessee

Lilacs do much better in more northern climes. I am at the very end of their southern tolerance. 'Miss Kim' is the only one I have, and it seems to take the heat here in stride. I've had it for about 10 years, and so far it is still healthy and blooms in much more shade than lilacs generally like.

—M.T., Potomac, Maryland

Well, maybe not the "very end." We grow 'Miss Kim' here, and it's doing well. I have also grown Blue Skies™, which also does well.

—W. and D.J., Lake Oconee, Georgia

The description in the Wayside Gardens catalog says Blue Skies™ is an exceptional per-

former for southern gardens—very disease resistant, tolerates heat and humidity, and is highly resistant to mildew. Also says it does not require winter chill to set buds.

—A.H., Beaufort, South Carolina

Here's more on Blue Skies™: It was introduced by Ralph Moore in 1987. Its correct botanical name is *Syringa vulgaris* 'Monore', but it's usually sold under the trademark name Blue Skies™. It's confusing when the commercial industry uses another name for a plant than that chosen by the developer. But then, wouldn't you rather buy a Blue Skies™ than a 'Monore'?

—K.M., Fort Wayne, Indiana

A pretty good substitute for lilacs in hot areas like Texas is chaste tree (*Vitex agnus-castus*)—it has similar coloring and effects.

—P.E., Kemp, Texas

the culture of tender perennials is so similar to that of true annuals that some flower shows may elect to group them together.

LEAFLESS MAGNOLIA

Three years ago we planted a five-foot sweet-bay magnolia (*Magnolia virginiana*) in October in a sunny spot and watered it regularly through its first summer. The first two winters were unusually mild, and the tree grew and bloomed well. This past winter was much cooler, and this spring we had several late hard frosts when the tree was in bud. Those buds never opened, and the new stem growth has a bluish-gray color. What has caused the leafless condition, and is there anything we can do about it?

—L.J., SALEM, OREGON

Magnolias, in general, resent being moved, and the best time to transplant them is in spring, when new growth is starting. Native to the southeastern United States, sweetbay magnolia grows best in boglike settings with light shade. It is usually evergreen in the southernmost part of its habitat but is deciduous in cooler climates like yours.

Even though you didn't transplant the tree at the optimum time, it appears the combination of your careful treatment and the mild winters meant your tree suffered no ill effects. Unfortunately, the late frosts this year undid some of that by shocking the tree and apparently killing the new leaf buds. The tree may still develop leaves—and even flowers—this year, but later than usual. The bluish-gray coloring of the stems is probably the natural maturation of the bark. Mulch the root zone with well-rotted cow manure or compost and make sure the tree receives regular deep waterings this summer if you have dry spells. It may take a couple of years for the tree to regain its vigor, but it should survive and perform reasonably well once it's thoroughly established.

William May, Gardeners Information Service, and Marianne Polito, Gardeners Information Service Manager.

WE'RE READY TO HELP:

For answers to your gardening questions, call Gardeners Information Service at (800) 777-7931, ext. 131, between 10 a.m. and 4 p.m. Eastern time, or e-mail us anytime at gis@ahs.org.



To Laura Johnson, the really beautiful thing about Preen is what she doesn't see.

Like most gardeners, Laura hates weeds. Which is why she loves Preen. With **Preen**, she never even sees them—**Preen** prevents weeds, before they even start, around nearly 200 bulbs, flowers, roses, shrubs, trees and vegetables.

And there's **Preen 'n Green**, which prevents weeds and fertilizes your existing plants. There's also new **Preen for Ground Covers**, a unique weed preventer created specifically for use with ground covers, like daylilies, pansies, ice plant and pachysandra.

They couldn't be easier to use—just sprinkle the granules into the soil or mulch, then gently water-in. No mess, no mixing, and no weeds for up to three months—guaranteed! And if you already have weeds, it's not too late—simply get rid of your existing weeds and then apply **Preen**.

So if, like Laura, your idea of a beautiful garden view doesn't include weeds, look for **Preen** products at your local gardening retailer. And discover the joys of weed-free gardening.



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www.preen.com



A garden is more than a collection of plants, it is home to a variety of wildlife. Attracting desirable species to your garden adds a wholesome balance and seasonal variety to the landscape, and it is easy to accomplish by providing appropriate habitats and sources of food. Among the most beautiful and fascinating visitors to any garden are hummingbirds. There are 16 species of “hummers” that regularly visit gardens in the United States; understanding their natural habitats and their preferences for sources of nectar can help you make your garden a seasonal home for these intriguing creatures.

Gardening with Hummingbirds



Attracting these beautiful birds to your garden is easy once you know how.

BY ARNETTE HEIDCAMP



A TINY BIRD with sparkling plumage flies into the garden and catches your eye as it darts from blossom to blossom. Its iridescent, emerald-green body hovers in front of a flower as its needlelike bill moves in and out for nectar or insects. Suddenly an intense patch of scarlet neon flashes as the bird turns its fabled ruby-colored throat in your direction before disappearing in the blink of an eye.

Hummingbirds—quick, beautiful, captivating. One can hardly describe this family of resplendent little creatures without a liberal sprinkling of superlatives. Arguably the hummingbird is the most beautiful of birds; certainly it is the smallest. Measuring a mere two inches, including its bill, the diminutive male bee hummingbird (*Mellisuga helenae*) of Cuba is the tiniest warm-blooded creature on earth. Fanciers never tire of watching hummingbirds engage in aerial acrobatics. We all want hummingbirds to visit our gardens and will go to great lengths to get them to stay.

Because of their small size and high metabolic rate, hummingbirds must replenish energy frequently. This is where we get lucky. While they may roam widely in search of insects and nectar to keep their little bodies going, they have excellent memories and return repeatedly to areas rich in flowers. Gardens that include appropriate flowers will attract hummingbirds and keep them coming back. By

adding alternative sources of nectar, such as sap wells and hummingbird feeders, our gardens can become irresistible.

Still, the best way to attract hummingbirds to the garden, at least initially, is to grow an abundance of nectar-producing flowers, particularly those that they visit naturally in the wild (see chart on page 24 for favorite native flowers).

Most well-adapted native plants thrive with minimal care and without need of synthetic fertilizer and pesticides—toxic pesticides should never be used on hummingbird plants.

Another consideration in selecting plants for hummingbirds is their season of bloom. In areas where hummingbirds rarely breed but are numerous during migration, concentrate on spring- and fall-blooming flowers. Gulf Coast and coastal California residents may place a little extra emphasis on winter-flowering varieties to accommodate wintering or resident hummers and may want to consider non-invasive, non-native ornamentals. For instance, well-adapted species of *Aloe*, *Eucalyptus*, *Grevillea*, and *Callistemon* produce copious amounts of nectar for the winter sustenance of Anna's and Allen's hummingbirds along the California coast.

For areas where hummingbirds spend a full growing season, a steady supply of nectar-producing flowers will keep them returning to your garden (see "Hangin' with Hummers," page 26).

WHERE TO FIND HUMMINGBIRDS

Hummingbirds can be found from Alaska to Tierra del Fuego in Chile; the entire hummingbird family (Trochilidae) is confined to the New World. But their distri-

bution is mostly tropical, with the greatest density of species in South America. The number of species diminishes as you move northward, with only one nesting as far north as Alaska, and only one in the entire eastern United States. Of the 16 species that commonly reside or nest above the Rio Grande, 14 are found in the West or Southwest, where mountainous terrain connects southward into Mexico and the tropics.

In addition to attracting nesting hummingbirds, many regions play temporary host to transients. For instance, both the rufous and calliope hummingbirds have an oval migratory route, making a northward spring migration up the Pacific coast and southward fall migration inland along the Sierras and Rockies. This elliptical route coincides with peak flowering, first in the deserts and later in the mountains.

Eastern Forests. Forested eastern mountains host ruby-throated hummingbirds from mid-spring to late summer. They nest in mixed woodlands, woodland edges, parks, and gardens across eastern North America from the Great Plains north to southern Canada, and south to Texas. They winter in Central America, or occasionally along the Gulf Coast. In addition to flower nectar, ruby-throated hummingbirds often feed on tree sap released by the drilling of sapsuckers. Though this is the only species indigenous to the eastern United States, its range is extensive, and it is a familiar visitor to gardens in this region from spring through late summer.

Western Mountains. Only a few species of hummingbirds brave the alpine heights. Yet, higher elevations throughout the Rockies offer prime nesting habitats to broad-tailed and calliope hummingbirds.

Broad-tailed hummingbirds inhabit thickets and moist canyons during nesting but afterward move to higher elevations of the Rockies and Sierras to forage on the abundant wildflowers of alpine meadows. Their spring migration is through low arid areas of the Southwest, as is the fall migration to Mexican highlands. By the time broad-tails abandon their territories in midsummer, migratory rufous hummingbirds move in to replace them. Our smallest hummingbird,

Opposite top: A rufous hummingbird rests on a lily. **Opposite below:** A young ruby-throated hummingbird feeds on nectar from *Salvia coccinea*. **This page above:** A male Anna's hummingbird and *Streptosolen jamesonii*.

North America's Hummingbirds and Habitats at a Glance



Broad-tailed hummingbird



Black-chinned hummingbird

HUMMINGBIRD SPECIES

Ruby-throated hummingbird
(*Archilochus colubris*)
Calliope hummingbird
(*Stellula calliope*)
Broad-tailed hummingbird
(*Selasphorus platycercus*)
Rufous hummingbird
(*Selasphorus rufous*)
Black-chinned hummingbird
(*Archilochus alexandri*)
Costa's hummingbird
(*Calypte costae*)
Anna's hummingbird
(*Calypte anna*)
Allen's hummingbird
(*Selasphorus sasin*)
Broad-billed hummingbird
(*Cynanthus latirostris*)
Blue-throated hummingbird
(*Lampornis clemenciae*)
Violet-crowned hummingbird
(*Amazilia violiceps*)
Magnificent hummingbird
(*Eugenes fulgens*)
White-eared hummingbird
(*Hylocharis leucotis*)
Berylline hummingbird
(*Amazilia beryllina*)
Lucifer hummingbird
(*Calothorax lucifer*)
Buff-bellied hummingbird
(*Amazilia yucatanensis*)

REGIONS

eastern forests

western mountains, West Coast

western mountains, desert

western mountains, West Coast, desert
western mountains, desert, southwest borderlands
desert, West Coast

desert, West Coast

West Coast

desert, southwest borderlands

southwest borderlands

southwest borderlands

southwest borderlands

southwest borderlands

southwest borderlands

semi-tropical areas

NORTH AMERICAN HUMMINGBIRDS' FAVORITE NATIVE FLOWERS BY REGION

Eastern Forests

Beebalm (*Monarda didyma*), butterfly weed (*Asclepias tuberosa*), cardinal flower (*Lobelia cardinalis*), fire-pink (*Silene virginica*), touch-me-not (*Impatiens capensis*)

Western Mountains

Castilleja spp., *Cleome serrulata*, *Epilobium angustifolium*, honeysuckles (*Lonicera* spp.), *Lupinus* spp., *Penstemon* spp., scarlet gilia (*Ipomopsis aggregata*)

Desert

Chuparosa (*Justicia californica*), desert willow (*Chilopsis linearis*), fairy duster (*Calliandra eriophylla*), ocotillo (*Fouquieria splendens*), *Penstemon* spp., red yucca (*Hesperaloe parviflora*), western coral bean (*Erythrina flabelliformis*)



Lobelia cardinalis

West Coast

Aquilegia spp., *Castilleja* spp., currant (*Ribes malvaceum*), *Diplacus* spp., *Eucalyptus* spp., gooseberry (*Ribes speciosum*), manzanitas (*Arctostaphylos* spp.), *Mimulus* spp., *Nicotiana* spp., *Silene lanciniata*, *Stachys* spp., *Zauschneria* spp.



Chilopsis linearis

Southwest Borderlands

Agave americana, *Anisacanthus* spp., *Bouvardia* spp., desert willow (*Chilopsis linearis*), fairy duster (*Calliandra eriophylla*), *Heuchera sanguinea*, *Malvaviscus arboreus*, ocotillo (*Fouquieria splendens*), *Penstemon* spp., red yucca (*Hesperaloe parviflora*), *Salvia* spp., *Stachys coccinea*, western coral bean (*Erythrina flabelliformis*)

Semi-Tropical Areas

Aloes (*Aloe* spp.), anaqua (*Ehretia anacua*), mesquite (*Prosopis glandulosa*), Texas ebony (*Pithecellobium flexicaule*), wax mallow (*Malvaviscus arboreus*)

the calliope, inhabits canyons, deciduous or coniferous forests, and forest edges adjacent to meadows. The calliope follows summer's advance up the mountains to the flower-rich meadows above the timberline; postbreeding movements may take it to elevations as high as 10,000 feet.

The Cascades of the Pacific Northwest host breeding rufous and calliope hummingbirds. The champion migrant of the hummingbird world, the very pugnacious rufous, makes a 2,000-plus mile trip from the wintering grounds of Mexico to a breeding range as far north as southeastern Alaska. The rufous nests in coniferous forests and forest edge habitats. Spring migration occurs at lower elevations and is made entirely up the coast, while gooseberries, currants, and manzanitas are in bloom. Fall migration begins early, occurs at much higher elevations, and follows a more easterly route.

Black-chinned hummingbirds, widespread in the West, inhabit the foothills of both ranges, nesting in their preferred woodland and canyon habitats, particularly in close proximity to water.

Deserts. While days are still short and other areas adrift with snow, many wildflowers bloom in the warmest part of the southwestern deserts. A few species of hum-

mingbirds winter over in these arid and semi-arid areas.

Costa's hummingbird arrives early in the desert, produces its first brood along riparian corridors from February to April, and then disappears in late May to produce its second brood along coastal areas of southern California. In Arizona, it prefers canyon and arroyo habitats rich in ocotillo (*Fouquieria splendens*), chuparosa (*Justicia californica*), yuccas, and cacti. It winters in warm places from Phoenix to Palm Springs, California. Overlapping Costa's during the non-breeding season is Anna's hummingbird, which is primarily non-migratory but withdraws slightly from the northernmost parts of the nesting range during colder months.

Many desert flowers blossom in response to the longer, warmer days of spring. The flowering of the graceful ocotillo coincides with the arrival of spring migrating species including Anna's, black-chinned, broad-tailed, broad-billed, Costa's, and rufous hummingbirds. Gilias and penstemons begin to open in mid-spring, but by late spring, when daytime temperatures on the desert are high, it is woody perennials, cacti, and succulents that fill the floral gap.

West Coast. The climate of a narrow strip



Aquilegia formosa

along the Pacific Coast is moderated throughout the year by moisture-laden ocean air. Winters are mild and summers are cool, with up to 15 inches of precipitation in the form of summer fog drip. Many wildflowers bloom from January to October, and some are in flower throughout the year.

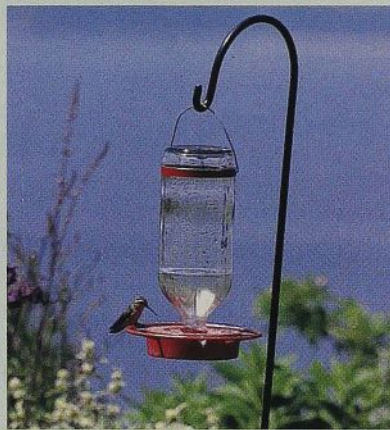
Inland from this coastal belt exists a wide variety of closely spaced ecological habitats, influenced by distance from the ocean, latitude, altitude, rainfall, and terrain. Because of the seasonal rain pattern, many wildflowers are winter annuals, flowering in early spring. Chaparral exists along the lower slopes of the southern California Ranges, and the Cascade-Sierra Nevada Mountains. Grassland, oak-woodland, and freshwater marsh communities are present in the north-south valley between these ranges.

These coastal areas are habitats for Anna's and Allen's hummingbirds. Anna's are found in broken chaparral and mixed woodland habitats. They winter from southern Arizona to southern Oregon but withdraw from the northern parts of this range during colder months. Territories are frequently centered around two species of currant—*Ribes malvaceum* and *R. speciosum*—that bloom sequentially.

Allen's hummingbirds nest in the humid canyons along the summer fog belt. Spring migration for Allen's occurs early along the coast; after breeding in late May or early June, they travel along the foothills of the Sierras to southern Cali-

Tips for Hummingbird Feeders

- Select a feeder with a small reservoir to ensure a fresh supply of nectar.
- For artificial nectar, combine water and sugar in a four- or five-to-one ratio; bring to a boil to dissolve sugar, then remove from heat to avoid changing the the sugar-to-water ratio.
- Clean feeders once a week by soaking for an hour or two in hot water with a small amount of bleach. Rinse thoroughly and allow to air-dry before refilling.
- Place the feeder in full or part shade to retard spoilage of the nectar.
- Place the feeder near trees or shrubs with small branches that will allow birds to perch for rest.
- Separate feeders by at least six feet to prevent one hummingbird from



dominating more than one feeder.

- Make sure the feeder is at least six feet off the ground and in a spot for easy viewing.

—Rita Pelczar, Associate Editor

Sources for Feeders

Acme Wild Bird Feeder Company,
Cincinnati, OH. (513) 766-2131
www.acmewildbirdfeeders.com.

Backyard Wings and Water, Frederick, MD. (301) 668-2999.
www.wingsandwater.com.

Bird Central, Scotts Valley, CA
(877) 461-0903.
www.birdcentral.com.

Resources

The Hummingbird Society, P.O. Box 394, Newark, DE 19715.
(800) 529-3699.
www.hummingbird.org.

Hummingbird Gardens, edited by Stephen W. Kress. Brooklyn Botanic Gardens, Brooklyn, New York, 2000.

The Hummingbird Garden, by Mathew Tekulsky. The Harvard Common Press, Boston, Massachusetts, 1999.

Hummingbirds.net. www.hummingbirds.net. A Web site for hummingbird enthusiasts that includes a map showing migration progress for ruby-throated hummingbirds.

fornia, Baja, and northwestern Mexico.

Southwest Borderlands. Many factors combine to create an exciting biodiversity in the southwest borderlands. Here, temperate life meets and mixes with tropical life. The region is a bridge between Mexico's Sierra Madres to the south and the Rockies to the north and contains a large number of plant species from a wide variety of arid and semi-arid habitats: grassland, woodland and shrubland, deciduous and coniferous forests, and mountains.

The terrain of this region is characterized by scattered peaks called "sky islands" that rise from desert plateaus. With summits over 9,000 feet, mountaintops are cool while deserts below are

Hangin' with Hummers

Whether hummingbirds nest in or just migrate through your region, many different flowers will tempt them to your garden. But in order to guarantee frequent visits over several weeks or months, you'll need to provide a steady supply of fresh blooms.

In a large garden, hummingbirds can flit from buckeyes to beebalms to bush sages and back, depending on the season. But you needn't have extensive gardens to attract a faithful following of hummingbirds—just lots of flowers. For a small garden, and particularly for container plantings, select plants that produce abundant blooms for several months. Because these avian whirligigs have a fondness for so many great garden plants, and because their high-energy output requires constant feeding, it is easy to fill patio containers, window boxes, and hanging baskets with nectar-rich delights that will have them calling on you regularly.

Here are a few suggestions for long-season bloomers—mostly annuals or perennials that can be grown as annuals—that are favorites with hummingbirds and that thrive in containers or hanging baskets.

—Rita Pelczar, Associate Editor

Begonia hybrids	Marmalade bush (<i>Streptosolen jamesonii</i>)
Bougainvillea hybrids	Morning glory (<i>Ipomoea</i> spp.)
Bush violet (<i>Browallia speciosa</i>)	Petunia hybrids
Cigar plant (<i>Cuphea ignea</i>)	Pincushion flower (<i>Scabiosa atropurpurea</i>)
Cypress vine (<i>Ipomoea quamoclit</i>)	Scarlet sage (<i>Salvia splendens</i>)
Desert bluebells (<i>Phacelia campanularia</i>)	Shrimp plant (<i>Justicia brandegeana</i>)
Fuchsia species and hybrids	Shrub verbena (<i>Lantana camara</i>)
Geranium (<i>Pelargonium</i>) hybrids	Star flower (<i>Pentas lanceolata</i>)
Impatiens hybrids	Trailing lobelia (<i>Lobelia erinus</i>)
Mealycup sage (<i>Salvia farinacea</i>)	Wishbone flower (<i>Torenia fournieri</i>)

hot. The plants on these sky islands differ considerably from south to north, as well as with elevation.

Above the hot desert lowlands are transitional zones up to the cool mountain summits. The resulting floral diversity attracts the most hummingbird species of any region in the United States. All but two of the 16 species that regularly cross the border either nest in or migrate through southeastern Arizona and southwestern New Mexico—the northernmost limit for many hummingbirds.

Broad-billed hummingbirds inhabit the open coniferous woodland and rocky mountain canyon habitats at the lowest elevations. This dazzling little hummer nests where streams support growth of sycamore and mesquite.

Blue-throated and violet-crowned hummingbirds are found at middle elevations. Our largest hummer, the blue-throated hummingbird is a summer resident in moist canyons near streams. The violet-crowned hummingbird is the only North American hummer with a

white throat and is found only in the mountains of extreme southeastern Arizona and southwestern New Mexico, inhabiting dry forests and riparian scrubland. It is a summer resident of deep canyons, forests, forest edges, and deserts near stream banks, where it nests among cottonwoods and sycamores.

Magnificent and white-eared hummingbirds are found at the higher elevations. The magnificent hummingbird nests in maples along mountain streams and on the slopes just below the ponderosa pine zone, becoming most plentiful in mid-June when the mesquite shrubs (*Agave americana*) begin to bloom. The white-eared hummingbird nests casually in the mountains of southeastern Arizona in woodland habitats near streams.

The berylline hummingbird is accidental in the mountains of southeastern Arizona. It migrates north in June, nesting from July to August among sycamores.

The lucifer hummingbird nests in the interior highlands of the Chisos Mountains of southwestern Texas and occasion-

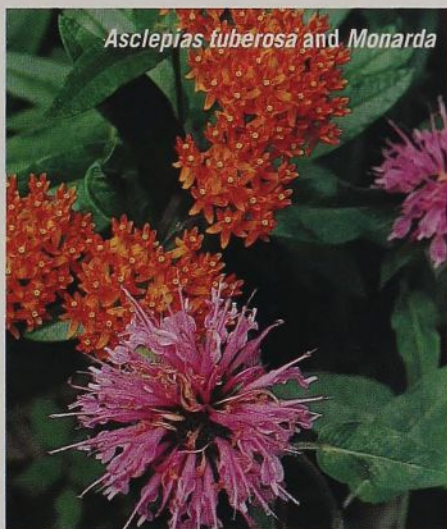
ally in southeastern Arizona, after which it moves upward into canyons. The lucifer has the most downward-curved bill of all North American hummers and is known to consume lots of insects, which it may glean from its favorite flowers: agaves, ocotillo, acacias, and cacti.

The black-chinned hummingbird prefers moist nesting habitats in this region.

Semi-Tropical Areas. The buff-bellied hummingbird nests from March to July among dense thickets along streams and semi-arid coastal scrub habitats of the lower Rio Grande Valley. Although its population is greatest in May and September, some may be found year round in the Brownsville area of Texas and occasionally in Louisiana.

INVITING THEM HOME

To encourage hummers to visit your gardens, include their favorite native plants (see chart, page 24) to create natural hummingbird oases. Then fill in with



Asclepias tuberosa and Monarda

cultivated varieties of annuals, herbaceous perennials, shrubs, trees, and vines that are adapted to your area and that add to the hummingbirds' nectar buffet. And just to make sure no hummer goes away hungry, hang feeders filled with a solution of sugar water for them (see "Tips for Hummingbird Feeders," page 25).

Now make yourself comfortable as you watch the hummingbirds and their antics to your heart's content.

Arnette Heidcamp is a free-lance writer living in Saugerties, New York. Her current project is a book about growing hummingbird flowers.

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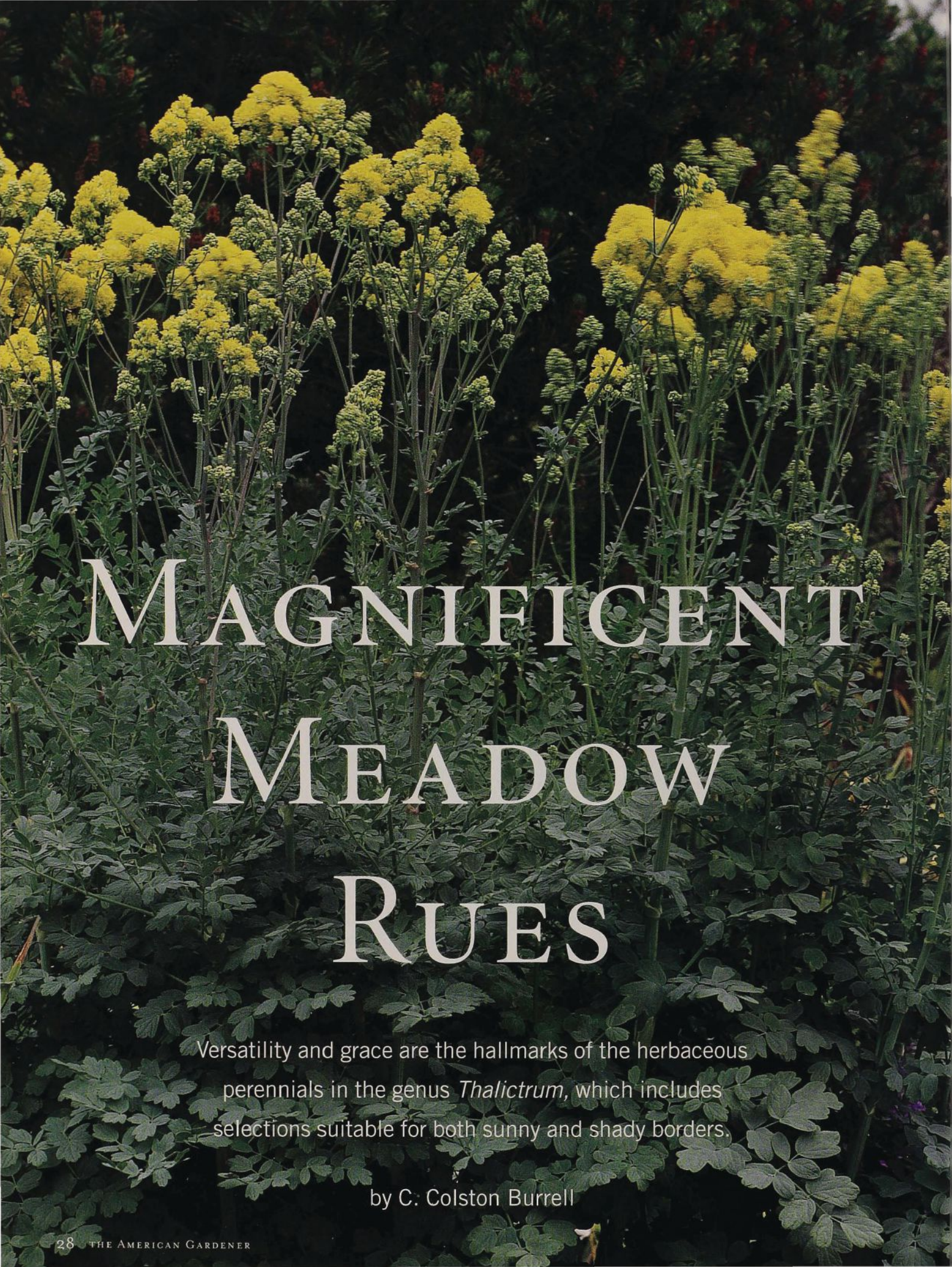
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MAGNIFICENT MEADOW RUES

Versatility and grace are the hallmarks of the herbaceous perennials in the genus *Thalictrum*, which includes selections suitable for both sunny and shady borders.

by C. Colston Burrell

ORNAMENTAL BOTH IN FLOWER AND FOLIAGE, meadow rues (*Thalictrum* spp.) seem poised to become the next “must-have” perennials for avid gardeners. It’s hard not to like these ethereal plants, which are graced with gauzy, delicate, finely lobed foliage reminiscent of columbines or maidenhair ferns. Their frothy inflorescences, which garden writer George Schenk evocatively described as “the herbaceous counterpart of a fling of confetti,” are composed of many tiny flowers gathered in flattened or loosely branched clusters.

Like some of their relatives in the buttercup family (Ranunculaceae), meadow rue flowers are formed of petallike sepals rather than true petals. These flowers come in a broad palette of colors, from pure white to cream-colored, yellow, pale green, and a delicious array of lavender to lilac hues. Some also feature decorative golden or white stamens that dangle seductively from between the sepals to produce a bi-color effect.

Most of the 130 or so species in the genus are native to northern temperate regions. In the wild, they grow in habitats ranging from woodlands and damp meadows to rocky, sun-splashed sites. Growing from rhizomatous or tuberous rootstocks, these herbaceous perennials come in an assortment of shapes and sizes—from shin-high ground covers to Amazonian showstoppers blooming six to 14 feet in the air—and are happy in an equally varied range of garden settings. For the most part, they grow best if planted in part or dappled shade where they will receive a consistent supply of moisture, but a number of species shine in the sunny border or rock garden, especially in regions blessed with cool summers.

SUNNY BORDER BEAUTIES

THE MID-GROUND of a deep border can always be augmented with billowing clouds of the three- to five-foot columbine meadow rue (*Thalictrum aquilegifolium*, USDA Zones 5–9, AHS Zones 9–4). When in bloom, the dense, domed

clusters of white or lavender flowers on this European and Asian species rivet the eye. I use the cultivars ‘Purpureum’ and ‘Thundercloud’, which can be difficult to find, to add purple to borders in early summer, when this color is particularly scarce. This species’ greatest flaw—and perhaps the only shortcoming of most members of this comely genus—is the short-lived flower display, which lasts only a week or two.

Bearing a passing resemblance to brocoli florets, the blue buds of yellow meadow rue (*T. flavum* var. *glaucum*, Zones

4–8, 9–1) open to soft clouds of fluffy sulfur-yellow flowers on three- to five-foot stems. Native to southern Europe, yellow meadow rue is an open, lacy-crowned plant with large leaves composed of many broad, gray-blue, scalloped leaflets. Every spring I intend to stake the tall stems, which tend to flop as soon as the flowers open. Each year I forget, and the resulting tumble of early summer flowers interweaves with a crimson barberry and a huge clump of scarlet and chartreuse Indian pink (*Spigelia marilandica*) to create a delightfully chaotic effect. A cultivar, ‘Il-

luminator’, was selected for the gold variegation that suffuses the steely blue foliage when it emerges in spring.

Perhaps the most distinctive meadow rue is *T. lucidum* (Zones 4–8, 8–5), a hard-to-find European and Asian species that has deep green foliage with linear, unlobed leaflets quite unlike those of its kin. The effect recalls bedstraw (*Galium* spp.) or burnet (*Sanguisorba* spp.). The erect, conical clusters of soft yellow flowers, which bloom for several weeks in summer, are self-supporting atop four- to five-foot stems.

Some tall plants beg to be sited at the front of the border, where their delicate blossoms can be seen at close range and their open habit does not obscure the view behind them, and lavender mist meadow rue (*T. rochebrunianum*, Zones 3–8, 8–4) is one of them. In mid- to late summer, this beauty dons a diaphanous veil of showy flowers five to seven feet above the ground. The



Opposite: A dense cluster of yellow meadow rues emphasizes the dramatic pairing of the sulfury flowers and blue-green foliage. Above: Held aloft on wiry stems, the flowers of columbine meadow rue seem to float above this border.

flowers are composed of persistent lavender sepals highlighted by yellow stamens.

Large-flowered 'Lavender Mist' is the most common selection available to gardeners, but the hybrid 'Elin'—a cross with yellow meadow rue—is earning accolades from all who grow it. Self-supporting purple stems garnished with the typical glaucous meadow rue foliage rise to as much as 12 feet, supporting a stunning crown of lavender-and-yellow flowers.

The prize for best flower display, however, goes to 'Hewitt's Double', a cultivar of the Asian native *T. delavayi*. Long-lasting sprays of double flowers appear late in the season over very fine-textured foliage. The lavender puffs, like a galaxy of tiny carnations, festoon conical inflorescences that droop artistically from wiry, drooping stems. In my garden, this plays out as a charming tumble over a mound of variegated Russian comfrey (*Symphytum xuplandicum* 'Axminster Gold').

FANTASTIC FOLIAGE

SOME MIGHT ARGUE that meadow rues are so ephemeral in flower that foliage

is their major asset. A handful of species do rest on the laurels of their leaves, conceding floral prowess to their more flamboyant relations. Among my foliar favorites is *T. isopyroides* (Zones 6–8, 8–4), which fashions mounds of overlapping, finely divided leaves with dozens of tiny, pinked leaflets in an intense shade of steely blue-gray. The modest yellow-green flowers are carried in airy clusters atop one-and-a-half foot stems in early summer. Native to mountainous regions of Asia, it is suited to sunny rock gardens or the front of a well-drained border.

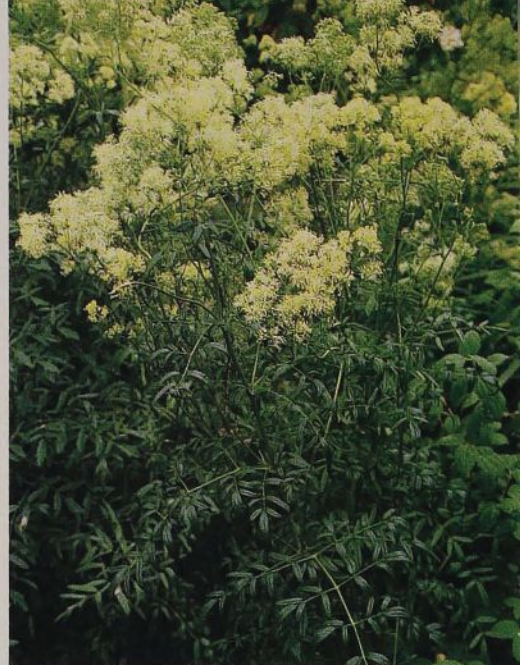
T. minus (Zones 5–8, 8–4), forms a leafy column to six feet. The dainty green rounded leaflets are the main attraction, though late-summer flowers provide a yellowish green accent. 'Adiantifolium' is an attractive low-growing selection with smaller, bluer foliage on densely clustered stems that recall southern maidenhair fern (*Adiantum capillus-veneris*).

Harder to find in the nursery trade is *T. flexuosum*, which has glaucous stems to five feet. This European species bears soft yellow flowers in mid- to late summer, but the mound of blue-green foliage with squarish leaflets really steals the show in a lightly shaded spot in my garden.

DIMINUTIVE DRAMA

IN ADDITION to *T. minus* 'Adiantifolium', there are several low-growing meadow rues ideally suited to rock gardens or border fronts. The diminutive Korean meadow rue (*T. ichangense*, also listed as *T. coreanum*, Zones 4–8, 8–3) has shield-shaped leaves that are held outward. Clouds of soft-pink flowers are carried above the leaves of this floriferous species, which blooms intermittently throughout the summer.

Kyushu meadow rue (*T. kiusianum*, Zones 4–8, 8–2) is so tiny that if it were not for its fuzzy pink to lavender flowers, you would never think it was a meadow rue. It grows to six inches high and over time spreads by stoloniferous roots into a broad mat up to several feet across. The early summer flowers are held just above the deep green, divided



Pale yellow flowers and distinctive linear foliage distinguish *T. lucidum*.

leaves. This species grows best in part sun or dappled shade and is an ideal ground cover for a rock garden or woodland bed. Reputed to be native to Japan and Korea, this enigmatic species appears in neither country under the name commonly seen in horticultural literature, and recent collections indicate its correct name may be *T. taquetii*.

Try this species and *T. ichangense* in a trough, old hollow stump, or at the front of a border where they won't be swamped by thuggish neighbors.

A bit taller, but still dwarfed by its lofty brethren, is baneberry-leaf meadow rue (*T. actaeifolium*, Zones 4–8, 8–2), a handsome plant with distinctive foliage and erect clusters of fuzzy, pale lilac flowers in summer. The common name stems from the broad, bluntly toothed leaflets, which resemble those of baneberry (*Actaea* spp.). Grow this three-foot-tall native of eastern Asia in part sun to dappled shade.

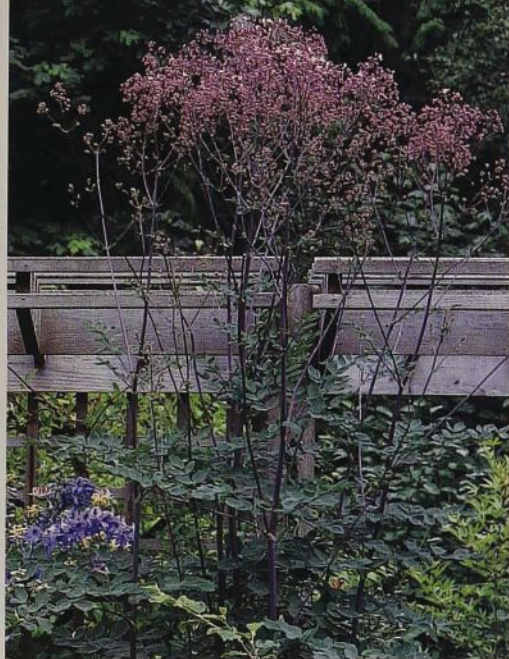
SUBTLE NATIVES

MOST NATIVE American plants are underrated, and our meadow rues are no exception. Because of their subtle coloring, meadow rues are easily overlooked in our fields and meadows, but a number of praiseworthy indigenous species are ripe for discovery.

The dangling candelabralike flowers of early meadow rue (*T. dioicum*, Zones 3–8, 9–1) add a touch of elegance and motion to the early spring garden. Gold-



In this garden, designed by Linda Cochran, a clump of ornamental grass masks the bare stems of *T. delavayi* 'Hewitt's Double' and emphasizes the cloudlike flowers.



The statuesque meadow rue hybrid 'Elin' is crowned with lavender-and-yellow flowers.

en stamens hang like silk tassels on a lampshade from male flowers, although female flowers are insignificant. Plants stand one to three feet tall, with sea-green, rounded leaflets that lend a ferny air to this woodland wild flower, native to eastern and central North America.

The powder-puff flowers of tall meadow rue (*T. polygamum*, Zones 3–8, 8–2) rival those of columbine meadow rue. The erect stems of this eastern native reach eight feet, crowned by wide, dense clusters of creamy white flowers in mid- to late summer. The finely divided leaves have narrow, blunt-lobed leaflets. Equally at home in a wet meadow or a border, this plant merits wider popularity.

Native to prairies of central North America, *T. dasycarpum* (Zones 3–8, 8–1) is an attractive species with delicate foliage clothing four- to six-foot purple-stained stems. Its upright clusters of drooping white flowers distinguishes it from other tall species. Waxy meadow rue (*T. revolutum*, Zones 3–8, 8–2) is similar but the pointed leaflets have a skunklike odor when rubbed.

The smallest of the native species with potential for garden use is mountain meadow rue (*T. clavatum*, Zones 4–8, 8–2), a denizen of moist, shady eastern woodlands. Soft gray-green leaves overlap like waves on stems barely a foot tall. In bloom, the plant shines with open clusters of white spring flowers sporting petallike sepals and a fringe of showy stamens.

Caring for Meadow Rues

Meadow rues are easy to grow in evenly moist, humus-rich soil in full sun or part shade. Most species are native to cool, shaded woodlands or wet meadows, so consistent moisture produces the best growth. All species will tolerate full sun as long as the soil stays consistently moist; however, part or dappled shade is recommended for all but the tallest border beauties. Though most species are fairly heat tolerant, plants will be stunted in blazing sun and dry soil, and their foliage will decline in summer from the bottom upwards, exposing bony ankles.

Mature plants form dense clumps that bear many flower stalks. Purple-tinted new shoots emerge in early to mid-spring. Even when given the best culture, tall stems tend to flop in the shade, and wind and rain can easily topple plants. Use peony hoops over entire clumps, or use wire stakes to keep individual stems erect. I prefer not to stake and enjoy the inevitable free-spirited sprawl. 'Lavender Mist' is the only plant that has never flopped in my garden, even when howling winds ripped shingles off my roof!

Pests rarely bother meadow rues, though leaf miners may disfigure the leaves with their meandering tunnels. If the soil becomes too dry, the foliage of some species, most notably *T. aquilegifolium*, may mildew. Spraying with a mixture of baking soda, water, and a drop of dish detergent should take care of the problem.

With the exception of the fast-spreading *T. delavayi* 'Hewitt's Double'—which should be divided and replanted every two to three years—plants seldom need division, but they can be lifted for propagation as the growth is emerging in early spring or in early autumn. Sow the seedlike achenes outdoors as soon as they are ripe in mid to late summer. Seedlings will flower in one to three years, depending on growing conditions.

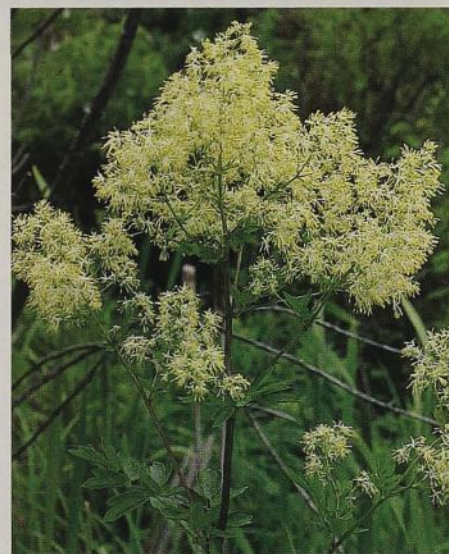
—C.C.B.

Some botanists place rue anemone (*Anemonella thalictroides*, Zones 4–7, 7–1), native to eastern and central North America, in the genus *Thalictrum*. The specific epithet means "resembling thalictrum," so the family ties are evident. Growing from tuberous roots that need to be divided regularly, this four-inch-tall woodland beauty has frail-looking yet resilient stems crowned with a triplet of divided leaves. Open clusters of delicate, starry flowers bloom in early spring. In the eastern half of this plant's range, the flowers tend to be white; those in the Midwest are more likely to be pink.

Among a handful of cultivars are greenish-flowered 'Betty Blake' (sometimes listed as 'Green Dragon') and 'Jade Feather', and double pinks such as 'Schoaf's Double Pink' and 'Cameo'.

THE NEW WAVE

UNTIL RECENTLY, an avid gardener's choice of meadow rues was relatively limited. But Heronswood Nursery in Kingston, Washington, has changed all that, thanks to owner Dan Hinkley's insatiable



Creamy white flowers garnish purple stems on *T. dasycarpum*, a prairie native.

appetite for new plants. His recent catalogs have featured numerous meadow rues never before offered commercially. And other nurseries are following suit (see "Sources," page 32).

My favorite new acquisition is showy *T. diffusiflorum* (Zones 4–8, 8–2), which

Sources

Arrowhead Alpines, Fowlerville, MI.
(517) 223-3581. www.arrowheadalpines.com. Catalog free.
Thalictrum dasycarpum; *T. delavayi* 'Hewitt's Double'; *T. flavum* var. *glaucum*; *T. ichangense*; *T. kiusianum*; *T. lucidum*; *T. rochebrunianum*.

Fieldstone Gardens, Vassalboro, ME.
(207) 923-3836. www.fieldstonegardens.com. Catalog \$2.50.
T. aquilegifolium; *T. delavayi* 'Hewitt's Double'; *T. flavum* var. *glaucum*; *rochebrunianum* 'Lavender Mist'.

Forestfarm, Williams, OR.
(541) 846-7269.
www.forestfarm.com. Catalog \$5; free if ordered online.
T. delavayi; *T. delavayi* 'Album'; *T. flavum* var. *glaucum*; *T. minus* 'Adiantifolium'; *T. rochebrunianum*.

Heronswood Nursery, Kingston, WA.
(360) 297-4172.
www.heronswood.com. Catalog \$5.
Anemonella thalictroides; *T. actaeifolium*; *T. delavayi*; *T. diffusiflorum*; *T. 'Elin'*; *T. filamentosum* var. *tenerum* Heronswood Form; *T. flavum* var. *glaucum* 'Illuminator'; *T. ichangense*; *T. isopyroides*; *T. kiusianum*.

Roslyn Nursery, Dix Hills, NY.
(631) 643-9347.
www.roslynnursery.com. Catalog \$3.
T. filamentosum var. *tenerum* Heronswood Form; *T. isopyroides*; *T. minus* 'Adiantifolium'; *T. rochebrunianum* 'Lavender Mist'.

Russell Graham, Salem, OR.
(503) 362-1135. Catalog \$2.
T. delavayi 'Hewitt's Double'; *T. dioicum*; *T. isopyroides*; *T. minus*; *T. occidentale*; *T. polygamum*.

We-Du Nurseries, Marion, NC.
(828) 738-8300. www.we-du.com. Catalog \$3.
Anemonella thalictroides; *T. actaeifolium*; *T. delavayi*; *T. polygamum*.

sports starry flowers composed of five huge lavender sepals. Plants form open, diffuse clumps of wiry, often weak stems clothed in attractive, bluish foliage. Though it lacks the poise of the taller species, the quarter-sized flowers make the bad posture easier to accept.

I only recently planted *T. filamentosum* var. *tenerum* Heronswood Form, which was selected because its extra-large clouds of white flowers last up to three months—real staying power compared to most of the ephemeral flowers in this intriguing genus.

I am also anxiously awaiting the first blooms on my young plants of *T. finetii*



New to gardeners, *T. diffusiflorum* bears floppy clusters of large, starry flowers.

(Zone 5–8, 8–3). Going by catalog descriptions, I expect extremely showy, large-sepaled, yellow-and-lavender flowers on stems to six feet tall. My young plant is somewhat undistinguished in foliage, but I feel certain all will be forgiven when it flowers.

The last of my haul from last year's Heronswood catalog are young plants of *T. sibiricum* with lovely gray-blue foliage. These promise to be crowned with a yellow froth in late spring, before the flowers of *T. flavum* var. *glaucum* grace the garden.

MEADOW RUES IN THE LANDSCAPE

TO RELEGATE meadow rues to the role of border fillers would be unjust, though they excel in this position. Their delicate foliage and airy flowers are an effective foil for plants with larger blossoms and bold leaves.

They serviceably fill gaps left by early-blooming bulbs and summer-dormant plants like oriental poppies.

A well-grown meadow rue can just as easily dominate a border. A single stately clump makes a dramatic focal point in the middle or rear of a bed. When making effective color combinations, take a cue from the flowers themselves. I accentuate the contrast between lavender sepals and yellow stamens with combinations of rich violet and shining yellows. White flowers like goats beard (*Aruncus* spp.) and wood aster (*Aster divaricatus*) also work well with lavender.

Yellow-flowered meadow rues combine well with blues, purples, reds or pinks. I placed a large clump of *T. lucidum* towards the back of a border surrounded by spiky rose-pink Siberian irises for foliar and color contrast, along with the maroon daylily 'Minstrel Boy', *Knautia macedonica*, and vibrant *Astrantia* 'Hadspen Blood' to dramatic effect. The white-flowered species are equally versatile, though they look a bit dingy next to pure white flowers like *Phlox* 'David' or 'Fujiyama'.

Native meadow rues fit comfortably into formal borders, but they look equally smashing in meadows and exuberant wild gardens with blue flag irises (*Iris versicolor*), blazing stars (*Liatris* spp.), garden phlox (*Phlox paniculata*), sneezeweeds (*Helenium* spp.), marsh mallows (*Hibiscus* spp.), ornamental grasses, and other unrestrained companions.

Choose woodland species like early and baneberry-leaf meadow rue for the shade or rock garden, along stone walls or in masses with shrubs. Combine them with woodland wildflowers such as liverleafs (*Hepatica* spp.), rue anemones, alumroots (*Heuchera* spp.), trilliums, and anemones, as well as ferns and hostas.

Whether you choose time-tested species and varieties or seek out the newest introductions, meadow rues are sure to complement your garden both in foliage and in flower.

A writer, lecturer, and landscape designer, C. Colston Burrell lives in the Blue Ridge Mountains of Virginia. He is author most recently of Perennials for Today's Gardens (Meredith Books, 2000).

AHS

**2001 Book
Award Winner**

Growing Home: Stories of Ethnic Gardening is one of four books to receive the Society's prestigious Annual Book Award. More information about all the 2001 book award winners can be found on page 7.

This story of the Korean Peace Garden in Minneapolis is just one of 31 inspirational portraits of Minnesota gardeners with diverse ethnic backgrounds included in Susan Davis Price's Growing Home: Stories of Ethnic Gardening. Though they trace their roots to far-flung regions of Africa, Asia, Europe, and South America, these gardeners share a passion for gardening that they have brought to America's heartland.

Wild Sesame and Balloon Flower

An urban oasis testifies to the psychological and spiritual rewards of gardening.



BY SUSAN DAVIS PRICE

PHOTOGRAPHS BY JOHN GREGOR

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WALKING FROM high-rise to garden, one passes the all-too-typical urban scene—busy parking lot, unkempt knoll, massive concrete overpass. So the bright green tapestry of 33 vegetable plots is doubly unexpected. Clustered together, the lovingly tended gardens are bursting with produce even on this early June afternoon.

Besides the familiar chives, onions, many-hued lettuces, and numerous peppers, there are low clumps of watercress and rows of Chinese bellflower, harvested for its roots after three years. Americans know the plant as balloon flower (*Platycodon grandiflorus*) and grow it only for the purple and white blossoms. The matte green of wild sesame plants (*Perilla frutescens*), grown for leaf and seed, contrasts with shiny spinach and chard. Artfully improvised structures—trellises constructed of old branches, sheds of found wood, gates made of bits of metal and plastic—add a suggestion of sculpture to the garden.

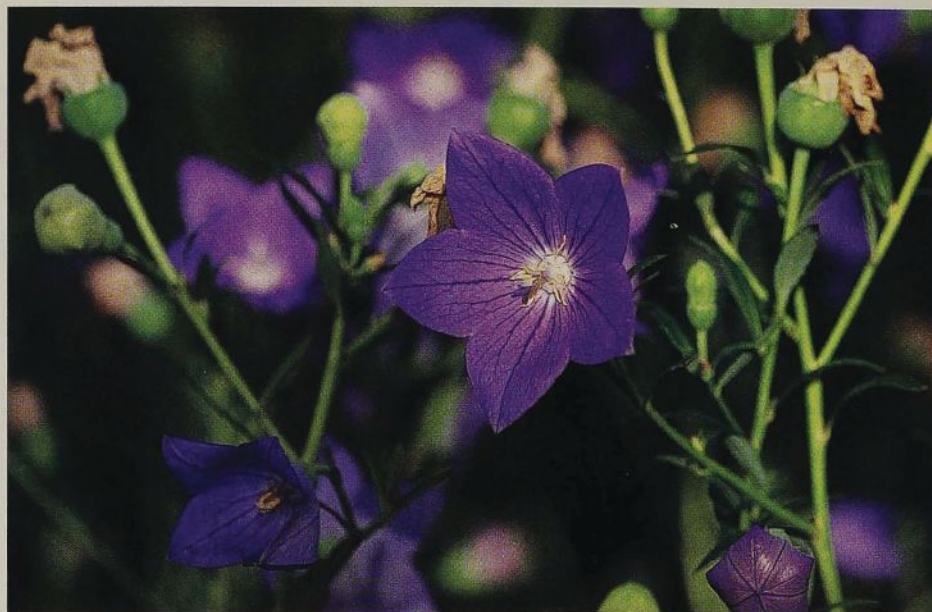
The Korean Peace Garden is planted and tended by 33 Korean elders (ages 60 to 90) of the Cedar-Riverside apartments in Minneapolis. “Gardening,” says program coordinator Kwangja Kwon of the Korean Volunteer Services Office, “is their life.”

The garden started over seven years ago because many of the elders—who do not know much English and came to this country at the invitation of their children—had been farmers in their home country and “they missed their farms,” Kwon explains.

To alleviate their loneliness, some of the elders began planting small patches around the apartment complex, but other residents complained. With the help of John Fabian, manager of the apartment complex, and permission from the city, the Koreans were given a grassy area a short walk from the high-rise.

The spot was full of rocks, but the elders began digging with hand tools. “It was a really tough job, but they were happy,” says Kwon, “because they had hope.”

Once the ground was cleared, the elders dug in compost they had made. In later years they’ve continued to add compost and manure from the University of Minnesota’s agriculture campus. “Now they have really good soil,” Kwon says. “They plant lots of things, not only for eating fresh, but also to save a lot of food money.



Chinese bellflower (*Platycodon grandiflorus*), a perennial known to American gardeners as balloon flower, is important to Korean cooks for its edible root.

And they grow many things they can’t find in the stores.”

Among these plants is mugwort (*Artemisia vulgaris*), known to Koreans as *suk* and used in soups and salads to give a pleasant green tint to food, and in bath water as a skin softener. Another is taro (*Colocasia esculenta*), the principal ingredient of *toran gak*, taro soup, an essential dish served at the yearly full moon festival in August. Since taro is a tropical plant, the gar-

deners must nurture it indoors during the long Minnesota winter. And the roots of *toduk* (*Codonopsis pilosula*), a climbing herb with bell-shaped flowers, are eaten to increase vital energy.

FOR FIVE YEARS, Bokson Pyunn has grown many vegetables in her plot, including those she doesn’t see at the market. There are chives and green and multiplier onions, of course, but also



Codonopsis pilosula, a climbing herb with bell-shaped flowers, is grown for its roots. Used for food and as medicine, the plant figures in Korean tales for its qualities of giving strength to the weary. Previous page: In the midst of Minneapolis’s urban congestion, Korean elders have created gardens of beauty and utility.



Left to right: Tae Young Lee, Samup Chang, Myong Lee, and Bokson Pyunn.

hot peppers and the Korean favorite, wild sesame. Grown from seed saved over the winter, these robust plants have leaves and seeds with the flavor of cumin and a hint of cinnamon. Adding a bright yellow color to the rows are the flowers of crown daisy (*Chrysanthemum coronarium*), or *ssukat* in Korean. The young leaves and stems give a tangy taste to stir-fries and casseroles.

Pyunn grows a Korean zucchini that she finds more flavorful than the ones generally available in American groceries, which she uses in soup, in noodle dishes, and to make fried zucchini pancakes.

Like most Koreans, Pyunn prefers the *homi*, the short-handled hoe with the triangular blade, for hand weeding. To use it, she must kneel or hunker close to the ground. In addition, she works with standard American equipment, such as rakes, shovels, and hoes.

SAMUP CHANG worked in the wholesale fish business in Korea. She was a “busy woman and had no time to garden,” she says. Besides, she lived near the ocean, where the soil was sandy and “the wind full of salt.”

“Now I have time,” she says, “and I am growing the vegetables that I love—bellflower root, watercress, wild sesame. I can stop by any time and take care of the plants and get pleasure from the garden.”

Chang and the other elders begin work as soon as the snow melts in April and plant cool-weather crops. Some of their vegetables are left in the ground over the winter, so the seeds will germinate early.

Chang knows that gardening is good for her health. “Vegetables are strong,” she explains. “They’re growing. I want to be strong. So I take care of myself.”

Wild Sesame

The aromatic annual called wild sesame or beefsteak plant (*Perilla frutescens*) resembles basil. Its wrinkled, purple foliage has a pleasant cinnamon-mint smell. A member of the mint family, wild sesame has the characteristic square stems and four stamens of most species in that family and shares a reputation for invasiveness. The plant, which grows about three feet high and bears pink flowers in late summer, was popular in American gardens as an ornamental until coleus took its place in the early 1900s.

In Asia, wild sesame is much used as a medicine for flu, lung ailments, prenatal problems, and incorrect energy balance. The foliage provides a red food coloring and an antimicrobial substance to pickled foods. Koreans extract oil from the seeds for cooking, as well as for industrial uses. In Japan the leaves, seeds, and flower spikes are used as a basic culinary herb called *shisho*.

MYONG LEE’S 20-by-10-foot plot contains 25 different kinds of plants and nary a weed. Perhaps that’s because, as she says, she spends “the whole day in the garden.” She grows two kinds of lettuce, three kinds of beans, two types of green onions, as well as cabbages, radishes, and the Korean favorites—Chinese bellflower, wild sesame, and *ssukat*.

Lee didn’t garden much in Korea, but after moving to Minnesota, she observed others gardening. “I see what they are doing,” she says, “and I do the same way.” Myong has become an expert gardener, raising buckets of produce the last four years. Even in early June, she says, she is eating “many things” from her garden.

She has even become something of a handywoman, building trellises, a shed, and other furnishings for her apartment and the garden. “She gathered wood and sticks and made a little storage building,” Kwon says, “and also the gate around the garden.”

AFARMER AND gardener most of his life, Tae Young Lee insists that he is 80, but his lean face and firm voice are those of a fit 60-year-old. In Korea, Lee had a large farm near Seoul, which supported his family of 10 children. He raised animals and grew rice, vegetables, and “many peppers—the basic ingredient in most Korean food.”

Compared to his farm, Lee’s garden here is “just a little spot,” he says. In fact, he grows a number of crops to feed himself and his wife, and to share with his children. Wild sesame, balloon flower, and *toduk* are there, of course, plus “Korean-style peppers that are not that hot and not that mild.” He raises cucumbers for his wife’s pickles and a zucchini-shaped eggplant—grown for its stems as well as its fruit—as well as Napa cabbages for his wife’s *kimchi*, the Korean pickle served at every meal.

About farming, Lee says, he had no choice—it was “a living.” But gardening is his passion. “Whenever I wake up in the morning,” he says, “I have to come out and look at everything in the garden the first thing; after that I can eat breakfast. I like to be in the garden—that is how I like to spend my time.”

Garden Vignettes

Small-scale plantings can create seasonal drama in any landscape.

BY RITA PELCZAR



A sundial, statue, or birdhouse can provide a focal point for a vignette. Here a combination of white and purple phlox and majestic two-toned lilies draw the eye upward toward the tall birdhouse that anchors the vignette. The background of evergreens serves to frame the planting in Harold and Debbie Ferguson's garden in North Wilkesboro, North Carolina.

VIRGINIA R. WEILER



Combinations of flowering herbaceous plants, ornamental grasses, and shrubs often create vignettes with lots of textural interest. In this border at Green Spring Gardens in Alexandria, Virginia, the drooping leaves of *Miscanthus sinensis* 'Cabaret' sway over the stiff branches of a dwarf Colorado blue spruce, the rounded mounds of the purple-flowered *Petunia* 'Primetime Plum', and the conical white inflorescences of *Hydrangea paniculata* 'Tardiva'. The variegated miscanthus and the blue-gray spruce provide additional contrast to the bright green foliage of the surrounding plants. Dwarf evergreens help carry a vignette through periods when plants are not in flower.

HOW MANY TIMES have you gazed across your landscape and, with a satisfied smile sighed, "Perfect!" Every faded bloom deadheaded, all weeds removed, each pruning task completed, every bed mulched. Can't remember the last time? You're not alone. Whenever I cross an item off my "to-do" list, I discover two or three more tasks that need attention right away. Face it. Gardening is an on-going process—you are never finished.

This would be frustrating were it not for the glimpses of garden perfection portrayed by little scenes within a landscape—combinations of color, texture, and form that simply take your breath away. These vignettes are captivating because the plants within the scene complement one another so well and they reach the height of their glory simultaneously. It's pure harmony.

SEASONAL ACTS

EVEN THE BEST gardeners and designers can't keep all parts of a border or garden in full bloom throughout the growing season,

but with bold vision and a little planning it's easy to create small scene-stealing vignettes to occupy center stage at different times of the year.

A garden vignette can be set off by itself—a small discrete planting that requires little space but provides great impact. Or it can be part of a larger planting—a dramatic grouping within a mixed border or along the edge of the woods that demands attention at a time when other areas gear up for, or recover from, their own seasonal displays.

Think of your landscape as a live performance revealed in seasonal acts. Each season/act is composed of a series of scenes; although they occur on the same stage, the spotlight moves around to focus on the star of the moment as the performance advances.

The seasonality of vignettes is part of their charm. By focusing attention on different parts of the garden from one season to the next, the overall landscape becomes more interesting. In the late days of winter, when my most traveled path is from the front door to the driveway, a simple planting next to the walk of *Daphne odora* fronted by a mass of fall-planted pansies grabs my attention.



"Rock plays a prominent role in landscapes in the Southwest and boulders are often used as anchors for garden vignettes," says designer Judy Mielke of Scottsdale, Arizona.

This planting of cacti and other succulents at the Arboretum at L.A. County demonstrates the effective use of rock as well as color—plants in shades and tints of a single color, in this case, green, contribute to a subtle yet stunning scene. Variations in form supply additional interest. The low-growing, rounded *Echeveria* × *imbricata*, *E. 'Afterglow'*, *Sedum album*, and *S. moranense* in the foreground contrast boldly with the upright forms of the red-tipped *Euphorbia trigona* 'Red' on the left and the columnar *Pachypodium geayi* in the center. "Occasionally in the desert you'll see a boulder with a plant growing out of it," remarks Mielke, "and that effect can be recreated by placing two boulders together to form a crevice from which plants can emerge." The horsetail (*Equisetum* spp.) growing between the boulders in this vignette demonstrates this technique.

Both the sight and the fragrance remind me that warmer days are coming. May finds a grouping of deep purple-blue Siberian iris, softly hued catmint, and the airy chartreuse blooms of lady's mantle drawing my eye past the front bed to the backyard fence where they cavort with dainty blue forget-me-nots. And so it goes. June brings a burst of color from one corner of the yard, only to be outdone by July's fireworks from another. In fall, miscanthus, rudbeckia, and 'Autumn Joy' sedums deliver a knockout backyard performance against the scrim of autumn foliage. Encore!

STAGING THE PERFORMANCE

A GREAT SHOW requires "chemistry" among participating players. In a garden vignette that chemistry is a function of the plants' relationships of size, form, texture, and color. Careful attention to these elements results in a planting where the total is much more than a sum of its parts. And as any performer knows, timing is everything. The stars of a vignette must deliver their display in tandem.

The first thing that garden designer Tracy DiSabato-Aust of Sunbury, Ohio, considers when planning a vignette is the compatibility of the plants she wants to use. They must have very similar cultural requirements because they will be growing close together. Another factor she takes into account is growth rate. "You don't want to include something that is extremely vigorous in a vignette," she says. "One thug can overtake an entire planting."

By including plants of differing sizes and forms—something tall and spiky, a couple rounded mounds or blobs, and a creeper or two—the composition of a vignette can be varied and balanced. Influenced by her southwestern environment, landscape designer Judy Mielke of Scottsdale, Arizona, uses a lot of cacti and succulents to contribute a variety of forms to her designs. Among her favorites are golden barrel (*Echinocactus grusonii*), purple prickly-pear (*Opuntia violacea* var. *santa-rita*), and Mexican fence post (*Pachycereus marginatus*). "As a counterbalance to the many vertical and rounded forms of succulents and cacti," Mielke comments, "succulent ground covers such as ice plant, sedum, or anacampseros can be incorporated into vignettes."

Another way to achieve drama with size and form is to include a small tree or shrub—perhaps one with a gently weeping or a rigidly columnar habit. Vines also contribute variety of form to a small planting. "Trellising is a good way to get some height without taking up excessive width within the garden," offers Kim Hawks, owner of Niche Gardens in Raleigh, North Carolina. A tree, shrub, or vine increases the size of the display, but needn't add to the overall number of plants or the amount of maintenance required.

Contrasting texture provides important detail to small plantings and though this element is often somewhat subtle, the diversity keeps the audience on its toes. For instance, broad-leafed hostas complement the lacy foliage of ferns and the delicate

Resources

Christopher Lloyd's Garden Flowers by Christopher Lloyd. Timber Press, Portland, Oregon, 2000.

Perennial Combinations by C. Colston Burrell. Rodale Press, Emmaus, Pennsylvania, 1999.

Sunbelt Gardening: Success in Hot-Weather Climates by Tom Peace. Fulcrum Publishing, Golden, Colorado, 2000.

blooms of foamflowers (*Tiarella* spp.) and coral bells (*Heuchera* spp.) in a shady corner. And dainty plants such as alyssum provide a fine, frothy base for the medium-textured globe amaranth or petunia and a tall, coarsely textured flowering tobacco for a long-blooming vignette of annuals.

ENHANCING THE SHOW WITH COLOR

COLOR PRODUCES exciting effects from subtle to sensational, and it is probably the first thing that visitors will notice about your display. Because it is such an obvious element, and the number of plants is limited, color is particularly important in a small-scale planting. Selecting varieties that bloom at precisely the same time is critical. A late bloomer that misses its cue will throw the rest of the scene off balance.

Colorful combinations, from subtle shades of soft pastels to boldly contrasting primary colors, set the garden's mood. But keep in mind that a small grouping of plants will be most effective if relatively few colors are employed. "Try not to do too much with too many colors in a vignette," warns DiSabato-Aust, or your scene will lack unity. To avoid this, she suggests, "emphasizing tints, tones, and shades" of just one or two colors.

Hawks' favorite approaches are to design either monochromatic vignettes with strongly contrasting textures or combinations of two colors. "This is basically how I dress," she comments. "I wear one color in various shades—usually purple—or two colors that work well together. I transfer this dressing style to the garden and it works every time."

An arrangement of shades of a single color—say, yellow coreopsis, yarrow, and daylilies—with a boldly contrasting hue such



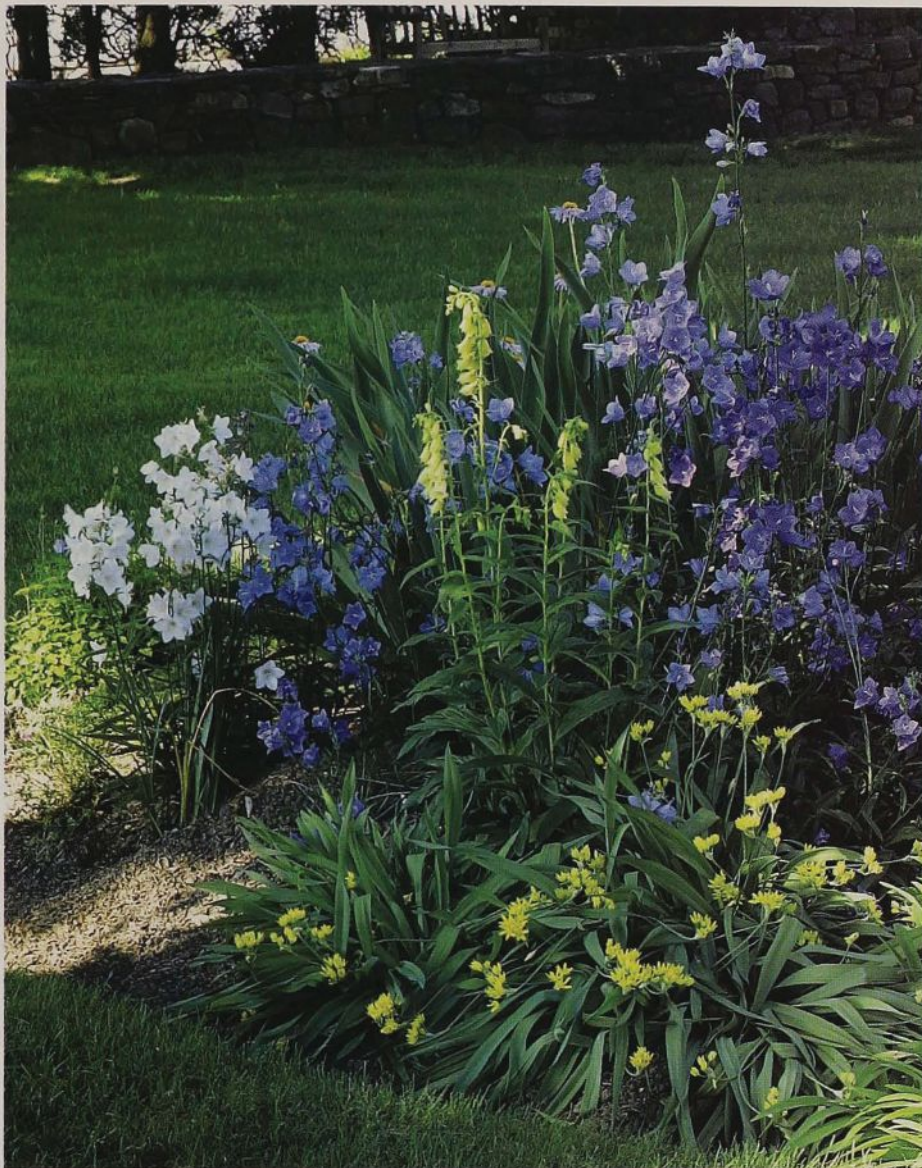
Foliage can play important roles in a vignette. In this dramatic planting in part shade, the soft white leaves of lamb's ear (*Stachys byzantina*) separate and accent the blue flowers of a hardy geranium and the rosy pink blooms of rodgersia. The coarsely textured foliage of the hosta and rodgersia anchor the frothy, finely textured rodgersia blooms and the medium texture of lamb's ear and geranium. Unlike some perennial vignettes, which are fleeting, this one will remain attractive for several weeks.



Various shades of a single color create visual interest without appearing busy or confusing. The bright yellow flowers of *Heliopsis helianthoides* 'Summer Sun' stand out boldly against several shades of purple contributed by the blooms of veronica, purple coneflower, and spike gayfeather (*Liatris spicata*) in this sunny summer vignette. This combination of drought-tolerant plants will add welcome color to the garden in mid- to late summer. As the flowers in this vignette fade, those in other areas of the garden take over.

as the intensely purple *Salvia* 'East Friesland' is often more dramatic than a rainbow of colors. For a simple summer vignette that packs a lot of punch, Hawks suggests a planting of *Canna* 'Bengal Tiger' with a drift of 'Goldsturm' rudbeckia (*Rudbeckia fulgida* var. *sullivantii* 'Goldsturm'). "And if there's room," she says, "add feather reed grass (*Calamagrostis arundinacea* 'Karl Foerster')." For a summer scene of her favorite color, purple, Hawks recommends *Buddleia davidii* 'Black Knight' with *Liatris spicata* and drumstick allium (*Allium sphaerocephalum*), fronted by *Verbena canadensis* 'Goodness Grows'. "And add *Solidago* 'Fireworks' for a purple-and-yellow fall scene," she suggests.

White flowers combined with foliage ranging from green to silvery gray produce a relaxing vignette that shines in the moonlight. Foliage color is especially important in a small planting. Green, blue-green, and gray-green foliage provide a gentle transition between contrasting flower shades and offer a respite from color overload. Variegated and non-green foliage add their own drama to a vignette, but beware: these colorful leaves may try to upstage the rest of the planting, so use them with caution. DiSabato-Aust nearly always includes at least two or three plants that have outstanding foliage color, texture, or form, which "hold the vignette even when things are not in flower."



TAKE A BOW!

AS THE GARDEN'S DIRECTOR, it is up to you to stage these seasonal vignettes. In addition to the plants, you may elect to include such performance-enhancing devices as lighting or props. A garden bench, statue, sundial, birdbath, or gnome may provide just the right touch of drama or whimsy. Carefully placed statuary is a great way to create a focal point in your vignette, and as Mielke notes, "statuary has the advantage of looking good all the time, while plantings may come and go through the seasons." But keep it simple and uncluttered, both for ease of viewing and maintaining.

Be sure to give careful attention to the precise site of your garden scene. "Placement of vignettes can be as much an art as creating the vignette," says Mielke. You should always consider likely vantage points—near a window, beside a deck, along a walkway—where the carefully planned design will be fully appreciated. Mielke suggests locating vignettes through-

This planting on the grounds of White Flower Farm in Litchfield, Connecticut, bursts into bloom in early summer. Limiting the number of different colors in a vignette, as seen here, helps maintain unity and increases the impact of a small planting. Both blue and white peach-leaf bellflowers (*Campanula persicifolia* 'Telham Beauty' and *C. persicifolia* 'Grandiflora Alba'), contrast well with the yellow perennial foxglove (*Digitalis grandiflora*) and golden garlic (*Allium moly*). Though these perennials will remain in flower only a few weeks, their contribution to the summer landscape is dramatic. All the plants in this vignette share similar cultural requirements of moist, well-drained soil and either full sun or part shade.

out your landscape "as surprises for people strolling through the garden...and as 'lures' to draw people into the garden."

Your featured vignette also helps focus your visitors' attention away from those parts of the landscape/stage where the performance is flagging or that just need a bit more work. Instead, visitors are naturally drawn to those areas that are primed for the limelight. These carefully designed plantings, though limited in size, can provide a show worthy of a standing ovation and one that is sure to garner rave reviews.

Rita Pelczar is associate editor of *The American Gardener*.

Give Your Vegetable Garden a Lift with Easy-to-Make Plant Supports



BY HAROLD TAYLOR

PHOTOGRAPHS BY ROGER FOLEY

size of the site, the materials available for construction, and the crops you want to grow, use the following width-to-height ratios: For taller, heavier crops needing more support, use a ratio of one foot of width to one and a half or two feet of height for the most stability. For a narrower teepee, use a ratio of one foot to three or four feet. After you've set the supports, draw the tops together, all overlapping in the same direction, and securely fasten with string or twine.

Because the legs of the teepee support and stabilize the entire vertical mass, the fewer the legs, the stronger each leg needs to be. Also, make sure that each leg is driven well into the soil to prevent the structure from toppling over.

CONSTRUCTION MATERIALS

TEEPEES CAN BE made from a variety of materials, including milled lumber such as 2x2x10s. I prefer to use natural materials, such as sticks gathered from the local woods, saplings cut from grown-over fields, or water sprouts (shoots that grow vertically along main branches) pruned from fruit trees or ornamental shrubs such as red-twig dogwood (*Cornus alba*) that are coppiced—cut back—each year. I've also used bamboo, which is available from commercial suppliers and comes in various lengths. Rot-resistant red or white cedar poles, available from specialty lumber suppliers, make durable structures that can last for years.

Whatever material you decide to use for the structure, cut stems of woody vines

HOME VEGETABLE GARDENS are typically planted in rows in the tradition of crop farming. While this technique has the merit of simplicity, it is not always the most practical or ornamental approach. At Longwood Gardens, we've begun to display vegetables in ways more suited for the home garden. One very successful technique has been the use of vertical structures as growing supports to lift up vining vegetables that used to sprawl on the ground.

Easy-to-assemble structures, made from natural materials such as wood, twigs, or branches, can improve a vegetable's performance, save space in the garden, facilitate planting and harvesting, and serve as ornamental focal points. When strategically placed, both the struc-

ture and the plant become visually striking elements in the garden.

THE BASIC TEEPEE

ONE OF my favorite designs is the "teepee," named for its structural resemblance to some Native American dwellings. These are relatively easy to build and will support a wide variety of vining plants. Teepees can range from the simplest of structures, used only for functional purposes, to intricately composed designs.

A teepee is made by placing three or more stakes of similar size an equal distant apart into the ground to form the outline of a circle. The diameter and length of the leg supports determine the overall height and strength of the teepee. Depending on the

Above: This teepee constructed by the author supports the growth of young beans in the summer vegetable garden.

HOW TO BUILD A SIMPLE TEEPEE-STYLE PLANT SUPPORT

The fine-textured teepee shown here and on the opposite page is a favorite for less vigorous vines and only takes a few hours to make. In this design, the main supports are embellished with secondary supports that spiral from top to bottom, providing visual interest as well as additional strength to the teepee. Here, I used flexible water sprouts from smoke bush (*Cotinus coggygria*), which are coppiced—cut back to near the ground—each winter. Apple prunings would also work and may be collected from a local orchard in late winter. A teepee made from these lightweight materials will usually last only one season.

It's best to build the structure in place early in the growing season, when there is ample working room in the garden. If the soil is wet, stand on planks or plywood while working to prevent soil compaction. Always loosen the soil near the base of the teepee with a digging fork or spade before planting.

—H.T.

MATERIALS NEEDED: spade, 20 to 30 freshly cut 5- to 6-foot-long water sprouts, twine, planks or plywood (if needed)

1. Use a spade to mark a circle for the teepee's location in freshly prepared soil. The diameter of the circle will depend on the length of the water sprouts, keeping in mind the desired width-to-height ratio described on the facing page.
2. Push the butt ends of the longest and sturdiest sprouts into the soil 8 to 10 inches deep and 8 inches apart in a circular pattern. The number of sprouts you need will vary according to the width of the circle.
3. Gather the tops together and tie them with twine at a point several inches below the junctures of all the sprouts (A).
4. To lay out the spiral, first attach a piece of twine at the base of a vertical sprout and wind it around the teepee several times (B) before reaching the top. Try to keep the spacing of the twine uniform from top to bottom.
5. Attach long, thin sprouts end to end on the vertical members, using the twine as a guide. Tie each sprout securely onto the vertical members with twine (C), removing the twine guideline as you work your way to the top of the teepee.
6. Complete the teepee by securing the last spiraling sprout to the top (D). You're now ready to plant.



may be woven through it to provide additional support for climbers and to soften the look of the teepee. Flexible stems such as those of grapevine, bittersweet, rose canes, or green briars are ideal.

MATCHING PLANTS TO TEEPEES

WHEN I BUILD an elaborate structure or make one from medium-strength materials, I select a plant with a moderate growth

habit—such as peas, half-runner beans, full-runner beans, and malabar spinach—so the architectural detail of the structure will not be obscured. Crops with large leaves, vigorous growth, and heavy fruits, such as winter squash, melons, gourds, pole limas, and cucumbers are well suited for larger teepees made from rugged materials such as cedar poles and thick bamboo.

When matching crops to support structures in a vegetable garden, I also

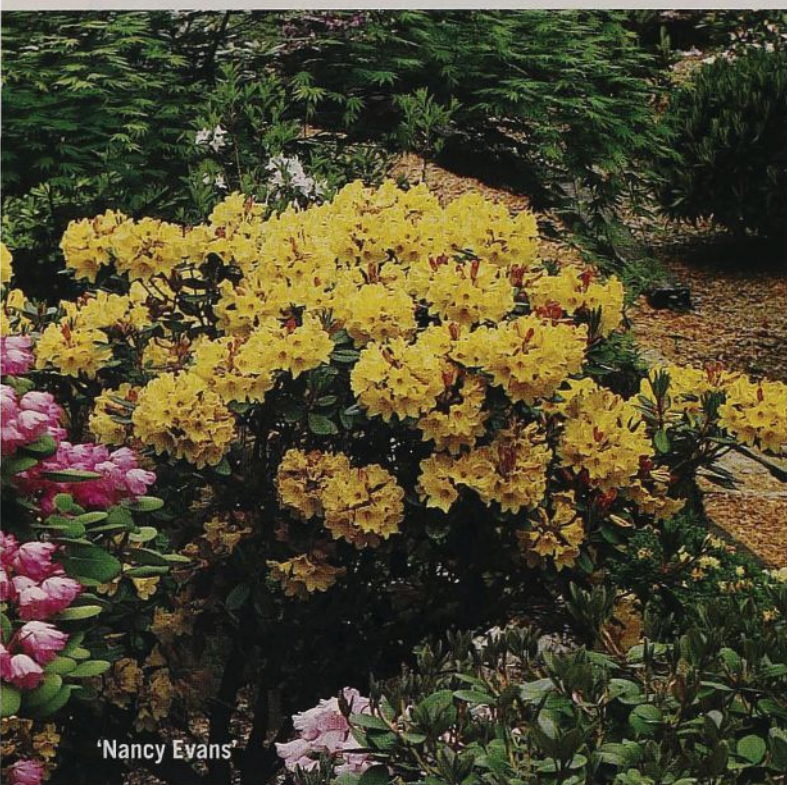
take into consideration how the height, length of season, and ornamental appearance will affect the overall design of the garden and other crops. Remember that in addition to being functional, these plant support structures can also be personal works of art.

Harold Taylor is section gardener for the Idea Garden at Longwood Gardens in Kennett Square, Pennsylvania.

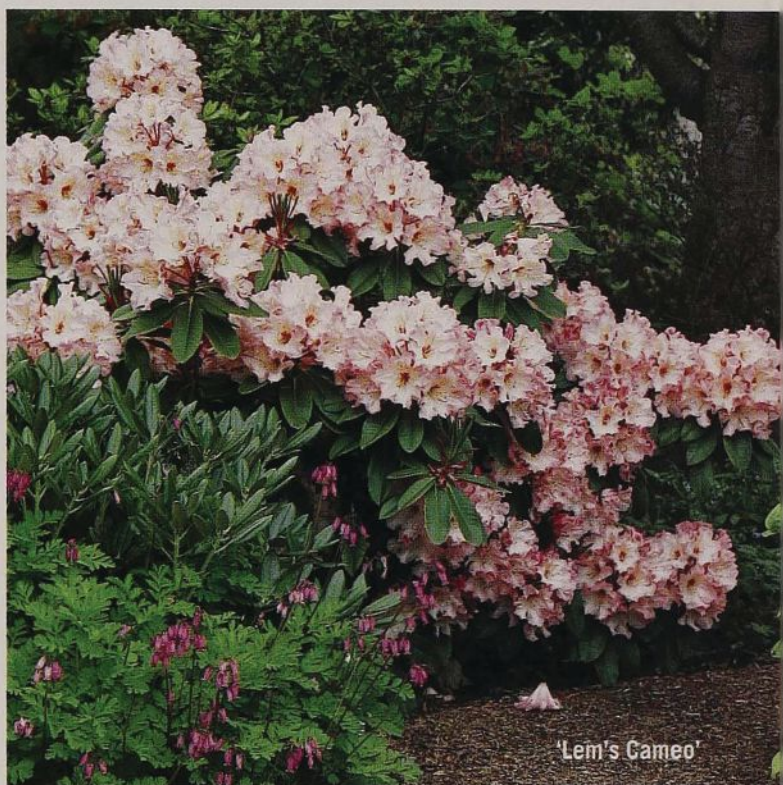
Regional experts name the best rhododendrons for North American gardens.

Rhododendrons

to rave about



'Nancy Evans'



'Leim's Cameo'

BY SONJA NELSON

RHODODENDRONS occur in a multitude of habitats in the wild, from the tundra of the Arctic Circle to the sub-tropical forests of the equatorial zone, and from the high mountains of the Himalayas to the coastal plains of the southeastern United States. With nearly 1,000 known species and some 25,000 named selections, it's no wonder that no single garden is suited to more than a fraction of the plants in this wide-ranging genus.

Although rhododendrons are generally accommodating plants and many adapt to cultivation in areas with climates quite different from that of their native habitats, others are more particular about

their growing conditions. Finding out which rhododendrons are best suited to a particular area can be challenging for the average gardener, who often encounters only a limited palette of old standbys at local nurseries.

A largely untapped source of knowledge about rhododendrons exists within the American Rhododendron Society (ARS), whose members live in climates almost as diverse as those of rhododendron wild habitats. Because ARS members experiment with new species and hybrids through plant and seed exchanges, they are uniquely qualified to evaluate the performance of specific rhododendrons in their own gardens.

Last year the ARS asked members of its 66 North American chapters to compile lists of "proven performers"—the rhododendrons that grew best in their gardens based on certain specific criteria (see "ARS Poll," page 48.) One top-performing rhododendron for each district within the following geographical regions is profiled, and a list of other regional proven performers is included in a chart on page 49. The lists are divided into four main categories of rhododendrons: those with large-leaves (elepidotes); those with small leaves (lepidotes); deciduous azaleas; and evergreen azaleas. A fifth category is vireyas, which hail from subtropical areas and are suited to warm climates.

COASTAL PACIFIC NORTHWEST

(includes ARS Districts 1–4)

WITH ITS moist, maritime climate, the area between the Pacific shoreline and the coastal mountain ranges stretching from British Columbia south to the Oregon-California border is optimal for growing a wide range of rhododendrons. Most of this region is in USDA Plant Hardiness Zones 7 and 8, though small areas of coastal British Columbia and Washington and a southern stretch of the Oregon coastline are in USDA Zone 9. The moderating effects of the ocean keep summer temperatures down near the coast, most of which is in AHS Plant Heat Zones 1 to 4; the inland of southern Oregon is in AHS Zones 5 and 6.

One of the proven performers listed by ARS members in the northern section of this region (District 1) is ‘Nancy Evans’ (Zones 7–9, 9–2), an attractive large-leaf rhododendron. A vigorous grower that has proven tolerant of diseases such as

powdery mildew, ‘Nancy Evans’ has a rounded form and grows about three feet high and wide in 10 years. Its orange-red flower buds open to reveal amber-yellow interiors with darker orange on the back-sides. The rounded flower clusters, or trusses, can reach six inches in diameter.

Among the large-leaf rhododendrons on ARS District 2’s proven performer list is ‘Hallelujah’ (Zones 5–9, 9–2)—a robust plant with a regal presence that demands attention. It’s a compact rhododendron, growing to a height and width of approximately four feet in 10 years. Its weighty, deep green leaves are marked by an unusual twist that gives the foliage a rough-looking texture. Similarly substantive bright pink flowers form in large, tight clusters. As with ‘Nancy Evans’, it is not considered highly susceptible to powdery mildew.

The flowers of ‘Lem’s Cameo’ (Zones 7–9, 9–2), one of ARS District 3’s proven performers, are a pastel mix of orange, yellow, and cream that is often described as “glowing.” Also a large-leaf rhododen-



dron, its new foliage is bronze, maturing to a glossy dark green. It grows to approximately five feet in 10 years. The parent of numerous Pacific Northwest hybrids—including ‘Nancy Evans’, mentioned above—‘Lem’s Cameo’ is emblematic of rhododendron hybridizers’ passionate quest for mixed flower color.

One species voted a proven performer for the southern portion of this region (District 4) is *R. augustinii* (Zones 6–8, 9–2), a small-leaf rhododendron native to forest margins and rocky cliffs in the Sichuan province of China. Multi-stemmed and upright, *R. augustinii* reaches six feet tall in 10 years. Its dark green leaves are narrow and willowlike and its lavender flowers are graced by protruding stamens that give them an airy appearance. Because *R. augustinii* has small leaves, it is more tolerant of sun than rhododendrons with very large leaves, and the delicacy of its foliage makes it especially useful for blending with other shrubs in a mixed border or at a woodland edge.

CALIFORNIA AND HAWAII

(ARS District 5)

MUCH OF central and eastern California is too hot and dry for rhododendrons to

GROWING REQUIREMENTS

Rhododendrons thrive in moist but well-aerated soil that is slightly acidic—a pH of 5 to 5.5 is ideal for most species—and rich in organic matter. Gardeners who don’t have such soil can, to a limited degree, meet these requirements through such practices as using soil amendments, raised beds, irrigation, and mulching. Rhododendrons are susceptible to their share of pests and diseases, but such problems can be minimized by meeting the cultural needs of the plants and by choosing varieties that are tolerant or resistant to the most likely afflictions in a particular region. The light requirements of rhododendrons vary with climate and variety, but most selections grow best if sited where they will receive part or dappled sunlight. Heavy shade often leads to lanky growth and reduced flowering.

The most uncompromising constraint on rhododendron choice is temperature. Large sections of the genus will die when temperatures fall below freezing; some will sustain temperatures to approximately 10 degrees Fahrenheit but no colder, and others survive temperatures as low as minus 30 degrees Fahrenheit. Still others languish in regions that experience extended periods of high temperatures.

Fortunately, because of the diversity within the genus, there are choices suited to many regions of North America. Notable exceptions to this are the desert Southwest and the Great Basin region, where the double limitations of low rainfall and alkaline soils make rhododendron culture impractical if not impossible. Extreme low temperatures in the northern mid-continent region from eastern Washington and Oregon across to Wisconsin also restrict—but do not eliminate—rhododendron use (see “Hardy Rhodies for Cold Climates,” page 50). Proof of the range of cold and heat tolerance within the genus is that ARS members grow rhododendrons in USDA Hardiness Zones 4 to 11 and AHS Heat Zones 11 to 2.

—S.N.



'Yaku Fairy'

thrive, but along the coast from Eureka in the north to Los Angeles in the south (USDA Zones 9 to 10 and AHS Zones 2 to 5), gardeners can successfully grow rhododendrons adapted to Mediterranean or sub-tropical conditions.

The northern section of the California coast is well suited to a group of wonderful rhododendrons belonging to subsection *Maddenia*. Rhododendrons belonging to this Asian group tend to bear highly fragrant flowers and often have distinctive foliage. One time-tested rhododendron for this area is 'Mi Amor' (Zones 8–10, 10–7), a hybrid of two species in this subgroup. Although its large and fragrant white flowers are its crowning glory, its enormous buds are a show in themselves. Its leaves, dark green on top and gray-green beneath, are deeply veined. This is a large plant, growing to six feet in 10 years.

Maddenia rhododendrons are also suitable for the coastal regions of southern California—where average minimum temperatures are above freezing—but ARS members in this section of District 5 rely more on evergreen azaleas for a performance they can count on.

Another good bet in this region is *vireya* rhododendrons, which are native to subtropical Asia. These rhododendrons will not abide freezing but tolerate the heat of southern California. The selection 'Jock's Cairn' (Zones 8–11, 11–7), for instance, bears beautiful domed trusses of funnel-shaped pink flowers highlighted by a dark pink throat.

In the frost-free, humid climate of Hawaii, *vireya* rhododendrons also grow to perfection.

COASTAL NEW ENGLAND (ARS District 6)

WITH THE exception of relatively mild Cape Cod, the Atlantic seaboard region of New England from Maine to Connecticut is in USDA Zones 5 and 6, AHS Zones 3 and 4. Though this area experiences cold winters and drying winds, it is much better suited to rhododendron culture than inland portions of New England, which are in USDA Zone 4.

One of the proven performers in this district is *R. keiskei* 'Yaku Fairy' (Zones 6–7, 7–1), a selected dwarf form of the species, which is native to Japan. The exquisite form of this plant—a tight mound up to a foot high—makes it ideal for the rock garden. A small-leaf, or lepidote, rhododendron, 'Yaku Fairy' has olive-green leaves that turn bronze in the winter. In spring, cheerful pale yellow flowers cover the plant. Lepidotes tolerate more sun than the large-leaf rhododendrons, and many are very cold hardy.

NORTHERN MID ATLANTIC (ARS Districts 7 and 8)

COMPARED WITH New England, winter temperatures ease up in the northern Mid-Atlantic, which includes southern Connecticut, southern New York, New

TYPES OF RHODODENDRONS

Because the genus *Rhododendron* is so large and diverse, botanists have divided it into eight subgroups, four of which contain most of the horticulturally important species.

Lepidotes (subgenus *Rhododendron*), are distinguished by the presence of scales—dotlike markings—on the undersides of the leaves. This group is composed mainly of evergreen rhododendrons with smallish leaves, but it also includes tender species such as *vireyas* and members of subsection *Maddenia* that can have quite large leaves.

Elepidotes (subgenus *Hymenanthus*), often termed large-leaf evergreen rhododendrons, are principally distinguished from lepidotes by the absence of leaf scales.

Two rhododendron subgroups are commonly known as azaleas; these are divided between evergreen species (subgenus *Tsutsusi*) and deciduous species (subgenus *Pentanthus*). Azaleas are most clearly distinguished from "true" rhododendrons by having five flower lobes and five stamens for each flower—most rhododendrons have 10 stamens to the flower. Azalea flowers are often shaped like a funnel—tubular at the base flaring into a wide mouth—while rhododendron flowers tend to be campanulate—that is, bell-shaped.

—S.N.

Jersey, and the southeastern portion of Pennsylvania. This region spans USDA Zones 5 to 7 and AHS Zones 4 to 7.

In this region, 'Janet Blair' (Zones 5–7, 8–3) is popular for its vigor and pleasing appearance. It is a large plant, reaching six feet in 10 years, but appears compact because of its dense, dark green foliage. Its light pink flowers are frilled at the edges and marked with a green flare on the upper petals.

Three of the proven performers in the northerly section of this region—'Ken Janek', 'Mist Maiden', and 'Yaku Angel'—are selected forms of *R. degronianum*

Sources

Bovees Nursery, Portland, OR. (503) 244-9341.
(800) 435-9250. www.bovees.com. Catalog \$2.
R. 'Jock's Cairn'.

Carlson's Gardens, South Salem, NY. (914) 763-5958.
www.carlsonsgardens.com. Catalog free.
R. degonianum subsp. *yakushmanum* 'Ken Janeck',
'Mist Maiden'; *R. 'Dream'*; *R. 'Janet Blair'*; *R. PJM* group.

Greer Gardens, Eugene, OR. (800) 548-0111.
www.greergardens.com. Catalog \$3.
R. augustinii, *R. degonianum* subsp. *yakushmanum* 'Ken
Janeck', 'Mist Maiden', 'Yaku Angel'; *R. prinophyllum*; *R.*
schlippenbachii; *R. 'Golden Lights'*; *R. 'Hallelujah'*; *R. PJM*
group; *R. 'Van Nes Sensation'*.

Roslyn Nursery, Dix Hills, NY. (631) 643-9347.
www.roslynnursery.com. Catalog \$3.
R. augustinii; *R. prinophyllum*; *R. prunifolium*;
R. schlippenbachii.

Shepherd Hill Farm, Putnam Valley, NY. (914) 528-5917.
www.shepherdhillfarm.com. Catalog online.
R. keiskei 'Yaku Fairy'; *R. 'Janet Blair'*.

Singing Tree Gardens, McKinleyville, CA.
(707) 839-8777. www.singtree.com. Catalog \$2.
R. degonianum subsp. *yakushmanum* 'Yaku Angel';
R. 'Hallelujah'; *R. 'Janet Blair'*; *R. 'Lem's Cameo'*; *R.*
'Mi Amor'; *R. 'Nancy Evans'*; *R. 'Van Nes Sensation'*.

We-Du Nurseries, Marion, NC. (828) 738-8300.
www.we-du.com. Catalog \$2.
R. minus; *R. prinophyllum*; *R. prunifolium*.

Resources

American Rhododendron Society, 11 Pinecrest Drive, Fortu-
na, CA 95540. (707) 725-3043. www.rhododendron.org.

Azaleas by Fred C. Galle. Timber Press, Portland, Oregon,
1985.

Rhododendrons in the Landscape by Sonja Nelson. Timber
Press, Portland, Oregon, 2000.

Success with Rhododendrons and Azaleas by H. Edward Rei-
ley. Timber Press, Portland, Oregon, 1992.

subsp. *yakushmanum* (Zones 4–7, 7–1),
a Japanese native that rhododendron afi-
cionados affectionately refer to as “yak.”
Growing slowly from one to four feet
high in 10 years, the species develops a
compact, mounding habit well suited to
smaller gardens. New foliage is cloaked

in white indumentum—a woolly coat-
ing—but as the striking narrow, convex
leaves mature, this is reduced to a dark
brown coating on their undersides. Al-
though coveted for form and foliage
alone, yaks also have superb flowers that
open pink from the bud and change to

white when fully open. They tolerate sunny sites
and are not known to be
plagued by common
rhododendron ailments
such as root weevils or
powdery mildew. Not
surprisingly, given its at-
tributes, this species is
often used for hybridizing
and is a parent of other
proven performers such as
'Nestucca', 'Percy Wise-
man', 'Ruth Davis', and
'Solidarity'.

SOUTH MID-ATLANTIC (ARS District 9)

THIS REGION OF the
Atlantic coast—which

includes Delaware, Maryland, and all
but the westernmost portion of Vir-
ginia—faces both high and low tem-
peratures within USDA Zone 7 and
AHS Zones 6 and 7, narrowing the
choices among large-leaf and small-leaf
rhododendrons, but are suited to a
wonderful array of azaleas, including
several eastern native deciduous azaleas
that thrive along the Mid-Atlantic
coast. Evergreen azaleas, however, offer
the widest choice, and one particular fa-
vorite of ARS members in this region is
'Dream'. This spreading plant grows to
approximately six feet high and bears
three-inch-wide, frilled purple-pink
flowers marked with dark purple spots.
A member of the Glenn Dale hybrids—
a group of azaleas bred for cold hardi-
ness and large flowers—'Dream'
originated at the U.S. National Arbore-
tum in Washington, D.C.

SOUTHEAST (ARS District 10)

THE CLIMATE, SOIL, and topography vary
greatly within this large region, which



'Yaku Angel'

ARS MEMBERS POLL

In the spring of 2000 the American Rhododendron Society (ARS) polled members of each of the society's 66 North American chapters on the best performing rhododendrons in their regions. The chapters were asked to list 10 plants in each of four categories: large-leaf (elepidotes), small-leaf (lepidotes), deciduous azaleas, and evergreen azaleas. Criteria for selection included:

- Pleasing appearance, including plant form, foliage, and flowers
- Cold hardiness and heat tolerance for the region
- Disease and pest resistance
- Satisfying overall performance

The last criterion was included to encourage members to list those plants that give them more satisfaction than frustration—more pleasure than misery.

With their lists of proven performers, each chapter also compiled cultural instructions specific to their regions.

Using this information, the ARS printed a brochure with general instructions on planting and caring for rhododendrons. Each chapter now has brochures that include an insert of their own list of proven performers.

Brochures and complete lists of proven performers for specific ARS chapters can be obtained by contacting:

Dee Daneri
Executive Director
11 Pinecrest Drive
Fortuna, CA 95540
Phone: (707) 725-3043
Fax: (707) 725-1217
E-mail: deedaneri@aol.com

The lists of rhododendron proven performers will soon be available on the ARS Web site:

www.rhododendron.org.

—S.N.



ranges from the rocky slopes of the Appalachians to the sandy coastal plain, and from USDA Zone 6 in the mountains to Zone 11 in southern Florida. The characteristic that sets this district apart from the others, however, is the heat of its summers, since much of the region falls in the AHS Heat Zones 8 and 9. To thrive in this region, rhododendrons must not only tolerate warm summers but survive the pests and diseases that are associated with the heat—notably a fungal disease called phytophthora root rot and azalea lacebug, a sucking insect.

Several deciduous azaleas native to the Southeast are listed among the proven performers. Among these is the lovely plumleaf azalea (*R. prunifolium*,

Zones 5–9, 9–5), a native of Georgia that blooms in July and August, bringing much needed color to the late summer garden. This upright, spreading azalea grows to about four feet high in 10 years. Its leaves are dark green on top and paler underneath, and its two-inch-wide tubular, funnel-form flowers come in a variety of hues from orange to red. It has proven to be somewhat resistant to azalea lacebug.

CENTRAL AND SOUTH

(ARS District 11)

FOUR ARS CHAPTERS make up District 11, which ranges from the Gulf Coast northeast through the Ozarks to the lower Midwest. The proven performers selected from this district reflect the extreme climatic diversity experienced within this large region.

Gulf Coast (southeastern Texas, Louisiana, Mississippi). The big-leaf proven performers for the Gulf Coast (Zones 8–9, 8–10) largely include old English hybrids such as 'Van Nes Sensation'. Various cultivars of *R. minus* (sometimes listed as *R. carolinianum*), an evergreen native of the Piedmont, are the choices for



ARS PROVEN PERFORMERS: REGIONAL CHOICES

The rhododendrons below are among those selected by American Rhododendron Society (ARS) members as top performers within the respective regions of North America. ARS chapters in each of 12 districts compiled these lists of proven performers, which are organized into four general categories of rhododendrons: large leaf (elepidote), small leaf (lepidote), deciduous azaleas, and evergreen azaleas.

	LARGE LEAF	SMALL LEAF	DECIDUOUS AZALEAS	EVERGREEN AZALEAS
Pacific Northwest				
<i>District 1</i>	'Point Defiance', 'Teddy Bear'	'Ginny Gee', <i>R. impeditum</i>	'Cecile', <i>R. occidentale</i>	'Blaauw's Pink', <i>R. kiusianum</i>
<i>District 2</i>	'Purple Splendour', 'Taurus'	'Vibrant Violet', <i>R. racemosum</i>	'Gibraltar', 'Mollala Red'	'Hino-crimson', 'Girard's Hot Shot'
<i>District 3</i>	'The Honourable Jean Marie de Montague'	'Dora Amateis', PJM Group	'Klondyke', <i>R. luteum</i>	'Kazan', <i>R. kiusianum</i> 'Komo Kulshan'
<i>District 4</i>	'Anah Kruschke', 'Unique'	'Blue Diamond', 'Honsu's Baby'	'Arneson Gem', 'Mount Rainier'	'Gerard's Fuchsia', 'Sherwood Orchid'
California/Hawaii				
<i>District 5</i>	'Noyo Brave', 'Horizon Monarch'	'Else Frye', 'Harry Tagg'	'Oxydol', 'Sun Chariot'	'Chinzan', <i>R. nakaharae</i>
New England				
<i>District 6</i>	'Scintillation', 'Vinecrest'	'Mary Fleming', 'Weston's Pink Diamond'	'Jane Abbott', <i>R. arborescens</i>	'Delaware Valley White', 'Stewartstonian'
North Mid-Atlantic				
<i>District 7</i>	'Gigi', 'Solidarity'	'Weston's Aglo', <i>R. mucronulatum</i>	<i>R. calendulaceum</i> , <i>R. vaseyi</i>	'Conversation Piece', 'Martha Hitchcock'
<i>District 8</i>	'Nestucca'	PJM Group, 'Windbeam'	—	—
South Mid-Atlantic				
<i>District 9</i>	'Cadis', 'Roseum Pink'	'Olga Mezitt', <i>R. minus</i>	'Homebush', <i>R. atlanticum</i>	'Hershey's Bright Red', <i>R. yedoense</i> var. <i>poukhanense</i>
Southeast				
<i>District 10</i>	'Caroline' (Gable), 'Vivacious'	'Manitou', <i>R. keiskei</i>	<i>R. austrinum</i> , 'Gibraltar'	'Elsie Lee', 'Kehr's White Rosebud'
Lower Midwest and South				
<i>District 11</i>	'Capistrano', 'Sandwich Appleblossom'	'Weston's Pink Diamond', <i>R. mucronulatum</i>	'Mount Saint Helen', <i>R. calendulaceum</i>	'Girard's Rose', 'Red Red'
Eastern Canada				
<i>District 12</i>	'Casanova', <i>R. brachycarpum</i>	'April Rose', 'Ramapo'	<i>R. canadense</i> , 'Homebush'	'Herbert', 'Elsie Lee'

lepidotes. Among evergreen azaleas, the choices include three from the Southern Indian hybrid group developed in the Deep South: 'President Clay', 'George Lindley Taber', and 'Mrs. G. G. Gerbing'.

Ozarks (Arkansas, eastern Oklahoma, southern Missouri, western Tennessee). In USDA Zones 6 and 7 and AHS Zone 8, summer heat and low average rainfall are the limiting factors for

rhododendron culture. Two small-leaf proven performers for the region are 'Aglo', a pink-flowering early bloomer, and *R. dauricum*, another early bloomer that holds its bright rose-pink flowers along the branches between leaf clusters.

Midwest (northern Missouri, Indiana, Illinois, Kentucky, Ohio, southern Michigan). Cold hardiness is a critical factor for rhododendrons in the Mid-

west, in USDA Zones 5 and 6 and AHS Zones 4 to 7. The small-leaf rhododendrons are the best choice here, and some of the hardiest and most favored belong to the PJM hybrid group, which was developed as a cross of *R. minus* and *R. dauricum*. The latter, a native of Siberia, passed on its extreme hardiness to its progeny.

Members of the PJM group bloom early in the spring, bearing bright pink flowers against mahogany-colored winter fo-

liage. Bright green new foliage emerges soon after. Several related cultivars with different habits or flower colors are available—all are tolerant of both heat and sun and are fully resistant to root weevils.

EASTERN CANADA

(ARS District 12)

WITH MOST OF eastern Canada in USDA Zone 4 or colder, its proven performers represent the input of three ARS chapters located within the narrow bands of USDA Zones 5 and 6 around Toronto and Niagara and in southern Ontario and along the Atlantic coast of New Brunswick and Nova Scotia. The latter area has a maritime climate with high rainfall, fog, and cool summers.

Among the proven performers for all three chapters is royal azalea (*R. schlippenbachii*, Zones 4–8, 8–2), a deciduous species native to Korea and northeastern China. This pink-flowering azalea with upsweeping stamens is elegant in flower. Its distinctive leaves, which emerge in whorls of five, turn red or orange in autumn.

HARDY RHODIES FOR COLD CLIMATES

UNTIL THE LATE '70s, gardeners in USDA Zone 4 and colder who wanted to grow rhododendrons had few options beyond the PJM hybrids, mentioned above. Thanks to the work of a number of dedicated plant breeders, there are now a few selections that can be grown in USDA Zone 4 and even in sheltered sites in Zone 3, giving hope to cold-weather gardeners in places like northern New England, the Upper Midwest, the Dakotas, and Alaska.

The best known of these hardy varieties is the Northern Lights series of deciduous azaleas developed by the University of Minnesota. There are more than 10 cultivars in this series—including 'Spicy Lights,' 'Lemon Lights,' and 'Pink Lights'—a few of which have withstood temperatures down to minus 35 degrees without damage to flower buds. These compact plants grow to heights varying from two feet to six feet in 10 years, producing flowers in a range of single and mixed colors, some fragrant.

One of the hardiest American natives is roselike azalea (*R. prinophyllum*, Zones



Rhododendron schlippenbachii



'Spicy Lights'

4–9, 9–2), which is found in the wild from New Hampshire and southern Quebec west to Illinois and Missouri. This deciduous azalea grows to about eight feet tall and as wide, with fragrant, bright pink flowers. It tolerates slightly limy soils.

HOPE FOR THE FUTURE

THE RHODODENDRONS included in the ARS proven performers lists are an ideal place for a gardener thinking about planting a rhododendron to start. The lists will of course change over time, as new hybrids are developed that are better adapted to temperature ex-

tremes, drought, and pests and disease.

Ongoing breeding programs include an effort to develop heat-tolerant rhododendrons for southern gardens using *R. hyperythrum*, and research to solve the two most irksome disease problems—petal blight and powdery mildew. Plant breeders are rising to the challenge so that more American gardeners can enjoy these rewarding ornamental shrubs.

A resident of Skagit County, Washington, Sonja Nelson is editor of the American Rhododendron Society Journal and author of Rhododendrons in the Landscape, published in 2000 by Timber Press.



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Book Reviews

Sunset Western Garden Book.

Kathleen Norris Brenzel, editor. Sunset Publishing Corporation, Menlo Park, California, 2001. 768 pages. Publisher's price, softcover: \$32.95.

THIS IS THE sixth edition of the *Sunset Western Garden Book* since its inception in 1954; each has been fatter, more informative, and more colorful. This one continues the trend, with 144 additional pages, 2,000 new plant descriptions, and a switch to full-color illustrations in the plant encyclopedia.

The Sunset western climate zone map, a significant feature introduced in the 1964 edition, was compiled by the Sunset staff to take account not only of temperature variations throughout the West, but of altitude, rainfall, and ocean influences (including fog banks). New to this edition are zone maps for Alaska and Hawaii. The introduction to this section is essential reading for all new gardeners in the West. All too often, new homeowners here attempt to reproduce gardens they knew in the eastern states or in Europe, ignoring the severe effect on favorite plants of the rainless summers and high temperatures they are likely to experience.

Throughout the decades of its publication, this book has responded well to changes in garden styles, gardening ethics, and the increasing variety of available plants. The 1995 edition included more ornamental grasses and plants that need little water; this sensible emphasis on adapting the garden to the climate continues in this edition, with the inclusion of more desert plants and Mediterranean natives. Many entries have been expanded to include more selections in

genera, such as *Kniphofia*, that are becoming better known.

There is a substantial "Selection Guide" listing and illustrating plants by important characteristics such as flower color, habit, disease resistance, fragrance, and soil requirements. A "Practical Gardening Dictionary" concisely explains techniques such as planting, irrigating, controlling pests organically, and much more. There is also a resource directory, a glossary, and a guide to plant names and their pronunciations.

Science and garden wisdom refined through the many years of the book's hugely successful existence are succinctly presented and flexibly bound in a sturdy soft cover. It is known in the West as the "gardener's bible," a reputation earned through the diligent gathering and testing of information by devoted editors. One of them, Joe Williamson, who worked on every edition, including this one, died before it went to print. The book, which is dedicated to Williamson, is a worthy memorial that every western gardener should own.

—George Waters

George Waters of Berkeley, California, is the former editor of Pacific Horticulture.

A Man's Garden.

By Warren Schultz. Houghton Mifflin, Boston, Massachusetts, 2001. 160 pages. Publisher's price, hardcover: \$40.

A MAN'S GARDEN is as much about *why* men garden as *how* they garden. In his typically warm, lighthearted style, Schultz, features editor for *Garden Design* and former editor-in-chief of *National Gardening*, presents an insightful study of men and their muses, exploring

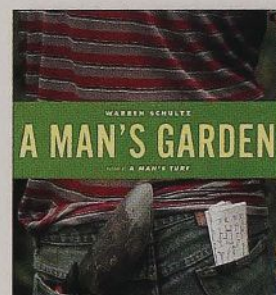
the varied sources of gardening inspiration that influence individual tastes and approaches to color, design, plant selection, and barbecue pits.

The book itself consists of 15 engaging profiles of men whose personalities and gardening visions are almost as colorful as their gardens. Their individual stories are an astonishing array of idle puttering, backhoes, careful propagation, compulsion, meditation, and whimsy.

Yet some common elements do stand out. A number of the men we visit attribute their interest in gardening to their own fathers or life on the family farm. And many of the gardeners are admitted "collectors." Perhaps the boyhood passion for collecting baseball cards has simply been transferred to trees, shrubs, and other plants.

Consider Ralph Velez: A former New Yorker transplanted to California, Velez has managed to amass a collection of 370 species of palm on 9,000 square feet of

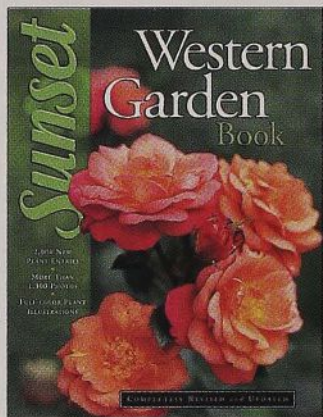
garden space; his 483 specimens represent the third largest palm collection in the country. Or South Carolina's Pearl Fryar, a



one-time coin collector who left his spare change behind to clip, snip, and prune his way through 500 trees and shrubs, thereby creating an imaginative landscape in his backyard that rivals the nation's finest topiary displays.

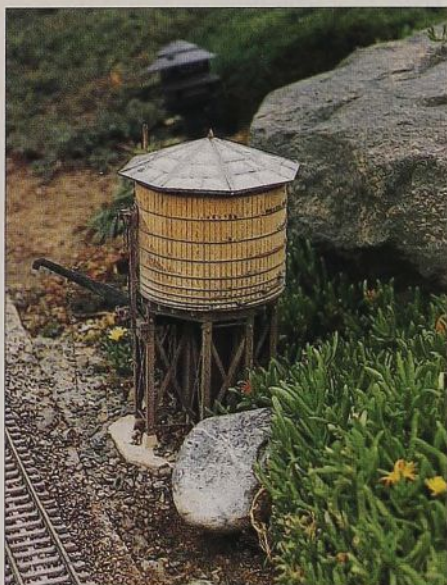
For many, "a man's garden" evokes images of rototillers, tomato cages, and bean poles. Schultz brushes off this stereotype with portraits of gardeners who seek out vegetables for their unique color as diligently as any rosarian, or whose fruit tree allées are set alongside boxwood hedges and perennial borders.

Many of the gardeners are also artists,



transforming inner voices into tangible landscapes, whether creating mystical mosaics in paving for Eastern-inspired meditational spaces, rendering Andy Warhol-style pop art in topiary, or transplanting Corinthian columns and sculptural features into a constructed landscape that echoes of Pompeii.

The profiles of Felder Rushing and Bob Kourik, well-known horticultural professionals and landscaping gurus, introduce us to men whose inner voices have led them to create some of the most winsome and unique landscapes imagin-



Roger Clarkson's miniature train garden in Riverside, California, includes a ground cover of ice plant. From *A Man's Garden*. Photo by Warren Shultz.

able. It is a safe bet that Vita Sackville-West never heard of constructed archeology, bottle trees, used-tire art, bathtub shrines, and front-yard fire pits.

Our cast of characters includes doctors, lawyers, and scientists. There are also two model train enthusiasts, a robber baron who invested more than \$100,000 on his passion, an innkeeper with a dazzling cottage garden amid a Colorado desert, and an Olympic ice-skating gold medalist. For Schultz, the Y-chromosome provides endless possibilities.

Perhaps the only downside to the book comes with the end of each vignette, where it is almost sad to leave one gardener and head on to the next. And yet *A Man's Garden* also leaves us with one clear image: It is personality that

makes each garden come alive; and the more unique the personality, the more unique the garden.

—Joseph M. Keyser

Joseph M. Keyser is the education specialist for the Montgomery County Department of Environmental Protection in Maryland; he also writes the "Green Man" gardening column for the Gazette newspapers.

With Paintbrush & Shovel: Preserving Virginia's Wildflowers.

By Nancy Kober and Donna M. E. Ware, botanical consultant. Watercolors by Bessie Niemeyer Marshall. University Press of Virginia in association with the Petersburg Garden Club, Charlottesville, Virginia, 2000. 280 pages. Publisher's price, hardcover: \$42.95.

IT WAS THE ERA of the Great Depression. People were out of work; times were tough—hardly circumstances one might consider ripe for the development of a nature preserve. Enter the federal government, which supplied jobs to many through the Works Progress Administration (WPA). Among these public jobs were a handful that were created specifically for unemployed female heads of households.

The establishment of Lee Park Wildflower and Bird Sanctuary in Petersburg, Virginia, in the mid-1930s was one of these projects. The project employed women in non-traditional capacities; their mission: to establish a sanctuary to preserve native flowers and birds in a region where many species existed at the northernmost limit of their range.

Rich in both botanical and social history, Kober's account links this unusual endeavor and its twin effort—the collection, illustration, and preservation of the Lee Park Herbarium—in this very readable and well-researched volume. Kober evokes a strong sense of life in that time and place, complete with its racial discrimination and lack of opportunity for women. But as she points out, "It was

also a time when social change was shaking up the usual order, even in conservative states like Virginia."

A year into the project, it was decided—by whom, it is not clear—to develop an herbarium documenting plants within the sanctuary. Heading this effort was a passionate horticulturist and widowed mother of five, Donald Claiborne Holden. Yes, Donald was her name, and it was she who decided that the herbarium should include watercolor illustrations. Holden turned to Bessie Niemeyer Marshall, an accomplished gardener and artist. The wife of an Episcopal minister who was disabled by Parkinson's disease and mother of nine children, Marshall welcomed the commission to paint the plants of the sanctuary. The job took her three years.

The book is divided into two parts: In Part I, Kober employs old photographs, quotations, anecdotes, and retrospective insights to acquaint us with the times, the people involved in the project, and the history of the sanctuary. Part II includes reproductions of Marshall's watercolors arranged by the habitats in which they grew at the park. From a simple spray of whorled tickseed (*Coreopsis verticillata*) to the intricate rendering of hazelnut (*Corylus americana*), these detailed watercolors

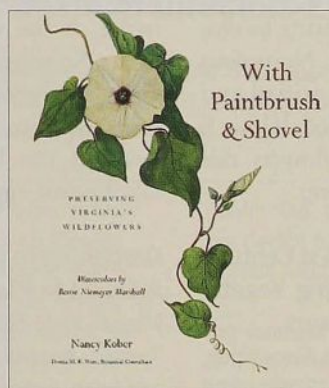
are delightful. Marshall's careful use of color reveals the subtleties of each plant; you can almost feel the different textures of leaves, flowers, and stems.

Today, much of the original sanctuary has been sold for development, but the Petersburg Garden Club is working through private and public partnerships to restore

the remaining 395 acres of Lee Park and repair the herbarium and the paintings. This book is an important part of that effort, and I recommend it to anyone who enjoys fine artwork, wildflowers, and well-researched tales. For gardeners in Virginia, especially those who like their history, this book is a must.

—Rita Pelczar

Rita Pelczar is associate editor of The American Gardener.

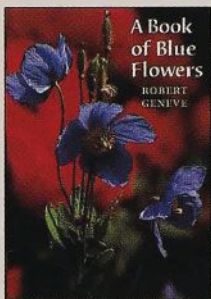


Gardeners' Books

There are many more new books on the market than we have time or space to review, but here are a few that recently caught our eye. Through a partnership with amazon.com, AHS members can order these and other books at a discount by linking to amazon.com through the Society's Web site at www.ahs.org.

A Book of Blue Flowers.

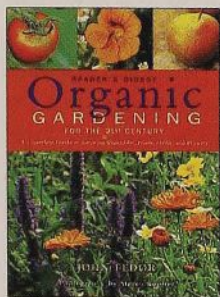
Robert Geneve. Timber Press, Portland, Oregon, 2000. 328 pages. Publisher's price, hardcover: \$34.95.



THIS BOOK provides information on basic care, propagation, and landscape use of more than 150 genera of flowers whose colors range from aquamarine to violet blue. Numerous species and cultivars are identified and many photographs are included. If blue is the color you seek in garden flowers, this book has plenty of ideas for you.

Organic Gardening for the 21st Century: A Complete Guide to Growing Vegetables, Fruits, Herbs and Flowers.

John Fedore. The Reader's Digest Association, Inc. Pleasantville, New York, 2000. 288 pages. Publisher's price, hardcover: \$30.

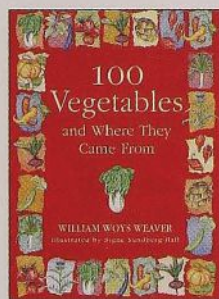


ABUNDANT illustrations and full-color photographs enhance this guide to creating a natural, nourishing, and attractive home garden. Topics covered include sustainability,

green manures, heirloom varieties, edible landscaping, and preserving fresh produce and herbs. An illustrated A-to-Z directory includes growing and harvesting information on 250 varieties of vegetables, fruits, and herbs.

100 Vegetables and Where They Came From.

William Woys Weaver. Algonquin Books, Chapel Hill, North Carolina, 2000. 320 pages. Publisher's price, hardcover: \$18.95.



THE fascinating stories of vegetables from around the world is presented in this book that combines history, culinary tips, and personal anecdotes. It is organized alphabetically by the common name of the vegetable; a drawing by Signe Sundberg-Hall illustrates each. Unusual vegetables from near and far are covered, from the Petaluma Gold Rush bean of the United States to Togo's Gbognome eggplant collards.

Gardening in the Desert: A Guide to Plant Selection and Care.

Mary F. Irish. The University of Arizona Press, Tucson, Arizona, 2000. 175 pages. Publisher's price, softcover: \$17.95.

AS A PRACTICAL introduction to desert gardening, this book encourages readers new to gardening in a desert climate to stop struggling to adapt plants to the environment. Instead, the author suggests taking advantage of the many exciting plants that are native to the desert Southwest, including trees, shrubs, perennials, desert palms, vines, annuals, cacti, agaves and other succulents—all of which thrive in this harsh climate. She also provides

tips on planting, watering, pruning, and propagation.

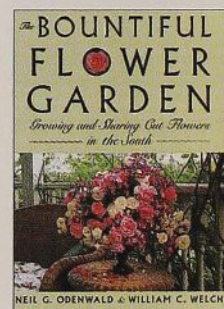
Chicken Soup for the Gardener's Soul: 101 Stories to Sow Seeds of Love, Hope and Laughter.

Jack Canfield, Mark Victor Hansen, Cynthia Brian, Cindy Buck, Marion Owen, Pat Stone, and Carol Sturgulewski. Health Communications, Inc., Deerfield Beach, Florida, 2000. 381 pages. Publisher's price, softcover: \$12.95.

THE 101 STORIES are written by 97 different writers from a wide range of backgrounds including a poet, a CEO, an environmentalist, an inner-city high school student, a public relations specialist, and a correctional school administrator. Some of the authors are familiar: Erma Bombeck, James A. Michener, Charles Kuralt; others authors are not, but all share a common interest in gardening.

The Bountiful Flower Garden: Growing and Sharing Cut Flowers in the South.

Neil Odenwald and William C. Welch. Taylor Publishing Company, Dallas, Texas, 2000. 191 pages. Publisher's price, hardcover: \$32.95.



THIS BOOK addresses recent trends in flower gardening and new concepts in garden design as it explores the role of cut flowers in the contemporary pleasure garden. Ideas for incorporating cutting flowers into existing flower, herb, and vegetable gardens are presented, together with advice on how to extend the vase life of cut flowers. Includes information on how to grow and propagate annuals, perennials, trees, shrubs, and vines suitable for use in fresh arrangements.

Regional Happenings

NORTHEAST

MAY 11-13. **Hill-Stead's May Market.** Hill-Stead Museum, Farmington, Connecticut. (860) 677-4787.

MAY 11-13. **Mother's Day Plant Sale.** The New York Botanical Garden, Bronx, New York. (718) 817-8137.

MAY 23. **Perennial Flower Basics.** Workshop. Brooklyn Botanic Garden, Brooklyn, New York. (718) 623-7220.

JUNE 1-3. **Annual Evergreen Open House.** Naturalistic one-acre residential garden of landscape designer Robert Gillmore. Goffstown, New Hampshire. (603) 497-8020.

JUNE 2. **Maine Herb Fest 2001.** Common Ground Fairgrounds, Unity, Maine. (207) 639-2005.

JUNE 2. **16th Annual Tower Hill Botanic Garden Plant Sale.** Tower Hill Botanic Garden, Boylston, Massachusetts. (508) 869-6111.

JUNE 2. **Spring Gardens in Bloom.** Tour and lecture. Old Sturbridge Village, Sturbridge, Massachusetts. (508) 347-3362.

JUNE 9. **A Closer Look at Historic Herbs.** Tour and workshop. Old Sturbridge Village, Sturbridge, Massachusetts. (508) 347-3362 ext. 325.

JUNE 9. **27th Annual Garden in the Woods Wildflower Sale.** New England Wildflower Society. Framingham, Massachusetts. (508) 877-6574.

JUNE 9 & 10. **Colorful Garden Weekend.** Classes and walks focusing on the use of color in garden design. The New York Botanical Garden, Bronx, New York. (718) 817-8747.

JUNE 11. **Hildene's Celebration of Peonies.** Festival. Manchester, Vermont. (802) 362-1788.

JUNE 22 & 23. **Pocket Garden Tour.** A three-mile tour of private and museum gardens. Portsmouth, New Hampshire. (603) 436-4762.

AHS Events

Events sponsored or co-sponsored by AHS are indicated by an **AHS** symbol. Expanded and updated Regional Happenings listings can be viewed on the Society's Web site at www.ahs.org.

JUNE 22 & 23. **Private Garden and House Tour.** Blithewold, Bristol, Rhode Island. (401) 253-2707.

JUNE 23. **Gardening with Your Child.** Tour and workshop. Old Sturbridge Village, Sturbridge, Massachusetts. (508) 347-3362 ext. 325.

JUNE 24. **City Spaces, Country Places Garden Tour.** A self-guided tour of 10 private gardens. Tower Hill Botanic Garden, Boylston, Massachusetts. (508) 869-6111.

continued on page 56

Notice to AHS Members in Good Standing—AHS Board of Directors Election

The American Horticultural Society members are hereby notified that the Society's Annual Business Meeting will take place at the Renaissance Hotel in Cleveland, Ohio, on Thursday, June 14, 2001, at 8:30 a.m. At this meeting, five (5) Directors will be elected for three-year terms. All AHS members in good standing are eligible to vote. If you cannot be present, please sign and return the proxy form on the back of this sheet.

DIRECTORS:

Joel Goldsmith is President and CEO of Goldsmith Seeds in Gilroy, California. Founded in 1962, Goldsmith Seeds is one of the top three wholesale breeders and producers of hybrid flower seed, vegetative geraniums, and other garden plants and seeds. Goldsmith has held director positions in a number of industry organizations, including Fleuroselect of Europe and the Professional Plant Growers Association.

Brian Holley is the Executive Director of the Cleveland Botanical Garden in Cleveland, Ohio. He has worked in botanical garden settings for over 20 years. While working at the Royal Botanical Garden in Hamilton, Ontario, he hosted Canadian television and radio gardening programs and served as gardening editor for the *Hamilton Spectator* newspaper. He has served on committees for such organizations as the Herb Society of America and the American Association of Botanical Gardens and Arboreta.

Melissa Marshall, ASLA, is a Partner of Marshall*Tyler*Rausch, where she coordinates botanic garden master planning and design projects. She has served as project director for master planning for the Chicago Botanic Garden, Missouri Botanical Garden, Holden Arboretum, Atlanta Botanical Garden and the Denver Botanic Gardens, to name a few. She is certified by the Council of Landscape Architectural Registration Board and is a member of the American Society of Landscape Architects.

Duane Kelly is the producer of the Northwest and San Francisco Flower & Garden Shows. Under his direction, the Northwest Flower Show has grown to become the third-largest flower show in North America. Kelly has also been active in the Arboretum Foundation, a 3,000-member support group for Washington Park Arboretum in Seattle. He served a two-year term as president and chaired the Arboretum Master Plan Campaign Steering

Committee. In 1999, he was the recipient of the Pacific Coast Nurseryman Outstanding Service Award.

Peg Dunnigan has just rotated off AHS's Friends of River Farm (FORF) Board of Directors, for which she served as chair since July 1997. She twice chaired AHS's Gala Committee. She also recently chaired fundraisers for the Mount Vernon Hospital and the Yacht Haven Garden Club. She is an avid gardener and a neighbor of AHS's River Farm headquarters.

SEE BACK FOR PROXY FORM



MID-ATLANTIC

MAY 10. **62nd Annual Herb Society Sale.** Sponsored by The Philadelphia Unit of the Herb Society of America. Chester Springs, Pennsylvania. (610) 566-6261.

MAY 11-13. **18th Annual Spring Wildflower Symposium.** Workshops, lectures, and guided hikes. The Wintergreen Nature Foundation, Wintergreen, Virginia. (804) 325-7451.

MAY 12. **"Gardening for Galapagos" Garden Tour.** Tour six gardens in Northern Virginia. Sponsored by John. C. Magee and Second Nature, Inc. (800) 283-7115.

MAY 12 & 13. **12th Annual Garden Fair.** State Arboretum of Virginia, Boyce, Virginia. (540) 837-1758 ext. 0.

MAY 12 & 13. **Mother's Day Weekend Plant Sale.** Phipps Conservatory and Botanical Gardens, Pittsburgh, Pennsylvania. (412) 622-6914.

MAY 18 & 19. **65th May Market.** Exhibition of gardening accessories, tools, and plants. Phipps Garden Center, Pittsburgh, Pennsylvania. (412) 441-4442.

MAY 19. **Tall Bearded Iris Show.** Frelinghuysen Arboretum, Morristown, New Jersey. (201) 326-7600.

JUNE 7-9. **11th Annual Native Plants in the Landscape Conference.** A focus on the best plants and practices for natural garden designs incorporating native plants. Millersville University, Lancaster County, Pennsylvania. (717) 872-3030.

JUNE 9. **Preparing and Using Healing Herbs.** Lecture. Lewis Ginter Botanical Garden, Richmond, Virginia. (804) 262-9887.

SOUTHEAST

MAY 19. **Gardening with Natives.** Lecture. Daniel Stowe Botanical Garden, Belmont, North Carolina. (704) 825-4490.

MAY 19. **Wildflower Identification.** Class. Daniel Stowe Botanical Garden, Belmont, North Carolina. (704) 825-4490.

MAY 20. **Spring Garden Tour.** Atlanta Botanical Garden, Atlanta, Georgia. (404) 876-5859.

MAY 20. **Sunday in the Rose Garden.** Festival and garden tour. Wilson Rose Garden, Wilson, North Carolina. (252) 237-4997.

MAY 26. **Spring Rose Show.** Cheekwood Botanic Hall, Nashville, Tennessee. (615) 794-0138.

AHS. MAY 28-JUNE 1. **"The Magic of Gardening": 2001 International Master Gardener Conference and Trade Show.** Walt Disney

World Resort, Lake Buena Vista, Florida. (352) 392-8836.

JUNE 5. **Care and Assessment of Landscape Trees.** Lecture. Daniel Stowe Botanical Garden, Belmont, North Carolina. (704) 825-4490.

NORTH CENTRAL

MAY 10-19. **Tulip Time Festival.** Holland, Michigan. (800) 822-2770.

MAY 10-20. **9th Biennial Lake Forest Infant Welfare Showcase House and Gardens.** Rim-wold, Lake Forest, Illinois. (847) 604-3479.

MAY 11 & 12. **Spring Plant Sale and Gardening Fair.** Ohio State University Chadwick Arboretum. Ohio State University, Columbus, Ohio. (614) 688-3479.

MAY 17-20. **Art in Bloom.** Floral interpretations of selected art pieces. Cincinnati Art Museum, Cincinnati, Ohio. (513) 721-2787.

MAY 18-19. **42nd Annual Hyde Park Garden Fair.** Chicago, Illinois. (773) 684-2619.

MAY 24. **Viburnums in the Landscape.** Lecture and walk. The Holden Arboretum, Kirtland, Ohio. (440) 946-4400.

MAY 30. **Success with Rhododendrons.** Lecture and walk. The Holden Arboretum, Kirtland, Ohio. (440) 946-4400.

2001 PROXY

Notice of Election in conjunction with the 56th Annual Meeting of the American Horticultural Society.

Complete and return to AHS Secretary, American Horticultural Society, 7931 East Boulevard Drive, Alexandria, VA 22308.

PROXY TO VOTE AT ANNUAL MEETING

I will not be able to attend the Annual Meeting of the American Horticultural Society on Thursday, June 14, 2001.

Please sign my proxy to AHS Secretary William Pusey or to _____, who will attend the meeting, to cast my ballot in the annual election of the Society as follows:

- ☐ Joel Goldsmith
- ☐ Brian Holley
- ☐ Melissa Marshall
- ☐ Duane Kelly
- ☐ Peg Dunnigan

write-in Candidate

write-in Candidate

and to cast my ballot in other matters that may properly be brought before the Annual Business Meeting with the same effect as though I were personally present.

Signature/AHS Member Number

Date

JUNE 2 & 3. **Garden Fair Extravaganza.** Klehm Arboretum and Botanic Garden, Rockford, Illinois. (815) 965-8146.

JUNE 8-12. **Lost in the Woods.** Conference. United Plant Savers Botanical Sanctuary, Rutland, Ohio. (802) 496-7053.

AHS. JUNE 13-16. **2001 Great American Gardeners Annual Conference.** American Horticultural Society, Cleveland, Ohio. (800) 777-7931.

JUNE 16. **Garden Walk.** Tour. Quad City Botanical Center, Rock Island, Illinois. (309) 794-0991.

JUNE 23 & 24. **Appalachian Herb Gathering: Growing, Conserving, and Using our Native Plants.** Conference. Sponsored by United Plant Savers, the National Center for Preservation of Medicinal Herbs, and Rural Action. Meigs County, Ohio. (740) 767-4938.

JUNE 23-25. **Boerner in Bloom Festival.** Hales Corners, Wisconsin. (414) 529-1870.

JUNE 30. **Rose Show.** Milwaukee Rose Society. Wauwatosa, Wisconsin. (414) 774-5567.

SOUTH CENTRAL

MAY 15. **Perennials for, in, and around the Water Garden.** Lecture. Sponsored by the Missouri Botanical Garden. Daniel Boone Library. Ellisville, Missouri. (314) 577-9441.

MAY 22. **Designing is Combining.** Lecture. Sponsored by the Missouri Botanical Garden. Ellisville, Missouri. (314) 577-9441.

MAY 24. **The Herb Society of America's Annual Conference.** Fort Worth, Texas. (440) 256-0514.

MAY 30-JUNE 2. **Lone Star Regional Native Plant Conference.** Pineywoods Native Plant Center, Nacogdoches, Texas. (936) 468-4104.

SOUTHWEST

JUNE 9 & 10. **"Holiday Magic" Spring Flower Show.** Albuquerque Garden Center, Albuquerque, New Mexico. (505) 883-9026.

JUNE 16 & 17. **Summer Plant Sale and Horticultural Fair.** The Arboretum at Flagstaff, Flagstaff, Arizona. (520) 774-1442.

JUNE 16 & 17. **Wildflower Festival.** Lookout Mountain Nature Center and Preserve, Golden, Colorado. (303) 526-0594.

NORTHWEST

MAY 18-20. **Rhododendron Festival.** Florence

McDonald Honored at AGGS Convention

ELVIN MCDONALD, a former AHS Board member, will be the honored guest at the American Gloxinia and Gesneriad Society's (AGGS) annual convention, which will be held July 3 to 8 in Kansas City, Missouri. The convention will be a celebration of the 50th anniversary of AGGS, which McDonald founded in 1951 at the tender age of 14.



Michael Riley, AGGS's business manager, says McDonald's precociousness is not surprising to those who know him. "He's just one of those people who single-mindedly pursues his passions," he says. According to Riley, McDonald launched the AGGS's initial magazine, *The Gloxinian*, and succeeded in attracting respected professionals from all over the world to the fledgling organization. Because early issues of the magazine did not indicate McDonald's age, most members didn't learn a teenager was doing all the work for the organization until much later. As an official AGGS delegate, McDonald began attending AHS annual meetings when he was only 16.

Originally trained as an opera singer, McDonald instead became a journalist best known for his work relating to plants and gardens. Currently senior staff editor for *Traditional Home* magazine, he has been the author, photographer, editor, or publisher of approximately 250 titles since 1965, with the still popular *AHS Encyclopedia of Gardening* (1993) among his credits. He has participated on boards and committees for numerous gardening organizations and served as Secretary and member of the AHS Board of Directors from 1987 to 1992.

Highlights of this year's AGGS convention will include a tour of Powell Botanic Gardens, a visit to Longview Gardens Perennial Nursery and Garden Center, and a flower show. McDonald will be the featured speaker during the flower show awards banquet on Friday July 6. Although many of the convention's activities are for AGGS members only, two events on Friday and Saturday will be open to the public: an auction of rare plants, books, and botanical art and gardening equipment, and a plant sale. For more information on AGGS or the upcoming convention visit www.aggs.org. The deadline for convention registration is June 1.

—Sarah Schroeder, Editorial Assistant

Chamber of Commerce. Florence, Oregon. (541) 997-3128.

MAY 19. **Spokane Lilac Festival.** Spokane, Washington. (509) 535-4554.

JUNE 23. **Whidbey Island Garden Tour.** Whidbey Island, Washington. (360) 321-4191.

JUNE 30. **Garden Fair.** Plant sale and demonstrations. Alaska Botanical Garden, Anchorage, Alaska. (907) 770-3692.

WEST

MAY 13. **California Wildflower Show.** Oakland Museum of California and Gardens, Oakland, California. (510) 238-2200.

MAY 15. **Insect Gardening: Butterflies and Friends.** Lecture. Balboa Park, San Diego, California. (619) 232-3821.

JUNE 7. **Young Tree Pruning.** Workshop. University of California Riverside Extension. Riverside, California. (909) 787-5804.

JUNE 8. **Bonsai Show.** Descanso Gardens, Flintridge, California. (818) 790-9415.

JUNE 9. **Mission San Juan Capistrano Flower and Garden Festival.** San Juan Capistrano, California. (949) 234-1300.

JUNE 23. **9th Annual Mendocino Coast Music and Art in the Gardens Tour.** Mendocino, California. (800) 653-3328.

CANADA

MAY 20, 21, & 27. **Lilac Festival.** Royal Botanical Gardens, Burlington, Ontario. (905) 527-1158.

MAY 25-27. **Great Gardening Weekend.** Montreal Botanical Garden, Montreal, Quebec. (514) 872-1400.

JUNE 1-3. **Bloomfest.** Calgary Zoo Botanical Gardens, Calgary, Alberta. (403) 232-9300.

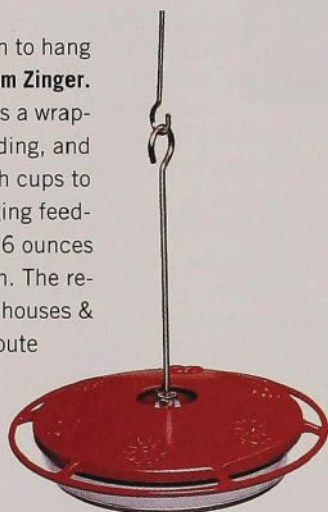
JUNE 21-NOVEMBER. **International Garden Festival.** Les Jardin de Métis (Redford Gardens), Mont Joli, Quebec. (418) 775-2221.

Seasonal Garden Goods

Gardening isn't just for the birds—it's also for other creatures that share outdoor space with gardeners. Here are a few selected products that will help put out the welcome mat for wildlife in your yard.

Give hummingbirds one more reason to hang around in your garden with the **Humm Zinger**.

This attractive red feeder features a wrap-around perch to encourage group feeding, and its six nectar ports are fitted with cups to deter nectar-thieving ants. The hanging feeder is nine inches in diameter, holds 16 ounces of nectar, and is easy to fill and clean. The retail price is \$19.95. Charley's Greenhouses & Garden Supplies, 17979 State Route 536, Mount Vernon, WA 98273. (800) 322-4707. www.charleysgreenhouse.com.



Toads are important predators of garden pests, especially slugs. Encourage them to take up residence in your garden by avoiding the use of toxic pesticides and by providing shelter such as the **Toad in the Hole**. This decorative clay pot is five inches high with a seven-and-a-half-inch diameter. Available for \$19.95. Kinsman Company, P.O. Box 428, Pipersville, PA 18947. (800) 733-4146. www.kinsmangarden.com.



Made from a special blend of sawdust, burnt clay, and other natural materials, this **Schwegler Bird House** breathes like wooden bird houses but repels water and resists rot. The model for small birds—available with 1¼-inch- or 1½-inch-diameter holes, depending on the type of bird you want to attract—retails for \$31.95. Models for larger birds are also available. Kinsman Company, P.O. Box 428, Pipersville, PA 18947. (800) 733-4146. www.kinsmangarden.com.



Designed to serve as a rest stop for butterflies, this colorful red-and-green glass **Butterfly Oasis** formed in the elegant shape of a calla lily has grooved petals that collect rainwater in shallow pockets for butterflies to sip. The glass flower is supported by a slender 32-inch copper pole. Each butterfly oasis costs \$23.95, with a slight discount for multiple orders. Gardener's Supply Company, 128 Intervale Road, Burlington, VT 05401. (800) 427-3363. www.gardeners.com.

Products profiled are chosen based on qualities such as innovative design, horticultural utility, and environmental responsibility; they have not been tested by the American Horticultural Society. Send new product information to Seasonal Garden Goods, *The American Gardener*, 7931 East Boulevard Drive, Alexandria, VA 22308.



For spectacular blooms throughout the year, buy Encore Azaleas.[®]

(or keep flipping back to this page)

If you want flowers more than once a year, ask for Encore Azaleas. They have big, vibrant, longer-lasting flowers that bloom repeatedly through spring, summer, and fall. Plus, they're available in a wide selection of plant shapes and bloom colors. With Encore Azaleas, you'll have flowers again and again and again. WWW.ENCOREAZALEA.COM



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Garden Market

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Pronunciations and Planting Zones

Most of the cultivated plants described in this issue are listed here with their pronunciations, USDA Plant-Hardiness Zones, and AHS Plant Heat Zones. These zones suggest a range of locations where temperatures are appropriate—both in winter and summer—for growing each plant. While the zones are a good place to start in determining plant adaptability in your region, factors such as exposure, moisture, snow cover, and humidity also play an important role in plant survival. The zones tend to be conservative; plants may grow outside the ranges indicated. A USDA zone rating of 0 means that the plant is a true annual and completes its life cycle in a year or less. Many plants that are perennial in warm climates are grown as annuals in cooler zones. To purchase an AHS Plant Heat-Zone Map for \$9.95, call (800) 777-7931.

A-D

- Adiantum capillus-veneris* ad-ee-AN-tum KAP-ih-lus-ven-AIR-iss (7-11, 9-3)
Allium moly AL-ee-um MAH-lee (5-9, 9-3)
A. sphaerocephalum A. sfeer-o-SEF-uh-lum (4-11, 12-1)
Anemonella thalictroides uh-nem-o-NEL-luh thal-ik-TROY-deez (5-9, 9-5)
Aster divaricatus ASS-tur dih-vair-ih-KAY-tus (3-9, 9-1)
Astrantia 'Hadspen Blood' uh-STRAN-tee-uh (4-7, 7-1)
Buddleia davidii BUD-lee-uh duh-VID-ee-eye (5-9, 10-4)
Calamagrostis xacutiflora kah-luh-mah-GROS-tiss ak-yew-tih-FLOR-uh (4-9, 9-5)
Campanula persicifolia kam-PAN-yew-luh pur-sik-ih-FO-lee-uh (3-8, 8-1)
Chrysanthemum coronarium kris-SAN-theh-mum kor-o-NAIR-ee-um (0, 9-1)
Codonopsis pilosula ko-duh-NOP-siss pih-LOSS-yew-luh (7-9, 9-7)
Colocasia esculenta kol-o-KAY-see-uh es-kyew-LEN-tuh (9-11, 12-4)
Cornus alba KOR-nus AL-buh (2-8, 8-1)
Cotinus coggygria KO-tin-us ko-JEE-gree-uh (5-9, 9-3)
Daphne odora DAF-nee oh-DOR-uh (7-9, 9-7)
Digitalis grandiflora dih-jih-TAL-iss gran-dih-FLOR-uh (3-8, 8-1)

E-L

- Echeveria ximbricata* etch-eh-VEER-ee-uh m-brih-KAY-tuh (6-11, 12-5)
Echinocactus grusonii eh-kee-no-KAK-tus gru-SO-nee-eye (9-11, 10-8)
Euphorbia trigona yew-FOR-bee-uh trih-GO-nuh (8-10, 10-8)
Heliopsis helianthoides hee-lee-OP-siss hee-lee-an-THOY-deez (4-9, 9-1)
Hydrangea paniculata hy-DRAN-juh pan-ik-yew-LAY-tuh (3-8, 8-1)
Iris versicolor EYE-riss vur-SIK-uh-lur (3-9, 9-1)

Knaulia macedonica NAW-tee-uh mass-uh-DON-ih-kuh (5-9, 9-5)

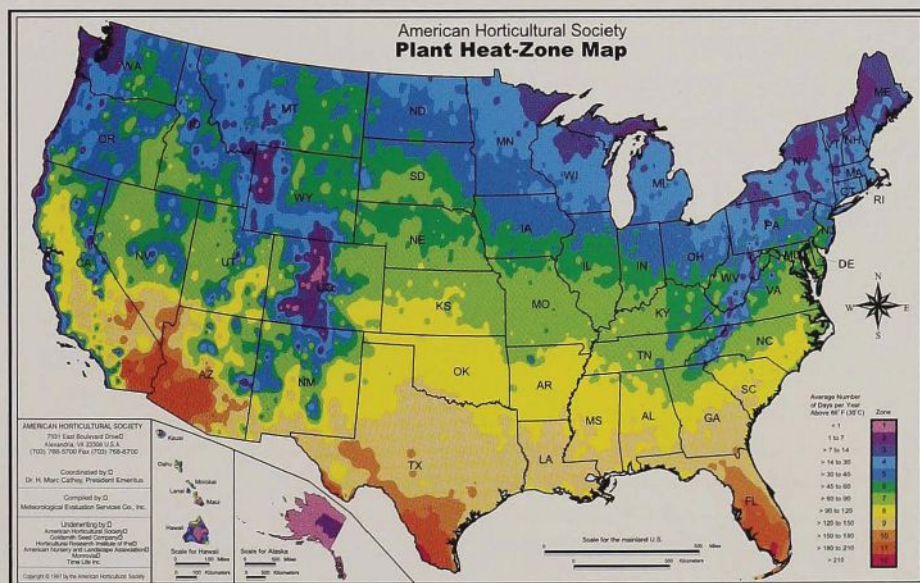
Liatris spicata ly-AY-triss spy-KAY-tuh (3-11, 11-1)

M-R

- Miscanthus sinensis 'Cabaret'* miz-KAN-thus sy-NEN-siss (4-9, 9-1)
Opuntia violacea var. *santa-rita* o-PUN-shuh vy-o-LAY-see-uh var. SAN-tuh-REE-tuh (11, 12-9)
Pachypodium geayi pak-ih-PO-dee-um jeh-AY-eye (11, 12-10)
Perilla frutescens peh-RILL-uh froo-TESS-enz (0, 12-1)
Phlox paniculata FLOKS pan-ik-yew-LAY-tuh (3-9, 9-1)
Platycodon grandiflorus plat-ih-KO-dun gran-dih-FLOR-us (4-9, 9-3)
Rhododendron augustinii ro-doh-DEN-dron aw-gus-TIN-ee-eye (6-8, 9-2)
R. dauricum R. DAW-rih-kum (4-8, 8-1)
R. degronianum subsp. *yakushmanum* R. deh-gro-nee-AN-um subsp. yak-oo-shih-MAN-um (5-9, 9-5)
R. keiskei 'Yaku Fairy' R. KEES-kee-eye (6-7, 7-1)
R. minus R. MY-nus (5-9, 9-5)
R. mucronulatum R. moo-kron-yew-LAY-tum (7-9, 9-7)
R. occidentale R. ahk-sih-den-TAL-ee (7-9, 9-7)
R. prinophyllum R. prin-o-FIL-lum (4-9, 9-3)
R. prunifolium R. proo-nih-FO-lee-um (5-9, 9-5)
R. schlippenbachii R. shlip-en-BAHK-ee-eye (4-8, 8-2)
R. viscosum R. viss-KO-sum (4-8, 8-1)
R. yedoense var. *poukhanense* R. yed-o-EN-see var. poo-kuh-NEN-see (5-9, 9-4)
Rudbeckia fulgida var. *sullivantii 'Goldsturm'* rood-BEK-ee-uh FUL-jih-duh var. sul-ih-VAN-tee-eye (3-9, 10-1)

S-Z

- Salvia x sylvestris 'East Friesland'* SAL-vee-uh sil-VES-triss (5-9, 9-3)
Sedum album SEE-dum AL-bum (5-9, 9-4)
S. moranense S. moor-uh-NEN-see (5-9, 9-4)
Solidago 'Fireworks' sol-ih-DAY-go (4-9, 9-1)
Spigelia marilandica spy-JEE-lee-uh mair-ih-LAN-dih-kuh (5-9, 9-2)
Stachys byzantina STAY-kiss bih-zan-TY-nuh (4-8, 8-1)
Pachycereus marginatus pak-ee-SEER-ee-us mar-jih-NAY-tus (10-11, 12-10)
Symphytum xuplandicum SIM-fih-tum up-LAN-dih-kum (5-9, 9-4)
Thalictrum actaeifolium thal-ik-trum ack-tee-ih-FO-lee-um (4-8, 8-2)
T. aquilegifolium thal-ik-trum ah-kwi-lee-jih-FO-lee-um (5-9, 9-4)
T. clavatum T. kluh-VAY-tum (4-8, 8-2)
T. dasycarpum T. das-ih-KAR-pum (3-8, 8-1)
T. delavayi T. deh-la-VAY-ee (6-8, 8-4)
T. diffusiflorum T. dif-yew-sih-FLOR-um (4-8, 8-2)
T. dioicum T. dy-o-EE-kum (3-8, 9-1)
T. finetii T. fih-NET-ee-eye (5-8, 8-3)
T. filamentosum var. *tenerum* T. fil-uh-men-TOH-sum var. teh-NAIR-um (6-9, 9-6)
T. flavum var. *glaucum* T. FLAY-vum var. GLAW-kum (4-8, 9-1)
T. ichangensis T. ih-CHAN-jen-siss (4-8, 8-3)
T. isopyroides T. eye-so-py-ROY-deez (6-8, 8-4)
T. kiusianum T. kee-yew-see-AN-um (4-8, 8-2)
T. lucidum T. loo-SIH-dum (4-8, 8-5)
T. minus 'Adiantifolium' T. MY-nus (5-8, 8-4)
T. polygamum T. pah-LIG-ah-mum (3-8, 8-2)
T. revolutum T. reh-vo-LOO-tum (3-8, 8-2)
T. rochebrunianum T. rowsh-broo-nee-AY-num (3-8, 8-4)
Verbena canadensis ver-BEE-nuh kan-uh-DEN-siss (4-7, 7-1)





Notes from River Farm

Reassessing Garden Design

by David J. Ellis

IT'S HUMAN nature to become set in our ways, and gardeners are as prone to this foible as any other group of hobbyists. But while familiar or traditional practices are comforting, sometimes it's important to reassess the way we do things. Stepping back to re-evaluate individual areas of our gardens is one of the primary tenets of the SMARTGARDEN™ program. With the guidance of William E. Barrick, who chairs the AHS River Farm Committee, and Geoffrey Rausch, who designed the River Farm Master Plan, the horticulture staff here at River

Farm has been putting this philosophy into practice by redesigning several garden areas that required an inordinate amount of maintenance or had deteriorated because of disease problems.

One of the major projects currently underway is the creation of a fragrance garden on the site of what was formerly a rose garden. Those roses were principally hybrid tea selections that were highly susceptible to black spot and other fungal diseases that thrive in the humid Washington, D.C.-area summers, so they are being replaced by a diverse planting of trees, shrubs, vines, and herbaceous perennials better suited to regional growing conditions. Most of plants for the new garden will have fragrant flowers or foliage.

According to the Society's Director of Horticulture Janet Walker, the design of the new garden has been influenced by how visitors use the area, which sits at the end of a lawn behind the Society's headquarters building. "It's been a gathering place at weddings and other events, so we wanted to increase the space available for people to sit and surround them with fragrant plants to enhance the experience," she says.



The disease-prone roses in this garden at River Farm are being replaced with a variety of plants better suited to the regional climate.

The garden will be anchored by a blend of evergreen and deciduous trees such as arborvitae, paperbark maples (*Acer griseum*), and 'Whitespire' birches that will provide color and textural interest in winter. Shrubs will include the compact form of Korean spicebush viburnum (*V. carlesii* 'Compactum'), osmanthus, and shrub roses like 'Cécile Brunner'. Among the herbaceous perennials will be phlox, pinks, Oriental lilies, irises, and herbs such as lavender, catmint (*Nepeta* spp.), and artemisia. And tender fragrant plants like ginger lilies (*Hedychi-*

um spp.) and gardenias will be grown in containers for summer display.

Another major renovation is underway in a circular garden formerly designed to display herbs. Four new theme borders will feature plants suited to different kinds of garden environments, including acid-loving plants, alkaline-tolerant plants, drought-tolerant plants, and moisture-tolerant plants. These beds will encircle a fifth theme border that will display plants selected for attractive or unusual textural effects.

Among all the new gardens, visitors will still find old favorites like the River Farm Children's Garden, the George Harding Memorial Azalea Garden, and the historic boxwoods that surround the buildings. And, of course, the natural beauty of our riverside location is as spectacular as ever.

So if you happen to be in the Washington, D.C., area this summer, please come by and visit. We are excited about the transformation of the Society's headquarters, and we think you will be, too.

David J. Ellis is editor of The American Gardener.

Summer Weekend Hours

In response to many requests from AHS members, River Farm will be open for limited weekend hours this summer. As of April 7, the Society's grounds and the Gift Shop and Visitor's Center are open from 9 a.m. to 1 p.m. each Saturday. These extended hours will continue through the end of October. A self-guided walking tour of the grounds is available, and children will enjoy the new monthly Children's Garden Newsletter, which includes seasonally-oriented information and activities. The newsletter is being produced by River Farm Living Laboratory intern Nancy Busick.



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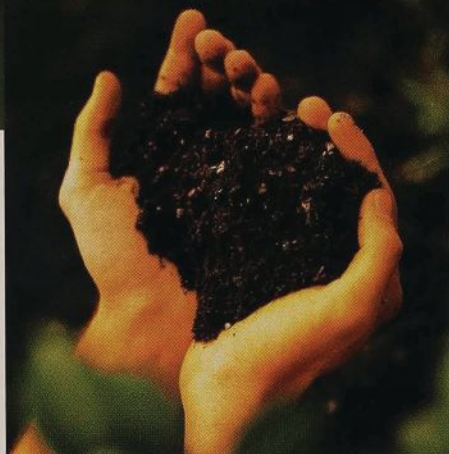
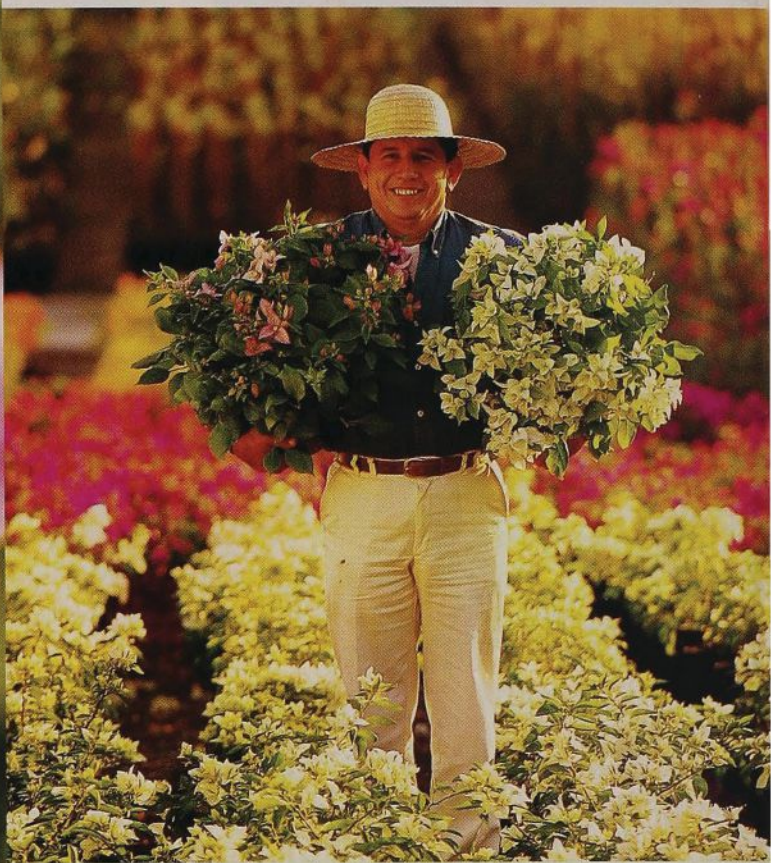
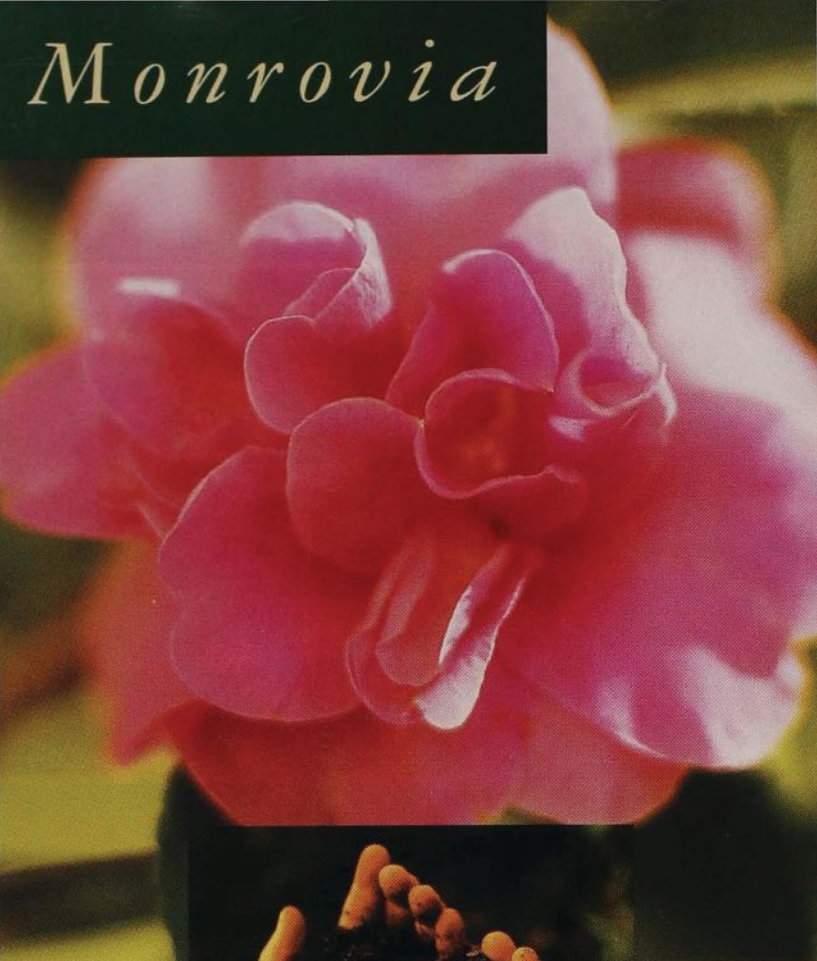


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