







ANNOUNCING THE AMERICAN HORTICULTURAL SOCIETY'S

"BY THE FOOT"

CAMPAIGN

THE CHALLENGE AT HAND

Thanks to the vision and generosity of philanthropist Enid A. Haupt, the American Horticultural Society has been headquartered for nearly 40 years at River Farm – 25 picturesque and historic acres on the Potomac River just a few miles from our nation's capital. River Farm has brought tremendous pride to the AHS and enhanced our national outreach capabilities. It has also entailed significant repairs and maintenance that are inevitable with an aging and much used property like River Farm. And we need your help.

AN INVESTMENT IN TODAY AND TOMORROW

While the AHS annually dedicates resources to the day-to-day operation and maintenance of River Farm, we are currently facing the urgent need to modernize the property's water and sewer system and upgrade the technological platform. These projects will require an investment of one million dollars, which is far outside the scope of our routine annual operating budget, and we need everyone's help to reach that goal. When this project is completed, River Farm will have better fire protection, our environmental footprint will be reduced, and we will be better equipped to carry out our mission.

Inch by inch, foot by foot...You can help gardening grow!



MAKING A DIFFERENCE, FOOT BY FOOT

Inch by inch, foot by foot, you can help make a difference for the AHS, River Farm, and our community of gardeners across the country. We need 4,000 feet of pipe and cabling to complete our project. For \$250, you can underwrite a foot of progress and help us in our efforts to maintain and improve the Society's River Farm headquarters for future generations. With a contribution of \$250 or more, you will receive a special certificate recognizing your support of the AHS's By the Foot Campaign.



To underwrite a foot (or feet!), please use the "Help Gardening Grow" envelope included with this issue of *The American* Gardener and note "By the Foot Campaign." You may also contact. Courtney Capstack, Development and Outreach Manager, by phone at 703-768-5700 ext. 127 or by e-mail at ccapstack@ahs.org. Special recognition is available for gifts of 20 feet or more.

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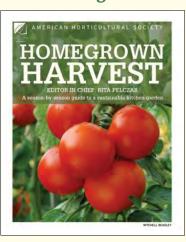
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NEW from the American Horticultural Society

A season-by-season guide to a sustainable kitchen garden



How and when to grow everything you want in your own kitchen garden

- Advice on planning, setting up, and designing your garden
- Expert, earth-friendly techniques for successfully growing and harvesting herbs, fruits, and vegetables
- Suggestions on the best crop varieties for different regions
- A season-by-season guide for bringing the freshest fruits, herbs, and vegetables from garden to plate



ALSO INCLUDES...

- Handy charts that tell you when to sow seeds and harvest different vegetables
- Resource list and glossary
- More than 300 color photographs throughout

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NOTES FROM RIVER FARM

HE GARDENING world is abuzz—spring is around the corner! As gardening activities ramp up across the country, the coming weeks will be full of opportunities to check out new varieties at garden centers, attend workshops, visit public gardens, or exchange tips with fellow plant enthusiasts. Whatever spring means to you, we hope it is full of rewarding gardening experiences.

At our River Farm headquarters, one of the first signs of spring is witch hazel bursting into bloom. In addition to watching the gardens awaken after a long winter, River

Farm is very much on our minds these days for other reasons. Our "By the Foot" fundraising campaign for the much needed infrastructure improvements at our headquarters is well under way. With this effort, our members and friends can support a foot or yard of the pipe and cable necessary for us to complete critical upgrades to our water, sewer, and communications systems.



Witch hazels in early spring bloom at River Farm

"Synergy" is an overused word, but it aptly describes

the close connection between our River Farm headquarters and the mission of the AHS. River Farm is a laboratory for innovative and sustainable gardening practices. Our children's garden gets field-tested daily. The various gardens and notable plants—as well as the wildlife they support—are an inspiration for our visitors, volunteers, and staff. Plus, River Farm's proximity to historic Mount Vernon makes it easily accessible to the thousands of visitors who each year drive down the George Washington Memorial Parkway to visit our first president's home.

Over the course of its long history, the American Horticultural Society has been a trusted source of the best horticultural knowledge on a national level. Acquiring River Farm in the 1970s added an exciting new dimension to what the Society could offer, and today the property remains a vital part of our work. Help us prepare for a bright future by becoming a supporter of our "By the Foot" campaign. Details on how to join us in this important effort may be found on page 2.

Also in this issue you'll find advice on the best daffodils for your region, an introduction to a West Coast plantsman who is making his mark on American horticulture, and an inside look at how the New York Botanical Garden is taking sustainable rose growing to a new level. And we would like to draw particular attention to the winners of our 2011 AHS awards (see page 14)—we are so pleased and proud to be able to honor these outstanding individuals and organizations that are making our world a better place.

Enjoy, and...happy spring!

Harry Rissetto, Chair, AHS Board of Directors Tom Underwood, Executive Director



CONTACTS FOR AHS PROGRAMS, MEMBERSHIP BENEFITS & DEPARTMENTS

For general information about your membership, call (800) 777-7931. Send change of address notifications to our membership department at 7931 East Boulevard Drive, Alexandria, VA 22308. If your magazine is lost or damaged in the mail, call the number above for a replacement. Requests for membership information and change of address notification can also be e-mailed to membership@ahs.org.

THE AMERICAN GARDENER To submit a letter to the editor of *The American Gardener*, write to The American Gardener, 7931 East Boulevard Drive, Alexandria, VA 22308, or send an e-mail to editor@ahs.org.

DEVELOPMENT To make a gift to the American Horticultural Society, or for information about a donation you have already made, call (800) 777-7931 ext. 127.

E-NEWSLETTER To sign up for our monthly e-newsletter, visit *www.ahs.org*.

INTERNSHIP PROGRAM The AHS offers internships in communications, horticulture, and youth programs. For information, send an e-mail to education@ahs.org. Information and application forms can also be found in the River Farm area of www.ahs.org.

NATIONAL CHILDREN & YOUTH GARDEN

SYMPOSIUM For information about the Society's annual National Children & Youth Garden Symposium, call (800) 777-7931 ext. 132 or visit the Youth Gardening section of www.ahs.org.

RECIPROCAL ADMISSIONS PROGRAM The AHS Reciprocal Admissions Program offers members free admission and other discounts to more than 250 botanical gardens and other horticultural destinations throughout North America. A list of participating gardens can be found in the Membership area of www.ahs.org. For more information, call (800) 777-7931 ext. 119.

RIVER FARM The AHS headquarters at River Farm is open 9 a.m. to 5 p.m. weekdays year-round (except Federal holidays), and 9 a.m. to 1 p.m. Saturdays from April through September. Admission is free. For information about events, rentals, and directions, visit the River Farm section of www.ahs.org.

TRAVEL STUDY PROGRAM Visit spectacular private and public gardens around the world through the Society's acclaimed Travel Study Program. For information about upcoming trips, call (800) 627-6621, send an e-mail to ahs@macnairtravel.com, or visit the Travel Study section of *www.ahs.org*.

WEBSITE: www.ahs.org The AHS website is a valuable source of information about the Society's programs and activities. To access the members-only section of the website, the user name is **garden** and the password is **ahs2011**.

MEMBERS' FORUM

CREATIVE TRAINING FOR VINES

Maya Manny, an AHS member and artist from San Rafael, California, sent us this tip for creating decorative supports for vines.

Tired of using dangling strings, sticks, and other unsightly aids for climbing plants, I started fashioning decorative supports attached to a six-foot cedar fence in my garden. Using recycled cord and twine, I created supports in the shape of a spider web and a sunrise.

For the spider web, I started with a large outer circle of twine, then attached lines of twine radiating out from a smaller circle placed inside. Once this was in place, I added a couple more circles to fill out the web. I secured the upper ends of the radial lines to the top of the fence with nails, and the lower ends to the ground with wire hoops or stakes. For the sunrise shape, I attached the radial lines to a thin



Maya Manny's spider-web-inspired trellising provides support for clematis in her garden.

wire frame that forms the base of the sunrise—the wire frame is held by tacks hammered into the bottom rail of the fence.

I've used these shapes to support vines such as morning glory (*Ipomoea* spp.),

clematis, and Carolina jessamine (*Gelsemium sempervirens*), but they are suitable for almost any small to medium-size vines. It takes only a little initial training to get the vines attached to the strings.

Maya Manny San Rafael, California

CORRECTION

The article on cutting-edge trees in the January/February 2011 issue contained an erroneous reference to a *Magnolia yuyuanensis* growing in Overland Park, Kansas. Thanks to Patrick Muir, a Master Gardener from Merriam, Kansas, who alerted us to the mistake. This tree is too tender to survive the winters there.

PLEASE WRITE US! Address letters to Editor, The American Gardener, 7931 East Boulevard Drive, Alexandria, VA 22308. Send e-mails to editor@ahs.org (note Letter to Editor in subject line). Letters we print may be edited for length and clarity.





THE AMERICAN HORTICULTURAL SOCIETY TRAVEL STUDY PROGRAM 2011 TOURS





with AHS Host Jane Diamantis and Tour Escort Susie Orso of Specialtours

■ Explore the beautiful and storied Loire Valley in northwestern France in springtime. This exclusive tour will provide entrée to some of the finest privately-owned historic châteaus and gardens, including Château de Cheverny, Château de Chenonceau, and the inspirational ornamental potager at Villandry. For the grand finale, we will enjoy the international "Journées des Plantes" festival at the Domaine de Courson, south of Paris.



Gardens and Innovation: Chicagoland and Rockford August 17–21, 2011

with AHS Host Katy Moss Warner and AHS Tour Escort Maren Seubert

■ Discover the horticultural abundance that the Chicago area offers during this tour of the innovative gardens that have contributed to the greening of Chicago. Among these are the Lurie Gardens in Chicago's Millennium Park, the world-renowned Chicago Botanic Garden, and Garfield Park Conservatory. We will also visit several stunning private gardens, award-winning gardens in Rockford, Illinois, and the trial gardens at Ball Horticultural Company's headquarters.



Castles and Gardens of Bohemia and Moravia September 25–October 6, 2011

with AHS Host Kurt Bluemel and Tour Escort Harriet Landseer of Specialtours

■ We begin this trip to the Czech Republic in the capital city of Prague, renowned for its castles and cathedrals. From there we will venture to the historic and picturesque regions of Bohemia and Moravia. Experience a wealth of gardens in styles ranging from formal Italianate, Renaissance, and Baroque to Neo-classical and modern—including several 20th-century gardens created by visionary designers.



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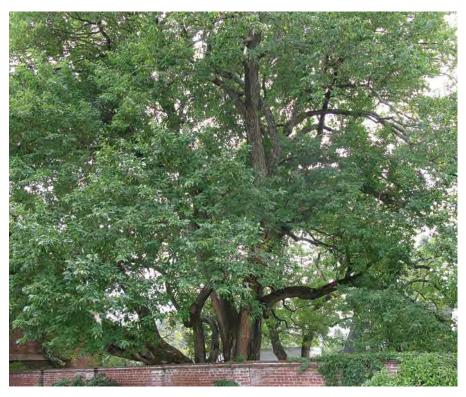


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News from the AHS

March / April 2011

PROGRAMS • EVENTS • ANNOUNCEMENTS



The majestic Osage orange tree at River Farm is now the National Champion.

A NATIONAL CHAMPION AT RIVER FARM

IT'S OFFICIAL! The nation's largest Osage orange tree (*Maclura pomifera*), according to the National Register of Big Trees coordinated by American Forests, is now at the American Horticultural Society's River Farm headquarters in Alexandria, Virginia. The former record holder was at Red Hill, Patrick Henry's home in Brookneal, Virginia.

The potential champion status of the tree was first recognized by **Jeff Kirwan**, author of *Remarkable Trees of Virginia*. While touring River Farm in 2009 during a booksigning, Kirwan was struck by the size of the Osage orange, and he encouraged the AHS staff to submit the tree's measurements to the American Forest's Register.

With the help of the AHS's corporate member **The Care of Trees**, a tree care company responsible for the maintenance of all trees at River Farm, the Osage orange's circumference was determined to be almost seven inches larger than the previous champion's, according to the Register.

Champions are determined based on a formula that includes circumference, height, and crown spread. River Farm's Osage orange measured 58 feet tall and more than 90 feet in crown spread. Arborists estimate the tree is at least 200 years old, but so far no records have been found to indicate how the tree, which is not native to the mid-Atlantic region, took root at River Farm.

"The Osage orange adds a unique historic and horticultural element to River Farm," says River Farm Horticulturist **James Gagliardi**. "A lot of people in urban areas don't have the opportunity to see large trees such as this, so to have it here in a public setting is a very special thing." For more on the National Register of Big Trees, visit the American Forests website (www.americanforests.org).

SPRING GARDEN MARKET IN APRIL

ONE OF THE mid-Atlantic region's can't-miss events, the AHS's Spring Garden Market at River Farm offers a wide selection of



A shopper at last year's plant sale

plants and unique garden goods. The sale kicks off on Thursday April 14 with an AHS members-only preview sale from 4 p.m. to 8 p.m., then continues on April 15 and 16 for the public. Shoppers can browse the wares of vendors from across the region who will be selling everything from native plants to trees, shrubs, vines, fruits, vegetables, and herbs. In addition to the plants, garden art, tools, apparel, books, and more will be available from vendors and in the AHS Garden Shop.

For the event, parking is \$3 (it's free for AHS members who show a current

membership card or this issue of *The American Gardener*). Proceeds of the sale will support the stewardship of River Farm. For more information and directions to River Farm, visit *www.ahs.org* or call (703) 768-5700.

NATIONAL YOUTH GARDEN SYMPOSIUM

TWO DYNAMIC speakers will give the keynote presentations at this year's 19th annual AHS National Children & Youth Gar-



Jane Taylor

den Symposium, "Digging Into the Art and Science of Gardening," taking place July 21 through 23 in Michigan. John Fraser of the Institute for Learning Innovation will give the opening keynote. Fraser is a conservation psychologist known for his work investigating how childhood experiences in natural environments influence attitudes and beliefs in adulthood. The symposium will wrap up with words of wisdom from Jane Taylor, the founder and first curator of the 4-H Children's Garden at Michigan

State University (MSU), who is widely regarded as a pioneer in the children's garden movement.

During the symposium, participants will enjoy behindthe-scenes tours of the two co-hosts: the MSU 4-H Children's Garden and the Frederik Meijer Gardens & Sculpture Park. Other highlights will include educational sessions, hands-on workshops, poster sessions, and ample opportunities for networking and sharing program success stories.

"This is the event of the year for anyone who is passionate about involving children and youth in gardening," says **Stephanie Jutila**, director of AHS Member Programs and Outreach. For more information, visit www.ahs.org/ncygs.

In addition to vital support through membership dues, the American Horticultural Society relies on grants, bequests, and other gifts to support its programs. We would like to thank the following donors for gifts received between December 1, 2010 and January 31, 2011.

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EXXONMOBIL GRANT FUNDS INTERNSHIP

FOR THE FOURTH year, the ExxonMobil Community Summer Jobs Program (CJSP) has granted the AHS funding for an internship position at River Farm. CJSP, administered through Volunteer Fairfax, will provide 60 such internships in the Washington, D.C., area this summer. CISP internships offer experience in the non-profit sector to undergraduate students exploring career options, while organizations such as the AHS benefit from enhanced opportunities to achieve their missions.

This year, the internship at River Farm will focus on member program and outreach for the Society. The intern will assist in the coordination of events and projects to help expand outreach efforts to gardeners nationwide.

HISTORIC GARDEN WEEK IN VIRGINIA

AMERICA'S OLDEST and largest home and garden tour takes place this spring from April 16 through 23 in Virginia. More than three dozen tours at over 250 properties are scheduled throughout all regions of the state. Besides highlighting horticultural aspects of the sites, Historic Garden Week will allow participants



Among the gardens on the tour will be the Grace Arents Garden at the Lewis Ginter Botanical Garden in Richmond.

to experience both historic and contemporary architecture, artwork, and garden structures.

The AHS's River Farm headquarters will be featured on the first day of tours. For a complete listing of tour sites, visit www.vagardenweek.org. Tickets can be purchased in advance online, or at participating properties on the day of the tour. Proceeds will help the Garden Club of Virginia restore historic gardens and grounds throughout the state. Since 1929, the organization has helped to restore gardens at more than 50 locations.

NEW AFFILIATE MEMBER PROGRAM

STARTING IN March, the AHS is offering a new membership option called the Affiliate Member Program. This new program has several levels designed for small organizations or companies that may not qualify for the corporate member level, but would still benefit from a professional membership affiliation with the AHS. The program is designed to meet the needs of garden design businesses, landscaping firms, nurseries, garden coaches, and other horticulture-related companies.



ark your calendar for these upcoming events that are sponsored or co-sponsored by the AHS. Visit www.ahs.org or call (703) 768-5700 for more information.

APR. 1 & 2. Great Gardens and Landscaping Symposium. Manchester, Vermont.

APR. 10 & 11. Colonial Williamsburg Garden Symposium. Williamsburg, Virginia.

APR. 14-16. Spring Garden Market. River Farm, Alexandria, Virginia. (Note: AHS Members-only preview sale is Thursday, April 14.)

APR. 16-23. Historic Garden Week in Virginia.

MAY 5-14. The Loire Valley and the Festival of the Domaine de Courson. AHS Travel Study Program. Loire Valley, France.

MAY 7. Smithsonian Garden Fest/National Public Garden Day. Washington, D.C.

JUNE 9. Great American Gardeners Awards Ceremony and Banquet. River Farm, Alexandria, Virginia.

JULY 21-23. National Children & Youth Garden Symposium. East Lansing and Grand Rapids, Michigan.

AUG. 17-21. AHS Travel Study Trip: Gardens and Innovation. Chicagoland and Rockford, Illinois.

AUG. 19-21. The Homestead's 13th Annual "In the Garden with the Experts" Symposium. Hot Springs, Virginia.

SEPT. 24. AHS Annual Gala. River Farm, Alexandria, Virginia.

SEPT. 25-OCT. 6. Castles and Gardens of Bohemia and Moravia. AHS Travel Study Program. Czech Republic.

OCT. 6-8. America in Bloom Symposium and Awards. Washington, D.C.

In addition to standard member benefits, the Affiliate Member Program offers a company listing on the AHS website and an AHS Affiliate certificate to display to customers. For information on how to involve your business in this new opportunity, e-mail development@ahs.org, or call Maren **Seubert** at (703) 768-5700 ext. 132.

News written by Editorial Intern Terra-Nova Sadowski.



2010 HONOR ROLL OF ANNUAL FUND

The American Horticultural Society is grateful to all who help advance our mission through financial, in-kind, and volunteer support. We would like to express special thanks to the following donors who increased their annual contributions through a special donation to the 2010 River Farm Annual Fund.

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Dr. Margaret Filbert Linda & Bob Fiscus Ms. Anne Fogle Gardens Remembered Heidi C. Garman Trish and Cam Gibson Ms. Peggy Griffith Mr. Bill Haggard G. T. & H. R. Halpin Mrs. E. Phillips Hathaway Hayes Family Fund Michael R. Helsel Karen LeCraft Henderson V. Janet Hollanger Mr. McDonald Horne A. C. and Penny Hubbard Merrill Jensen Jim Johnson Phil & Liz Johnson Mrs. Sandra Kapetanakis Ann & Mark Kington Virginia Anne Korteweg Mr. Julius Kusey R. A. Lanciault Ms. Elaine and Mr. W. David Lee Bonnie Lilley John & Carol Little Tim & Zenny Logue Kay E. B. MacNeil Ruth Holje Manuele Mr. & Mrs. Malcolm Matheson, III Mr. S. Charles Melton Mr. and Mrs. William A. Morrill Marcia S. Morton Donna L. Nelson

In memoriam Dr. Molly Netto Ms. Susan O'Connor Pennsylvania Perlite Corporation Harriet and Edward Purtell Joan F. Rice Mrs. William C. Ridgeway, Jr. Mr. and Mrs. Alexander Roe Reginald & Dolores Rose Keith Rustemeyer Dr. Randall Lee Saxon Linda Schweitzer Martha S. Seaman Ruth-Marie Putnam Smith Melvin Starr Martin V. Steed, Jr. John J. Szczech Kevin Tatreau Colonel B. D. Taylor Dr. R. Dale Thomas Joy Reynolds Thompson Susan Thomson Regina von Schriltz **Judith S. Waters** Rosa Watkins Ms. Jamia Weeks



AHS MEMBERS MAKING A DIFFERENCE: Honey Barnekoff

by Terra-Nova Sadowski

ONEY BARNEKOFF may be one of the few people who can say they enjoyed spending time in prison. While serving as the first—and, to this point, only—female president of the

Honey Barnekoff

Gardeners of America/Men's Garden Clubs of America (TGOA/MGCA) in 2004, Barnekoff started Gardening From the Heart, a program designed to teach inmates at a correctional facility near her home in

Overland Park, Kansas, how to garden.

"It's a population that most people would like to forget about, but about 80 to 90 percent of those inmates are going to come back out, and they're going to have to have mended their ways and learned a useful trade," says Barnekoff.

Gardening From the Heart was organized under the local Arts in Prison program, which offers inmates instruction in the fine arts. However, there were no lessons relating to gardening, so Barnekoff and five other TGOA/MGCA members started giving lessons in classrooms and greenhouses. The inmates created a water garden, beautified the grounds, and maintained a vegetable garden for the penitentiary's kitchen.

"I loved being in there with the inmate," says Barnekoff. "They would get so excited about gardening and would drag me all over the place to show me what they were doing." Some former inmates have since pursued careers in the green industry.

FORGING A CONNECTION WITH THE AHS

Another accomplishment of Barnekoff's presidency was the development of a partnership between the TGOA/MGCA and the AHS. As part of the relationship, AHS

members can enter the garden club group's photography contest and the two organizations promote each other's major events.

As an AHS member herself for the last decade, Barnekoff is particularly fond of the Reciprocal Admissions Program (RAP), which gives AHS members at participating gardens free admission and other discounts. Instead of flying to last year's TGOA/MGCA conference in Grand Rapids, Michigan, she drove so she could visit RAP gardens along the way. "The journey to Michigan was just as eventful as the conference itself," she says.

When she isn't visiting public gardens, Barnekoff offers tours of her own large garden where she grows lilies and many other plants. She also enjoys hosting her grandchildren and hopes they will come to share her love for gardening.

Terra-Nova Sadowski is an editorial intern with The American Gardener.



AHS CORPORATE MEMBER IN PROFILE

Espoma Company: Committed to Natural Garden Products

by Terra-Nova Sadowski

ANY HORTICULTURAL companies today are developing and promoting natural products. For the ecologically minded, this is making it easier than ever to achieve great garden results while being earth-friendly. However, there are so many options, and so many definitions of the term "natural," that it can be difficult to tell which companies are genuinely embracing sustainable gardening practices. One company that's justifiably proud of its green commitment is Espoma Company, headquartered in Millville, New Jersey.

"We believe 'natural' is best defined as something that is derived from nature and has not been materially altered by humans," explains Espoma Vice President Jeremy Brunner. He is the fourth generation owner of Espoma, and after 14 years in the business, he is still coming up with innovative new products and other ways to reflect the company's commitment to environmental responsibility.

A NATURAL ADVANTAGE

Established in 1929, Espoma became well known in the 1940s thanks to its plant food, Holly-tone®. This was the first product on the market specifically designed for acid-loving plants such as azaleas, camellias, blueberries, and hydrangeas. Today,



Espoma offers 50 different products ranging from plant foods and potting mixes to pesticides and soil conditioners. All are made from natural, organicbased ingredients, including bone meal, pasteurized poultry ma-

nure, alfalfa meal, and minerals such as gypsum and greensand.

These ingredients offer a number of advantages compared with those commonly found in synthetic products. For example, conventional fertilizers such as



Solar panels on Espoma's facilities occupy roughly a square acre and power all its operations.

urea and ammonium sulfate are notorious for quickly leaching into waterways. The components of Espoma's plant foods release their nutrients slowly so they are less likely to be washed out of the soil. They also "help improve soils by encouraging biological activity and adding humus," says Brunner.

Brunner is particularly excited about Espoma's new potting mixes containing mycorrhizal inoculants—fungi that develop a symbiotic relationship with plant roots to increase overall nutrient absorption. Initial sales reflect a definite enthusiasm for these enhanced mixes, which embrace soil ecology rather than ignore it.

WALKING THE WALK

"As a company that supplies environmentally responsible products, we feel we need to be true to that philosophy across our business," says Brunner. One component of this, adds Brunner, is to "support organizations that work to promote gardening at all levels [and] promote natural and sustainable gardening." For this reason, Espoma became a corporate member of the AHS in 2009, and has recently developed collaborations with the National Gardening Association, the American Nursery & Landscape Association, and Garden Centers of America.

Another manifestation of Espoma's environmental philosophy is its commitment to renewable energy. As of December 2010, its manufacturing facility and office headquarters are completely powered by rooftop solar panels. "Solar energy creates no greenhouse gases and does not rely on either domestic or imported fuels for generation," says Brunner. "In short, it's good for the company, the environment, and the country to switch to clean solar energy."

The greening of the horticultural industry is an important step towards creating a sustainable future. Since Espoma's inception, the company's products and philosophy have always made this a priority. From converting its facilities to solar power to innovative products that work with nature instead of fight it, Espoma is setting a high standard for other companies in the green industry.

Terra-Nova Sadowski is an editorial intern with The American Gardener.

AHS NEWS SPECIAL

AHS 2011 Great American Gardeners National Award Winners

THE AMERICAN HORTI-CULTURAL SOCIETY is proud to announce the distinguished recipients of the Society's 2011 Great American Gardeners Awards. Individuals, organizations, and businesses who receive these national awards represent the best in American gardening. Each has contributed significantly to fields such as plant research, garden communication, landscape design, youth gardening, teaching, and floral design. We applaud their passionate commitment to American gardening and their outstanding achievements within their areas of expertise.

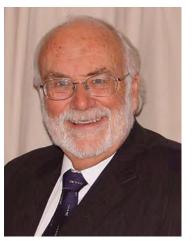
The 2011 awards will be presented on June 9 during the Great American Gardeners Awards Ceremony and Banquet at River Farm, the AHS's head-quarters in Alexandria, Virginia. For more information, or to register to attend the ceremony, visit www.ahs.org/awards or call (703) 768-5700 ext. 132.

LIBERTY HYDE BAILEY AWARD

Given to an individual who has made significant lifetime contributions to at least three of the following horticultural fields: teaching, research, communications, plant exploration, administration, art, business, and leadership.



THIS YEAR'S recipient of the AHS's most prestigious award is **Richard E. Bir**, Extension Horticulture Specialist Emeritus with North Carolina State



University (NCSU) in Fletcher. During his 25-year tenure with NCSU, Bir worked with county agents and nurserymen to evaluate, select, and grow better plants for the landscape, focusing primarily on shrubs and trees. Prior to this, Bir was an Extension horticulturist in Florida from 1972 to 1979. While there, Bir earned several national and state Extension awards for his work, including best radio program.

Over the course of his career, Bir has been influential in increasing public awareness of American native plants and making them more available through mainstream markets. In particular, he was instrumental in establishing and guiding the development of the Cul-

lowhee Native Plant Conference. Since its debut in 1984, this annual event has become the foremost native plant conference in North America.

Bir's 1992 book, *Growing and Propagating Showy Native Woody Plants* (University of North Carolina Press) is still considered a classic. A popular speaker, he has made presentations about native plants throughout North America and written numerous articles for popular, academic, and trade publications. In recent years, Bir has served as a consultant for the Southern Highlands Reserve in western North Carolina, dedicated to the native plants of the southern Appalachian Mountains.

Bir has been the recipient of many horticultural awards, including the Arthur Hoyt Scott Medal and Award from the Scott Arboretum in Swarthmore, Pennsylvania in 2006. In 2008, he received the International Award of Honor from the International Plant Propagators Society.

LUTHER BURBANK AWARD

Recognizes extraordinary achievement in the field of plant breeding.

Through his plant-breeding efforts, Tom Carruth has helped transform the rose's



reputation from that of a fussy prima donna into a tough, beautiful plant anyone can grow. As director of research and marketing for Weeks Roses in Pomona, California, a position he has held

since 1988, Carruth seeks out the best among proven older roses as well as introducing new varieties, 11 of which have received the prestigious All-America Rose Selections Award (AARS), tying him with breeder Keith Zary for most lifetime AARS winners. The most recent is Dick Clark™ ('Wekfunk'), this year's winner.

PAUL ECKE JR. COMMERCIAL AWARD

Given to an individual or company whose commitment to the highest standards of excellence in the field of commercial horticulture contributes to the betterment of gardening practices everywhere.

A partner in Wertheim, van der Ploeg, & Klemeyer, an architecture, landscape archi-



tecture, and planning firm in San Francisco, California, Ernest Wertheim has been involved in garden center design in North America, Europe, South Africa, and Australia for more than 50 years. Wertheim was instrumental in the formation of Garden Centers of America, a nonprofit trade association, in 1972. As an active member of that organization from its founding, he has made major contributions to the successful planning and design of North America's independent garden centers.

G.B. GUNLOGSON AWARD

Recognizes the innovative use of technology to make home gardening more productive and successful.

Edmund C. Snodgrass is president and founder of Emory Knoll Farms, Inc., and



Green Roof Plants in Street, Maryland— North America's first nursery specializing in plants for green roofs and horticultural consulting. The nursery has supplied plants for more than

400 green roof projects throughout the United States and Canada. Snodgrass collaborates on green roof research with academic institutions including Pennsylvania State University, North Carolina State University, and Michigan State University, and he advises public gardens, including the Singapore Botanic Garden and the U.S. Botanic Garden, on green roof installations. He has also co-authored two books about green roofs.

HORTICULTURAL THERAPY AWARD

Recognizes significant contributions to the field of horticultural therapy.

An international leader in the field of horticultural therapy, Candice A. Shoemaker



is a professor of horticulture and human health at Kansas State University in Manhattan, and director of the university's graduate studies in horticultural therapy. In her research, Shoemaker

investigates the physical and psychological benefits of gardening, with a focus on children and older adults. Her work has been published in numerous journals, proceedings, and books, and she was editor-inchief of Interaction by Design: Bringing People and Plants Together for Health and Well-being (Wiley-Blackwell, 2002). Shoemaker is also the executive chair of the People Plant Council, an international organization that promotes research and communications relating to the influence plants have on human well-being and quality of life.

LANDSCAPE DESIGN AWARD

Given to an individual whose work has demonstrated and promoted the value of sound horticultural practices in the field of landscape architecture.

With more than 25 years in public garden design and master planning, W. Gary



Smith has distinguished himself as a landscape architect who celebrates plants and the connections they offer between people and nature. Working almost exclusively in botanic

gardens and arboreta, he strives to find ecologically sustainable ways of making gardens. His most recent projects include master planning and garden design for the Southern Highlands Reserve; the Texas Arboretum at the Lady Bird Johnson Wildflower Center; and the conservatory gardens at the John A. Sibley Horticultural Center at Callaway Gardens in Georgia.

MERITORIOUS SERVICE AWARD

Recognizes a past Board member or friend of the American Horticultural Society for outstanding service in support of the Society's goals, mission, and activities.

William E. Barrick served on the Society's Board of Directors from 1991 to 2010,



including three years as chair. He lent his expertise to various committees, most notably the Awards Committee, which he streamlined and strengthened during a decade as its chair. For

the Society's 75th anniversary in 1997, Barrick compiled 75 Great American Garden Plants, a book describing dependable, lowmaintenance plants for a wide range of growing zones. In 2004, he co-authored the AHS Southeast SMARTGARDEN Regional Guide. Barrick has been the executive director of Bellingrath Gardens in Alabama since 1999. Prior to that, he was executive vice president and director of gardens at Callaway Gardens in Pine Mountain, Georgia, for nearly 20 years.

B. Y. MORRISON COMMUNICATION AWARD

Recognizes effective and inspirational communication—through print, radio, television, and/or online media—that advances public interest and participation in horticulture.

North Carolina resident **Joe Lamp'l** is a published author, syndicated columnist,



national television show host, and a Certified Landscape Professional. He is the former host of *Fresh from the Garden* on the DIY Network and *GardenSMART* on PBS. As founder and CEO of The joe gardener® Company, which provides ecofriendly gardening information, Lamp'l hosts and produces *Growing a Greener World*, a television series that debuted in 2010 focusing on sustainability issues with an emphasis on gardening. *Growing a Greener World* content is also shared through a podcast series and blog.

PROFESSIONAL AWARD

Given to a public garden administrator whose achievements during the course of his or her career have cultivated widespread interest in horticulture.

Executive director of Pittsburgh's Phipps Conservatory and Botanical



Gardens since 1994, Richard Piacentini has led the institution's transformation into a model of green building practices and environmental awareness. Since breaking ground on

the first LEED certified visitor center at

a United States public garden in 2003, Phipps has endeavored to "green" all of its gardens, displays, programs, and operations. Most recently, construction began on a new Center for Sustainable Landscapes that will comply with the world's highest green building standards. Piacentini has also served as executive director of the Leila Arboretum Society in Michigan, as executive director of the Rhododendron Species Foundation in Washington, and assisted in the development of the Pacific Rim Bonsai Collection.

JANE L. TAYLOR AWARD

Given to an individual, organization, or program that has inspired and nurtured future horticulturists through efforts in children's and youth gardening.

As a high school student in Great Barrington, Massachusetts, **Sam Levin** co-found-



ed Project Sprout, the first student-initiated and student-run public school garden in the country. Now in its fourth year, Project Sprout has inspired many other student-run gardens

in schools as nearby as a few miles, and as far away as Uganda. In this one-acre, organic, edible garden, students learn everything from how to grow food to leadership skills and handling responsibility. Levin has presented at dozens of schools, inspiring other students to start their own school gardens. As a keynote speaker at the AHS's 2010 National Children & Youth Gardening Symposium in Pasadena, California, he impressed attendees with his engaging and passionate presentation.

Nominations for 2012

Help us give recognition to deserving "horticultural heroes" by nominating someone you know for one of the 2012 Great American Gardeners Awards. To do so, visit our website (www.ahs.org) and click on "Awards" for more information, including a list of recipients from past years.

TEACHING AWARD

Given to an individual whose ability to share his or her horticultural knowledge with others has contributed to a better public understanding of the plant world and its important influence on society.

Robert M. Olen is an Extension educator for the University of Minnesota Ex-



tension Service in St. Louis County, Minnesota. For 30 years he has focused on cold climate gardening and growing fruits and vegetables. Olen developed one of the earliest Master

Gardener programs in Minnesota, which continues to be one of the most established and successful programs in the state. His work with commercial growers has emphasized local fruit and vegetable production and implementing ways to extend the growing season. Olen conducts a popular weekly call-in radio show, hosts a locally produced PBS gardening show, and writes a monthly gardening feature for *The Senior Reporter*.

URBAN BEAUTIFICATION AWARD

Given to an individual, institution, or company for significant contributions to urban horticulture and the beautification of American cities.

Douglas E. Hoerr is a Fellow of the American Society of Landscape Archi-



tects and a Distinguished Alumnus of Purdue University, where he earned a bachelor's degree in Landscape Architecture in 1979. Since then, he has designed public and

private spaces that emphasize horticulture as a transformative element. Hoerr brings to his work a deep understanding of spaces and the people who inhabit them. One of his most notable projects is his award-winning street-scape design for the medians along Chicago's Michigan Avenue, which has become a model for urban greening initiatives everywhere.

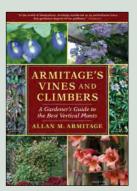
2011 AHS Book Award Winners

Each year, the American Horticultural Society recognizes outstanding gardening books published in North America with its annual Book Award. Nominated books are judged by the AHS Book Award Committee on qualities such as writing style, authority, accuracy, and physical qual-

ity. This year's four recipients, selected from books published in 2010, are listed below.

The 2011 Book Award Committee was chaired by Scott Calhoun, a garden designer and author based in Tucson, Arizona. Other committee members were Brandy Kuhl, head librarian at the Helen Crocker Russell Library of Horticulture in San Francisco, California; Doug Green, a garden writer and online media entrepreneur based in Stella, Ontario; Susan Appleget Hurst, a garden communicator in Winterset, Iowa; Greg Williams, producer of HortIdeas newsletter in Gravel Switch, Kentucky; Irene Virag, a former Newsday writer who won a Pulitzer Prize and lives in Fort Salonga, New York; and William Welch, a professor and Extension specialist at Texas A&M University in College Station and author of several garden books.

Armitage's Vines and Climbers by Allan M. Armitage. Timber Press, Portland, Oregon.

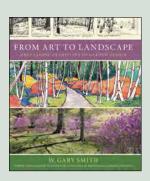


HORTICULTURAL

SOCIETY

"Allan Armitage has done it again with this book; doing for vines what he has been doing for herbaceous perennials for the past 20 years giving clear, succinct information gardeners can use and delivering it with a dry wit," notes Doug Green. "This is a clever and authoritative guide to perhaps the most neglected category of ornamental plants that is both a pleasure to read and a reference necessity," says Scott Calhoun.

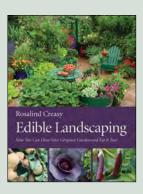
From Art to Landscape by W. Gary Smith. Timber Press, Portland, Oregon.



"Brimming with innovative design ideas and inspiration, this book is excellently produced from cover to cover," says Kuhl. "What a wonderfully fresh take on landscape design that encourages the artist and garden designer to abandon notions of realism in order to create exceptional patterns on canvas and soil," says Calhoun. "With beautiful art and

excellent writing, it's a thoughtful book you can get lost in so deeply you won't want to be found," says Irene Virag.

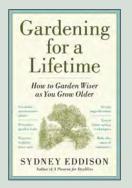
Edible Landscaping by Rosalind Creasy. Sierra Club Books, San Francisco, California.



First published in 1982, this landmark book was one of the first to demonstrate the ornamental value of edible plants, "There hasn't been any other book that addresses the subject of landscaping with food plants as effectively as this one," says Susan Appleget Hurst, "The new, updated edition is still detailed and specific enough for experienced gardeners, but is even more ac-

cessible and inspiring for new gardeners." In addition to its outstanding content, Brandy Kuhl feels that this edition is "beautifully designed with striking photography," and highlights edible gardening in all parts of the country, not just in the author's garden.

Gardening for a Lifetime by Sydney Eddison. Timber Press, Portland, Oregon.



This memoir gives a practical yet poetic perspective to gardening in the golden years of life. "It resonated with me because gardening isn't as easy for me as it once was, and it made me think about the advantages of the experiences I have accumulated," says William Welch. However, Calhoun points out that it's "not just a book for the AARP crowd. Her wise gleanings from a lifetime of gardening are equally useful to anyone with

limited time and energy for gardening." Further adding to its universal appeal, "even if you don't garden, you can get something from this book," says Virag.

BY MARY LOU GRIPSHOVER

Daffodils regional proven performers



Few plants herald the arrival of spring like the cheerful blooms of daffodils. Experts from the American Daffodil Society share their recommendations for cultivars that will thrive in different regions of North America.

■ OR MANY of us, daffodils are the **◄** flower of spring, the flower of hope, the flower that says, "Yes, winter is over." They also belong to one of the few plant genera that gardeners in all regions of the United States can grow successfully. Mind you, that's not to say that all daffodils will grow in all regions, but there are some daffodils that will grow in all regions; it's just a matter of selecting the ones that will thrive where you live.

Daffodils (Narcissus spp.) are among the easiest plants to grow, which makes

them a great choice for beginning gardeners and for introducing children to gardening. For more experienced gardeners, this large, diverse genus offers plenty of opportunities to explore ways to use them creatively in garden design or to experiment with breeding their own unique selections.

Another great reason to grow daffodils: Deer don't eat them. Neither do squirrels, moles, voles, rabbits, or any other critters. And once planted, the bulbs can remain in the same location for

many years and will continue to increase, or perennialize.

DAFFODIL CLASSIFICATION

Daffodils have been separated into 13 divisions based on flower form. The system is too detailed to be outlined in this article, but for those who are interested, a full description of the classification system will be provided through a link to this article on the AHS website (www.ahs.org).

In general, the cyclamineus hybrids in Division 6 and the trumpet daffodils in Division 1 bloom early in the season. Short-cupped daffodils in Division 3 are later-season bloomers, and poeticus hybrids in Division 9 usually end the daffodil display.

MAKING CHOICES

With all the daffodils available—more than 25,000 cultivar names have been registered and hundreds are available each year in catalogs or at local stores—perhaps the most difficult task a gardener faces is selecting which cultivars to grow.

One way to ensure you choose excellent daffodils is to select cultivars that have won the American Daffodil Society's John and Gertrude Wister Award (see sidebar, page 22), given for excellence as a garden plant. Among the requirements for award winners are that they should perform well in most regions of the country. They also must be vigorous plants that have attractive, long-lasting flowers. The flowers should be reasonably sunfast so that colors don't become bleached out or the edges of the cups or coronas—"burn" and become dry and crisp. Thirty-three daffodils have received the award since it was established. the most recent being the 2011 winner 'Barrett Browning', a white-and-orange, small-cupped daffodil.

Daffodils planted in masses make a spectacular showing, as in this woodland garden. For the best effect, choose a single cultivar.



'Barrett Browning' is the 2011 winner of the American Daffodil Society Wister Award.

With a focus on Wister award winners, backed up by advice from American Daffodil Society (ADS) members in various regions, here are some recommendations for specific daffodil selections that are known to flourish in different regions of the country.

PACIFIC NORTHWEST

Gardeners in the Pacific Northwest enjoy the perfect climate for daffodils and will be successful with nearly all selections. An exception may be some of the tazettas (Division 8), which often send up foliage in the fall.

Some of the best daffodils in this region have been bred by Elise and Dick Havens, the owners of Mitsch Daffodils, a nursery in Hubbard, Oregon. Their 'Rapture', with its beautifully swept-back



The backward-facing petals of 'Rapture' give it a unique windswept look.



'Sweetness' is a good choice for warmer regions, such as Southern California and the Deep South.

yellow petals, blooms early in the season and is the only daffodil to have won both the Wister Award for garden performance and the ADS's Pannill Award as an outstanding exhibition flower.

'Stratosphere' is a tall daffodil with yellow petals and a short orange cup and several blooms to the stem. In some climates it looks more like an all yellow flower. It blooms later in the season and was the first to win the Wister Award, in 1985.

'Accent', a breakthrough flower in 1960 for white-and-pink daffodils, won the award in 1987, the second flower to be so honored. This is a flower that opens with pink color, and—unlike with some

selections—you don't have to use your imagination to call it pink.

SOUTHERN CALIFORNIA AND THE SOUTH

In warmer regions of the United States, such as southern California and some parts of the South, the tazettas steal the show beginning in late December or January. The tazettas offer the added bonus of fragrance, but it can be a bit overwhelming, and gardeners tend to either love it or hate it.

For those who live in warmer regions, I suggest trying 'Falconet', which Phil Huey, a member of the Texas Daffodil Society, describes as fabulous. This yellow-and-red

DAFFODIL GROWING GUIDELINES

Many of the cultivars described in this article will not be available at local nurseries, so you'll need to rely on the mail-order sources listed on page 23. Order your bulbs early—by the end of June at the latest. Early orders are shipped first, so there's less chance of the grower being out of the bulbs you want. Avoid mixtures; a large group of the same cultivar will look better and bloom simultaneously.

In most areas, plant daffodils about twice as deep as the bulb is tall—about five to six inches. The distance apart is really dependent on your garden plan. If you are naturalizing them, plant them 12 inches or so apart; it may look sparse at first, but the bulbs will multiply and soon you'll have a field of color. If you want to create clumps of them in your garden beds, plant them five or six inches apart.

Daffodils thrive in sites where they receive at least a half day of sun, but they can be grown under deciduous trees because they progress through much of their active growth before the trees fully leaf out. They're not particular about soil type—either loam or clay is fine as long as it drains freely; soggy soils can cause bulb rot. They grow best with access to regular moisture during active growth, which is from early fall until the foliage turns yellow the following spring.

When planting new bulbs, mix a balanced fertilizer (6-10-10 or 10-10-10 is good) into the soil beneath the bulbs. On established plantings, broadcast fertilizer with a low-nitrogen content in spring and fall. If you fertilize only once a year, do it in the fall, because that's when the bulbs are making new root growth.

To ensure daffodils bloom heartily from year to year, it's important to leave the foliage intact after blooming because this is when photosynthesis is most active, creating next year's blooms. Resist the urge to cut the foliage to ground level, tie it up, or fold it over and put a rubber band around it; just leave it in place until it yellows naturally. Camouflage it with annuals marigolds are good—or other perennials such as daylilies.

If the number of blooms drops off after a few years, the bulbs are telling you they're crowded and need to be dug up, divided, and replanted (you can also share a few with friends or neighbors). Given space and a year or two to grow back to blooming size, they'll again repay you with beautiful blooms.

selection is a cross between a tazetta and N. jonguilla and has three to five or more florets per stem. Another good choice for this region is 'Ice Follies', which is one of the most widely-grown daffodils. It has an industrial-strength constitution that makes it ideal for mass public plantings or large drifts. It goes through an interesting color change, opening white and yellow, with the cup becoming creamy white as the flower matures.

'Sweetness' blooms early and has a fragrance to match its name. The smallish yellow flowers usually come just one to a stem, but occasionally there are two.

Yellow-and-orange 'Tahiti', which received the Wister Award in 2003, is the only double that re-blooms consistently in Texas. Double daffodils, especially older ones, sometimes "blast," or fail to open properly, when weather conditions fluctuate. I haven't seen any scientific research to explain this, but it seems to happen when there's a change either from nice cool weather to unusually warm, or vice versa.

There's a widespread perception that daffodils won't grow in Florida unless they





'Falconet', left, and double-flowered 'Tahiti', right, have both proven to be successful selections in warm regions such as Texas.



are forced, but that's not the case. The late John Van Beck, who lived in the Tallahassee area, discovered that with the proper selection of cultivars, it's possible to have five months of daffodil bloom in Florida and South Georgia. His wife, Linda, continues to grow daffodils and the couple's recommendations, which are included in a book co-authored by Linda Van Beck (see "Resources," page 23), include Wister winners such as 'Accent' and 'Barrett Browning'.

Other good choices include 'Brackenhurst' and one of its parents, 'Ceylon', share the same yellow-and-orange color scheme. 'Saint Keverne', a lovely all-yellow flower, is a Historic Daffodil, which in ADS circles means it was bred or in gardens before 1940. The miniature 'Hawera', with its several pendent all-yellow florets is a little charmer. If you like fragrant, smaller flowers, try 'Quail', which bears several small-cupped yellow blooms per stem.

In northern Georgia, big, bold, vigorous 'Bravoure' flourishes. This large white-and-yellow trumpet daffodil puts on a big show in mid-season. For very early flowers, you can't go wrong with 'Peeping Tom', a cyclamineus hybrid in Division 6. The bold, long trumpet with its narrow, slightly reflexed petals makes a welcome patch of gold in the garden. Another very early bloomer is 'Monal', with yellow petals and a large, bright red cup.

UPPER MIDWEST AND MOUNTAIN STATES

The cold winters and short growing season in the Upper Midwest and some Mountain states don't deter daffodils, but they bloom later than elsewhere. In places where the ground freezes early, like Minnesota, bulbs should also be planted earlier so they have time to set roots before the ground freezes solid. To be safe, plant bulbs before October 15, and for added protection, mulch the ground above the bulbs once the ground freezes.



Dainty miniature 'Hawera', left, combines well with brightly colored pansies. Another Wister Award winner, 'Accent', above, was one of the first pink-and-white daffodils.

Mary Durtschi, whose garden in Stockton, Utah, is an ADS Display Garden, says she has occasionally planted bulbs as late as December 15 in beds that had already been prepared, and then covered with a thick layer of straw. Among her favorites are 'Rapture', 'Fragrant Rose', 'Ceylon', and 'Bravoure'.

Good choices for cold-climate gardens include 'Golden Aura', an all-yellow, large-cupped daffodil that blooms in late midseason and makes a good show in the garden. It also makes its way to the exhibition table now and again. The same can be said of 'Misty Glen', which is all white with a green eye. Neither flower is large, but they bloom reliably.

'Merlin' is a late-blooming, shortcupped flower with white petals and a small, almost disc-shaped yellow cup edged with red. It's a medium-sized flower that will benefit from a little afternoon shade.

'Segovia' is one of the larger miniatures, being almost two inches in diameter and about a foot tall. When it's happy, it makes a nice clump in the garden, and almost always makes it to the show table as well. Its white-and-yellow, small-cupped flowers are borne singly.

MID-ATLANTIC

From the Ohio Valley across to the mid-



Miniature 'Peeping Tom', here keeping company with trout lilies (Erythronium 'Pagoda'), is a cheery-looking, early-blooming daffodil.

JOHN AND GERTRUDE WISTER GARDEN AWARD

The American Daffodil Society (ADS) sponsors an award program that recognizes outstanding daffodil selections. The award program, which debuted in 1980, is named the John and Gertrude Wister Garden Award in honor of two influential members of the ADS.

A renowned landscape architect and horticulturist, John C. Wister (1887–1982) was a charter member of the ADS and the third recipient of its Gold Medal, in 1961. He graduated from Harvard University and studied at the Harvard School of Landscape Architecture and the New Jersey Agricultural College.

Wister had broad horticultural interests and involvement. He was secretary of the American Rose Society for many years and was a member of some 50 horticultural societies—including the American Horticultural Society (AHS)—and 30 scientific and conservation organizations. He was the first director of the Arthur Hoyt Scott Horticultural Foundation and designed and created the Scott Arboretum at Swarthmore College in Pennsylvania, which now encompasses 300 acres.

Wister was the author of four books: *The Iris, Lilac Culture, Bulbs for American Gardens,* and *Four Seasons in Your Garden*. He was also the first horticulturist to receive five major American horticultural awards: The Liberty Hyde Bailey Award presented by the AHS; the Scott Medal; the American Peony Society's A. P. Saunders Memorial Medal; the Honor and Achievement Award of the International Lilac Society; and the Gold Medal of the American Daffodil Society.

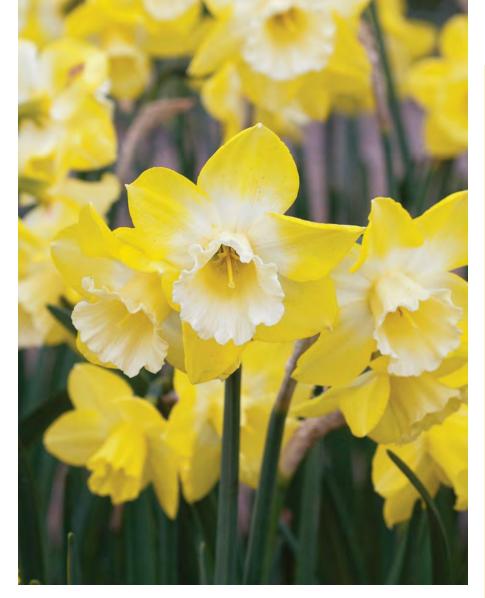
You can find a complete list of Wister winners on the ADS website (see "Resources," opposite page).

—M.L.G.

Atlantic states, growing conditions for daffodils are good, and most selections will flourish. I garden in the Cincinnati, Ohio, area, and one of my favorites is 'Fragrant Rose', a white-and-pink, large-cupped daffodil that is a mid- to late-season bloomer with a roselike fragrance. Besides being a great addition to a garden, it's also a frequent winner at daffodil shows.

The yellow-and-orange, double variety 'Crackington' is another frequent show-winner. The petals and sepals open orange, becoming paler as the flower matures, while the rows of yellow petals lay in perfect symmetry, one row of progressively smaller petals atop another. 'Dainty Miss' is an all-white, small flower—about two-and-a-quarter inches in diameter—which grows about 12 inches tall. A perfectly formed and larger version of its parent, *N. rupicola* subsp. *watieri*, it blooms in late mid-season.

The only split corona to have gained the Wister Award is 'Tripartite'. This allyellow flower usually comes with two to three dancing blooms per stem, with the



Suited for the mid-Atlantic region, 'Intrigue' was introduced by daffodil breeder William Pannill.

cup split into six segments lying back against the perianth. It blooms late in the season. 'Camelot' is a sturdy, largecupped, all-yellow flower that not only makes a beautiful display in the garden, but is the parent of more than 125 other daffodils, so if you have any interest in breeding your own daffodils, take note. Its foliage remains green well into June here in the Ohio Valley.

William Pannill, considered the dean of amateur daffodil hybridizers in the United States, gardens in Martinsville, Virginia. Among the many daffodils he's introduced, he's particularly proud of 'Intrigue', a lovely reverse bicolor. "I think it has dual value for show and garden," says Pannill. Late in the season, its two or three blooms to a stem open lemon-yellow, with the cup maturing to white. Like most jonquil hybrids, it has a fine scent. Another Pannill introduction is 'Chromacolor', which has a large flower, and is described as "an improved 'Accent' of deeper color." It's now being mass-produced for commercial sale.

Another good choice for the mid-Atlantic region is 'Resplendent', a Grant Mitsch hybrid that bears a large, tall flower with yellow petals and a vivid orange-red cup. It blooms in mid-season here under deciduous trees, which offer some protection against the sun burning the cup.

FUTURE LOOKS BRIGHT

With so many amateur and professional breeders working on developing new daffodils, you can expect to see a steady stream of selections with improved characteristics such as color, longer blooming season, and disease resistance. Breeders are also striving to extend the range of daffodils into regions where they have not previously been successfully cultivat-

Sources

Bill the Bulb Baron, Santa Cruz, CA. (831) 236-8397. www.billthebulbbaron.com. Brent and Becky's Bulbs, Gloucester, VA. (877) 661-2852. www.brentandbeckysbulbs.com. John Scheepers, Bantam, CT. (860) 567-0838. www.johnscheepers.com. Mitsch Novelty Daffodils, Hubbard, OR. (503) 651-2742. www.mitschdaffodils.com. Nancy Wilson Miniature Daffodils, Garberville, CA. (707) 923-2407. www.asis.com/~nwilson. Old House Gardens, Ann Arbor, MI. (734) 995-1486. www.oldhousegardens.com.

Resources

The American Daffodil Society, P.O. Box 522, Hawkinsville, GA 31026–0522. www.daffodilusa.org. ■ Members receive quarterly issues of The Daffodil Journal, an invitation to the annual convention, and the opportunity to become an accredited daffodil judge. The ADS website offers daffodil information and links to daffodil societies and shows. Photos of all the Wister winners, as well as thousands of other daffodils, may be seen at www.daffseek.org. Daffodils by Theodore James, Clyde Wachsberger, Harry Haralambou. Harry N. Abrams, Inc., New York, New York, 2004. **Daffodils for North American Gardens** by Becky and Brent Heath. Bright Sky Press, Houston, Texas, 2002. Daffodils in Florida: A Field Guide to the Coastal South by Linda and Sara

ed. One of the more exciting developments is work currently underway in southern California to create a line of fall-blooming daffodils. Now that's really something to look forward to.

Van Beck, 2004 (available through

the ADS website).

Mary Lou Gripshover is a past president of the American Daffodil Society. She gardens in the Cincinnati, Ohio, area.

For the design-impaired, here's how to combine plants with different shapes effectively in the garden.

BY RAND B. LEE

'M NOT VERY good at designing a garden in my head. Plant shapes give me particular trouble: I am always putting things next to each other, then deciding they look awful together. So with the help of my friend and fellow garden writer Nancy McDonald, I came up with a simple system of horticultural geometry that reduces all possible plant shapes to four primary groups—spikes, blobs, pools, and mists—and suggests ways of combining the shapes for maximum visual pleasure.

SPIKES

Spike plants stand more or less upright, although a few less rigid characters may have to be staked. In general, they are at least three times taller than they are wide, with the bulk of the branches, flowers, and foliage clustered either at their bases or at their tops. If they do branch, they do so in a uniform or slightly tapered column running most of the way up the central stem. They draw the eye upward, enhancing the third dimension of a garden and creating a framework through their linearity. Grouped together, they also add a sense of formality and order to a garden.

Certain genera—alliums, delphiniums, foxgloves (Digitalis spp.), and liatrises—are typically spiky. So are the old-fashioned biennial hollyhocks (Alcea rosea); the goldflowered evening primrose (Oenothera biennis), which can grow three to six feet tall; taller snapdragons (Antirrhinum majus), such as the half-hardy perennial Rocket series; mulleins (Verbascum spp.); perennial Maximilian's sunflower (He-



SPIKES Spiky plants such as black cohosh (Actaea sp.), foreground, and delphiniums add a third dimension to Judy Finch's garden in Palouse, Washington.

lianthus maximiliani); and the tall, hardy, cobalt-blue Siberian catmint (Nepeta sibirica). All are at home in the mixed border.

BLOBS

The best blob plants form dense, heavylooking, mounded bushes or clumps. They lend a reassuring substance to the border that spike plants cannot, and their curving lines counterbalance the formality of spike plants. A prime example is the 'Annabelle' cultivar of smooth hydrangea (Hydrangea arborescens), which is native to eastern North America. It makes a roundish bush three to five feet tall and wide. Even "blobbier" are its huge, nearly spherical white flowerheads that form in late spring to early summer.

Another great blobby shrub is the diminutive cultivar of Norway spruce



POOLS California fuchsias (Zauschneria californica) such as 'Silver Select' flow around rocks.

(Picea abies 'Little Gem'), which forms a slow-growing, dense green cushion to one to three feet wide and a foot tall. Although very hardy, it doesn't fare well in hot, humid climates.

Spiraea japonica cultivars 'Goldmound' and 'Limemound' offer gold and chartreuse spring foliage, respectively, on mounds two to three feet tall and three to four feet wide. Alpine spirea (S. japonica 'Nana') produces such a dainty mound shape—eight inches to a foot high and two to three feet in diameter—that it is often used in rock gardens. These spireas are cold hardy to at least USDA Zone 4, but the leaves may burn if they are exposed to full sun in warmer climates.

Symphotrichum novi-belgii 'Snow Cushion' (syn. Aster novi-belgii) makes a great front-of-the-border blob. At one foot tall by 18 inches wide, it is a mass of goldeyed white daisies in late summer and fall. Coreopsis 'Moonbeam' forms lacy green mounds spangled in summer by starlike yellow flowers. Hemerocallis 'Stella de Oro', the popular miniature gold-flowered reblooming daylily, is another good blob.

Edible blob plants include Greek basil (Ocimum basilicum 'Minimum'), which makes perfect little, fragrant, green hemispheres about eight inches tall and wide;

and Swiss chard 'Bright Lights', which forms rich green-leaved blobs adorned with bright red, pink, yellow, orange, or white stems.

Coral bells (Heuchera spp.) are lovely little blobs for much of the year, but in late spring to early summer they hoist airy wands of blossoms that transform them into mist plants.

POOLS

Pooling plants hug the ground, spreading evenly in homogeneous blankets. They soften harsh geometries and serve as a horizontal canvas upon which more dramatic plants can be framed.

My favorite pooling plant is the drought- and alkalinity-tolerant Turkish speedwell (Veronica liwanensis). This hardy perennial makes a spreading mat of little, round, dark green leaves that turn purplish in winter; for several months in spring it covers itself with tiny, true blue blossoms. The hardy moss phloxes (Phlox subulata) make good pooling plants for rockeries, as do the creeping thymes (Thymus spp.). The four-inch-tall, mat-forming stonecrop (Sedum spurium 'Fuldaglut') has reddishorange leaves and rose-red flowers in late summer and autumn; like most stonecrops, it is quite drought tolerant. Solenop-

Sources

Ambergate Gardens, Chaska, MN. (877) 211-9769. www.ambergategardens.com. Companion Plants, Athens, OH. (740) 592-4643. www.companionplants.com. Forestfarm, Williams, OR. (541) 846-7269. www.forestfarm.com. High Country Gardens, Santa Fe, NM. (800) 925-9387. www.highcountrygardens.com. Magic Garden, Newfield, NY. (607) 564-9055. www.magicgardenplants.com.

Resources

Gardening with Shape, Line and Texture by Linden Hawthorne. Timber Press, Portland, Oregon, 2009. Perennial Combinations by C. Colston Burrell. Rodale Press, Emmaus, Pennsylvania, 2008.

The Well-Designed Mixed Garden by Tracy DiSabato-Aust. Timber Press, Portland, Oregon, 2009.



BLOBS In Antje Coté's Pacific-Northwest garden, sedums (foreground) and spirea 'Goldflame' form tidy mounds.

MORE PLANT CHOICES

■ SPIKE PLANTS

Acanthus spinosus (spiny bear's breeches), USDA Zones 5-9, AHS 7 ones 9-5 Aconitum 'Bressingham Spire' (monkshood), Zones 3-8, 8-3 Campanula thyrsoides (yellow-spike bellflower). Zones 5-8, 8-5 Eremurus ×isabellinus 'Shelford Hybrids' (foxtail lily), Zones 6-9, 9-4 Iris pallida 'Variegata' (variegated iris), Zones 5-9, 9-5 Veronicastrum virginicum forma album (white culver's root, syn. Veronica

■ BLOB PLANTS

virginica), Zones 4-8, 8-3

Armeria maritima 'Compacta' (compact sea pink), Zones 3-9, 9-1 Campanula medium 'Premium Pink' (dwarf Canterbury bells), Zones 5-8, 8-5 Dianthus 'Tiny Rubies' (pink), Zones 5-8, 8-5 Mirabilis multiflora (desert four o'clocks), Zones 7-10, 10-7 Santolina 'Saso Dwarf' (lavender cotton), Zones 6-9, 9-6 Scutellaria resinosa (prairie skullcap), Zones 4-8, 8-1

■ POOLING PLANTS

Origanum vulgare 'Humile' (creeping oregano), Zones 5-9, 9-5 Phlox stolonifera 'Blue Ridge' (creeping phlox), Zones 4-8, 8-1 Stachys byzantina 'Silver Carpet' (lamb's ear), Zones 4-8, 8-1 Thymus lanuginosus (woolly thyme), Zones 5-9, 9-4 Zauschneria californica 'Mattole Select' (California fuchsia). Zones 8-11, 12-8

■ MIST PLANTS

Adiantum aleuticum (western maidenhair fern), Zones 3-8, 8-1 Crambe cordifolia (giant kale), Zones 6-9, 9-6 Fallugia paradoxa (Apache plume), Zones 6-8, 8-5 Limonium platyphyllum (sea lavender), Zones 7-9, 9-7

sis fluviatilis (also listed as Isotoma fluviatilis), an Australian native in the bellflower family, grows an inch tall, forming a mat of cream-edged green leaves that are topped by pale blue starlike flowers.

MISTS

Mist plants froth the air, blurring lines and softening spaces in much the same way pooling plants do, but adding a third dimension of height. Their leaves or flowers diffuse the light, allowing glimpses of silhouettes of other plants set behind them. If a mist plant is small enough, it can act as a frame for plants with more rigid shapes; larger mist plants create airy space where the eye can rest in otherwise busy borders.

Bronze fennel (Foeniculum vulgare 'Purpurascens'), with its threadlike leaves, is the archetypal, hardy perennial mist their cultivars. They bear dense clusters of bluish, fernlike basal leaves and, in early to midsummer, clouds of tiny white to purple blossoms. They are especially suited for borders and woodland edges. Other perennial mist plants include baby's breath (Gypsophila spp.); American native prairie flax (Linum perenne subsp. lewisii); and the tender perennial's orange-flowered hummingbird mint (Agastache aurantiaca).

There are misty annuals, too. Cosmos bipinnatus 'Sonata Mix' creates a thick froth of big rose, pink, or white daisies floating all season long upon swells of fine-cut green leaves. Love-in-a-mist (Nigella sativa) forms threadlike clouds of green and starry white, blue, or pink blossoms in early summer; they quickly develop into decorative balloonlike seedheads. Cloud larkspur (Consolida ajacis),



MISTS Airy plants such as Ipomopsis rubra, left, and Russian sage (Perovskia atriplicifolia 'Little Spire') soften the lines of more angular plants.

plant. It emerges from taproots in early spring as great smoky bronze-green puffs that swell up to four feet tall and wide. In late summer, spikes topped with large, flat, bronze-gold flowers attract butterflies and their larvae. Fennel is considered invasive in some regions, however, so check to see if this is a problem in your area.

The meadow rues (*Thalictrum* spp.) make nice mist plants, particularly the European and Asian species Thalictrum aquilegiifolium and T. rochebruneanum and annual cousin to the delphiniums, makes billows of tiny green stems and leaves in which hang delicate white, blue, or pink flowers shaped like miniature dolphins.

COMBINING PLANT SHAPES

The two basic principles of shape-combining are: Repetition, Not Competition and Contrast Pleases, Monotony Freezes. These adages may appear to contradict one another, but, in fact, both are necessary to the geometrically balanced garden.



In her Wisconsin garden, Dorothy Danforth uses plants such as Carex elata 'Bowles' Golden', Astilbe chinensis 'Visions in Pink', Ligularia 'The Rocket', Phlox paniculata 'Blue Paradise', and Rudbeckia fulgida 'Goldsturm' to create a dynamic combination of shapes.

No matter how charming it may sound, a garden in which no two plants are shaped alike is usually a nightmare of visual overstimulation. The eye instinctively looks for similarities, and it tires easily when it can find few. As long as their shapes are harmonious, repeating plant shapes here and there, even if you are using plants of different sizes, textures, and bloom times, can make the difference between a garden that looks like a community and one that looks like a specimen collection.

On the other hand, a garden in which all or most of the plants are shaped alike can be boring. What is wanted is a balance between repeated plant shapes and contrasting plant shapes, so that the eye can find both reassurance through sameness and refreshment through novelty.

The spike is the most useful plant shape because it harmonizes with all the other shapes, as long as the various plants' mature heights and widths are considered when intermingling them. For example, white foxgloves (Digitalis purpurea forma albiflora) are striking rising from the spreading pool of bronze, pink, and gold

bugleweed (Ajuga reptans 'Multicolor'); and a circle of the tall-necked white Darwin tulips 'Maureen' would look even more pristine with the surprise of a weeping purple beech (Fagus sylvatica 'Purpurea Pendula') in the center of them.

Blob plants harmonize beautifully with spike plants, as when one-and-a-half to two-foot silver mounds of Artemisia ludoviciana 'Valerie Finnis' are partnered with the tall spikes of the biennial mullein (Verbascum bombyciferum), or when the white-edged, blue-green mounds of Hosta 'Patriot' are backed by clumps of the three-foot-tall white foxglove.

As long as they are not allowed to grow too diffuse in outline, blob plants also blend well with pool and mist plants: I love white bouquet tansy (Tanacetum niveum) lapped by a wide swathe of sweet alyssum (Lobularia maritima), or the squat dwarf fescue (Festuca glauca 'Elijah Blue') interplanted with airy blue flax. Pool plants are difficult to partner with mist plants, however, unless you cover a wall with a vertical pooling vine-such as Boston ivy (Parthenocissus tricuspidata)—and plant your mists, like Thalictrum aquilegiifolium, at its base.

If you have room, the best way to use pooling plants effectively is to figure out which specimen plants you want to frame them with, then plant a pool twice as wide as your specimen plants will be tall at maturity. That means spiky Veronica spicata 'Icicle', which grows around 20 inches tall in bloom, would look best encircled by a pool of creeping white fairies' thimble (Campanula cochlearifolia var. alba) at least 40 inches in diameter.

Having read all of this, you needn't feel guilty if you decide to make your entire garden a happy jungle of mists and messes, or a blazing phantasmagoria of surprises. But amid all that excitement, clear out a circle for a bench and surround it with a wide pool of all the same type of plant. You will find yourself drawn to that patch of restfulness over and over again, as the lark is drawn to the vast blue sky.

Rand Lee is a garden writer based in Santa Fe, New Mexico. This article is updated from one originally published in 2000.

Oregon's plant geek Extraordinaire

BY KYM POKORNY PHOTOGRAPHS BY JOSHUA MCCULLOUGH

Running a trend-setting nursery, globe-trotting in search of new plants, writing horticultural references, and designing gardens are all in a day's work for Sean Hogan.

■ EAN HOGAN walks through the greenhouses of Cistus Nursery, stopping every few feet to describe a plant or tell its story. Two customers follow, torn between listening or lagging behind to eyeball a striking yucca they've never seen before. After being questioned, Hogan admits they're looking at the only four plants he's got.

Hogan smiles and the lines around his hazel eyes crinkle. Maybe he'll add figuring out how to propagate this spectacular selection to the already never-ending to-do list facing him as owner of the Pacific Northwest nursery that inspires the nerdiest of the plant nerds. Or maybe his customers' attention will shift to the next amazing plant, and then the next one, until their brains are overloaded and they forget the yuccas.

HORTICULTURAL HEAVEN

Twelve years ago, Hogan and Parker Sanderson, his partner at the time, put their savings into leasing five acres on Sauvie Island near Portland, Oregon. They built the first of Cistus's 22 greenhouses and began filling it with the considerable plant collection they'd been amassing over the years.

Even fellow plant nuts accustomed to horticultural excesses, such as Tony Avent, owner of Plant Delights Nursery in Raleigh, North Carolina, were rendered almost speechless when first encountering the tangled mass of treasures. "It was horticultural insanity," Avent recalls. "You could spend two or three days in there. If you moved too fast, you'd miss something."

With more room at Cistus, Hogan and Sanderson indulged their obsession for collecting without feeling constrained. On trips around the world, including five to South Africa and dozens to the American Southwest, Mexico, and South America, the pair found hundreds of species, many



Sean Hogan examines bitterroot (Lewisia rediviva), a western native named after 19thcentury explorer Meriwether Lewis.

new to cultivation. Although Sanderson died in 2006, Cistus and its reputation continued to grow. Gardens now stretch 500 feet down the gravel driveway, making it clear to visitors and customers they are entering a special place.

"It's a mecca, a world destination," says Panayoti Kelaidis, senior curator at Denver Botanic Gardens. "No one goes to the Northwest without going there."

Although Kelaidis and Avent are familiar with Hogan's contributions to horticulture on a more global scale, gardeners of all levels from beginners to aficionados are discovering Cistus. They come by the hundreds on tour buses that arrive up to three times a week from spring through fall. They come after hearing Hogan speak, after reading his 2009 book Trees for All Seasons: Broadleaved Evergreens for Temperate Climates, or after referring to his much-lauded, two-volume Flora: A Gardener's Encyclopedia (2003), which Hogan calls "my baby." They come to buy plants they can't get anywhere else, to see the extraordinary garden and nursery, and to meet the man who coined the often-misunderstood term "zonal denial."

ZONAL DENIAL

Though people tend to think the expression refers to growing plants that are not hardy in their area, Hogan says this is not the intent. He defines zonal denial as "the ability to create any texture, look, or feel, however exotic, with plants that thrive in one's own climate."

The point, he says, is to get gardeners to leave convention behind, to not be constrained by the narrow confines of tradition or by what other people think. That can include trying plants that may not be hardy in your garden.

"Certainly I'm a fan of growing any plant you want," says Hogan. "That's part of the fun of gardening. If it's important to you, grow it on your windowsill in winter, or dump ice on your lilacs in summer. But that's not the primary definition of zonal denial."

At the nursery, a green sign with white letters spells out the phrase, which will surely be part of Hogan's legacy. For a few days each winter, snow falls on the sign and



Yuccas, agaves, cacti, and a wide array of other drought-tolerant plants hold sway in this section of Cistus Nursery.

coats the fine leaves of the bamboo next to it. Nearby are species of palm, eucalyptus, olive, fig, and banana. It's not what people expect, which is exactly the point.

"One of Sean's biggest influences is encouraging people to think outside the box," says John Grimshaw, author of New Trees and manager of Colesbourne Gardens in Gloucestershire, England. "He's broadening their horizons, showing them there's a much bigger palette of plants they can try and should try."

NATURE AND NURTURE

In the upper-class Portland neighborhood where Hogan grew up, gardeners and gardening surrounded him. His mother, grandfather, uncle, neighbors, all of them, he says, were "pretty diehard plant geeks."

On one side lived Margaret Mason, a rock garden enthusiast who talked to the rapt 10-year-old about penstemons and gentians. On the other, retired general Gen Itchner invited Hogan to help in his manicured beds of annuals.

With his parents, Bernard and Theta Hogan, he often went on hikes in the high desert of eastern Oregon and the chaparral and oak savannah of central California. He also spent time tramping around Yosemite National Park, where his mother grew up next door to renowned photographer Ansel Adams.

Whether by nature or nurture, Hogan is drawn to the road. He didn't think twice about taking off alone for a weekend trip to the Sierra foothills after he learned to drive in Sacramento, where the family moved when he was 12. By the time he was 17, he was traveling throughout the West, including Mexico. And the more time he spent in the wild, the more he became aware of the connections between plants.

"You start seeing the shapes, the patterns, the parallels," he says. "No matter where you are, you see connections. It's absolutely the most fascinating thing." For example, he recalls standing on the edge of a cliff in Neuvo Leon in northeastern Mexico, "looking out on the same dark trunks of oak, at manzanita and ceanothus that look for all the world like the ones you've seen in the Siskiyous."

Even more influential for the botanically gifted teenager was the realization

About Cistus Nursery

Cistus Nursery, 2271 Northwest Gillihan Loop Road, Portland, OR 97231. (503) 621-2233. www.cistus.com.

■ A mail-order and retail nursery located on Sauvie Island, 15 miles northwest of Portland, Cistus specializes in Mediterranean climate, Northwest native, Southern Hemisphere, and hardy tropical plants. The retail nursery is open daily from 10 a.m. to 5 p.m., year round.



Sean Hogan plant hunting in Mexico in 2006

that plants grow in combinations that jolt people out of their comfort zone. In the Sierra Madre of northeastern Mexico, he saw clumping dwarf blue palms (*Brahea decumbens*) and eight-foot rosettes of *Agave genterii* growing under Douglas firs. Such discoveries excite Hogan, not just because of his love for pure science, but also for the implications for horticulture and gardening.

NOT ENOUGH HOURS IN THE DAY

All that stomping around gives Hogan, now 47, a sense of what works well in the garden—insight he's determined to pass on to anyone who will listen, buy a plant, or hire him as a designer, an aspect of his career many people don't know about, but on which he spends about three-quarters of his time.

Though his first love is designing public gardens such as the meticulously authentic Lan Su Chinese Garden in Portland, which he devoted three years to in the late 1990s, Hogan makes his bread and butter on private jobs. His approach can be surprisingly minimalist. In a recent project for Portland residents John and Fran Von Schlegell, Hogan reiterated the natural materials and modern lines of the house with a restrained palette of silvergray foliage and warm orange and red

SEAN HOGAN'S PLANT INTRODUCTIONS AND FAVORITES

Over the course of his career, Sean Hogan has introduced more than 500 plants into cultivation. Here are a few relatively new Cistus introductions; some are listed in the nursery catalog and others are expected to be available later this year.

Agave parryi var. huachucensis 'Huachuca Blue' On one of his many trips to the Southwest, Hogan discovered a blue agave with a particularly steel-blue color at 7,000 feet in the Huachuca Mountains. As he often does, he named it in honor of its native range. It's a 20- to 24-inch tall, artichoke-shaped plant that eventually forms small colonies. USDA Hardiness Zones 8–11 (Zone 7 if soil is very well-drained).

Ceanothus ×'Nathan's Fendling' Named after Hogan's partner, Nathan Limprecht, who on his first excursion to the chaparral country of the Siskiyou Mountains waded out into a sea of shrubs and spotted something unique. Sure enough, at one of Hogan's favorite places on the planet, he'd found a cross between West Coast natives *C. cordulatus* and *C. velutinus* that blends the tangled branches of the former and the round, blue, waxy foliage of the latter. A gorgeous evergreen shrub to about six feet. Zones 6–8.

Cupressus arizonica var. glabra 'Sedona Column' Yes, this Arizona cypress was collected near the town of Sedona, but it wasn't on a hike up in the orange cliffs. Instead, Hogan spotted this dense, upright seedling, decorated for Christmas, growing on the side of Highway 89 just a breeze away from passing semis. Drought tolerant, it grows up to 15 to 18 feet tall. Zones 5–9.

Delosperma congestum 'Gold Nugget' While hiking on the eastern flank of the Drakensberg Mountains in South Africa in 1991, Hogan took cuttings of a "cute little plant" he spotted on a cliff ledge. Trials at Denver Botanic Gardens indicate the ice plant selection is hardy to at least Zone 5. It forms a compact mat of bright green foliage highlighted with masses of bright yellow flowers. A good plant for the Midwest, Alaska, and Canada. Zones 5–10.

Ficus carica 'Sticky Fingers' This year, Hogan introduced a new fig that he and his late partner Parker Sanderson found on a frosty Christmas-morning walk along the levee in Clovis, California. With no tools at hand, Hogan used car keys to make a crude cutting of the plant, which oozed white sap on the walk back to the car, thus the name 'Sticky Fingers'. Three other figs he has introduced, all selections of F. afghanistanica and grown for their extraordinary foliage rather than fruit, are equally fascinating. Platinum-leafed 'Silver Lyre' is his favorite; 'Green Filigree' and 'Dwarf Green Filigree' have foliage almost as dissected as a Japanese maple. All stretch 15 to 20 feet and are very drought tolerant. 7ones 7-10.



Opuntia 'Imnaha Blue' It's impossible to leave prickly pear off a list of introductions from cacti-crazy Hogan, who is on a crusade to convince people prickly pears are not "trailer trash" plants. The extremely round, blue paddles and sparse spines of this one should do the trick. A cross between *O. polyacantha* and *O. vulgaris*, it was found spilling over a basalt ledge in northeast Oregon near the tiny town of Imnaha. Zones 4–10.

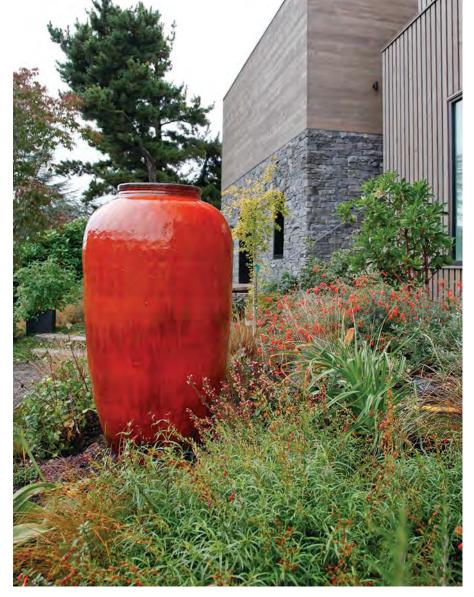
Tetrapanax papyrifera 'Steroidal Giant' Here's a plant that more than lives up to its name, rising to 15 feet tall in one season with leaves a stunning five to eight feet in length. Hogan acquired it by a convoluted path that started with an elderly man who brought it from Japan to Hawaii. After many years, the man gave it to California nurseryman Ed Carman, who kept it in a gallon pot for two decades. When Roger Warner, formerly of the legendary Western Hills Nursery in California, saw it, he was ecstatic to think he'd found a miniature rice paper plant. It didn't take long to figure out it was anything but, and he passed it to Hogan. Stem hardy to Zones 7–11, root hardy to Zone 6.

Trachelospermum asiaticum 'Theta' In a seed batch sent to Hogan from a Hong Kong botanical garden, he noticed an Asian star jasmine that "looked a little different." So he selected it and named it after his mom. Extremely thin leaves are flecked with silver in the center and turn maroon in winter. It climbs eight to 12 feet up a trellis or falling over a wall. Popular in the Southeast, it prefers full to part shade and regular watering during dry spells. Zones 7–10.





Yucca rostrata 'Sapphire Skies' Most people would find it difficult to make a list of their top 500 favorite plants. Not Hogan, who puts Yucca rostrata high up on his. But it's tough to propagate and the seedlings vary in "blue-osity," so Hogan was thrilled to find this powdery blue selection in the early 1990s in northern Mexico; he has been able to reproduce it through tissue culture. If you're looking for an architectural plant, this is it. It grows quickly to three feet and, in good conditions, eventually up to 10. Zones 7-10 (although has been grown successfully in Zones 5 and 6). If you're looking for an even hardier yucca, Hogan recommends Y. baccata var. vespertina 'Hualampai Blue', a stunning banana yucca that is very upright, very blue, and grows up to four feet tall. Zones 4-10.



In addition to all his other activities, Hogan finds time to design gardens such as this one at the home of Portland, Oregon, residents John and Fran Von Schlegell.

bark and flowers. "With all my self-imposed ideas about plants fitting together, I also think it's fun to think about repeating colors and textures in ways you won't necessarily see in nature," he says.

He works on drawings in his home office, upstairs in the 1880 craftsman house he shares with partner Nathan Limprecht. Maps of minimum and maximum temperatures are taped to one wall and light streams in through a cathedral of bamboo outside the six windows.

Downstairs in the kitchen he indulges his "hospitality gene," chopping vegetables and boiling pasta while keeping up a steady stream of conversation with friends, acquaintances, and strangers. Entertaining planned and impromptu—is as much a part of his life as the 12-hour work days.

The hospitality gene can get Hogan into binds, though. Even he acknowledges that getting caught up in the moment often puts him at a disadvantage. "He'll tell you he's going to stop by," says Avent, who lives across the country from Hogan. "But he's made 40 other friends in the area. He'll start at one end and you'll never see him. Six months later, you say, 'I thought you were coming by' and he'll say, 'I got busy.'"

No one seems to hold it against him, though, mainly because Hogan can charm the leaves off an evergreen.

Legendary British gardener Christopher Lloyd, who could be equally engaging but more acerbic, traded quips and friendship with Hogan for 20 years. The two met at California's Berkeley Botanic Garden, where Hogan was horticulturist from 1988 to 1995, and Hogan unwittingly influenced one of Lloyd's most infamous gardening decisions: to tear out the 70-year-old rose garden his mother,

Daisy, planted at Great Dixter, Lloyd's über-famous garden in Sussex, England.

"I gave him starts of some things hardy banana, agave, various hardy succulents," Hogan recalls with a smile. "I didn't really know about his famous rose garden, but I got a card that said, 'I planted your bananas. Tore out roses. They'll talk.' "

"They" did talk—the gardening world, especially in we-do-it-a-certainway Great Britain, was scandalized by Lloyd's flamboyant new subtropical garden. Hogan and Lloyd were amused, not surprising for two men with a penchant for pushing boundaries.

THE POWER OF STORY

Hogan also likes to engage people's imaginations with stories that often change the way they think about plants. A good example of this comes on a fall afternoon at Hogan's home garden in Portland. About a dozen women from a garden club listened as Hogan patiently identified plants he's identified 100 times before. The oak (Quercus hypoleucoides) that doesn't look like an oak. The Chinese rice-paper plant (Tetrapanax papyrifer) that, yes, is hardy. The palm that comes from a plant found at a temple in Japan. There are bits of Chile, South Africa, San Francisco, and Portland in the garden, he told them. Hogan explained that plants can be more than the sum of their parts. He's making the point that they come with stories and the stories make a difference.

"It's one thing to understand where a plant came from in the wild; that's a teaching moment," Hogan explains. "But if you know the history of where it came from in cultivation, it adds another very rich layer. It gives a sense of place, a sense of history."

To emphasize this, he relates a story. "There's a little white primrose that grows on the Falkland Islands. There was a fellow who was the captain of a ship that was sunk during the Falklands War. He rescued only one thing when he abandoned ship. The King of Saudi Arabia had given him a gold-bound volume of a book on the flora of Saudi Arabia, but what he grabbed was that little primula. He took it back to England and named it 'Swan Song' for the ship, which was called The Swan." Summing up, Hogan says, "There is a difference between that plant and the primrose sold at the grocery store."



Hogan has a soft spot for prickly pears (Opuntia spp.) This one is O. basilaris 'Peachy'.

Even if the tale is forgotten by its audience, Hogan believes in its power. Somewhere in the brain is a spark that will light upon sight of a primrose.

For Hogan, knowledge is a powerful addiction, one he hopes others will develop at Cistus. He and Sanderson built a covered area, intimate with exotic plants, where people are encouraged to have a seat and a conversation. This design was inspired by the salonlike atmosphere of Western Hills Nursery in California's Sonoma County, where Hogan volunteered in his 20s. "Seeing people meeting each other, hearing different languages, watching connections being made," he says. "That gives me the biggest high."

ADVENTURES IN PLANT HUNTING

Perhaps the only bigger high Hogan gets is from plant hunting, where his extreme focus on the task at hand is legendary. On



Hogan's design aesthetic shows through in this elaborate border that flanks Cistus's entrance.

plant-collecting trips, Hogan can get so caught up keying out a plant or just musing at its wonderfulness that, all of a sudden, he realizes he's headed for an all-nighter when everyone else is heading to bed. "He focuses on what's right in front of him, not the future," says Avent, who has traveled with Hogan.

If you can get Hogan to sit still long enough, the stories tumble out. On expeditions to South Africa with Sanderson, he encountered baboons with good throwing arms, ended up at the hospital with a more-serious-than-usual case of food poisoning, and came across a red,

Resources

Flora: A Gardener's Encyclopedia, Sean Hogan, Chief Consultant. Timber Press, Portland, Oregon, 2003 (two volumes).

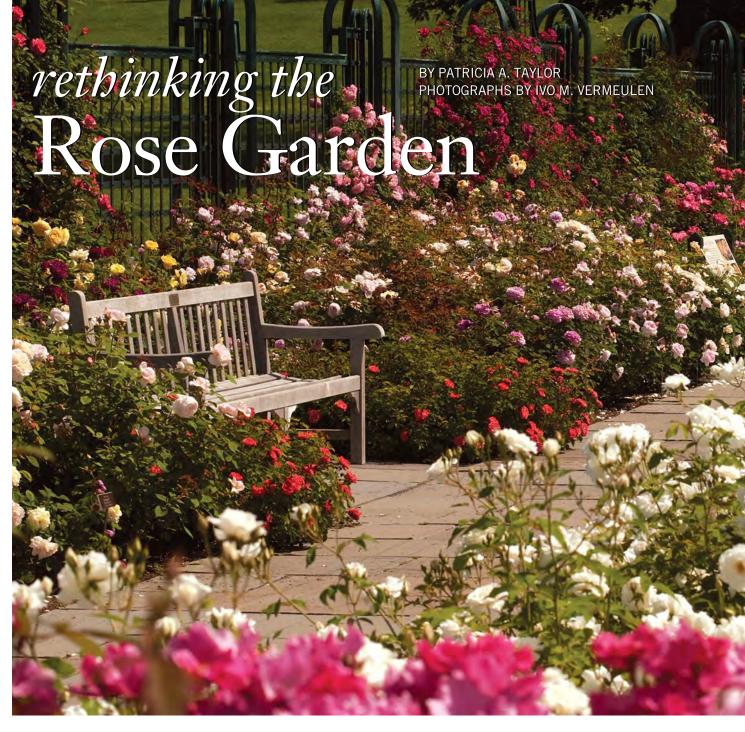
Trees for All Seasons: Broadleaved Evergreens for Temperate Climates by Sean Hogan. Timber Press, Portland, Oregon, 2009.

black, and green poisonous viper that looked just like a euphorbia. "We were in the land of mimicry, so we mimicked a wild hare and ran," he says, laughing from the safety of time and distance.

Running isn't always an option. On another trip to South Africa in 1991, the two arrived in a remote region, only to be told the local constable requested their presence. Politics being what they were, refusing seemed unwise. The day unfolded with a paddy wagon ride, ranch hands with rifles, a drunken Afrikaner barbecue, "Northern Exposure" on TV, a car accident, and a ride in a BMW with the 1970s pop group Bread blaring on the radio. "It was a cacophony of weirdness," says Hogan, noting that the constable turned out to be a "sweet, sweet guy and intensely passionate gardener."

Weirdness aside, the experience makes for a great story, one he'll be telling for years to come as he walks through the greenhouses of Cistus, always with people following along, listening, looking, and learning.

Kym Pokorny has been the garden writer for The Oregonian for 14 years.



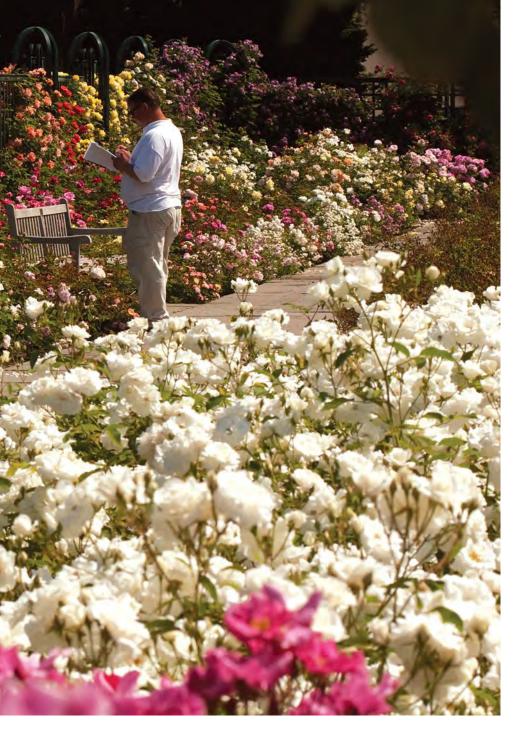
Roses that require chemical coddling need not apply to the newly restored Peggy Rockefeller Rose Garden at the New York Botanical Garden.

T WAS THE spring of 2007 and Peter Kukielski found his eyes tearing as he surveyed the 1.04-acre Peggy Rockefeller Rose Garden at the New York Botanical Garden (NYBG). There was 'Dainty Bess', dubbed one of the most beloved of the single hybrid teas, with its mahogany-tinted stamens nestled among soft shell-pink petals. The exceptionally fragrant 'Mystic Beauty', a light-pink, continuous-blooming Bourbon rose, was close by. These two and another 400 rose cultivars had just been sentenced to death by Kukielski, the garden's curator.

It was not supposed to be this way. Just a year before, he had been hired by the NYBG, located in the Bronx, to oversee a \$2.5 million restoration and to maintain the rose garden's status as one of the most beautiful in the United States. During the previous winter,

Kukielski had supervised infrastructure improvements, soil amendments, the addition of new roses so that the garden was in continuous bloom from spring into fall rather than just in June and September, and the repositioning of many roses to add an educational component to the garden's mission.

And then he was informed about New York City Local Law 37. This new law prohibits the use of three groups of pes-



ticides on city property. The botanical garden had just learned that it fell under the law's purview; its rose garden, in particular, was regularly drenched with a cocktail of the banned pesticides.

Suddenly, just a year after arriving from Atlanta, where his company designed rose gardens for large estates, Kukielski was faced with an immense challenge: turning a garden that was, as he puts it, "living on an I.V. drip of chemicals," into one that showed it was possible to grow extraordinarily beautiful roses not only without pesticides, but also without extra fuss and care.

Roses that Kukielski personally loved, such as the aforementioned 'Dainty Bess', had to go. Others, which shall remain nameless, he admits he was glad to toss. All had been bred primarily for beauty, with little thought of the care and the chemicals needed to keep them alive. Even with weekly spraying, many were covered with black spot and yellow foliage by the time September rolled around.

Thanks to breeders like Bill Radler, who developed the popular and robust Knock Out™ rose series, there were some roses in that spring of 2007 that bloomed all season without the use of



Above: Peggy Rockefeller Rose Garden Curator Peter Kukielski with 'Mother of Pearl' roses. Left: Kukielski evaluates roses in the David Austin English rose border. In the foreground are two floribunda rosesdark pink 'Betty Prior' and white Iceberg™.

chemicals. But these roses, to devotees at least, offered little that was special beyond their vigorousness. To someone like Kukielski, who readily bills himself as a rose fanatic, roses should be enchanting. They should beguile with lush beauty and delicate fragrance.

WORLDWIDE SEARCH

Like many rosarians, Kukielski had viewed with dismay the decline in popularity of roses among the American gardening public in the last 50 years because of the flower's reputation for excessive care and spraying in home gardens. Kukielski was aware, however, that there were breeders both in the United States and abroad who were seeking to bring roses back into gardens by creating vigorous, beautiful, disease-resistant plants.

To find these plants, Kukielski spent the winter of 2008 traveling around the world—via the Internet. He contacted Germany's preeminent nursery, W. Kordes Sohne. A five-generation rosebreeding machine, Kordes introductions have won more awards in All Deutschland Rose (ADR) trials than those from any other firm. (The ADR trial is a three-year evaluation of new varieties at 11 locations throughout Germany; absolutely no pesticides are used.) "With



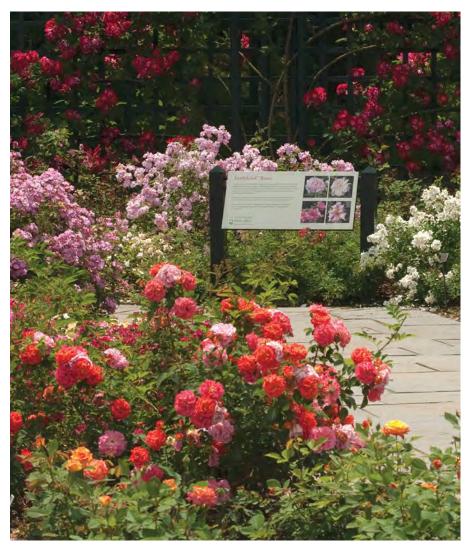
extraordinary healthy foliage," Kukielski says, "Kordes roses are stand-outs among no-spray varieties."

He clicked over to the House of Meilland in France, where six generations of the family have been busy breeding roses, among them the world-famous 'Peace' rose. Today, the firm's emphasis is on exquisite, often fragrant, roses that require little or no spraying. Among these are the dwarf, everblooming shrubs in the Drift™ series introduced in 2008.

Closer to home, there was G. Michael Shoup of the Antique Rose Emporium in Brenham, Texas. For almost three decades, Shoup has been hunting for and introducing fragrant old-time roses mute legacies from settlers of a century and more ago that had become wild along Texas back roads and cemeteries. He has also used these tough old-timers as parents of carefree, repeat-blooming roses that are often almost prickle free.

A little further north, at the Texas AgriLife Extension Service in Dallas, Kukielski reviewed the Earth-Kind® roses. Starting in 1990, the Service established plant trials in which roses were left on their own in baking heat for four years—no fer-

Top: A panoramic view of the expansive Peggy Rockefeller Rose Garden. Right: The garden introduced its trial site of Earth-Kind roses in spring 2010.



tilizer, no pesticides, no fungicides, and, after the first year, no water. Those that not only survived—and it was surprising to many that there were survivors at all—but also looked good were designated Earth-Kind roses. Among these, 'Ducher'—bred in France in 1869 and featuring elegant, fragrant, ivory-white flowers—has been a star at the Peggy Rockefeller Rose Garden. (Earth-Kind trials are now being conducted in public gardens throughout most of the eastern half of the U.S. and in California, Oregon, and Alaska.)

Up in Minnesota, Bailey's Nurseries, another multi-generational firm, was also developing stellar roses, thanks to the breeding work of Ping Lim. Hired in 1992, Lim is responsible for many award-winning roses as well as the recently introduced ever-blooming, fragrant Easy Elegance™ Rose series. Bailey's is so convinced of their vigor and resistance to disease that it offers a two-year guarantee to all home gardeners.

Kukielski also sought out roses developed by the late Griffith Buck. A professor at Iowa State University, Buck was one of the first recognized breeders to introduce disease-resistant roses. Over four decades, he named 90 different varieties. "These are great roses," Kukielski says, "not only for the harsh climate of the American prairie, where they were bred, but for any climate. Among these, 'Quietness', with soft pink, fragrant, ever-blooming flowers, is a stand out."

MAKING SPACE

When Kukielski had finished his research, he had a list of 1,700 roses that he wanted to add to the garden. That meant an almost equal number had to go. By reconfiguring the beds, he was able to whittle down the discard number to 1,300. Still, that is an awful lot of roses to put on the chopping block. In addition, breeding work is on-going, so every year Kukielski learns of new, exciting roses. Since the only way he can acquire them is to banish other roses from the garden, it has now become a one-for-one tradeoff.

This tradeoff regimen is rough. Last summer, for example, Kukielski saw a rose description in the Kordes catalog and on the spot decided he had to have it. The more difficult decision was how to eliminate a rose to make room for it.

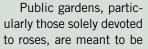
WHAT IS A SUSTAINABLE ROSE GARDEN?

A sustainable rose garden, such as the Peggy Rockefeller Rose Garden, is not necessarily an organic garden. While the roses in such a garden are either disease resistant or completely impervious to diseases, they are subject to insect infestations. When the pests are particularly numerous, sprays are often used. Generally, organic sprays are tried first, but if they are not effective, synthetic chemicals are applied.

That said, the Margaret Hagedorn Rose Garden at the U.S. Botanic Garden in Washington, D.C., is totally organic. This status, according to its director, Holly Shimizu, was a decision by the entire staff. The garden, however, is not a monoculture—that is, it does not consist only of roses. Perennials are mixed in with disease-resistant roses and the carefully chosen combination of plants helps to deter pests and diseases.

Out on the West Coast, the Huntington Rose Garden, under the aegis of its longtime curator, Clair Martin, has been almost spray-free for over two decades. Much

of this is due to stringent state laws that have increasingly banned the use of toxic chemicals in public places. Martin points out that the relatively dry climate in San Marino, California, is also conducive to discouraging disease. That, plus the careful selection of roses, decreases the need for regular applications of synthetic pesticides.





The rose garden at The Huntington in San Marino, California

beautiful displays. As is evident from Peter Kukielski's example, an incredible amount of work is needed to enable a public rose garden to make the transition to a sustainable one. There is another factor as well: time. As Martin points out, "Once you break away from chemicals, it takes at least three years to get the garden back into balance with nature and the soil healthy." While a rose curator might argue in favor of such an approach, a garden's trustees, charged with overseeing a beautiful creation, may be more reluctant to do so.

Currently, there appears to be no overall trend toward creating sustainable public rose gardens. However, with the increase in new laws restricting the use of toxic chemicals in public areas, as well as the superb breeding work by rose fanciers both in this country and abroad, expect to see more such beautiful and inspiring gardens in the near future.

—P.A.T.

To ensure that the newcomers perform to expectation and that old-timers remain competitive, he introduced an evaluation system in 2009. Every month, Kukielski and garden volunteers rate each rose with regard to floral beauty, foliage attractiveness, fragrance, and overall vigor. These evaluators are tough. Only 22 of the 487 repeat-blooming varieties in the garden received Superior

ratings in 2009 and 2010. (See sidebar on page 39 for list.)

Roses that end up at the very bottom of the list are candidates for disposal. Yet a few of these are retained, because the garden has an educational mission to demonstrate the history and evolution of rose breeding. So in designated areas of the garden, visitors can see the old, fragrant hybrid tea roses, a collection of heritage roses, a swath



'Awakening' roses climb the central gabezo in the Peggy Rockefeller Rose Garden.

of David Austin English roses, and classics such as the 'Peace' rose. These areas of the garden are sprayed as needed with approved pesticides so that they do not look like a wasteland by early fall.

STANDING ON THEIR OWN ROOTS

Kukielski points out that just about all roses—newcomers and classics—added to the collection are brought in on their own roots. Own-root shrubs are just that; a single plant from top to bottom. Grafted shrubs are two-part creations. Generally the roots—or understock of a grafted plant determine its height and shape, while the upper section—the scion—exhibits the attributes of its flowers and foliage. The advantage of grafting is that a relatively young plant can be grafted onto established roots, which means a larger shrub the first year in the garden.

Sources

Chamblee Roses, Tyler, TX. (800) 256-7673. www.chambleeroses.com. Heirloom Roses, St. Paul, OR. (503) 538-1576. www.heirloomroses.com. Northland Rosarium, Spokane, WA. (509) 448-4968. www.northlandrosarium.com. Pickering Nurseries, Port Hope, ON, Canada. (866) 269-9282. www.pickeringnurseries.com. Regan Nursery, Fremont, CA. (800) 249-4680. www.regannursery.com. Roses Unlimited, Laurens, SC. (864) 682-7673. www.rosesunlimitedownroot.com.

Resources

Just Say No to Chemicals—My Journey to All Natural Rose Gardening by Paul Zimmerman, Article based on lecture to New York Botanical Garden, www.paulzimmermanroses.com. The Sustainable Rose Garden edited by Pat Shanley, Peter Kukielski, and Gene Waering. Casemate/Newbury Books, Havertown, Pennsylvania,

"While own-roots roses, when compared to grafted roses, take a little more time to build up and become established," Kukielski says, "they are always true to their variety. They are also more likely to survive hard winters and temperature fluctuations. Basically, these are healthier plants and less prone to pathogens."

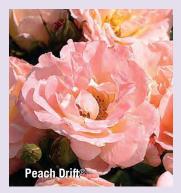
It is relatively easy to distinguish an own-root rose from that of a grafted rose at a garden center. If there is a little woody ring or a knob at the base of the plant, it indicates a graft has been made.

Because the Peggy Rockefeller Rose Garden is a monoculture garden—only one type of plant is grown—it is essential that the healthiest possible plants are initially included in its designs. Most other garden areas contain a mixture of plants—shrubs, perennials, and annuals —and this mixture ensures that no one pest can wipe out the entire display.

TOP-RATED PERFORMERS AT THE PEGGY ROCKEFELLER ROSE GARDEN

In alphabetical order, the following 22 repeat-blooming roses were the only ones among 487 varieties to receive Superior ratings in both 2009 and 2010. For a list of the Top 100 Performers by year, go to www.nybg.org, click on "Gardens & Plants," then "The Collection," and then on "Rose Garden."





NAME	CLASS	FLOWER TYPE/COLOR	
Brother's Grimm Fairy Tale™	Floribunda	Double/deep red-orange	
Caramel Fairy Tale™	Shrub	Double/light amber-yellow	
Cinderella Fairy Tale™	Shrub	Double/light pink	
'Ducher'	China	Double/white	
Easter Basket™	Floribunda	Semi-double/pink-edged yellow	
Home Run™	Shrub	Single/deep red	
'Jasmina'	Large-flowered climber	Very double/pink-violet	
'Karl Ploberger'	Shrub	Double/pale yellow	
Kordes Moonlight™	Large-flowered climber	Semi-double/coppery yellow	
'Kosmos'	Floribunda	Very double/creamy white	
Lady Elsie May™	Floribunda	Semi-double/orange-pink	
Laguna™	Large-flowered climber	Very double/magenta-pink	
'Larissa'	Shrub	Very double/pink	
Lions Rose®	Floribunda	Very double/creamy white, pink blush	
'Macy's Pride'	Shrub	Double/creamy white	
'Mother of Pearl'	Grandiflora	Double/pink	
Peach Drift®	Shrub	Semi-double/peach-apricot	
Pink Drift®	Shrub	Single/deep pink	
'Purple Rain'	Shrub	Double/purple-pink	
'Quietness'	Shrub	Double/light pink	
Rosanna®	Large-flowered climber	Very double/salmon-pink	
Traviata™	Hybrid tea	Very double/red	

For example, rose slugs—the larvae of primitive wasps called sawflies—wreak havoc on rose foliage while leaving that of catmint (Nepeta spp.) unharmed. By interspersing catmints with rose shrubs, rose slugs are blocked from a straight-line attack on the roses. Because Kukielski does not have such a mixed-planting option in his garden, the roses that come out on top of the monthly evaluations are truly extraordinary.

EXPANDING AVAILABILITY

Quite a few of the roses Kukielski has selected, particularly those developed by European breeders, are not only unfamiliar to American gardeners but also unavailable. By displaying them in the Peggy Rockefeller Rose Garden, Kukielski hopes to create enough interest among American suppliers that they will offer them.

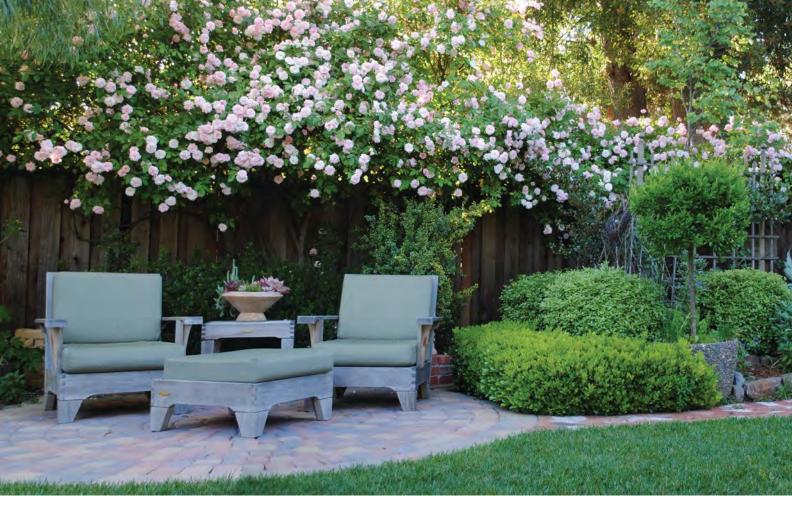
"I feel this is where we have a key role," he says. "In all honesty, there are many rose varieties on the market that are beautiful but not great garden plants. These roses require too much effort to maintain, both in terms of chemical sprays and fertilizers. Working in the public garden arena, I want to show everyone that comes to the Peggy Rockefeller Rose Garden that they too can easily grow roses in their own gardens."

To aid gardeners too far away to visit the Garden, Kukielski has co-edited, with Pat Shanley and Gene Waering, The Sustainable Rose Garden (see review on page 55). Through that book as well as through garden visitors, Kukielski has embarked on a crusade—one that ironically he might not have undertaken without the help of Local Law 37.

Faced with a challenge, Kukielski turned it into an opportunity—one that proved both satisfying and exciting. One testament to the success of his approach came from the Great Rosarians of the World (GROW), which bestowed its 2010 Rose Garden Hall of Fame Award on the Peggy Rockefeller Rose Garden. In announcing the award, GROW officials noted that, "Through the vision of Curator Peter Kukielski, the Rose Garden has undergone a tremendous renovation and transformation...which has resulted in creating a sustainable public garden, representing an outstanding collection of roses that...can be grown without harming the environment."

"I personally want to bring the rose back as a great garden plant," Kukielski proclaims. "It is a plant that now needs little effort to maintain and little to no chemical intervention. It is available in many sizes, shapes, and colors, has the longest flowering time of all blooming shrubs and, finally, is just absolutely, incredibly beautiful."

Patricia A. Taylor is a garden writer based in Princeton, New Jersey.



Garden Secrets

Using vertical gardening techniques can reduce the visual impact of unattractive landscape features.

BY SUSAN MORRISON AND REBECCA SWEET

PHOTOGRAPHS BY REBECCA SWEET

EVEN THE loveliest of gardens can harbor an eyesore. Whether it's an ugly (and noisy) air-conditioning unit or a looming utility pole, most of us have something in our gardens that we wish would just go away. When budget or practical considerations preclude that option, the best approach is to blend, hide, or soften the appearance of those offenders to minimize their impact in the landscape. Learning a few easy design strategies and knowing the right plants to use is all it takes.

HIDE IN PLAIN SIGHT

While your first thought might be to simply hide an eyesore with a screening plant, this plan can sometimes backfire, depending on the plant you choose. Whether a plant stands out or blends in has a lot to do with its texture. A large, dense shrub with big, coarse leaves plant-

ed directly in front of an object will often draw the eye toward the very thing you want to disguise. While it is certainly effective at blocking a view, it doesn't provide a particularly attractive alternative.

When trying to disguise something, it's better to use a plant with fine textures. From a distance, finely textured plants

with small or narrow leaves appeal to the eye without demanding a lot of attention. When placed in front of or near an object, the plant's delicate features help the object appear to gently recede into the background. Examples of these types of plants include grasses such as *Miscanthus sinensis* 'Morning Light', with its narrow leaves,



Above: Delicate leaves and an open form make evergreen hopseed bush (*Dodonaea viscosa*) an appropriate choice to draw the eye away from the downspout of this house. Opposite: A 'Cécile Brunner' climbing rose provides additional height to a fenceline, screening out unwanted views.

and shrubs such as *Euonymus japonicus* 'Green Spire', with its small, variegated leaves and open habit.

Barbecues and Other Built-Ins. To draw attention away from the bulky shape of built-in elements in your yard—such as barbecues, fire pits, or hot tubs—place a finely-textured plant nearby to help them blend into their surroundings. You won't be able to completely hide these things—nor should you need to—but you can certainly soften their visual impact with a green, living screen.

Keep the ultimate size of a plant in mind when making your selection; you don't want it to grow so large that it eventually overpowers your space. Who wants to be completely isolated from the rest of the yard by a dense, massive shrub when barbecuing or relaxing in the hot tub? Vertical plants work well, as they have the height to get the job done without eating up too much garden space. The plant you choose should also be tough enough to withstand any residual heat or chlorine, such as *Euonymus fortunei* 'Emerald 'n Gold' or *Camellia sasanqua* 'Setsug-

ekka'. And don't forget, plants near barbecues or fire pits can't be allowed to grow too tall or flop over where they might touch a flame or scalding-hot surface—for obvious reasons!

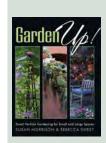
Downspouts. These are necessary yet potentially distracting elements around your home. Typically made from aluminum, galvanized metal, or plastic, they rarely harmonize with the architecture of your house or your landscaping. While they might not consume a lot of space, they can be attention grabbers.

Softening the outline of a downspout with larger shrubs is a good way to reduce its impact. Again—plants with large, bold leaves tend to draw attention, so opt instead for those with soft, feathery foliage, such as yew pine (Podocarpus elongatus 'Monmal') or hopseed bush (Dodonaea viscosa).

There are a few other things to keep in mind when selecting plants to place near a downspout. The soil needs to have excellent drainage to prevent root rot, especially in wetter climates. Remember to leave plenty of room between the plant and the downspout so that the foliage of the plant when it is mature won't block the bottom of the drain.

Some downspouts can be quite beautiful, of course, especially when they are made from copper or another natural material. If you're lucky enough to have one of these, consider growing a delicate vine up the downspout. The beauty of the downspout will still shine through, and the vine will act as another design element.

When choosing a vine, make sure it won't grow so large or heavy that it pulls the downspout off the side of your house or smothers your roof in a blanket of green. Wisteria, ivy, and trumpet vines,



This article is excerpted and adapted from *Garden Up! Smart Vertical Gardening for Small and Large Spaces* by Susan Morrison and Rebecca Sweet (Cool Springs Press, Brentwood, Tennessee, 2011, \$19.95). Used with permission from the publisher.



The use of vertical plants and upright garden accessories transforms a tiny suburban yard, above, into a private, tropical retreat, right.

for example, grow too large for a gutter to support. The constant effort required to prevent them from covering a roof makes them an impractical choice. Instead, plant a deciduous vine with an ultimate height of 15 feet. Deciduous vines are lighter, so in stormy conditions are less likely to be pulled off than a heavier, evergreen vine. Examples of delicate deciduous vines to consider are some species of clematis, Mexican flame vine (Senecio confusus), and orange clock vine (Thunbergia gregorii).

OUT OF SIGHT, OUT OF MIND

Sometimes something is just too utilitarian or downright unattractive to blend in with the rest of the landscape. Whether it's an air-conditioning unit, a utility pole, or a neighbor's roofline, softening it might not be enough. What you need is a way to permanently hide an object or view—whether that's using evergreen plants, a cleverly placed trellis, the art of distraction, or a combination of all three.

Air-Conditioning Units and Heat **Pumps.** Why is it that these bulky things often seem to be placed right in the middle of prime garden views? Not only that, but they offer no aesthetic value to your landscape, and when they're running, they are loud and blow out hot air.

When you want to conceal an airconditioning unit or heat pump with plants, select tough varieties that can stand up to hot air that will likely be blowing directly on them. Plants should be spaced a minimum of two to three feet away from the box, as good air cir-



culation is required for the unit to operate efficiently. Also be sure to keep one side of the unit free of any plants for easy access and maintenance.

Avoid planting a single specimen directly in front of a heat pump or AC unit; instead of distracting the eye, it can have the opposite effect, making the unit more prominent. A better strategy is to place a group of plants next to the unit to help nudge a viewer's gaze to a more pleasant view.



Because they are approximately the same height and depth, these flowering quinces (Chaenomeles sp.) make an air-conditioning unit less conspicuous in this planting bed.

Utility Poles. A seemingly simple solution to an obtrusive utility pole is to wrap netting around it and grow a vine that will "skirt" the pole. This could be a problem, however, when utility workers need to access the poles. Most utility companies require a fivefoot easement around a pole for access. When plants grow into this space, pruning becomes the responsibility of the homeowner—you. If a plant is not pruned when requested, utility company workers may be forced to prune it themselves, whether the homeowner agrees or not. Since the poles are city property, the utility company will always have the right to remove vines.



If you decide to plant a vine, make it a fast-growing annual, such as golden hops (Humulus lupulus 'Aureus'), blackeyed Susan vine (Thunbergia alata), or morning glory (Ipomoea sp.) Annual vines can grow 20 feet in a single season. If access is required later, removing them is fairly easy and inexpensive.

Utility Boxes. If you have underground utilities, you won't have the problem of looming poles and overhead lines that exist in many neighborhoods. Still, you may end up with a large utility box placed on your front lawn. These boxes are typically filled with high-voltage components, so

significant open space is required on all sides for safe and easy access.

A simple solution is to focus on screening the sides and rear of the box, which are most visible from your garden and home, while leaving the front that faces the street open for easy access.

This can be done by planting flowerbeds that will shield your view of the utility box, using a decorative fence or small trellis as the backbone of this small bed. In addition to providing an attractive background for shorter plants, a fence may also prevent plants from spreading into the required open space. Using a trellis to supgrow quite tall, especially when trained along the top of a fence. Climbing roses provide months of gorgeous blooms, a garden full of scent, and decorative rose hips in fall. Even in winter, when the roses have lost their leaves, their bare branches will continue to provide partial screening. Hardy and vigorous climbing rose varieties include 'William Baffin', 'New Dawn', and Fourth of July™.

For maximum year-round coverage, consider evergreen trees and shrubs with dense foliage. If room allows, place the plants in a staggered pattern rather than in a single straight row; a staggered



Left: Use fast-growing annuals, such as golden hops (Humulus lupulus 'Aureus'), to "skirt" utility poles. Above: Fast-growing, narrow hopseed bush and compact Carolina laurel cherry (Prunus caroliniana 'Compacta') hide the view of a neighbor's unattractive roofline.

port a small vine creates an additional design element in the planting beds.

Rooflines. Love thy neighbors, but not their rooflines? In residential neighborhoods, undesirable views of rooflines are one of the most common homeowner complaints heard by garden designers. Plants that can be used as screens to effectively block out an offending view should provide additional interest-such as fragrance, colorful blooms, or beautiful eyecatching foliage.

Climbing roses are a good choice. Depending on the variety, they can both fit within a narrow planting bed and still arrangement increases the area's perceived depth and offers more visual appeal. In very narrow spaces where only a single row is feasible, mix your plantings and stagger heights to create an illusion of depth.

SOFTENING CHAIN-LINK FENCES

Here's a design problem that a lot of homeowners must contend with: a chain-link fence. Though functional, most chain-link fences lack style as well as provide little privacy—and removing them is usually not practical. However, you can easily soften a fence's harsh line and make it less obtrusive or even more attractive. All you need are



the right plants, plus materials available at your local home-improvement store or neighborhood garden center.

Using plants to break up lines. One solution is to use a chain-link fence as a giant trellis to support a mix of vines that can cover the fence with both foliage and flowers. While annual vines such as the common morning glory grow the fastest, they only last for one season and will need to be replanted each year. For most gardens, perennial or evergreen vines are a better choice because they will provide years of beauty once established.

When choosing a vine, avoid those that develop large woody trunks. Not only can they overpower a garden, but, over time, they will destroy a fence. More suitable are vines that are manageable in size and weight, such as honeysuckle (*Lonicera* × *brownii* 'Dropmore Scarlet'), evergreen wisteria (*Millettia reticulata*), or Carolina jessamine (*Gelsemium sempervirens*).

Add another layer of fencing. Another simple and inexpensive way to soften your chain-link fence is to install reed fencing in front of it. Available at most



Above: Honeysuckle covers a chain-link fence with summer blooms. Top: A brightly painted lattice conceals a chain-link fence and provides a colorful backdrop for the garden.

garden centers, reed fencing is easy to attach to a chain-link fence with twist ties. It offers immediate coverage and provides a beautiful natural background for surrounding planting beds. This type of fencing is available in neutral colors, making it a good choice to create a simple backdrop for lush planting beds. It has the added advantage of providing nearly complete visual privacy, and, de-

pending on the height of your chain-link fence, can increase the height of your screening by an extra foot or two.

An assembly of lightweight wooden trellis panels, readily available at most garden centers, can also make a good additional layer of fencing. Paint the panels a neutral color if you want the fence to recede into the background, or go bright to transform the fence into a bold design statement. To take this idea one step further, consider inserting small random mirrors or decorative tiles within the fence.

WORK WITH WHAT YOU HAVE

As you can see, no matter what you have in your landscape that detracts from its beauty, there is often a fairly simple solution. Sometimes it's necessary to view the problem as an opportunity to turn lemons into lemonade. With a little creativity, you can minimize negative visual impacts—and perhaps get something more in return.

Susan Morrison and Rebecca Sweet are landscape designers in northern California and the co-authors of Garden Up! (Cool Springs Press, 2011).



GARDEN SOLUTIONS

No-Sweat Tips for Great Garden Soil

by Scott Aker

ARLY IN MY career as a gardener, I was convinced that Hard work was needed to prepare the soil for planting. ✓ I dug deeply and incorporated peat, decayed manure, and several other additives. Once parenting demanded more of my time, I had to settle for simply mulching instead of all that digging in part of my garden. After a few years of this, I was surprised to find that my intensely amended and tilled soil was no better than the soil that only received mulch. The mulch had encouraged a host of creatures to inhabit the soil, and these were far more effective than I could ever be in improving it.

Avoiding many garden problems starts with your soil. Here are my best tips for taking care of it without needlessly breaking your back in the process.

LET SOIL GUIDE YOUR GARDEN

I have never heard a gardener boast that he or she has the perfect soil, probably because it doesn't exist. Perhaps you think your soil is too wet, too dry, too poorly drained, lacking in nutrients, or too light to hold plants against strong winds. Sandy soil is great where rainfall is plentiful, but doesn't hold nutrients well. Clay soil holds nutrients beautifully, but may stay soggy for long periods of time.

While it is possible to improve almost any soil from the top down by adding organic matter, to a large degree success in your garden depends on accepting the soil you have and growing the plants that thrive in it naturally. If your soil is sandy, you'll find you can grow terrific melons, as well as prairie plants and succulents. If you have slow-draining, heavy clay soil, your best bet may be creating a perennial garden with plants that tolerate wet feet, such as cardinal flower (Lobelia cardinalis), Siberian iris (Iris sibirica), and ornamental sedges (Carex spp.).

That said, a soil test can help guide your selection of amendments. For example, if you discover that your soil is not acidic enough for the blueberry bushes you have your heart set on, you can try using pine straw as mulch. (For more on soil testing, see articles linked to this one on the AHS website, www.ahs.org.)

NATURE KNOWS BEST

If you want great soil, emulate nature. That means providing lots of organic matter. This will support a complex web of life that is essential to healthy soil that can resist invasions of soilborne diseases, provide essential nutrients to your plants, and maintain optimal moisture levels.

To reap these benefits, apply chopped leaves, rotted manure, or other available organic matter once or twice a year in a layer no more than two inches deep. Also, avoid compacting the soil, which can eliminate the spaces between soil particles that provide oxygen to all the things that live in your soil, including plant roots.

GUARD AGAINST CONTAMINANTS

Be careful about what you put into your soil. There are many pests, diseases, and weeds that find their way into your garden via soil from somewhere else. For example, insects such as black vine weevils and Japanese weevils may hitch a ride in a new plant and escape detection until they've wreaked havoc in your garden.

Fungal diseases such as verticillium wilt, Southern blight, and phytophthora root rot can also arrive in potted plants and in improperly handled mulch. All result in the sudden collapse



A tomato infected with Southern blight, a common soil-borne disease.

and wilting of otherwise healthy plants. Southern blight and verticillium wilt are nearly impossible to eradicate once they get into your soil, which may force you to drastically limit the plants you grow in your garden.

Oxalis, chickweed, yellow nutsedge, and other difficult weeds may be lurking in soil that trees, shrubs, and perennials are sold with. The best way to prevent all these problems is to hold new plants—whether purchased or passed along from friends or neighbors—in a quarantine area so you can monitor them for a few weeks to ensure that you won't be planting a problem.

This spring, I encourage you to take time to really get to know and appreciate your soil. As you dig into it, hold some in your hand, take a close look at its texture, and breathe in its aroma. Notice all the things that call it home. Examine the different stages of decay going on in it. Knowing more about your soil will make you a better gardener.

Scott Aker is a Washington, D.C.-based horticulturist. For 10 years he wrote the "Digging In" column for The Washington Post.

Gardening Q&A with Scott Aker

FIZZLING FOXGLOVES

I've grown foxgloves in my partly shaded perennial border for several years. At first they were fine, but last year the foliage turned bronze and dried up and the flower stalks didn't develop properly. Do you know why this might be happening?

Your foxgloves are probably host to thrips or mites, or, more likely, both. Both pests are tiny, so in order to identify them, hold a piece of white paper under some of the affected leaves and then tap on the leaves vigorously. Use a magnifying glass to examine whatever falls on the paper.

Thrips are small torpedo-shaped insects, generally yellow in color, that scrape away leaf tissue and ingest the sap. This results in very small linear white stipples on the leaves, and causes them to curl a bit. Mites are small round creatures about the size of a period. They feed by piercing the leaves and sucking up the sap. They also stipple the foliage, but their stippling is more yellow. If left untreated, either of these pests can injure the leaf tissue so badly that the leaves turn bronze and may eventually dry up.

Mites and thrips get started in the first warm days of spring, so keep damage to a minimum by looking for these pests as soon as the leaves start to emerge. You may be able to discourage a developing population by spraying the foliage weekly with a strong jet of water. Both pests thrive in hot, dry conditions, so you might also

try moving your foxgloves to a cooler site. If all else fails, you can try using a pesticide containing neem or horticultural oil to control mites, or apply a product containing spinosad to control thrips.

REVERTING SPRUCE

I planted a dwarf Alberta spruce next to my front door four years ago, and it has since grown to four feet tall. This spring I noticed that a branch about six inches from the top is sticking out and has much larger needles than the rest of the plant. Should I cut this branch off?

Yes, you need to remove this branch, which is known as a reversion. Dwarf Alberta spruce is simply a compact form of white spruce (*Picea glauca*). From time to time, individual buds may mutate back to the non-dwarf form. If left to grow, the reversion will transform your dwarf Alberta spruce into a much larger tree.

Cut the branch off well below the point it is growing from, even if that means removing the top of the spruce. Dwarf conifers that spawn one reversion sometimes produce more, so if your spruce exhibits this tendency, either remove it or transplant it to a location where it has more room to grow—a mature white spruce may reach 15 feet in diameter and 50 feet in height.

—S.A.

E-mail your gardening questions to Scott Aker at saker@ahs.org.

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HOMEGROWN HARVEST

Delicious and Dependable Peas

by Fiona Gilsenan



EAS (Pisum sativum) are easy-togrow cool-season vegetables with a long list of attributes: they can be sown directly in the ground where they germinate readily; their seeds are large and easy to handle; and with the help of soilborne bacteria, they feed themselves by fixing nitrogen in the soil. They are delicious raw or cooked—even the shoots can be snipped for salads—and they're full of protein, B vitamins, and fiber.

The familiar garden or shelling peas (sometimes called English peas) have tough, inedible pods; only the seeds are eaten. Snap peas are eaten whole—both the plump seeds and the tender pods. Snow peas are also eaten whole, but the flat pods are harvested while the seeds are still immature.

Tall varieties or vining types will climb a trellis to significant heights. Dwarf or bush varieties, which can be grown on supports or not, usually mature earlier

than vining types, and produce their crop over a shorter season.

GROWING GUIDELINES

Peas thrive in cooler temperatures, but with careful timing, gardeners in almost every part of North America can grow them successfully. Seed packages will indicate the number of days to maturity based on the date you sow. Most varieties require 50 to 70 days, although seeds planted in cool soil may take longer to sprout.

Young pea seedlings tolerate some frost, so in cooler climates, sow peas in late winter or early spring, after the soil has thawed. Select both early and late varieties to extend the harvest season. A second crop can often be grown in fall.

In warm regions, sow peas in the fall and winter to avoid the hottest months of the year. In areas with mild winters and cool summers, gardeners can sow peas virtually year round as long as the plants are regularly watered.

Peas need well-drained soil and full sun; they grow best with a soil pH of 6.0 to 7.5. If your soil drains poorly, amend it with compost or plant in raised beds to prevent seeds from rotting.

Be sure to erect your trellising system before or just after planting, otherwise stems create a tangled mess. Trellises for vining types should be six to eight feet high and reasonably sturdy; bamboo teepees work well, or you can string netting between posts. Although bush types can be grown without support, the air circulation provided by a trellis helps discourage diseases. A simple technique to support short vines is to insert branched twigs into the ground along the row to give them something to climb.

Soil inoculants—bacteria that help pea roots fix nitrogen in the soil—are available from most seed companies and can be sprinkled on seeds prior to planting. Although these beneficial bacteria occur naturally in many soils, using inoculants helps ensure a healthy population, particularly if past yields have been low.

Water peas deeply at least once a week-more when they are flowering

Planting Basics

GETTING STARTED In cold weather regions, sow peas in spring as soon as the ground can be worked; a second crop can be sown in early fall in many areas. In warmer regions, sow from late fall to late winter.

To speed germination and growth, soak seeds overnight and dust with an inoculant prior to planting.

SPACING Space bush peas in rows 16 to 18 inches apart; four feet apart for vining types. Sow seeds one inch deep and one to two inches apart.

DAYS TO MATURITY 50 to 80 days from seed, depending on the variety.



and setting pods. Keep the roots cool with a mulch of straw or compost, and weed carefully to avoid disturbing their shallow roots.

PESTS AND DISEASES

Many varieties are resistant to the most common pea diseases: fusarium wilt, powdery mildew, viruses (such as enation virus), and bacterial root rot. To further avoid diseases, provide good air circulation with proper spacing and vine support. Grow peas in a different bed each year, using a three-year rotation.

Aphids may gather on new shoots; pinch out the shoots or knock the aphids off with a strong jet of water.

RECOMMENDED VARIETIES

Shelling peas

- 'Alderman' (Tall Telephone). 80 days. Tall vines (up to eight feet) produce high yields of three- to four-inch pods.
- 'Mr. Big'. 67 days. This 2000 All-America Selections (AAS) winner has pods up to six inches long and vines to four feet. Resistant to wilt and powdery mildew.

Sources

Territorial Seed Company, Cottage Grove, OR. (800) 626-0866. www.territorialseed.com.

W. Atlee Burpee Seed Company, Warminster, PA. (800) 888-1447. www.burpee.com.

West Coast Seeds, Delta, British Columbia, Canada. (888) 804-8820. www.westcoastseeds.com.

Snap peas

- 'Sugar Snap'. 62 days. A 1979 AAS winner, it grows four to six feet tall with sweet, three-inch pods.
- 'Sugar Ann'. 52 days. An early-ripening bush pea bears sweet, crisp pods on twofoot plants. A good choice for small gardens.

Snow peas

- 'Oregon Giant'. 65 days. Four- to fiveinch pods on three-foot-tall vines.
- 'Mammoth Melting Sugar'. 70 days. Produces pods up to five inches long on four-foot, wilt-resistant vines.

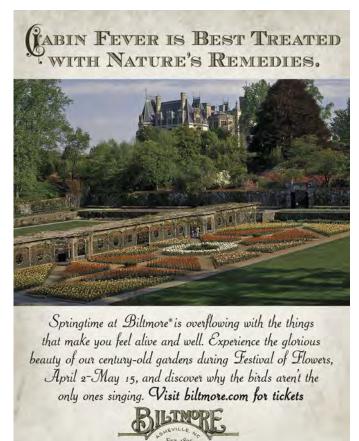
ENJOYING THE HARVEST

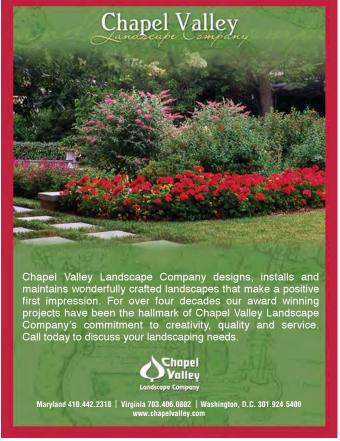
Harvest garden and snap peas when the seeds are plump but the shells have not started to wither. If you can see a sharp outline of the pea through the pod and the pod has turned a dull green, the peas are overripe and will taste bitter and starchy. Pick snow peas just when the seeds start to swell inside the pod. Depending on the variety, snow and snap peas may have strings to remove, similar to green beans. Don't allow over-mature peas to remain on the vine, because this will discourage further production.

In my opinion, peas taste best when cooked minimally, so I simply steam them lightly or throw snow peas in at the end of a stir-fry. Peas are also delicious raw in salads; snap peas are great as crudités.

My children adore frozen peas as snacks, so I freeze as many as I can. Blanch the peas lightly—two minutes in boiling water and then two minutes in ice water before bagging and freezing.

Fiona Gilsenan is a garden book author and a contributor to the Sunset Western Garden Book. She lives in Victoria, British Columbia.





GARDENER'S NOTEBOOK

Horticultural News and Research Important to American Gardeners

MONARCH POPULATIONS RECOVERING

Each year, monarch butterflies travel about 2,800 miles from Canada and the United States to Mexico to overwinter. and the good news is that a just-released study indicates a promising increase in monarch (Danaus plexippus) populations counted in Mexico this season.

Monarch migration numbers have approximately doubled from last year, when an alarming 75 percent drop was observed that put counts at the lowest level since comparable record-keeping began in 1993. Population counts are based on the acreage the insects occupy at specific breeding sites they return to every year. This year, 9.9 acres were occupied with colonies, up from 4.7 acres last vear.

The study, sponsored by the World Wildlife Fund (WWF), the National Commission for Natural Protected Areas of Mexico, and the cellular carrier Telcel, noted that although these numbers are encouraging, populations are still chronically smaller than expected, based on averages for the past seven years. For example, in 1997, colonies occupied 45 acres.



Gardeners can attract monarchs by planting milkweeds such as Asclepias currassavica.

Year-to-year fluctuations in insect populations are normal, but the primary causes of these monarch declines are attributed to a variety of factors such as climate change, habitat loss through deforestation, and the use of pesticides on roadside populations of common milkweed (Asclepias syriaca), a primary food source and host plant for monarchs.

To reduce habitat loss, conservation groups such as the WWF are promoting alternate-income projects in regions around the monarch breeding sites. One program gives local residents who might otherwise illegally harvest trees an opportunity to grow them for profit instead.

Gardeners can encourage monarch populations by avoiding pesticide use and planting a variety of milkweeds. Showy milkweed (A. speciosa, USDA Hardiness Zones 3–9, AHS Heat Zones 9–1) grows well in cooler regions, swamp milkweed (A. incarnata, Zones 3-9, 9-3) thrives in soggy soils, and tropical or scarlet milkweed (A. currassavica, Zones 9–11, 12–1) tolerates heat.

PEACH AND CITRUS PEST BIOCONTROLS

Fruit trees are notoriously susceptible to a variety of pests and diseases. Two particularly destructive pests are the peach tree borer—which kills more peach trees in the United States than any other insect—and the Diaprepes weevil—an in-



The destructive larva of the peach tree borer

troduced species from the Caribbean that damages citrus trees. Because beneficial nematodes—microscopic worms—are known predators of both pests, the USDA's Agricultural Research Service has been exploring the potential for making the nematodes even more effective biocontrols.

For instance, nematodes successfully prey on the underground life stages of the peach tree borer, but once the pests emerge aboveground, the nematodes are too sen-



A colony of monarch butterflies overwintering in the Oyamel fir forests of central Mexico.

Protecting One of Your Most Valuable Assets





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sitive to the sun's light and heat to follow in pursuit. In Byron, Georgia, scientists have created a nontoxic, environmentallyfriendly gel that can be sprayed on trees to form a protective barrier so that nematodes can follow the borers. During the first year of testing, 30 percent of the borers survived; the next year none survived.

At the University of Florida, another team has discovered that when citrus tree roots are attacked by Diaprepes weevils, the roots exude chemicals that attract beneficial nematodes. This is a new discovery in citrus tree defense mechanisms, and the researchers' ultimate goal is to develop rootstocks highly adept at recruiting nematodes in their defense.

MORTON ARBORETUM'S NEW SWEETSPIRE

After rigorous evaluation in botanical gardens and universities, a new Virginia sweetspire (Itea virginica 'Morton', Zones 5–9, 10–6) developed at the Morton Arboretum in Lisle, Illinois, is hitting the market. "This is a time-proven shrub that's been in our collections since 1958 and has been a top performer all along,"

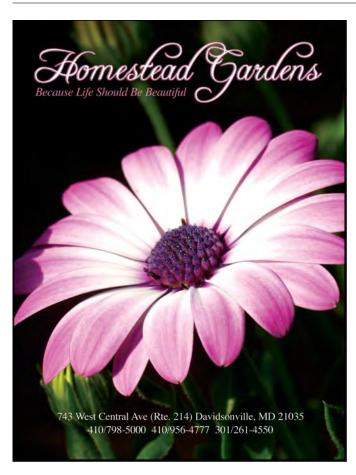


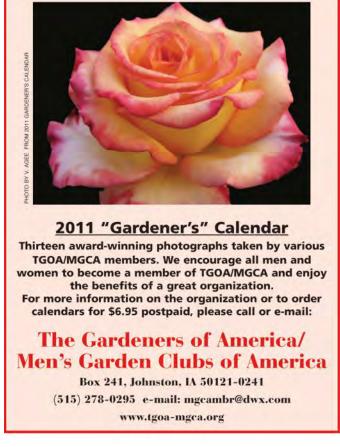
A shrub with multi-season appeal, 'Morton' Virginia sweetspire provides vivid fall color.

says Kris Bachtell, Morton's vice president of collections and facilities.

Sweetspire, a clump-forming shrub native to the southeastern United States, is best known for its attractive fall foliage;

the hollylike leaves turn bright red, peaking in early November and lasting through the first frost. In addition to the colorful fall foliage, Virginia sweetspire produces racemes of white, fragrant flowers in mid-





PEOPLE and PLACES in the NEWS

Mailorder Gardening Association Changes Its Name

The world's largest nonprofit association of direct-to-customer gardening companies has changed its name. In order to better reflect the full range of options consumers now have for making purchases, the Mailorder Gardening Association is now called the Direct Gardening Association (DGA).

Executive Director Camille Cimino says, "Today's consumer enjoys the convenience of being able to purchase gardening products online in addition to print catalogs, and our new name embraces this growing trend."

Members of the DGA sell their products through various venues, from catalogs and websites to social media and mobile commerce. Virtually everything related to gardening is available, from seeds and plants to irrigation supplies and power equipment. To learn more about the DGA, visit www.directgardeningassociation.com.

Harold Pellett Receives Scott Medal

Even in retirement, Harold Pellett is still making waves. He is this year's recipient of the Arthur Hoyt Scott Medal presented by the Scott Arboretum of Swarthmore



College in Swarthmore, Pennsylvania. The award is given to individuals who have made outstanding national contributions to the science and art of gardening.

During his 38-year career as a faculty member in horticultural science at the University of Minnesota, Pellett produced over 25 shrub and tree varieties, published over 50 scientific papers in peer-reviewed journals, and advised 20 graduate students who are now involved in several horticultural fields.

In his retirement, Pellett founded the Landscape Plant Development Center to continue breeding durable plants

tolerant of environmental and biological stresses. Pellett will add the medal to the many other awards he has received, including the American Horticultural Society's Liberty Hyde Bailey Award and the American Society for Horticultural Science Distinguished Achievement Award for Nursery Crops.

June to early July. The flowers attract butterflies and other pollinators. 'Morton,' which will be marketed under the name Scarlet Beauty™, is particularly cold tolerant, and thrives in moist, acidic soil, where it grows three to four feet tall.

ENDANGERED PLANT COLLECTIONS

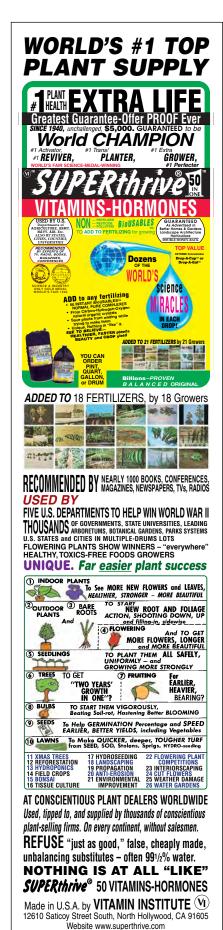
2010 marked the end of the International Year of Biodiversity, but North America still has some catching up to do. An assessment conducted by Botanic Gardens Conservation International, the U.S. Botanic Garden, and the Arnold Arboretum of Harvard University found that only 39 percent of the nearly 10,000 endangered and threatened plants in Canada, the United States, and Mexico are maintained in seed banks or living collections.

The study was prompted by the need to quantify North America's contribution to-

wards global plant conservation. An international agreement, the Global Strategy for Plant Conservation (GSPC), set targets and principles for plant conservation actions through 2020. One of these goals states that by that time, 75 percent of threatened plant species should be accessible through collections. To achieve this, the current capacity must nearly double.

Despite the outcome, horticultural curators are optimistic. Michael Dosmann, curator of living collections at the Arnold Arboretum says, "By participating in this assessment, many of us saw for the first time the direct value of our plants in bolstering efforts to conserve our threatened flora. We hope this becomes a new paradigm in collections management."

News written by Editorial Intern Terra-Nova Sadowski.



BOOK REVIEWS

Recommendations for Your Gardening Library

The Conscientious Gardener: Cultivating a Garden Ethic Sarah Hayden Reichard. University of California Press, Berkeley and Los Angeles, California, 2011. 254 pages. Publisher's price, hardcover: \$27.50.

SOMETHING'S IN the air in Seattle. First came Linda Chalker-Scott, the myth-busting professor, author, and blogger who



casts the hard light of science onto horticultural practices based at best on anecdotal evidence—and, at worst, on old wives' tales. Now comes Sarah Hayden Reichard, conservation biologist at the University of Washington, wielding data from peer-reviewed journals to examine sustainable gardening as we currently know it.

In addition to scientific facts, throughout the book Reichard invokes the philosophy laid out in A Sand County Almanac,

the classic 1949 book by Aldo Leopold. One of the most influential conservation thinkers of the 20th century, Leopold wrote eloquently about the need for changing how humans relate to the land. In a similar vein, Reichard aims to help us view the garden "like the land, as a fully functioning ecosystem—and to incorporate the awareness that its impacts extend far beyond its footprint."

Reichard can be an enjoyable storyteller as well as an exacting scientist, and the book is enlivened with her personal experiences as a gardener on three quarters of an acre in a "somewhat wild" ravine in Seattle. These include her adventures with the mountain beavers—creatures she finds alternately captivating and infuriating as they chew up her prized plants and stack them neatly at the entrance to their burrows.

The Conscientious Gardener is divided into eight chapters covering soil, water, the pros and cons of going native, gardening and wildlife, pest management, confronting climate change, and waste reduction strategies in the garden. Given that Reichard is one of the leading authorities on plant invasion—her research helped document that more than half the invasive species in developed countries around the world were introduced for the horticultural trade—it's not surprising that the most compelling chapter is on "the aliens among us."

Although Reichard comes to no earth-shaking conclusions about the current state of sustainable gardening, her search for a garden ethic based on both science and a love of the land can serve as a model for gardeners everywhere.

—Janet Marinelli

Janet Marinelli has written several books on sustainable gardening, including Stalking the Wild Amaranth (Henry Holt, 1998).

Prairie-Style Gardens

Lynn M. Steiner. Timber Press, Portland, Oregon, 2010. 303 pages. Publisher's price, hardcover: \$34.95.

THROUGH TENDING her own prairie garden in Minnesota, editor-cum-garden writer Lynn Steiner developed a love of the



myriad plants that once dominated the Midwestern landscape. Her passion shines through in this lavishly illustrated book, written from the heart in a succinct, informative style.

As its subtitle states, this book covers all you need to know to "capture the essence of the American prairie wherever you live." It begins with an introduction to the vast and varied grassland communities of the Midwest, from the

prairie borderlands to the slopes of the Rockies. These tall, mixed, and shortgrass prairies serve as templates to inspire and inform gardeners with their majesty and species diversity.

Because "plants of the tallgrass prairie are best suited to a wide range of garden and landscape uses," the book focuses mostly on these. An appendix lists these species by botanical name, divided into the categories, Flowers, Grasses and Sedges, Shrubs and Small Trees, and Trees.

Next, the book presents a straightforward explanation of the steps necessary for planning, site selection, preparation, purchasing, and planting gardens and small scale restorations devoted exclusively to regionally appropriate native species. Steiner devotes a chapter to weeding, watering, burning, and mowing. Unlike many books that cover prairie gardening, it focuses on techniques appropriate for smaller spaces.

Steiner wisely points out the potential pitfalls of native landscapes in urban and suburban neighborhoods. For example, prairie plants may appear weedy to the uninitiated. She suggests ways to help neighbors accept non-traditional landscapes, such as demonstrating intent with mowing strips, fences, and other elements common in traditional gardens.

Plant profiles complete the volume, highlighting the showiest, most adaptable, and size-appropriate forbs and grasses for residential landscapes.

Whether you envision a sea of waving grasses, or simply wish to enjoy a sampling of the prairie's diverse flora, this book is sure to inspire and inform.

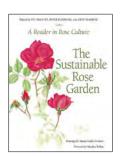
—C. Colston Burrell

C. Colston Burrell is a plantsman, garden designer, and author of several books, including Hellebores (Timber Press, 2006).

The Sustainable Rose Garden

Edited by Pat Shanley, Peter Kukielski, and Gene Waering. Newbury Books, Havertown, Pennsylvania, 2010. 272 pages. Publisher's price, hardcover: \$34.95.

ABOUT 20 YEARS ago, I stood with the eminent rosarian Rayford Reddell at his Garden Valley Ranch in Petaluma, California.



Masses of roses of many kinds were in kaleidoscopic bloom. Nary a mildewed leaf nor a bug-chewed bud was visible. "What's the secret to such a healthy-looking rose garden?" I asked him.

"Spray, spray, and spray," he said. And he meant using heavy-duty, toxic pesticides. Today, as Garden Valley's current owner Ron Robertson explains in *The Sustainable Rose Garden*, the only spray

now used on the roses is active aerated compost tea. "Basically what we're doing is introducing sufficient quantities of good fungus [sic] and bacteria to out-compete the pest organisms that are always present," he says.

This organic approach to pest and disease control, coupled with rose breeders' spectacular new disease-resistant hybrids, has taken rose growing into the new era of ecological consciousness. The use of pesticides has become far less attractive to many rose growers, as we learn that the chemical sterilization of our rose gardens is ultimately self-defeating.

The editors of this book are all master rosarians with important positions in the world of roses. They've brought together pieces written by 38 of the world's leading rose experts to examine all aspects of the new sustainable roses, from new classes of low-maintenance roses to sustainable gardening practices, establishing healthy ecologies of beneficial microorganisms on the plants, and much more—including nine sweetly scented poems about roses by Emily Dickinson.

The information presented in this reader will appeal to amateur and professional alike. Of particular importance are articles about the new landscape roses that function so well with minimum maintenance. "Earth-Kind® Rose Trials—Identifying the World's Strongest, Most Beautiful Landscape Roses," describes trials where candidates for the Earth-Kind label are planted in unimproved soil, given no fertilizer, water, or pesticides, and are essentially abandoned to their fate. Those that survive and thrive are given the designation. Michael Marriott weighs in on "Health in David Austin's English Roses," and Gary Pellett writes a "Report on Kordes® ADR Roses in the United States 2010." This latter is a German program similar to the Earth-Kind trials.

Overall, this is a fascinating and informative book for anyone who loves roses but wants to avoid spraying them with toxic chemicals.

—Jeff Cox

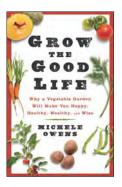
Jeff Cox is the author of Landscape With Roses (Taunton Press, 2002) and 18 other books on organic gardening, food, and wine.



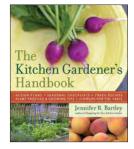
GARDENER'S BOOKS

Edible Gardening

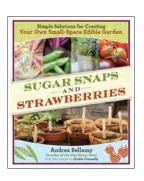
CONFESS, I'm not really a by-the-book gardener, despite having a horticulture degree. Part of the fun for me—particularly when it comes to my vegetable garden—is following my instincts and whims, and seeing what happens, rather than trying to follow all the "rules." While my approach may not be exactly scientific, I love picking up tips and tricks from others, so I can't resist perusing all the latest books on edible gardening. Here are some that got me thinking, planning, and planting what I hope will be my best effort yet.



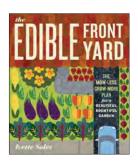
Grow the Good Life by Michele Owens (Rodale, 2011, \$24.99) is, in short, a "why-to" rather than a "how-to." If you think veggie gardening isn't for you, this book aims to convert you into a rabid grower of all things edible. For those already on Owens' wavelength, don't write the book off too quickly as preaching to the choir—she has plenty of wise, wry, eye-opening things to say on the subject, based on her nearly two decades of experience.



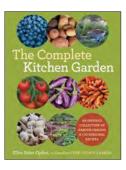
The Kitchen Gardener's Hand**book** by Jennifer R. Bartley (Timber Press, 2010, \$22.95) comes at the topic from a seasonal perspective with the goal of having "something either to eat or to cut for an arrangement through the year." For each season, the book describes the plants at their peak during that time of year, recipes, luscious photographs, succinct to-do lists, and a few exemplary designs.



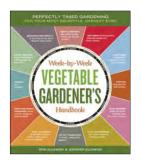
For the newbie, starting small is a good idea. Sugar Snaps and Strawberries by Andrea Bellamy (Timber Press, 2010, \$19.95) will walk you through "planning, creating, and tending an organic food garden in a small space." Bellamy delivers bitesize pieces of information about everything from soil and pests to raised beds and containers.



Ready to make the bold, brazen move of planting your edibles out front for the world to see, instead of hiding them out back like a dirty little secret? *The Edible Front Yard* by Ivette Soler (Timber Press, 2011, \$19.95) covers every consideration, from which plants to choose to designing and maintaining your audacious, tradition-flouting food garden.



The Complete Kitchen Garden by Ellen Ecker Ogden (Stewart, Tabori & Chang, 2011, \$24.95) provides plans for 14 different themed edible gardens, ranging from the salad lover's garden to the family garden. For each theme, Ogden gives brief descriptions of the plants to use, broad guidelines distilled into 10 tips for making the plan work for you, and recipes starring the resulting bounty.



While a pretty edible garden is a noble goal, there's a practical side to this game, which is the raison d'être for the Week-by-Week Vegetable Gardener's Handbook by Ron Kujawski and Jennifer Kujawski (Storey Publishing, 2010, \$14.95). This accessible, straightforward book lays out tasks based on weeks before and after an area's last frost date, making it useful no matter where you live.

—Viveka Neveln, Associate Editor

REGIONAL HAPPENINGS

Horticultural Events from Around the Country

NORTHEAST

CT, MA, ME, NH, NY, RI, VT

RAP MAR. 5-APR. 25. The Orchid Show: On Broadway at NYBG. The New York Botanical Garden. Bronx, New York. (718) 817-8687. www.nybg.org.

MAR. 26. Maine Garden Day. Workshops, displays, trade show. University of Maine Cooperative Extension. Lewiston, Maine. (800) 287-1482. www.umaine.edu/ gardening/maine-garden-day.

APR. 9. Northern Gardening Symposium: The Life-Long Garden. Vermont Technical College, Randolph Center, Vermont. (508) 877-7630. www.newenglandwild.org/learn.

RAP APR. 30 & MAY 1. Sakura Matsuri Cherry Blossom Festival. Brooklyn Botanic Garden. Brooklyn, New York. (718) 623-7200. www.bbg.org/visit/calendar.

Looking ahead

RAP MAY 7. **Plant Sale.** Bartlett Arboretum Gardens. Stamford, Connecticut. (203) 322-6971. www.bartlettarboretum.org.

MID-ATLANTIC

PA, NJ, VA, MD, DE, WV, DC

THROUGH JUNE 5. Close: A Journey in Scotland. Art exhibit. United States Botanic Garden. Washington, D.C. (202) 225-8333. www.usbg.gov.

% MAR. 17–20. **Springfest Flower &** Garden Show. Sussex County Fairgrounds. Augusta, New Jersey. (973) 989-9448. www.springfestgardenshow.org.

RAP MAR. 26. Lahr Native Plant Symposium and Plant Sale. United States National Arboretum. Beltsville Agricultural Research Center. Beltsville, Maryland. (202) 245-5898. www.usna.usda.gov.

RAP APR. 2. Oh Deer: Deterring Damage in the Garden. Lecture. Green Spring Gardens. Alexandria, Virginia. (703) 642-5173. www.fairfaxcounty.gov/parks/gsgp/ education.htm.

APR. 7. Plant Hunting in Western China. Lecture. Wister Center, Swarthmore College. Swarthmore, Pennsylvania. (610) 328-8025. www.scottarboretum.org. Flower and garden shows that offer free or discounted admission to AHS members or present AHS awards are designated by a 🛞 symbol. For details on the specific benefits offered, visit www.ahs.org/events/index.htm and click on "Flower and Home and Garden Shows."

Events hosted by botanical gardens and arboreta that participate in AHS's Reciprocal Admissions Program are identified with the **RAP** symbol. Current AHS members showing a valid membership card are eligible for free or discounted admission to the garden or other benefits. Special events may not be included; contact the host site for details or visit www.ahs.org/rap.

RAP APR. 30. Rare Plant Auction. Delaware Center for Horticulture. Longwood Gardens. Kennett Square, Pennsylvania. (302) 658-6262. www.thedch.org/activities-events.

Looking ahead

RAP MAY 7 & 8. Garden Fair. The State Arboretum of Virginia at Blandy Experimental Farm. Boyce, Virginia. (540) 837-1758. www.virginia.edu/blandy.

MAY 15. Eastern Shore of Virginia Habitat for Humanity Small Garden Tour. Eastville, Virginia. (757) 442-4687. www.easternshorehabitat.org.

SOUTHEAST

AL, FL, GA, KY, NC, SC, TN

RAP MAR. 20. Thinking Outside the

Old Rose Symposium in May

THERE MAY BE no better place to explore the history of roses than at the Wyck Historic House and Garden, established in 1689 in Germantown, Pennsylvania. On May 21, the Old Rose Symposium will celebrate its third year at the nation's oldest rose

garden growing in its original plan. Rose experts will lecture on topics relating to the flower's historical significance.

Speakers will include rosarian Stephen Scanniello, president of the Heritage Rose Foundation and sponsor of the symposium, and Wyck's horticulturist and curator, Nicole Juday. Juday will speak on the deep-rooted history of plants at Wyck. For example, at least three roses growing at Wyck are believed to be from the 17th century: Rosa alba 'Semi Plena', 'Pink Leda', and 'Celsiana'.

Additionally, there will be an auction of rare heritage roses, including a complete collection of Bermuda Mystery Roses: unidentified varieties found growing on the island of Bermuda in the 1950s. Jennie Watlington, a former president of the Bermuda Rose Society, will discuss what is known about the origins of these roses.

During lunch, guests are invited to tour

Wyck's two-and-a-half-acre site, which boasts a 1920s greenhouse. All proceeds will support the preservation and operation of the Wyck property. To register, e-mail boverholser@wyck.org, visit www.wyck.org, or call (215) 848-1690.

—Terra-Nova Sadowski, Editorial Intern



The cultivar 'Elegant Gallica' was first discovered growing at Wyck in 1970.

Morton Arboretum Spotlights Trees with "Nature Unframed" Exhibit

BRIGHT YELLOW fabric highlights the striking branch structure of a dead Chinese cork tree (Phellodendron chinense var. glabriusculum). In the distance, a blue ash (Fraxinus quadrangulata) stands behind a giant canvas, its branches protruding through to

create a living painting. Nearby, a rainbow of colorful yarn hugs the bark of a yellowwood (Cladrastis kentukea), imitating lichen or moss. These are just a few of the 11 installations that will be on display at the Morton Arboretum in Lisle, Illinois, beginning May 19.

The exhibit is called "Nature Unframed," and Anamari Dorgan, head of visitor experience at Morton, says it will be unlike any of the previous seasonal exhibits."We wanted the artists to have the freedom to respond to the specific landscapes of our site to inspire visitors to think about trees in a new way," says Dorgan.



'Bound Denbighshire' by artist Philippa Lawrence is an example what will be on view at Morton's exhibit.

Instead of seeing trees as

a backdrop to a typical visitor experience, the exhibit will bring them to the foreground as a focal point within the gardens. In doing this, the art will call attention to the vital role trees play in everyone's lives, while providing multi-dimensional appeal for both art and horticulture enthusiasts.

Because the Morton Arboretum is part of the Reciprocal Admissions Program, AHS members showing a current membership card receive free admission. For more information, call (630) 968-0074 or visit www.mortonarb.org.

–Terra-Nova Šadowski, Editorial Intern

Ground Cover Box. Lecture. Aldridge Botanical Gardens. Hoover, Alabama. (205) 682-8019. www.aldridgegardens.com.

RAP MAR. 22 & 21. Atlanta Blooms! 20,000 Watts of Flower Power. Spring bulb display. Atlanta Botanical Garden. Atlanta, Georgia. (404) 876-5859. www.atlantabotanical

MAR. 24-27. Annual Plant Fair and Sale. Callaway Gardens. Pine Mountain, Georgia. (706) 663-5153. www.callawaygardens.com.

MAR. 24–27. Festival of Flowers. Providence Hospital Campus. Mobile, Alabama. (251) 639-2050. www.festivalofflowers.com.

RAPR. 8-10. Bloom 'n' Garden Expo. Garden show and plant sale. Ag Expo Center. Franklin, Tennessee. (615) 973-2112. www.bloomngarden.com.

RAP APR. 12–15. Spring Plant Sale. Wing Haven Gardens. Charlotte, North Carolina. (704) 331-0664. www.winghavengardens.com.

APR. 22 & 23. Spring Plant Sale. University of North Carolina Charlotte Botanical Gardens. Charlotte, North Carolina. (704) 687-2870. www.gardens.uncc.edu.

RAP APR. 30 & MAY 1. Food and Garden Festival. Fairchild Tropical Botanic Garden. Coral Gables, Florida. (305) 667-1651. www.fairchildgarden.org.

NORTH CENTRAL

IA, IL, IN, MI, MN, ND, NE, OH, SD, WI

RAP MAR. 26 & 27. Illinois Orchid Society Spring Show & Sale. Chicago Botanic Garden. Glencoe, Illinois. (847) 835-5440. www.chicagobotanic.org.

APR. 2. Garden Expo 2011. Crow Wing County Master Gardeners. Central Lakes College. Brainerd, Minnesota. (218) 824-1068. www.extension.umn.edu/county/crowwing/mg.

RAP APR. 2. Spring Fever Symposium. Iowa Arboretum. Madrid, Iowa. (515) 795-3216. www.iowaarboretum.org.

RAP APR. 16 & 17. Daffodil Show. Fellows Riverside Gardens. Youngstown, Ohio. (330) 740-7116. www.millcreekmetroparks.org.

RAP APR. 21. Build a Rain Barrel: Save that Rain for a Sunny Day. Workshop. The Holden Arboretum. Kirtland, Ohio. (440) 602-3833. www.holdenarb.org.

RAP APR. 22. Planet Indy: Gestalt Gardening with Felder Rushing. Lecture. Indianapolis Museum of Art. Indianapolis, Indiana. (317) 923-1331. www.imamuseum.org.

RAPR. 29-MAY 1. Orchard in Bloom Garden Show. Holiday Park. Indianapolis, Indiana. (317) 251-9253. www.orchardinbloom.org.

SOUTH CENTRAL

AR, KS, LA, MO, MS, OK, TX

RAP MAR. 21-APR. 3. Tulip Extravaganza. Floral display. Garvan Woodland Gardens. Hot Springs, Arkansas. (501) 262-9300. www.garvangardens.org.

RAP MAR. 22. Fruit Orchard Planting. Demonstrations, lectures, workshops. South Texas Botanical Gardens & Nature Center. Corpus Christi, Texas. (361) 852-2100. www.stxbot.org.

RAP MAR. 25 & 26. March Mart Plant Sale. Mercer Arboretum and Botanic Gardens. Humble, Texas. (281) 443-8731. www.hcp4.net/mercer.

MAR. 25 & 26. New Albany Home and Garden Show. Union County Fairgrounds. New Albany, Mississippi. (662) 316-0088. www.newalbanygardening.com.

RAP APR. 1. Arbor Day Tree Giveaway. Missouri Botanical Garden. Kemper Center for Home Gardening. St. Louis, Missouri. (314) 577-5100. www.mobot.org.

APR. 2 & 3. Spring Garden Show. Louisiana State University Agricultural Center. City Park Botanical Garden. New Orleans, Louisiana. (504) 483-9471. www.lsuagcenter.com.

APR. 30 & MAY 1. Show Me Gourd Festival: Gourdening. State Fair Grounds Agriculture Building. Sedalia, Missouri. (816) 987-2133. www.showmegourdsociety.com.

garden.com.

MAY 6 & 7. **Symphony of Gardens Tour.** Natchez, Mississippi. (601) 446-6345. www.symphonyofgardenstour.com.

SOUTHWEST

AZ, NM, CO, UT

APR. 1 & 2. Southwest Regional American Community Gardening Association Conference. Rio Salado College. Tempe, Arizona. (877) 275-2242. www.communitygarden.org.

APR. 9. **Herb Festival.** Boyce Thompson Arboretum. Superior, Arizona. (520) 689-2723. www.cals.arizona.edu/bta.

RAP APR. 16 & 17. **Spring Bulb Show.** Red Butte Garden at the University of Utah. Salt Lake City, Utah. (801) 585-0556. www.redbuttegarden.org.

RAP APR. 18-23. **Party for the Planet.** Earth Day celebration. Tracy Aviary. Salt Lake City, Utah. (801) 596-8500. www.tracyaviary.org.

RAP APR. 21. Wicked Plants: The Deliciously Dark Side of the Plant World. Lecture. Denver Botanic Gardens. Denver, Colorado. (720) 865-3580. www.botanicgardens.org.

RAPR. 29–MAY 1. Maricopa County Home & Landscape Show. Arizona State Fairgrounds. Phoenix, Arizona. (602) 485-1691. www.maricopacountyhomeshows.com.

Looking ahead

MAY 6. National Public Gardens Day Celebration. Rio Grande Botanic Garden. Albuquerque, New Mexico. (505) 848-7112. www.cabq.gov/biopark.

WEST COAST

CA, NV, HI

MAR. 23-27. San Francisco Flower and Garden Show. San Mateo Event Center. San Francisco, California. (415) 684-7278 ext. 2. www.sfgardenshow.com.

RAP MAR. 26. **Spring Plant Sale.** The Gardens at the Springs Preserve. Las Vegas, Nevada. (702) 822-7700. www.springspreserve.org.

APR. 2. **Wise Water Management.** Workshop. Occidental Arts and Ecology Center. Occidental, California. (707) 874-1557 ext. 201. *www.oaec.org.*

RAPR. 7–10. California State Flower, Food Garden Show. Cal Expo. Sacramento, California. (877) 696-6668 ext. 4. www.calstategardenshow.com

APR. 11. **The Pleasure Garden.** Lecture. San Diego Horticultural Society.

Del Mar Fairgrounds. Del Mar, California. (760) 295-7089. www.sdhortsoc.org.

APR. 17. **Garden Party and Tour.** Windsor Square-Hancock Park Historical Society. Los Angeles, California. (213) 243-8182. www.wshphs.org.

Looking ahead

RAP MAY 14 & 15. **Herb Weekend.** Plant sale, tastings. Fullerton Arboretum. Fullerton, California. (657) 278-4010. www.fullertonarboretum.org.

NORTHWEST

AK, ID, MT, OR, WA, WY

RAP MAR. 25–27. **Boise Flower & Garden Show.** Idaho Botanical Gardens. Boise Centre. Boise, Idaho. (503) 335-3336. www.gardenshowboise.com.

MAR. 26. Spring Gardening Symposium: Inspired Gardening Within the Environment. Northwest Horticultural Society. Kenmore, Washington. (206) 780-8172. www.northwesthort.org.

RAP APR. 28. **Hypertufa Container Workshop.** Kruckeberg Botanic Garden. Shoreline, Washington. (206) 546-1281. www.kruckeberg.org.

APR. 30 & MAY 1. **FlorAbundance.** Plant sale. Magnuson Park. Seattle, Washington. (206) 325-4510. *www.arboretumfoundation.org.*

Looking ahead

RAP MAY 1–8. **MayFest.** Displays, presentations, plant sale. Lakewold Gardens. Lakewold, Washington. (253) 584-4106. www.lakewoldgardens.org.

MAY 14 & 15. **Idaho Green Expo.** Green Works Idaho. Boise Centre. Boise, Idaho. (208) 949-6058. www.idahogreenexpo.org.

RAP MAY 21. **Plant Sale and Seasonal Kick-Off.** Alaska Botanical Garden. Anchorage, Alaska. (907) 770-3692. www.alaskabg.org.

CANADA

MAR. 15–20. **Canada Blooms.** Flower and garden festival. Direct Energy Centre. Toronto, Ontario. (416) 447-8655. *www.canadablooms.com.*

RAP APR. 9. The All-You-Can-Eat Gardening Workshop. Royal Botanical Gardens. Hamilton, Ontario. (905) 527-1158. www.rbg.ca.

APR. 14. Cedar Series Art in the Garden. Art exhibit. VanDusen Botanical Garden. Vancouver, British Colombia. (604) 257-8333. www.vandusengarden.org.





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 0-0 means that the plant is a true annual and completes its life cycle in a year or less.

A-F

Acanthus spinosus uh-KAN-thus spih-NO-suss (USDA Zones 5-9, AHS Zones 9-5) Adiantum aleuticum ad-ee-AN-tum uh-L00-tih-kum (3-8, 8-1)

Agastache aurantiaca ah-GAH-stah-she aw-ran-tee-AY-kuh (7–10, 10–7)

Ajuga reptans uh-JOO-guh REP-tanz (3-9, 9-1) Alcea rosea AL-see-uh ro-ZAY-uh (2-9, 9-2)

Antirrhinum majus an-tihr-RYE-num MAY-juss (7-9, 9-1)

Armeria maritima ar-MEER-ee-uh muh-WRIT-ih-muh (3–9, 9-1)

Artemisia Iudoviciana ar-teh-MEEZ-yuh loo-doh-vik-ee-AN-uh (4-9, 9-1)

Asimina triloba uh-SIH-mih-nuh trv-LO-buh (4-8, 9-5)

Betula pendula BET-yew-luh PEN-dyew-luh (3-7, 7-1)

Camellia sasanqua kuh-MEEL-yuh sah-SAHNG-kwuh (7-9, 9-6)

Campanula cochlearifolia kam-PAN-vew-luh kok-lee-air-ih-FO-lee-uh (5-7, 7-5)

C. thyrsoides C. thur-SOY-deez (5–8, 8–5) Consolida ajacis kon-SOL-ih-duh uh-JAY-sis

(0-0, 9-1)Cosmos bipinnatus KOZ-mos by-PIN-nay-tus (0-0.11-1)

Crambe cordifolia KRAM-bee kor-dih-FO-lee-uh

Digitalis purpurea dih-jih-TAL-iss pur-PUR-ee-uh (4-8, 8-1)

Dodonaea viscosa doh-doh-NEE-uh viss-KO-suh (9-11, 12-9)

Eremurus xisabellinus air-eh-MYUR-us

iz-uh-BEL-ih-nus (5-8, 8-5) **Euonymus fortunei** yew-ON-ih-mus

for-TOON-ee-eye (4-9, 9-1)

E. japonicus E. jah-PON-ih-kus (6–9, 9–1) Fagus sylvatica FAY-gus sil-VAT-ih-kuh (4-7, 9-4)

Fallugia paradoxa fah-LEW-gee-uh pair-uh-DOK-suh (7–11, 12–7)

Festuca glauca fes-TEW-kuh GLAW-kuh (4-8.8-1)

Foeniculum vulgare fee-NICK-vew-lum vul-GAY-ree (4-9, 9-1)

Gelsemium sempervirens jel-SEE-me-um sem-pur-VY-renz (7-9, 9-1)

Helianthus maximiliani hee-lee-AN-thus maks-ih-mil-ee-AN-eve (4-9, 9-4)

Humulus lupulus HEW-mew-lus LEW-pew-lus (4-8, 8-1)

Hydrangea arborescens hy-DRAN-juh ar-bo-RES-enz (4-9, 9-1)

Ipomopsis rubra ih-po-MOP-sis ROO-bruh (6-9, 9-5)

Iris pallida EYE-ris PAL-lih-duh (1–9, 9–1) *I. sibirica* I. sy-BEER-ih-kuh (3–8, 9–1)

Lavandula angustifolia lah-VAN-dyew-luh ang-gus-tih-FO-lee-uh (5-8, 8-5)

Lewisia rediviva loo-ISS-ee-uh reh-dih-VY-vuh (4-8, 8-3)

Limonium platyphyllum lih-MO-nee-um plat-ee-FIL-um (7–9, 9–7)

Linum perenne LY-num pur-EN-ee (7–9, 9–7) Lobelia cardinalis lo-BEEL-yuh kar-dih-NAL-iss (2-8.8-1)

Lobularia maritima lob-yew-LAIR-ee-uh muh-WRIT-ih-muh (0-0, 9-1)

Lonicera xbrownii lah-NISS-er-uh BROWN-ee-eye (3-8, 8-3)

Millettia reticulata mih-LET-ee-uh reh-tik-yew-LAY-tuh (7-10, 10-7)

Mirabilis multiflora mih-RAB-ih-liss mul-tih-FLOR-uh (7–10, 10–7)

Nepeta sibirica NEP-eh-tuh sy-BEER-ih-kuh (3-8, 8-1)

Nigella sativa ny-JEL-luh sah-TEE-vuh (0-0.9-1)

Ocimum basilicum OSS-ih-mum buh-SIL-ih-kum (0-0.12-1)

Oenothera biennis ee-NOTH-ur-uh by-EN-iss (4-8.8-1)

Origanum vulgare o-RIG-uh-num vul-GAH-ree (4-9, 10-2)

Parthenocissus tricuspidata par-then-o-SISS-us try-kuss-pih-DAY-tuh (4-8, 8-1)

Perovskia atriplicifolia peh-ROV-skee-uh at-rih-plih-sih-FO-lee-uh (5-9, 9-2)

Phlox subulata FLOKS sub-yew-LAY-tuh (3-8, 8-1)

P. stolonifera P. sto-Ion-IF-ur-uh (4-8.8-1)

Picea abies PY-see-uh AY-beez (3–8, 8–1)

P. glauca P. GLAW-kuh (2–7, 7–2)

Podocarpus elongatus pah-doh-KAR-pus ee-lon-GAY-tus (9-11, 12-1)

Scutellaria resinosa skoo-tuh-LAIR-ee-uh rez-ih-NO-suh (4-8, 8-1)

Sedum spurium SEE-dum SPUR-ee-um (3-10, 8-3)

Senecio confusus seh-NEE-see-o kon-FEW-suss (10-11, 12-7)

Spiraea japonica spy-REE-uh jah-PON-ih-kuh (4-9, 9-1)

Stachys byzantina STAY-kiss bih-zan-TY-nuh (4-8, 8-1)

Symphyotrichum novi-belgii sim-fy-o-TRY-kum NO-vih-BEL-jee-eye (4–8, 8–1)

Tanacetum niveum tan-uh-SEE-tum

nih-VEE-um (5-9, 9-5) Thalictrum aquilegiifolium thal-IK-trum

ah-kwi-lee-jih-FO-lee-um (5-9, 9-4)

T. rochebruneanum T. rowsh-broo-nee-AY-num (3-8.8-4)

Thunbergia alata thun-BUR-jee-uh ah-LAY-tuh (10-11.12-10)

T. gregorii T. greh-GOR-ee-eye (11–11, 12–10)

Thymus pseudolanuginosus TY-muss soo-doh-luh-noo-jih-NO-sus (5-9, 9-5)

Verbascum bombyciferum ver-BAS-kum

bom-bih-SIF-ur-um (5-9, 7-2) Veronica liwanensis vur-ON-ih-kuh

lih-wuh-NEN-sis (4-9, 9-4) V. spicata V. spy-KAY-tuh (3-8, 8-1)

Veronicastrum virginicum ver-on-ih-KASS-trum vir-JIN-ih-kum (4–8, 8–3)

Zauschneria californica zowsh-NAIR-ee-uh

kal-ih-FORN-ih-kuh (8-11, 12-8)

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—David J. Ellis, Editor





PLANT IN THE SPOTLIGHT

Pawpaw: Pretty and Palatable

by James Gagliardi

PAWPAW SEEMS strangely out of place in the temperate woodlands of eastern North America. With its long, broad, hanging leaves and smooth, chartreuse fruit similar in appearance to a small mango, it looks almost tropical. Yet the plant's native range encompasses 25 states from northern Florida to southern Ontario and west to Michigan and Nebraska.

My first experience with pawpaw (Asimina triloba, USDA Zones 5–9, AHS Zones 9–5) happened while I was serving on the Plant Selection Committee of the Delaware Center for Horticulture's Rare Plant Auction® in 2008. That year, the committee chose pawpaw to grace the auction catalog cover, selecting it over 400 other amazing plants because of pawpaw's many unique qualities.

The only cultivated species among the eight in its genus, pawpaw grows as a shrub or small tree, reaching up to 20 feet tall and wide. Because this tree forms a tap root, transplanting is difficult; pawpaw should be purchased young or grown from seed. From seed, fruiting occurs in four to eight years, while a grafted tree fruits in two to three years.

Pawpaw's large, lush leaves (up to a foot long) make a bold statement in the landscape, especially in fall when they turn pure

Sources

Nolin River Nut Tree Nursery, Upton, KY. (270) 369-8551. www.nolinnursery.com. One Green World, Mollala, OR. (877) 353-4028; www.onegreenworld.com.



Pawpaws, above, thrive in sunny locations. Their pale green, mangolike fruits, above right, form in clumps, and their dark, exotic-looking flowers, right, are worth close inspection.

yellow. Before the leaves emerge in late spring, unusual flowers appear along the bare branches. The small, dark purple flowers are easy to miss, but when inspected closely, their intricacies become apparent. Each bloom is made of a smaller inner circle and a larger outer circle of three recurved petals. The flowers attract flies and beetles for pollination with an unpleasant odor. Pawpaw requires cross-pollination for optimal fruit set, so it's best to plant at least two different selections or cultivars.

Each flower produces multiple fruits up to five inches long with several large, dark brown, beanlike seeds. These reach maturity over a staggered period of time in late summer but have a short shelflife, which explains why you won't find them in the grocery store. To eat them, simply break open the soft skin to enjoy the yellow-orange flesh, which has a custardlike texture.





The unique flavor of pawpaw fruit has been described as a combination of various tropical fruits including banana, mango, and kiwi. Pawpaw can substitute for banana in most recipes, which might explain some of its other common names, such as poor man's banana and Indiana banana.

The true pawpaw connoisseur may seek out some of the rarer cultivars, selected for their fruit's size, taste, or color. For example, 'Taytwo' is prized for fruits with lightcolored flesh and exceptional flavor resembling vanilla custard, while 'Mitchell' produces large, sweet fruits with few seeds. And as you might guess, 'Prolific' can be counted on to produce a bumper crop of fruit. However, any pawpaw is worth growing if you have the right space.

James Gagliardi is the horticulturist at the headquarters of the American Horticultural Society at River Farm.



