



The American GARDENER[®]

The Magazine of the American Horticultural Society

March / April 2008

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a passion for
Peonies



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NOTES FROM RIVER FARM

IN MY GARDEN in Dayton, Oregon, I look forward to spring as a time of renewal and regrowth. It starts with the bold colors of spring-flowering bulbs, eases into the striking accents offered by flowering trees and shrubs, and concludes with a new flush of growth throughout the garden. This year, I am especially looking forward to the explosion of wisterias and clematis along my arbor, and the symphony of hydrangeas, forsythias, lilacs, lavender, and cannas blooming along my garden path. Regardless of what part of the country you live and garden in, I hope that you share the joys of the changing seasons with me—however subtle or dramatic they may be.

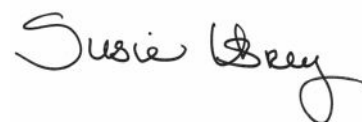
Just as our gardens go through cycles, so do organizations such as the American Horticultural Society. With each cycle or change, we are called upon to rise to the occasion, tackle the matter at hand, identify the challenges we face, and seize the opportunities that we are presented with. Such was the case this past January when the AHS Board of Directors gathered for our annual planning workshop at River Farm.

One of the first challenges we faced was the day-to-day leadership for the Society's work. Just prior to our January workshop, Deane Hundley announced his resignation as AHS President. Deane shared with me that it was with mixed emotions that he decided to leave the AHS in order to pursue other professional interests and spend more time with his family. I wish Deane the very best in his new endeavors and thank him for the many contributions he made to the Society.

With change comes opportunity, and our AHS Board of Directors felt the timing was right to reassess our leadership structure—both staff and volunteer—to make certain that we are positioning the Society for success in today's rapidly changing world. I am pleased to share that as our first step towards this renewal, we selected Tom Underwood to fill the newly created position of Executive Director of the American Horticultural Society. Many of you already know Tom from his work with the Society's programs over the past five years, and I am sure you will join me in congratulating him and welcoming him in this new role. I am truly excited by this new direction and look forward to partnering with Tom and the staff in the months ahead as we continue to position the Society for even greater success.

Another challenge we faced at our planning workshop was identifying and agreeing on a set of strategic imperatives for the Society for 2008. Ensuring that we are continually moving forward with visionary new programs, while not losing sight of our day-to-day responsibilities, requires steady commitment from both the AHS staff and our Board members. At the end of the workshop, I was very pleased to see that the staff and Board emerged with a clear sense of direction and a solid list of assignments. I look forward to sharing our progress with you in the coming months.

As we move into this most exciting time of year for gardeners across America, please be assured that your AHS continues to be in capable and caring hands. I hope you enjoy all that this issue has to offer and that it will be an inspiration to your gardening this spring.



—Susie Usrey, *Chair, AHS Board of Directors*



KASSIE BAKER

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MEMBERS' FORUM

A WELL-ROUNDED ISSUE

The January/February 2008 issue has to be your best ever. Certainly Marty Ross's article about Marvin Snyder and his conifer garden is the best-written garden magazine article I have ever read. In Pam Baggett's article about walkways, I was impressed with not only her great ideas for making a utilitarian path interesting, but also with the article's illustrations of different house and garden styles from many different regions of North America.

As if that weren't enough, the One on One interview featured Harold Koopowitz, who is one of the "greats" of the orchid world and whose views on the Convention on International Trade in Endangered Species of Wild Flora and Fauna (CITES) applicability to plants (or lack thereof) should be much better known. Thanks for giving Harold a voice in *The American Gardener*.

In addition to excellent articles, the regular practical departments and up-to-date news about many things in the gardening world, such as this issue's new plants, recycling of plastic pots, gardening for and with children, and book reviews, make this magazine a wonderful resource for gardeners.

*Ella May Wulff
Philomath, Oregon*

SHORT-CHANGED ON COLEUS

The article "Coleus's Comeback" by Ray Rogers (January/February 2008) left me disappointed. While the article covers fairly esoteric (though intriguing) points such as the plant's 1853 discovery in Java, popular opinions of coleus in the early years of the 20th century, and its new Latin nomenclature, it fails to include basic information such as whether the plant is an annual or perennial, what hardiness and heat zones it tolerates, and what is the optimal soil pH for growing it.

Although the article is an excerpt from a book that will presumably be more comprehensive, it is important that key data be presented in the magazine. While avid gardeners and horticulture profes-

MYSTERY PLANT NO LONGER

Many readers have offered suggestions for the identity of the mystery plant that appeared in the November/December 2007 issue in a photograph sent in by Tina Cofield of Bear Creek, Alabama. We finally have a definitive ID from former University of Georgia horticulturist and woody plant expert Michael Dirr:

I saw the mystery plant pictured in the last issue and immediately agreed with Richard Olsen, who identified it as *Nyssa sylvatica* (tulpeo or black gum).



Interestingly, it's one of the most difficult plants for students to identify because the leaves are variable in shape, serrations, and lobing, especially in the juvenile stage. One of the best ways to ID it is to look at the leaf scars, which have three vascular bundle traces that look like cave entrances.

Nyssa is picking up steam in commerce and there are many new cultivars—including variegated, twisted stem, red new foliage, and weeping types—being introduced. For a species that was typecast as difficult to transplant, it is close to mainstream.

Keep up the great work.

*Michael Dirr
Bogart, Georgia*

sionals do enjoy a plant's finer points and back story, it should not be done at the expense of the fundamentals.

*Charles Fields
New York, New York*

Editor's note: The editors must take the blame here, because Ray Rogers covers all the basics in his book. Coleus is considered a tender perennial and thrives in USDA Zone II, AHS Zones 12 to I. It will

grow best in soil with a pH range from slightly acidic to slightly alkaline (6 to 8).

UNDESERVING TOMATO?

I love this publication, but I'm not sure the UGLYRIPE® tomato covered in a news item in the September/October 2007 issue (page 48) is worth promoting.

I have concerns about this tomato being grown year round. Even though it is grown in Florida, it must still be grown in a greenhouse. Is it grown hydroponically or is it grown in soil? Also, is it grown organically?

And I thought that we are trying to shorten the distance that produce travels in this country to conserve on energy spent shipping and picking unripe produce so that it will withstand long distances.

If this is what must happen to get a tomato that tastes like a tomato out of season, then I'd say, eat something else that happens to be in season.

*Jennifer Ewing
Port Orford, Oregon*

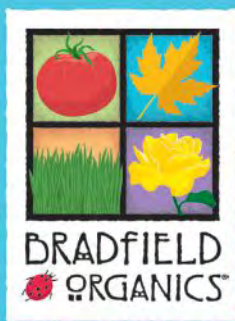
Editor's note: Your points are well taken. However, we didn't intend the news item to serve as a promotion for the tomato; we were interested by the idea that the Florida marketing board was using purely cosmetic features to decide what kind of tomatoes could be exported.

DO YOU MOW? Contributing Editor Rita Pelczar is researching an article on energy efficient lawn mowers and would like input from AHS members. If you have had good experiences with reel mowers, battery-powered mowers, or electric mowers, please e-mail your recommendations and stories to Rita at editor@ahs.org. If you are willing to be interviewed, please include daytime contact information.

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.



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Underwood Named AHS Executive Director

THE AMERICAN HORTICULTURAL SOCIETY Board of Directors has selected **Tom Underwood** as the Society's Executive Director. This newly created position will become the top staff position in the organization, replacing the office of president, which was vacated when Deane Hundley resigned as AHS President and Chief Executive Officer in early January. Underwood, who has been with the AHS for five years, was promoted from his former position as Director of Member Programs and Chief Operating Officer.



Tom Underwood

"Based on Tom's experience at the AHS and connections within the American horticultural community, the Board feels that he is the right person to lead this organization at this point in time," says **Susie Usrey**, chair of the AHS Board. "And by repositioning the top leadership role to an executive director, we are shifting to a model that has served the Society well for most of the last three decades and is typical of many similar nonprofit organizations today."

Underwood brings nearly 30 years of leadership experience in the horticulture industry to the position. Prior to joining the AHS, he worked for 20 years with the Walt Disney World Resort in Lake Buena Vista, Florida. At Disney, he was involved with producing the annual Epcot International Flower & Garden Festival, coordinated horticultural training and internships, developed gardening programs and seminars, and managed behind-the-scenes nurseries and greenhouses for the resort. He has a bachelor's degree in ornamental horticulture from Cal Poly San Luis Obispo and a master's degree in science education from the University of Central Florida.

"The American Horticultural Society is dedicated to making a difference in people's lives through the art and science of horticulture. Our mission is more important today than ever before," says Underwood. "I am tremendously honored to have been selected by our AHS Board to lead the organization at this important time in the Society's history. I expect the coming years to be full of collaboration, synergy, and excitement as we continue to move the organization forward."

AHS Expands Role in Providing Produce for Local Food Bank

ACCORDING TO America's Second Harvest, 24 to 27 million Americans rely on emergency food services annually, and approximately 633,000 citizens in the metropolitan Washington, D.C. area are at risk of hunger.

Food banks are chronically short of fresh fruits and vegetables, so for the last two years the AHS has donated produce grown in *The Growing Connection* demonstration garden at its River Farm headquarters to the Capital Area Food Bank. This year, the AHS is joining forces with Plant a Row for the Hungry (PAR) to broaden the scope of the program. Developed by the Garden Writers Association, PAR is a nationally based campaign that encourages gardeners to donate their excess harvest to local food banks or soup kitchens.

From April 1 to November 1, River Farm will serve as a centralized drop-off site for produce donations. AHS members

who live in northern Virginia and the surrounding metropolitan area and would like to donate their surplus harvest can deliver it to the Education Office at River Farm by noon on Mondays. AHS staff members will then deliver all the donations to the food bank.

"With the help of local gardeners, we can supplement what we are producing in *The Growing Connection* garden," says **Jessica Rozmus**, AHS education programs coordinator. "Last year the AHS donated 700 pounds of produce, and this year I hope to increase that to 1,500 pounds."

Rozmus encourages anyone interested in participating to take the name of the program literally. "Plant an extra row or two of each kind of vegetable you normally grow," she says.

For more information on how you can participate, contact Jessica Rozmus at (703) 768-5700 ext. 137, e-mail jrozmus@ahs.org, or visit the AHS website at www.ahs.org and click on the "River Farm" link.



AHS staff member Jessica Rozmus, left, displays produce grown in *The Growing Connection* demonstration garden, above, for donation.

April Garden School Focuses on Trees

A NEW AHS Garden School program, “Trees of the American Landscape,” will take place at George Washington’s Mount Vernon Estate & Gardens in Alexandria, Virginia, on April 10 and 11. During this two-day workshop, participants will learn how to select, establish, preserve, and restore trees. Sessions will also focus on the value of trees in the landscape and the characteristics plant explorers and breeders are seeking for the next generation of landscape trees.



Tony Aiello from the Morris Arboretum will be among the Garden School speakers.

Mount Vernon’s Director of Horticulture, **Dean Norton**, will serve as guest horticulturist for this event. Other featured speakers are author, landscape architect, and arborist **Guy Sternberg** of Starhill Forest; arboricultural researcher **Tom Smiley**, of the Bartlett Tree Research Laboratories; noted tree enthusiast **Mike Hayman** of Louisville, Kentucky; **Holli Howard**, director of data gathering and analysis for Casey Trees; and Morris Arboretum’s Director of Horticulture and Curator, **Tony Aiello**. In addition to lectures, attendees will par-

take in a guided tour of George Washington’s beloved trees, as well as a field study focusing on tree care and preservation led

by The Care of Trees—the exclusive tree care company of the American Horticultural Society.

For more information, call (703) 768-5700 ext. 137 or visit www.ahs.org and click on “Events.”

Historic Garden Week in Virginia

FROM APRIL 19 to 27, gardeners, history buffs, design enthusiasts, and the public in general can enjoy the 75th annual Historic Garden Week in Virginia. Sponsored by the Garden Club of Virginia, this event features beautiful homes, gardens, and historical landmarks stretching the length and breadth of the state and spanning four centuries of history. Tours include five or six houses and gardens each, totaling 250 sites statewide. The AHS’s River Farm headquarters in Alexandria is a participating site, where visitors can take a self-guided walking tour. Visit www.VAGardenweek.org for more information.

AHS Webinars for 2008

THE AHS will offer four free online garden seminars—or webinars—this year, exclusively for its members. The live webinars are delivered as an on-screen slide show, with the presenter’s voice delivered as streaming audio through the computer’s speakers or by telephone. Registered participants can access the webinars from practically any location where there is access to a high-speed Internet connection. Each webinar starts at 1 p.m. Eastern time and lasts about an hour,

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AHS NATIONAL EVENTS AND PROGRAMS

2008 CALENDAR

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

- MAR. 19–JUNE 1. **Epcot International Flower & Garden Festival.** Lake Buena Vista, Florida.
- MAR. 20. **Webinar: Native Ferns, Moss, and Grasses** by William Cullina (Registration closed.)
- APR. 10 & 11. **AHS Garden School.** “Trees of the American Landscape.” George Washington’s Mount Vernon Estate and Gardens, Alexandria, Virginia.
- APR. 18 & 19. **Friends of River Farm Plant Sale.** George Washington’s River Farm, Alexandria, Virginia. (Please note: Member’s-only preview sale is from 4 p.m. to 8 p.m. on April 17.)
- MAY 4–7. **Colonial Williamsburg Garden Symposium.** Williamsburg, Virginia.
- MAY 8. **Webinar: New and Underused Woody Plants for American Gardens** by Dan Hinkley.
- MAY 9. **Magic of Landscapes.** Lake Buena Vista, Florida.
- MAY 18. **Friends of River Farm Family Picnic.** George Washington’s River Farm, Alexandria, Virginia.
- MAY 24–OCT. 13. **Green Garage® Exhibit at United States Botanic Garden.** Washington, D.C.
- MAY 27–30. **AHS President’s Council Trip.** Washington, D.C.
- JUNE 6. **Great American Gardeners Awards Ceremony and Banquet.** George Washington’s River Farm, Alexandria, Virginia.
- JUNE 19 & 20. **AHS Garden School.** “Gardening with Native Plants.” Denver Botanic Gardens, Denver, Colorado.
- JULY 8. **Webinar: Designing with Color and Texture For Visionary Effects** by Tracy DiSabato-Aust.
- JULY 23–26. **National Children & Youth Garden Symposium.** Greater Philadelphia Area.
- AUG. 22–24. **The Homestead’s 10th Annual “In The Garden With the Experts” Symposium.** The Homestead, Hot Springs, Virginia.
- SEPT. 20. **AHS Annual Gala.** George Washington’s River Farm, Alexandria, Virginia.
- OCT. **Webinar.** Details to be announced.
- OCT. 23. **Dr. H. Marc Cathey Day.** George Washington’s River Farm, Alexandria, Virginia.
- DEC. 11. **Annual Friends of River Farm Holiday Reception.** George Washington’s River Farm, Alexandria, Virginia.

with time for questions from the audience. Registration is on a first come, first served basis.

William Cullina of the New England Wild Flower Society will present the first webinar, “Native Ferns, Moss, and Grasses,” on March 20. This webinar is already fully subscribed and registration has closed.

On May 8, **Dan Hinkley**, plantsman and former owner of Heronswood Nursery in Kingston, Washington, will present “New and Underused Woody Plants for American Gardens.” Registration will open on April 15 through the members-only area of the AHS website. Space is limited and early registration is recommended.

On July 8, landscape designer and author **Tracy DiSabato-Aust** will present a webinar on “Designing with Color and Texture For Visionary Effects.”

A fourth webinar is planned for October—look for more details in upcoming issues or on the AHS website.

Spring Plant Sale at River Farm

AT THE AHS’s annual plant sale at River Farm on April 17, 18, and 19, more than 30 vendors will be providing a variety of new and uncommon trees, shrubs, herbs, perennials, annuals, and



Hostas and other perennials will be available at the plant sale.

other plants. Shoppers will find everything from heirloom tomatoes and topiaries of culinary herbs to pine-scented geraniums and dwarf, reblooming, rose-scented iris.

AHS members presenting a valid membership card may attend the preview sale from 4 p.m. to 8 p.m. on Thursday, April 17. The public is welcome on April 18 from 9 a.m. to 5 p.m., and on April 19 from 9 a.m. to 4 p.m. Parking is free for AHS members and \$3 for non-members. All proceeds from the sale will benefit the gardens and grounds of River Farm. For additional information, visit www.ahs.org or call (703) 768-5700 ext. 114.

Coinciding with the plant sale, the National Capital Area Garden Clubs–District II will hold their Standard Flower Show, titled “All Things Bright And Beautiful,” in the main house at River Farm. The show is free and open to the public on April 17 from 1:30 to 5 p.m., and April 18 from 9 a.m. to 1 p.m.

Explore noteworthy landscapes while learning about America's great trees and native plants at these exclusive AHS Garden School offerings.

AHS GARDEN SCHOOLS *for 2008*

This year, the hosts for the American Horticultural Society's Garden Schools will be George Washington's Mount Vernon Estate in Virginia and the Denver Botanic Gardens in Colorado.

At Mount Vernon, we will study the stunning trees that beautify the American landscape. And at Denver Botanic Gardens—one of the first gardens in the country to emphasize native plants—we will study native species. Gardening enthusiasts and horticultural professionals alike will benefit from these inspirational and informative two-day workshops.

Visit www.ahs.org or call (703) 768-5700 ext. 137 for more information on how you can be part of these exciting events.

APRIL 10 & 11, 2008

Trees of the American Landscape

George Washington's Mount Vernon Estate and Gardens, Alexandria, Virginia

with Guest Horticulturist Dean Norton, Mount Vernon's Director of Horticulture



JUNE 19 & 20, 2008

Gardening with Native Plants

Denver Botanic Gardens, Denver, Colorado

with Guest Horticulturist Scott Calhoun, garden designer and author



An AHS Garden School guided tour



Colonial Williamsburg Symposium

ON MAY 4 to 7, the 62nd annual Colonial Williamsburg Garden Symposium, “Celebrating the American Garden: Bringing People and Plants Together,” will be held in Williamsburg, Virginia.

Co-sponsored by the AHS and *Fine Gardening* magazine, the event will include experts from up and down the East Coast and elsewhere speaking on a wide range of topics such as “Restoring New York City’s Parks and Gardens” and “Flooding the Senses with Water in the Garden.” Optional activities will include walking tours, workshops, and demonstrations. Call (800) 603-0948 or visit www.history.org/conted for more information or to register for the symposium.



Magic of Landscapes Symposium

THE SIXTH ANNUAL Magic of Landscapes symposium, co-sponsored by the American Horticultural Society and other green organizations, will take place on May 9 at the Epcot International Flower & Garden Festival in Orlando, Florida. This year’s symposium, which focuses on strategies for creating value with quality landscapes, features speakers **Phil Myrick** from the nonprofit organization Project for Public Spaces and **John Thomas** of the landscape architecture firm Edward Pinckney and Associates.

For the first time, Magic of Landscapes will feature “Tools You Can Use,” a five-segment update on best design and horticulture practices, including America in Bloom’s “8 Criteria for American Cities” and “10 Underutilized Plants and Shrubs.” Optional tours of the historic landscapes of nearby Winter Park will also be offered. Continuing education credits are available for various aspects of this program. For more information, please visit www.magicoflandscapes.com.

News written by Editorial Intern John Fiege and AHS staff.

COURTESY OF COLONIAL WILLIAMSBURG FOUNDATION

Gifts of Note

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, 2007 and January 31, 2008.

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Ms. Luise Strauss

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Ms. Lisa Windhusen

*In honor of the marriage of
Mr. and Mrs. Donald Sigmund*
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If you would like to support the American Horticultural Society as part of your estate planning, as a tribute to a loved one, or as part of your annual commitment to charitable giving, please contact Laura Alexander, (703) 768-5700 ext. 127 or laalexander@ahs.org.

The Matheson Legacy at River Farm

by Courtney Capstack

THE AMERICAN HORTICULTURAL SOCIETY (AHS) and the gardening community of the greater Washington, D.C., area recently lost two long-standing friends and contributors who had strong links to the Society's River Farm headquarters in Alexandria, Virginia. On December 14, 2007, **Emma Tompkins Matheson** died at the age of 94 from complications caused by a stroke. A week later, her husband of 72 years, **Malcolm Matheson, Jr.**, also 94, died of respiratory failure.

Malcolm Matheson, Jr. spent much of his childhood living at River Farm. His father, **Malcolm Matheson, Sr.**, moved to the property, which was then known as Wellington, with his wife and children in 1919. The Mathesons made significant improvements to the



grounds over the years, building a new wing on the estate house and adding plantings of perennials, boxwoods, and trees, many of which still flourish today.

In 1936, Malcolm Matheson, Jr., married Emma Tompkins—known to her friends as Pinkie—and the couple settled in a home near River Farm.

Malcolm Matheson, Sr., put the property up for sale in the early 1970s, and the AHS purchased it for its headquarters in 1973 with the aid of a generous contribution from the Enid Haupt Charitable Trust. “At last, gardening has a home,” exclaimed **David G. Leach**, the Society's president at the time. Prior to the acquisition of River Farm, the Society's staff had been split between a crowded office in Alexandria and the Plant Records Center at the Tyler Arboretum in Lima, Pennsylvania.

THE MATHESONS AND THE WHITE HOUSE CONNECTION

Another part of the Matheson legacy at River Farm is a set of wrought iron gates that originally graced the White House for over a century, from 1818 through the 1930s.

According to historian **William Seale**, the Charles H. Tompkins Construction Company was often contracted to work at the White House during the administration of President Franklin Roosevelt. During a renovation project in 1936 and 1937, the gates were removed from the northeast entrance. At the time, White House contractors could dispose of unused materials at their discretion, and it is thought that Tompkins gave the gates to the Matheson family around the time of his daughter Emma's marriage to Malcolm Matheson, Jr., which coincided with the renovation. The gates were later installed at the front entrance of River Farm, where they remained until 2002.



The restored White House Gates now welcome visitors to River Farm.

Seale, a former AHS Board member, was instrumental in identifying the historic origins of the gates, which have since been restored to their original glory and are now prominently displayed at the entrance to a mixed border near the front of the Estate House. —C.C.

The Mathesons' contributions to horticulture extended well beyond the grounds at River Farm. “My mother was an excellent gardener, flower judge, and flower arranger,” says **Lida Stifel**, one of Malcolm and Emma's six children. Emma served two terms as president of the Garden Club of Alexandria, Virginia; was a director of the Garden Club of America; and served on the Dumbarton House Gardens Committee while a member of the National Society of Colonial Dames of America.

An active member of the AHS, Emma served on the Society's Board of Directors from 1981 to 1983, was on the AHS Advisory Council from 2003 to 2007, and received the AHS's Local Horticulture Award in 2004. Both Malcolm and Emma had been Haupt Associates members of the AHS President's Council since 2003.

“Mr. Matheson was the perfect gentleman—but with wit and humor,” says **Stephanie McLellan**, a former AHS employee and long-time neighbor to the Mathesons. “Mrs. Matheson was quite the lady in her ‘garden’ hat and always just as quick as her husband with a quip and a laugh. Mr. Matheson's boyhood home was very dear to both of them—and I think a major reason that they supported so many AHS projects over the years.”

Malcolm and Emma Matheson were committed to the welfare of the AHS and River Farm, never hesitating to offer help and advice when needed. Their presence will be missed at River Farm, but their legacy will continue to live on as an integral part of the AHS's history.

Courtney Capstack is the development associate for the AHS.

AHS 2008 GREAT AMERICAN GARDENERS NATIONAL AWARD WINNERS

THE AMERICAN HORTICULTURAL SOCIETY is proud to announce the distinguished recipients of the Society's 2008 Great American Gardeners Awards. Individuals, organizations, and businesses who receive these 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 conservation. We applaud their passionate commitment to American gardening and their outstanding achievements within their fields.

The 2008 awards will be presented on June 6 during the Great American Gardeners Awards Ceremony and Banquet at River Farm, the AHS's headquarters in Alexandria, Virginia. To register for the awards banquet or for more information, visit www.ahs.org or call (703) 768-5700 ext. 137.

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.

Harold Pellett is the executive director of the Landscape Plant Development Center headquartered in Chanhassen, Minnesota, which he founded in 1990. This national non-profit organization is devoted to developing durable, stress-tolerant landscape plants for all regions.



Growing up in his family's nursery business in Iowa, Pellett was involved in horticulture from an early age. He received his doctorate from Iowa State University, focusing his studies on plant physiology, breeding, and genetics. Pellett then taught horticulture and conducted research for more than 36 years at the University of Minnesota. His research involved the breeding and evaluation of landscape plants, resulting in more than 25 new tree and shrub introductions. Among these is the "Lights" series of cold-hardy azaleas.

Pellett's many accolades include the Award of Merit from the National Council of State Garden Clubs and the Medal of Honor from the Garden Club of America. He is also a Fellow of the American Society for Horticultural Science and the International Plant Propagators Society.

H. MARC CATHEY AWARD

Recognizes outstanding scientific research that has enriched the field of horticulture.

Thomas G. Ranney is a professor of horticultural science at North Carolina State University. He leads a research program at the Mountain Horticultural Crops Research and Extension Center in Fletcher, North Carolina, where he focuses on



the development of new landscape plants. Recent developments include *Calycanthus* 'Venus' and transgeneric hybrids such as *×Schimlinia floribunda* and *×Gordlinia grandiflora*. Ranney's research has helped change breeding rules for interspecific and transgeneric hybrids. He has also helped preserve germplasm of plants that are extinct or threatened in the wild.

Ranney has received numerous awards, including the Distinguished Achievement Award for Nursery Crops from the American Society for Horticultural Science.

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.

David Salman is the president and chief horticulturist of the retail nursery, Santa Fe Greenhouses, in New Mexico and its



mail-order division, High Country Gardens, which he founded in 1984 and 1992, respectively. Both businesses specialize in beautiful and drought-tolerant plants for western gardens.

Widely regarded as a xeriscaping pioneer, Salman promotes waterwise gardening through articles published in national magazines and speaking engagements throughout the country.

Salman has introduced more than 25 plant selections with an emphasis on native, cold-hardy, and xeric species. He also collaborates on regional plant evaluation programs such as Plant Select®, which promotes plants suited to the Rocky Mountain region.

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.

Herbert R. Schaal is a principal in the renowned landscape architecture firm EDAW/AECOM and a Fellow of the American Society of Landscape Architects.



During Schaal's more than 30 years at EDAW, he has applied the principles of landscape architecture, sustainability,

and ecology to a wide range of projects.

In recent years, Schaal has specialized in design of public gardens, including educational gardens for children and gardens for healthcare facilities. Among these, some of his best-known projects are children's gardens at the Cleveland Botanical Garden, the Morton Arboretum, and the Norfolk Botanical Garden.

The more than 50 regional and national awards he has received have established him as one of the most acclaimed contemporary landscape architects.

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.

Irene Virag is an award-winning freelance journalist who has contributed a weekly garden column to *Newsday* since 1995 and writes articles for magazines such as *Better Homes & Gardens* and *Fine Gardening*.

If you know someone you would like to nominate for one of the 2009 Great American Gardeners Awards, please visit our website (www.ahs.org) and click on "Awards" for more information.



She joined *Newsday* in the 1980s and won a Pulitzer for local reporting in 1986. She later became editor of the magazine's "Home and Garden" section.

Virag is a Fellow of the Garden Writers Association and has won that organization's top award for newspaper writing several times. She is an inspirational public speaker and the author of *Gardening on Long Island with Irene Virag* (Newsday Books, 1999).

After earning a master's degree at Northwestern University's Medill School of Journalism, Virag went to Harvard University on a Nieman Fellowship.

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.

Francis X. Flaherty owns and operates Flaherty Iron Works in Alexandria, Vir-



ginia, which specializes in hot hand-forged ornamental metal work. In 2004, Flaherty assisted the AHS in the restoration of a set of 19th-century White

House gates that were discovered at the AHS's River Farm headquarters. The restored gates were featured at the 2005 Philadelphia Flower Show, after which Flaherty installed the gates at River Farm.

Additionally, Flaherty hand-forged a unique metal design piece for the AHS's Green Garage® exhibit, which is being displayed around the United States, and he continues to provide quality craftsmanship and support to the AHS.

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FRANCES JONES POETKER AWARD

Recognizes significant contributions to floral design in publications, on the platform, and to the public.

Renny Reynolds is a renowned entertaining, gardening, and lifestyle expert. In the 1970s he founded RENNY: Design for Entertaining in New York City, an event design firm known for its unique floral arrangements. Catering to high-profile clients such as Yves Saint Laurent and the White House, the company's designs have been featured in publications ranging from *House Beautiful* to *Horticulture*.



In 2002, Reynolds turned the business over to his nephew and co-founded Hortulus Farm Nursery & Gardens, an 18th-century farm located in Bucks County, Pennsylvania. He is also the author of *The Art of the Party* (Gibbs Smith, 2003).

PROFESSIONAL AWARD

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

Holly Harmar Shimizu has been the executive director of the United States Botanic Garden since 2000. During that period, she has overseen a major renovation of the garden's conservatory and the development of the new National Garden that opened in 2006.



Shimizu's career has included serving as the first curator of the National Herb Garden at the U.S. National Arboretum in Washington, D.C., and as the managing director at the Lewis Ginter Botanical Garden in Richmond, Virginia.

For 12 years, Shimizu was a host on *The Victory Garden*, a gardening television show broadcast on PBS and HGTV. She has also contributed to many books and magazines. Shimizu is on the advisory board of the American Botanical Council, and has served on the board of directors of the American Public Gardens Association.

CATHERINE H. SWEENEY AWARD

Recognizes extraordinary and dedicated philanthropic efforts in support of the field of horticulture.

Betty Brown Casey is one of America's leading philanthropists. In 2001, after becoming aware of the dramatic decline of trees in the District of Columbia since the 1970s, she donated \$50 million to endow a new non-profit organization called Casey Trees, whose mission is "to restore, enhance, and protect the tree canopy of the Nation's Capital."



The organization works to increase community activism and involvement in the planting and care of trees through various educational initiatives. It has developed new mapping and monitoring systems that have enabled cities and communities around the country to inventory their trees and map their successes, encouraging local involvement.

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.

Mike H.C. Devlin and **Valerie R. Frick** co-founded and co-developed the Cam-



den Children's Garden in Camden, New Jersey, in 1999. With Devlin as the executive director and Frick as the director of education, this husband-and-wife team has created a safe environment where children in one of the nation's most dangerous cities can learn about plants and nature.

Devlin and Frick also operate several other programs, including a Youth Employment and Training program for at-risk Camden youth through the Camden City Garden Club, a non-profit they founded in 1985.

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.

Laura Deeter is an assistant professor of horticultural technologies at the Agricultural Technical Institute (ATI) of the Ohio State University in Columbus, where she earned a doctorate degree in 2002. Deeter employs a variety of teaching styles and methods to create an informal, interactive learning environment.



She travels extensively, speaking on many gardening topics, and has authored numerous publications on wide-ranging topics such as landscape ornamentals, plant identification, and student-centered learning techniques.

Among the honors she has received are the ATI Distinguished Teaching Award, the Ohio State Alumni Award for Distinguished Teaching, and the Perennial Plant Association Academic Award.

URBAN BEAUTIFICATION AWARD

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

The Nebraska Statewide Arboretum (NSA), a nonprofit organization based at



the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources, is a unique network of more than 80 affiliate parks, arboreta, and other public garden sites across Nebraska. Founded in 1978, the organization is dedicated to the greening of every community in the state.

Through its Community Program, the NSA has provided more than \$7 million in matching grants to 228 Nebraska communities, resulting in more than 850 landscaping projects. It also provides a range of technical assistance, including planning, design, plant selection, and water conservation.

2008 AHS Book Award Winners

EACH YEAR, the American Horticultural Society recognizes outstanding gardening books published in North America with its annual Book Award. Books are judged by the AHS Book Award Committee on qualities such as writing style, authority, accuracy, and physical quality. This year's four recipients, selected from books published in 2007, are listed below.

Susan C. Eubank, a horticultural librarian for the Los Angeles County Arboretum and Botanic Garden in Arcadia, California, chaired the 2008 committee. Other committee members were **Gene Bussell**, a garden editor for *Southern Living* magazine in Birmingham, Alabama; **Thomas Cooper** of Watertown, Massachusetts, former editor of *Horticulture* and *The Gardener* magazine; **Doreen Howard** of Roscoe, Illinois, a former garden editor for *Woman's Day* who writes for various garden publications; **Marty Ross**, a regional contributor for *Better Homes & Gardens* and writer for Universal Press Syndicate who lives in Kansas City, Missouri, and in Hayes, Virginia; **Marcia Tatroe** of Centennial, Colorado, a writer for the *Denver Post* and *Sunset* magazine; and **Marty Wingate** of Seattle, Washington, a garden columnist for the *Seattle Post-Intelligencer*.

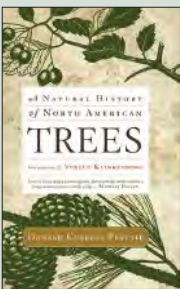
Foliage by Nancy J. Ondra. Storey Publishing, Massachusetts.

"This outstanding book is like opening a new box of paints," says Marcia Tatroe, "providing both inspiration and practical advice on using foliage plants." With more cultivars with colorful leaves becoming available, author Nancy J. Ondra "encourages readers to think conceptually about foliage," says Tom Cooper. "Rob Cardillo's magnificent photographs show just how exciting leaves can be," adds Marty Ross.



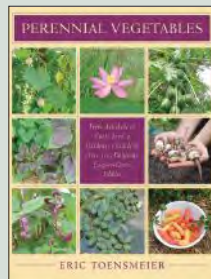
A Natural History of North American Trees by Donald Culross Peattie. Houghton Mifflin Company, New York, New York.

This condensed version of two volumes originally published in the 1950s "keeps alive a tradition of high-quality writing and great horticulture," says Cooper, and brings the late Donald Culross Peattie's lyrical essays to a new generation. "It's like being taken on a trip to visit these trees," says Marcia Tatroe. "The black-and-white drawings of each tree are amazingly evocative," says Marty Wingate. "A must for every horticultural library," says Doreen Howard.



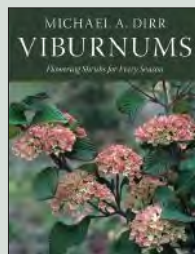
Perennial Vegetables by Eric Toensmeier. Chelsea Green Publishing Company, White River Junction, Vermont.

Full of surprising edible possibilities, this book "promotes fresh thinking as to what a vegetable garden can be," says Howard. "This topic is presented in a thorough and engaging way," says Susan Eubank. "It teaches responsible gardening practices without preaching," adds Ross. Gene Bussell notes that the book's production "reflects Chelsea Green's earth-friendly policy," while maintaining high quality.



Viburnums by Michael Dirr. Timber Press, Portland, Oregon.

In the first book dedicated entirely to this versatile genus of landscape trees and shrubs, "Michael Dirr has distilled his great knowledge of viburnums into a handsome reference full of careful observations and the unrestrained opinions that gardeners rely on him for," says Ross. "This book is useful, inspiring, and nicely done, with lots of good color photographs taken by Dirr as well as several beautiful illustrations by his wife, Bonnie," adds Wingate.



Citation of Special Merit

The AHS Book Award is given to publishers for a single book published in a specific year. However, two AHS Citations of Special Merit are being awarded in recognition of a series or regularly revised reference that has become an invaluable addition to horticultural literature.

Brooklyn Botanic Garden's All-Region Guide series

Published under the auspices of the Brooklyn Botanic Garden since 1945, this collection of horticultural handbooks currently includes more than 180 volumes offering practical ideas and inspiration for North American gardeners.



Sunset's Western Garden Book

In 2007, Sunset released the eighth edition of the *Western Garden Book*. Because this "bible" for western gardeners maintains up-to-date information built on a foundation of earlier editions, the committee chose to recognize the entire body of work rather than a single edition.





Woodland Beauties

Shy, beautiful, spring-blooming ephemerals, trilliums are coveted additions to a woodland garden, but overcollection and habitat loss are endangering them in the wild. BY JOAN DE GREY

TRILLIUMS ARE easy to recognize—and easier to love. But too much love can be a dangerous thing. The collection of wild specimens by admirers as well as the destruction of their habitats have greatly reduced the native populations in North America, endangering the survival of some species. Fortunately, more growers are propagating trilliums by seed, division, and—more recently—tissue culture. Now, those who want to include this lovely spring wildflower in their garden can

more easily purchase a wider variety of trilliums that have been produced in cultivation (see “Ethical Propagation and Purchase of Trilliums,” page 19).

Commonly called wakerobins because their flowering time loosely coincides with the return of robins, which overwinter in warmer regions, trilliums bloom in early spring before deciduous trees leaf out. Reliable perennials that thrive in woodland settings and moist shady garden borders, they are ephemeral—that is, they are plants that fade into

dormancy after flowering and return the following spring.

Among the approximately 48 species in the genus *Trillium*, 35 are native to eastern and southeast North America and seven are native to western North America. There are also six species indigenous to Asia, but because they are not commonly grown in North America, they are not covered in this article.

All species grow from underground rhizomes, and plants range in height from a diminutive five inches to a full two feet.

White-flowered *Trillium grandiflorum* and Virginia bluebells carpet the woodland at Delaware's Winterthur garden in early spring.

ETHICAL PROPAGATION AND PURCHASE OF TRILLIUMS

“The unifying theme for most trillium species is that they are representative of intact ecosystems,” says Rick Lewandowski, director of the Mt. Cuba Center in Greenville, Delaware.

Disturbance of such ecosystems, whether from development or conversion of habitat to agricultural use, has a ripple effect. “When the ecosystems begin to degrade through human intervention, invasion by non-native plant species, excessive deer browsing, off-site impacts such as erosion, or forest management practices, trillium populations begin to decline,” explains Lewandowski.

If a trillium-populated area is clear-cut, the protective leaf canopy is removed, effectively destroying the habitat. It is not recommended—and is often prohibited by law—to dig the plants from a natural stand. However, if the habitat is threatened by development, conservation groups sometimes schedule plant rescues to save native plant populations. Before attempting a plant rescue, be sure that the property owner is in agreement and you are in compliance with all applicable laws.

Most experts agree that, unfortunately, a large percentage of trillium nursery stock is collected from the wild, often be-

cause they are difficult or time-consuming to propagate. For example, William Cullina of the New England Wild Flower Society notes that painted trillium (*Trillium undulatum*), a native

of the eastern United States that bears white to pale pink flowers, is particularly hard to propagate, so much of what is sold is wild collected.

Tissue culture of trilliums is being studied and holds promise for increasing the availability of desirable species. “Our goals at Mt. Cuba Center,” says Lewandowski, “have been to propagate and grow trilliums from seed, tissue culture, and division to assist the horticulture industry in its efforts to make trilliums more widely available through reliable methods that don’t exert pressure on native habitats or populations.”

Before purchasing a trillium, ask about the origin of the plants, and, in particular, whether the plants are nursery-propagated. Be sure you are buying plants from reputable nurseries that are propagating trilliums from seed, rhizome divisions, and/or tissue culture—or that plants from growers who are doing so.

—Rita Pelczar, Contributing Editor



Trillium undulatum is difficult to propagate, so specimens for sale are often wild-collected.



Depending on the species, the flowers can be upright or nodding, but always with three outer sepals and three inner petals; their flower colors include white, pink, maroon, and yellow.

The genus is divided into two subgenera: pedicellate trilliums and sessile trilliums. Pedicellate trilliums bear flowers with relaxed petals on a short stalk that emerges from the center of the whorl of three leaves. Sessile types lack flower stalks so their flowers appear to sit on top of the leaves. Flowering time for each species varies somewhat depending on the latitude and altitude of the site.

PEDICELLATE TRILLIUMS

The approximately 23 pedicellate species are native to North America, northeast Asia, and the Himalayan Mountains. Nearly all produce solid green leaves and wide-spreading petals.

The deep red flowers of *Trillium erectum* are striking but possess a disagreeable odor.

Few early spring woodland plants are as impressive as *Trillium grandiflorum* (USDA Hardiness Zones 4–8, AHS Heat Zones 8–1), often considered the showiest of all *Trillium* species. Commonly called the great white trillium or white wake-robin, it is a vigorous clump-forming perennial that can literally create a rolling carpet of blooms from late April through early June, depending on the location. This species features a single stem that grows 16 to 18 inches tall, producing a whorl of mid-green leaves, green sepals, and a large two- to four-inch-wide white flower with yellow anthers. The flower turns pink as it ages. An established clump can achieve a spread of two feet, making it a useful woodland groundcover.

Native to northeastern North America and southward through the Appalachian Mountains, native stands display significant variability in size and flower color. *Trillium grandiflorum* forma *polymerum* (also listed as the cultivar ‘Flore Pleno’) bears snow-white double flowers. Another

er popular variant is *T. grandiflorum* var. *roseum*, which produces soft pink to deep pink flowers with leaves and stems that may be infused with deep red undertones.

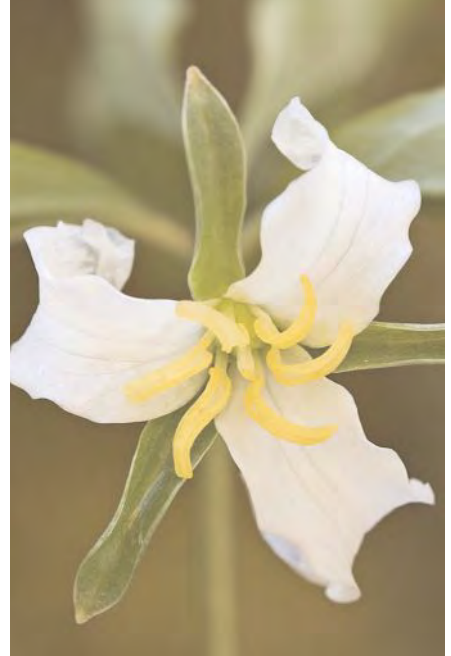
Trillium expert Frederick W. Case Jr., author of *Trilliums* (see “Resources,” page 22) recommends *T. grandiflorum* as a perfect choice for novice growers. The plants are hardy, easy to grow, and readily form impressive clumps.

Trillium erectum (Zones 4–7, 7–3) is commonly called the purple trillium or stinking Benjamin, a nod to the disagreeable scent of its flowers. This is Case’s favorite trillium, which, he says, “is easy to propagate, has many varieties, and forms good clumps.” It can grow 20 inches tall with a spread of 12 inches. Its flowering season coincides with that of *T. grandiflorum*, with flowers opening from April through early June. Each stem produces a single deep red-maroon flower with purple-tinted sepals. It displays more variability in size and color throughout its natural range within northeastern North America, than any other pedicillate species. Flowers of *T. erectum* var. *album* (syn. *T. erectum* forma *albiflorum*) are white.

From late March through June, *Trillium catesbaei* (Zones 6–9, 8–4) graces the southeastern United States with its nodding flowers that range from white to rose or pink. Commonly called bashful or rosy wakerobin, it produces petals, sepals, and anthers that are all distinctly recurved (curled backward), but the flowers are often partially hidden beneath the leaves.

The natural range of *Trillium nivale* (Zones 5–8, 8–5) spans from West Virginia and southern Pennsylvania westward through the north central states. Commonly called the snow trillium, it blooms in very early spring—mid-March to early April. Gene Bush, owner of Munchkin Nursery and Gardens in Depauw, Indiana, says it is the first trillium to appear in his garden. “It is small and brave, often with snow on the foliage. Hardy as a rock, easy to grow, reliable,” says Bush. It grows to a demure five inches in height with blue-green leaves and small, pure white flowers.

Indigenous to the Great Smoky Mountains of Tennessee, western North Carolina, and northern Georgia, stands of *Trillium simile* (Zones 4–8, 8–1) are often found growing along moist stream banks and among rhododendron thick-



Top left: *Trillium grandiflorum* forma *polymerum* bears double flowers. **Top right:** The flowers of *Trillium catesbaei* have distinctly recurved petals. **Above:** ‘Purple Heart’ is an attractive selection of *Trillium nivale*, which is native to the Pacific Northwest.

ets. Also called sweet white trillium, it produces broad leaves, bears large creamy white flowers, and stands 18 inches tall. “It is a carefree grower and easy to divide,” says Rick Lewandowski, director of the Mt. Cuba Center in Greenville, Delaware. “We have enormous sweeps of this species in our woodland garden. Few trilliums perform as well for us.”

The western North American native, *Trillium ovatum* (Zones 5–8, 8–5), is commonly known as the coast or western white trillium. Its reddish green stems emerge in early spring, producing dark green leaves and a single clean white flower that slowly fades to pink with age. The stems reach an impressive 20 inches in height. Leaves of the variety *maculosum* display deep ma-



The flowers of sessile trilliums grow directly on top of their foliage and are not as showy as those of their pedicellate counterparts. Two commonly available species are *Trillium sessile*, top, which features dark maroon flowers, and *Trillium luteum*, above, with yellow-green flowers.

roon markings, a feature that is uncharacteristic of pedicellate species.

Another western native, *Trillium rivale* (Zones 5–8, 8–5), is indigenous to the Siskiyou and Klamath Mountains in Oregon and California. The species name refers to its habit of growing near streams. This dwarf species grows five inches tall; it features white or pale pink flowers that are

often marked at the base of the petals with purple flecking. A selection with dramatic flecking, named ‘Purple Heart’, is sometimes available.

SESSILE TRILLIUMS

The second group of trilliums, those with sessile flowers, is comprised of approximately 23 species, all of which are

native to North America. Flowers of these species have no stalk and the three short petals are borne upright directly from the center of a cluster of leaves, which are typically mottled.

Although the natural range of yellow trillium (*T. luteum*, Zones 5–7, 7–4) is limited to western North Carolina, eastern Tennessee and Kentucky, and northern Georgia and Alabama, it has displayed adaptability by escaping cultivation and naturalizing in other regions. This easily cultivated species features mid-green leaves heavily mottled with light green and delicately scented, upright, light yellow-green flowers that open in April and May.

Another species indigenous to a relatively small region, *T. foetidissimum* (Zones 5–9, 9–5) can be found growing wild in Mississippi and Louisiana. It is also adaptable to a relatively wide range of soil conditions and can be grown as far north as southern Minnesota. The stems reach 10 inches tall with exceptionally showy olive-green leaves that are mottled with irregular bright green blotches with bronze undertones. The maroon petals of the flower are slightly incurved. Despite its common name, fetid trillium is a favorite of Tony Avent, owner of Plant Delights Nursery in Raleigh, North Carolina, “A single rhizome multiplies to 15 to 25 flowering stems in five years. Also, it grows from seed to flowering in four to five years,” says Avent. “It is truly a marvelous and easy-to-grow specimen.”

Trillium sessile (Zone 4–8, 8–1), native to the American Midwest and commonly called toad trillium or toadshade, grows 12 inches tall and produces a clump about eight inches across. Its coloring is dramatic: the dark-green leaves are mottled with pale green, white, bronze, and maroon. And the flowers, which appear from March to mid-May, depending on location, are a vibrant red-maroon.

Trillium cuneatum (Zones 6–9, 9–6), is indigenous to the southeastern United States, from North Carolina to Mississippi, but it can be grown well outside of its native range. According to William Cullina, director of horticultural research at the New England Wild Flower Society’s Garden in the Woods, in Woodstock, Connecticut, it is “one of the most vigorous and large of the mottled-leaved species. We grow a form with wine-red

flowers that smell intensely of ripe fruit on a warm April day.”

“Robust *T. cuneatum* is hard to beat,” says Cole Burrell of Free Union, Virginia, author of *A Gardener’s Encyclopedia of Wildflowers*. “The mottled leaves are slightly ruffled, and the flowers smell of Juicy Fruit™ gum.” Grown in moist, humus-rich soil in part to full shade, plants can grow two feet high, blooming in mid-March through mid-April.

Resources

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Munchkin Nursery & Gardens, Depauw, IN. (812) 633-4858. www.munchkinnursery.com. Catalog \$4; free online.

Native Plant Nursery and Gardens, Salem, OR. (503) 581-2638. www.nwplants.com. Catalog online.

New England Wild Flower Society. www.newfs.org.

Plant Delights Nursery, Inc., Raleigh, NC. (919) 772-4794. www.plantdelights.com. Catalog online; print catalog for 10 stamps or a box of chocolates.

Underwood’s trillium (*Trillium underwoodii*, Zones 5–9, 9–5) grows in deciduous woodlands within a limited natural range including Alabama, western Georgia, and northern Florida, but like many other trilliums, it is hardy well beyond that region. Plants emerge early—often in February or March in the southern part of its range, in April in cooler regions. The leaves boast a checkerboard mottling with a central silver streak. Plants grow about eight inches tall, and the dark purple flowers have a somewhat unpleasant aroma.

GROWING TRILLIUMS IN THE GARDEN

Trilliums grow best in dappled or seasonal shade; a mature deciduous woodland is an ideal growing location. In early spring, before the trees leaf out, exposure to sunlight ensures that the plants will flower freely. By the time leaves are fully expanded and the woodland is in full shade, trilliums have entered dormancy. Trilliums will not flower well or even survive many seasons when grown in deep, year-round shade.

In general, trilliums grow best in a humus-rich, well-drained, slightly acidic

to neutral soil, “although some do well in clay, and a few, such as *T. undulatum*, can handle very acidic, peaty soil,” says Cullina. Their water requirement, like their need for light, is somewhat seasonal. “Most trilliums need plenty of moisture in spring, but can handle drier soil after they go dormant in summer,” says Cullina.

In a garden, soil preparation is critical for success. Cullina enriches the sandy loam soil of his woodland garden with aged compost, “digging in six to eight inches worth when newly planting, and topdressing with two inches every spring.”

Gene Bush likes to improve drainage in his beds by incorporating organic matter such as compost or deciduous leaves. The leaves can be chopped up to speed up the process of decomposition.

Trilliums are bothered by few insect pests; seedlings are susceptible to damage caused by snails and slugs. Unfortunately, trilliums are a delicacy for deer. Because they produce a single stem each year, trilliums are particularly susceptible to damage by grazing. When the stem is removed, the plant loses the only source

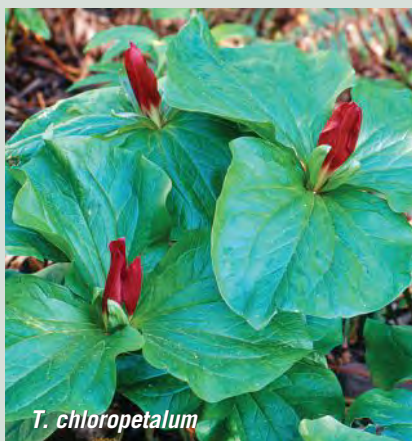


Besides extreme hardiness and vigor, *Trillium cuneatum* offers the bonus of fragrant flowers.

JOSEPH G. STRAUCH JR.

MORE TRILLIUMS WORTH GROWING

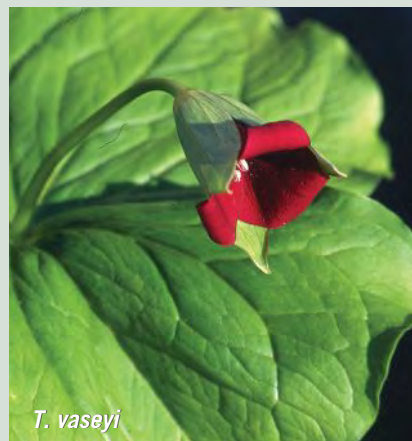
Name	Height/Spread (inches)	Flowers and Foliage	Natural Range	USDA Hardiness, AHS Heat Zones
<i>Trillium cernuum</i> (nodding trillium)	24/10	pale pink, white, or red-brown with wavy petals on pendant stalks	eastern North America	6–9, 9–6
<i>Trillium chloropetalum</i> (giant wakerobin)	16/8	white, yellow, red, or brown-purple flowers; marbled green, gray, maroon leaves	California	6–9, 9–6
<i>Trillium recurvatum</i> (purple wakerobin)	12/12	deep maroon, sometimes white or yellow flowers; mottled green leaves	eastern U.S.	5–8, 8–3
<i>Trillium stamineum</i> (twisted trillium)	15/8	dark red flowers with twisted petals; marbled silver-and-green leaves	southeastern U.S.	5–9, 9–5
<i>Trillium sulcatum</i> (southern red trillium)	15/8	blood-red flowers, sometimes yellow, cream, or bicolored, on erect pedicels	southeastern U.S.	3–8, 8–3
<i>Trillium vaseyi</i> (sweet wakerobin)	24/10	large nodding dark maroon flowers; large leaves	Appalachian Mountains	5–8, 8–3
<i>Trillium viride</i> (wood trillium)	16/8	yellow-green flowers; green leaves with white spots	Illinois and Missouri	4–8, 8–1



T. chloropetalum



T. recurvatum



T. vaseyi

of food for the rhizome, which stores energy for the following season's growth. Plants might survive a few years of grazing but over time will likely succumb.

In the garden, trilliums combine well with other non-aggressive woodland ephemerals and perennials, including ferns, bleeding hearts (*Dicentra* spp.), dog-tooth lilies (*Erythronium* spp.), columbines (*Aquilegia* spp.), bellworts (*Uvularia* spp.), epimediums, woodland phlox, Virginia bluebells (*Mertensia virginica*), forget-me-nots (*Myosotis* spp.), and wood poppies (*Stylophorum diphyllum*).

PROPAGATING TRILLIUMS

Trilliums are generally slow-growing but, over time, many species form large clumps or spreading colonies. Each pollinated trillium flower can produce a fleshy seed pod that ripens by mid-sum-

mer. The seeds are small with a fleshy outgrowth called an elaiosome that contains oils that attract ants. In a natural environment, the ants carry the seeds back to their nest, consume the elaiosome and discard the seed, effectively dispersing it.

"You can increase your stand if you collect the ripe seed capsules in mid- to late summer and plant the seeds immediately a few inches deep," suggests Cullina. Removal of the elaiosome by soaking freshly collected seeds for about 15 minutes in a three-percent hydrogen peroxide solution helps reduce the seeds' susceptibility to mold and rot. Seeds usually germinate within two years and produce blooming plants in five to eight years.

Trilliums can also be propagated by dividing their rhizomes, which is usually done after flowering, as leaves turn yellow, but also can be done just as stems emerge

in spring. Cut the rhizome into divisions that contain both roots and at least one or two buds. "Be careful not to damage the root systems, as this will set the plants back quite a bit," says Cullina. Rhizomes should be planted as quickly as possible to avoid drying out. Plant them two to six inches deep and space them six to 24 inches apart, depending on the maximum spread of the species.

Because trilliums are widely adaptable, gardeners in many regions of the country can enjoy one or more species of this charming spring ephemeral in their woodland beds or shady borders. However, to reduce the threat of overcollection in their natural habitats, be sure to buy only nursery-propagated trilliums.

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Spiking Interest



WHEN DESIGNING and planting our gardens, most of us tend to focus on flowers first. But to be successful, a design must rely on structure—the “architectural” elements of form and texture, shape and height. Strong form, along with the plant’s texture, give a garden season-long interest.

In profile, the majority of garden plants have an even, rounded form. Like a sky filled with billowing clouds, these mounding forms are satisfying to the eye, but too much of a good thing quickly makes a vignette mundane.

Sharp edges make sharp contrasts, creating essential tension in planting design. Tension in design comes from a balanced relationship and interplay between strongly opposing elements, which causes both el-

ements to achieve greater prominence. Ascending swords, spears, and lances make lasting impressions. Vertical lines draw the eye skyward, which breaks the horizontal lines of the planting and animates the entire garden picture. Hand in hand with form, the texture of foliage creates visual excitement that makes a successful design.

Just like a sculpture or jardinière holds your gaze, the singular contrasting form of ascending blades creates a point for the eye to rest, thereby allowing it to take in the details around it. Without an arresting form, the eye wanders aimlessly. But beware of overload. Treat spiky plants like garden ornaments—use them deliberately and sparingly.

Spiky foliage is found in a variety of common garden plant groups, including

the sedges, ferns, arums, and orchids. However, the bulk of the plants I am going to address fall into two general groups, the woody desert lilies and the bulbous or rhizomatous irises and their kin.

Desert lilies, once classified in the lily family (Liliaceae), have been split into new families, most notably the agave family (Agavaceae) and the dracaena family (Dracaenaceae), though botanists do not uniformly agree on the new classification. These plants share a need for fast-draining soil and sunshine, though many tolerate moderate shade. The iridaceous group, on the other hand, contains wetland plants ideal for loamy soils in sunny sites, as well as woodland plants that thrive in rich humusy soil and need more shade.

Plants with bold, spiky foliage can make a ho-hum garden exciting. Here are some noteworthy choices you can integrate into your landscape.

BY C. COLSTON BURRELL



Above: An agave's starburst form provides a stunning focal point for this planting at the Boyce Thompson Arboretum in Arizona. Opposite: In the bog garden at New York Botanical Garden, the spiky leaves of *Carex* 'Joe Dance', *Imperata cylindrica* 'Rubus', and *Juncus effusus* contrast well with the mounded form of *Chelone* 'Hot Lips' and the broad, rounded leaves of bergenia.

DESERT SUITE

The unfolding rosette of *Agave parryi* (USDA Hardiness Zones 7–10, AHS Heat Zones 12–5) foliage makes a lasting impression on the eye. Its rosettes are squat and rotund, ultimately attaining one to two feet. When the flower finally arrives, it rises to six feet or more, and sports more than 100 upright yellow flowers in tight tiers. Although each rosette flowers only once, offsets, or pups, may form from the crown before the rosette dies. Among the hardiest of the agaves, *A. parryi* thrives in sandy soil. A sloping site is ideal, where excess water will drain away from the crown. Full sun to light shade is best. Several subspecies have been named, each with a different form and size. Additional gardenworthy



Container plantings such as this *Cordyline australis* 'Pink Stripe' can be placed to add textural interest where needed in a garden.

agaves to consider include *A. americana*, *A. gracilipes*, *A. havardiana*, *A. montana*, *A. neomexicana*, and *A. scabra*. Take care, particularly if you have children, where you site agaves that have stiff, sharp spines at their leaf tips, because they can pierce the skin.

The twisted powder blue blades of blue sotol or desert spoon (*Dasylyrion wheeleri*, Zones 7–10, 11–7) are lined with teeth reminiscent of the snout of a sawtooth shark. Roughly spherical in outline, mature crowns reach four feet in height, and give rise to towering, 10-foot spires of densely packed cream-colored flowers. This dioecious genus flowers annually, unlike many other desert lilies.

A southwestern desert native, sotol, grows best in well-drained sites with average sandy or loamy soil. Good drainage is essential, and avoid organic mulches, which can retain water around the crown of the plant. Prized for xeriscape gardens, this exquisite plant has a grace lacking in the more menacing agaves and yuccas. The long blades that surround the spherical crown dance in unison in the wind, and the flowers are favored by insects. *Dasylyrion texanum* (Zones 9–11, 11–9) has unarmed green leaves and narrow bloom spires, while the spineless filamentlike foliage of *D. longissimum* (Zones 8–11, 11–8) forms a unique, fine-textured crown.

Nelson's blue beargrass (*Nolina nelsoni*, Zones 8–10, 10–8) produces a nearly circular mound of three-foot, smooth-edged blue-gray blades on trunks that can rise to 10 feet or more in the wild. In gardens, this Mexican native reaches a modest height of a few feet, crowned with four-foot branched spikes of small creamy flowers adored by insects. With age, multiple stalks make full, wide clumps of exceptional beauty. Give plants a sunny, well-drained position in average sandy or loamy soil. *Nolina texana* (Zones 7–11, 11–7) has more upright, green foliage and bears its creamy flowers within the sphere of foliage.

The stiff, channeled awls of *Hesperaloe parviflora* (Zones 6–11, 12–6), lined with curled threads, are handsome enough, but the erect two- to six-foot spikes of tubular, creamy cerise flowers nearly steal the show in late spring. Favored by gardeners and hummingbirds alike, myriad spires arising from a multi-stemmed crown of decorative leaves make this one of the most re-



Dasyliirion longissimum adds a fine-textured contrast in this colorful succulent border designed by Susan Springer. Right: At the Ladybird Johnson Wildflower Center, tall, erect flowering spikes of *Hesperaloe parviflora* provide a welcome burst of color in late spring.



warding of woody desert lilies. Contrast the stiff foliage with soft or delicate plants such as sedums, gauras, gaillardias, evening primroses (*Oenothera* spp.), sages (*Salvia* spp.), and verbenas. Additional species such as *H. campanulata* and *H. tenuifolia* (both, Zones 8–10, 10–8) are difficult to locate but worth the effort.

Yuccas are quintessential spiky forms, familiar in old gardens, cemeteries, and along roadsides. Adam's needle or Spanish bayonet (*Yucca filamentosa*, Zones 4–11, 12–5) is widely distributed in the East, and has a variety of brightly variegated forms. They grow from woody crowns with fleshy roots. The nodding, creamy-white flowers have three petals and three petal-like sepals that form a bell. Erect, multi-branched bloom stalks rise five to 15 feet above the stiff, two- to two-and-a-half-foot needle-like leaves. Plant yuccas in average to rich, well-drained soil in full sun or light shade and they will thrive for years with little care. Individual crowns bloom only once, but offsets perpetuate the clump. Plant yuccas in dry soil or rock gardens, as accent plantings, or in seaside gardens. 'Bright Edge' has yellow-variegated leaves. A myriad of species is available, including the stiff and imposing *Y. gloriosa*, spherical blue *Y. rostrata* 'Sapphire Skies', and *Y. baccata*, which has leaves like huge green bananas.

PLANTS THAT LIKE WET FEET

Though the desert springs to mind when thinking of spiky forms, many moisture-loving plants also feature spiky foliage. The narrow ridged blades of sweet flag (*Acorus calamus*, Zones 3–8, 9–4) are easily overlooked in the sunny wetlands where it grows wild across the northern hemi-

sphere. In the garden, however, sweet flag, most notably white-striped 'Variegatus', is a knockout. Sweet flag is distinctive for the strong citrus odor of its crushed leaves and rhizomes. It's at its best in water gardens or ponds, where the flat fans of leaves ascend three to four feet. Plant sweet flag in fertile loamy soil or in containers in full sun or



When the swordlike leaves of yucca are positioned in front of plants with large, broad leaves such as cannas, a pleasing balance of opposing elements is achieved.

Nepeta racemosa 'Snowflake' creates a billowy cloud of green and white that is dramatically pierced by the linear foliage of *Acorus calamus* 'Variegatus'.

part shade. Contrast the verticality with flat, floating leaves of water lilies (*Nymphaea* spp.) or bold pickerel weed (*Pontederia cordata*). For diminutive spikes in sun or shade, *Acorus gramineus* (Zones 5–8, 9–5) forms a carpet of arching fans in green or in brilliant yellow stripes in the selection called 'Ogon'. Plants thrive in water or equally well in rich, moist garden soil.

A well-turned sedge (*Carex* spp.) provides a garden with season-long texture and distinctive form. Drooping sedge (*Carex pendula*, Zones 5–9, 9–5) offers spikes with a curve. Crisp, leathery, high arching leaves form a two- to three-foot fountainlike clump. Each blade tapers gradually to a long, sharp point. In late spring, tall stalks rise above the leaves, dangling their green inflorescences like worms on a hook. Despite heat and humidity, they always look crisp and tidy. Plants grow in standing water or evenly moist, rich loamy soil. Once established, they will tolerate periodic drought. Contrast them with bold-leaved plants such as hostas, bergenias, rodgersias, and ligularias. Fringed sedge (*C. crinita*, Zones 3–8, 8–1), is a deciduous native American sedge with



a similar look. Light green leaves form a mounding, fine-textured clump that is a bit more refined than drooping sedge, with which it is sometimes confused.

The large-flowered “flag” irises are familiar sights in late spring and early summer wetlands of the East and Midwest. Most species are stout, with bold strap-shaped leaves and bright indigo, blue-violet, or purple flowers. The tetraploid selection of southern blue flag (*Iris virginica*) called ‘Contraband Girl’ (Zones 4–9, 9–4), with stiff, upright blades nearly four feet tall, stands out from ordinary irises. Plant irises in evenly moist to wet, humus-rich soil in full sun or light shade. They also grow well in up to eight inches of water.

For container culture, plant them in rich clay-loam soil. A small division can fill a large container in a season. Southern blue flags excel in pondside plantings, bog gardens, and in low spots with ferns, sedges, grasses, and other wetland perennials. They also thrive in formal settings. For contrast, combine their strap-shaped foliage with the airy plumes of astilbe and the bold leaves of rodgersias and umbrella leaf (*Darmera peltata*).

Additional irises with excellent foliage include *Iris giganticaerulea*, *I. hexagona*, *I. ensata*, *I. laevigata*, and many of the “Louisiana” hybrids.

Sources

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Desert Gardens Nursery, Phoenix, AZ. (602) 569-1300. www.desertgardensnursery.com.

Siskiyou Rare Plant Nursery, Talent, OR. (541) 535-7103. www.srpn.net. Online catalog.

Yucca Do Nursery, Hempstead, TX. (979) 826-4580. www.yuccado.com. Online and print catalog.

Resources

Agaves, Yuccas and Related Plants: A Gardener's Guide by Mary and Gary Irish. Timber Press, Portland, Oregon, 2000.

Sharp Gardening by Christopher Holliday, Timber Press, Portland, Oregon, 2005.

MORE PLANTS WITH SPIKY FOLIAGE

Name	Height/ Spread (ft.)	Sun/Shade	Remarks	Origin	Hardiness, Heat Zones
<i>Aloe cooperi</i> (grass aloe)	1–1½/1–1½	full sun to light shade	narrow, knobby, succulent leaves, spikes of nodding coral summer flowers	South Africa	8–9, 9–8
<i>Asplenium scolopendrium</i> (Hart's tongue fern)	1–2/1–2	part to full shade	vase-shaped fern, undivided spear-shaped fronds; needs slightly alkaline soil	Europe and western Asia	6–8, 8–6
<i>Astelia chathamica</i> (Chatham Island astelia)	3–5/4–6	full sun to part shade	stiff, arching silver swords from multi-crowned clump, showy red fruits on branched stems	New Zealand	8–9, 9–8
<i>Bletilla striata</i> (Chinese ground orchid)	1–2/1–2	light to full shade	pleated leaves, dark magenta flowers in spring; form <i>alba</i> has white flowers	China	5–9, 8–5
<i>Cordyline australis</i> (New Zealand cabbage tree)	5–20/2–8	full sun or light shade	grow as shrub in borders and containers; needs rich, well- drained soil, drought tolerant	New Zealand	10–11, 12–10
<i>Crocosmia ×crocosmiiflora</i> (montbretia)	2/2	full sun to light shade	summer bulb with fans of lance- shaped leaves and arching clusters of red, orange, or yellow flowers; invasive in some regions	hybrid	6–9, 9–3
<i>Dietes grandiflora</i> (wild iris)	2–4/2–3	full sun to light shade	fans of long, narrow blades from creeping rhizomes, white flowers etched with yellow open in daylight	South Africa	9–11, 12–10
<i>Helictotrichon sempervirens</i> (blue oat grass)	1–2/1–2	full sun to light shade	stiff, silver-blue blades form rounded crown with airy plumes in summer, plant in light, well-drained soil	western Mediterranean	4–9, 9–1
<i>Juncus patens</i> (California gray rush)	2/2	full sun to part shade	pointed, long, tubular leaves stand upright in fine, dense clumps, will grow in moist soil or standing water, but tolerates drought	southern Washington State to Mexico	7–10, 10–7
<i>Kniphofia caulescens</i> (torch lily)	3–4/2–3	full sun to light shade	blue-gray foliage in vase-shaped rosette; erect, dense, orange-and- yellow flower spikes in summer, plant in rich, well-drained soil	South Africa	6–9, 9–4



Bletilla striata



Crococsmia 'Lucifer'



Kniphofia 'Cobra'



In addition to its vertical form, *Phormium* 'Sundowner' adds color and height to a mixed planting dominated by foliage. Where it is hardy, it can grow to six feet tall with an equal spread.

In most of the United States, gardeners make do with a few potted New Zealand flax (*Phormium tenax*, Zones 9–11, 12–2) scattered outdoors in summer in sunny spots where a bit of panache is required. But West Coast gardeners enjoy them as year-round additions to beds, borders, and containers. A range of warm foliage colors makes New Zealand flax cultivars the most sought-after spikes for curb appeal and seasonal drama. Tangarine, apricot, cerise, rose, and chartreuse are a few of the colors presented by the striped foliage. Often, multiple colors appear in a single variety. This species is native to peatlands and along stream courses adjacent to grasslands in temperate New Zealand. Plants demand even moisture and in cultivation seem to also need excellent drainage in full sun to light shade. Despite their native haunts, in containers waterlogged soil and wet crowns are sure death.

Rattlesnake master (*Eryngium yuccifolium*, Zones 4–9, 12–1) is a bold architectural gem that commands attention from even the most jaded gardener. Its leafy rosettes of 14-inch, lance-shaped, gray-green leaves resemble a yucca. Tall, stout flower stalks to three feet are crowned by branched, open clusters of pale green to white, spherical to conical heads with inconspicuous bracts. Plant rattlesnake master in average to rich,

moist but well-drained soil in full sun or light shade. Native to American prairies, they are tough and tenacious, thriving in gravel and sand in the full summer sun. Set out plants while they are young, because they resent disturbance.

DESIGNING ON THE EDGE

Vertical forms fit into gardens in a variety of ways. To place specimens as focal points, visually divide the depth of the



Iris laevigata thrives in damp locations such as this one in Sally Geist's Oregon garden.

garden space into thirds. For an intimate feel, place a specimen one third of the way from the viewing point. For a more expansive feel, accentuate the perspective by placing the plant two thirds of the way into the space.

Use yuccas and their kin to mark the corners of beds. Contrast is the key to effective display. Surround dramatic verticals with prostrate and low-spreading groundcovers. Consider herbaceous as well as woody choices such as junipers and other shrubs. Mounding forms are also effective, but should never dominate. Bold foliage can also set off a spiky form, especially when the leaves are long and delicate. In a moist spot, try elephant ears and cannas backing a phalanx of stiff iris blades.

The interplay between light and plants is one of the most beguiling aspects of the garden. As light changes throughout the day, so does the way it mingles with ascending leaves. The most familiar expression of luminescence is found in the evening garden. Here, dim light plays off of the surface of flowers and leaves. Backlighting a plant is the best way to reveal its underlying structure. For example, the setting sun behind a richly textured yucca or sotol creates a glowing fountain of light.

Containers offer flexibility for creative displays, as plants with varied water needs are easily arrayed in proximity. They are particularly useful for growing plants that are not hardy outdoors, but they needn't be restricted to seasonal use. In mild climates, use them to anchor the corners of a bed, to top lintels, or grouped at an entrance.

If you don't already have spikes in your garden, take a stroll with an eye for dull spots. If you've combined too many similar textures, or a bed is bland and unidimensional, consider adding a vertical form to enliven the profile. If you are uncertain of how a spiky plant will look in the garden, grow it first in a container. If the fit is right, it is easy to make the planting permanent. If you already have spikes in your garden, add a new plant in a new setting to sharpen the contrast. Wherever you place them, ascending leaves are sure to please.

Cole Burrell is the author of numerous garden books, including Hellebores, which received the 2007 American Horticultural Society Book Award.



a Penchant *for* Peonies

Gail Gee can't get enough peonies, and once you see her Maryland garden, you'll understand why.

ARTICLE AND PHOTOGRAPHS BY SUSAN A. ROTH

TO STEP THROUGH the arched gate of Gail Gee's suburban Maryland garden is to enter the rarefied world of the passionate gardener. In Gee's private two-acre realm, bounded by white lattice fencing, towering arborvitae screens, and 1,500 feet of black-mesh deer fencing, an intense obsession for plants rules all else. Here Gee schemes how to find space to fit the next coveted new plant.

Gee's plant tastes are catholic, but she cultivates a particular passion for peonies. The peony collection she began five years ago, when she bulldozed her property as the first step in a major garden renovation, now numbers 200 plants and 140 cultivars. Yet hers is no typical collector's garden laid out in librarylike rows, because Gee's other obsession is garden design. Her garden is both an exquisite Americanized version of an English garden and a peony showcase.

WHY PEONIES?

"I haven't met a peony yet that I didn't love at first sight," says Gee. Her beloved peonies became the building blocks for the two acres of mixed borders in back of her home (another quarter acre is in front, another acre in the rear is a woodland garden) because their many fine attributes meet the demands of a discerning garden designer. "They bloom big and bold early in the season," Gee notes. She also appre-

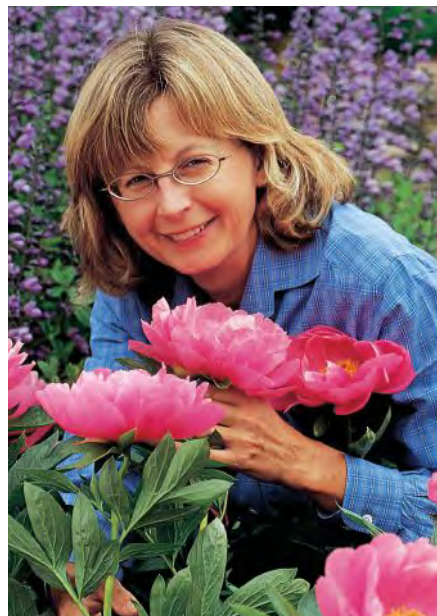
Pink 'Paula Fay' peonies and pale yellow 'Prairie Moon' peonies colorfully frame the steps up to Gail Gee's deck.



ciates that their foliage gleams shiny green with boldly jagged outlines, the plants form attractive, sturdy mounds that give the garden substance from summer into fall, and, compared with most other herbaceous perennials, peonies require very little care, especially if you select the best of the best.

Peony plants live extremely long lives, flourishing for generations without needing to be divided. Gee, 48, works under the assumption that the peonies she plants will likely outlive her. “When I’m old and gray, the peonies will still be there,” she says. She’s planning a garden that will mature into an easy-care showplace.

With this long-term goal in mind, she’s incorporated a diverse assortment of shrubs and small trees to keep the peonies company. As Gee and her garden grow into their golden years together, she figures the garden will pretty much take care of itself, or at least it won’t require the heavy labor she now does mostly by herself, from



Above: One of Gail Gee’s favorite peonies is ‘Ludovica’. **Top:** In mid-season, Gee’s side garden is awash in pink from peonies such as ‘Friendship’, ‘Superior’, and ‘Paula Fay’.

morning to night, five or more days a week from late winter through fall.

Designed with 20- to 30-foot-wide borders on each side and circular nine-foot-wide beds in the center, the garden’s color scheme is modeled on the style of legendary English landscape designer Gertrude Jekyll. Pinks, blues, lavenders, pastel yellows, white, and silver preside over the west side in the “cool border,” while reds, golds, oranges, and purples dominate the east side in the “hot border.”

CHOOSING THE BEST

Gee jokes that her favorite peony is “whatever is in bloom,” but she can be hard-hearted when she needs to be. She selects and plants only the best, so if a peony—or any other plant, for that matter—doesn’t perform, it gets yanked.

After years of trial and error, Gee knows what to look for in a peony. Sturdy stems are critical, because with so many specimens, she doesn’t have time to stake them. Gee also avoids cultivars with double flowers, unless they are accompanied by sturdy stems, because these hefty blossoms are more likely to bend toward the ground and stay there. She prefers cultivars with single, semi-double, anemone, and Japanese flower forms that offer bold drama but are less likely to suffer during storms. She also prefers cultivars that develop several, but not too many, buds on a flowering stem. “The side blossoms support the terminal blossom and they bloom afterward, extending the flowering period,” she says.

Gee grows a broad selection of peonies, including herbaceous garden peonies (cultivars of *Paeonia lactiflora*), the beloved flowers of grandmother’s garden and Dutch Master still-life paintings; tree peonies (*P. suffruticosa*), the dinner-plate-size blossoms depicted on Chinese screens; and the latest rage, intersectional peonies (*P. ×hybrida*), the hybridization breakthrough that created tree-peonylike flowers on herbaceous plants.

Her current passion is the intersectionals, a category of hybrids created by crosses between herbaceous and tree peonies, usually with *P. ×lemoinei* or *P. lutea* bloodlines. These plants look like herbaceous peonies on steroids. They die to the ground like garden peonies but the foliage is more deeply cut and blossoms

PEONY-GROWING TIPS

Gee grows her herbaceous peonies in full sun but lets her tree peonies have some shade. “Tree peony flowers are very fragile,” she notes. “The hot sun fries them, so they might last only half a day. I plant them where they get only morning sun.”

She plants bareroot herbaceous peonies in early fall so they have time to establish roots before winter. Herbaceous peony tubers should be planted so the buds, or “eyes,” are no more than two inches below the soil surface. “Tree peonies and intersectionals should be planted a bit deeper,” says Gee. “There are usually soil line marks on the stems to indicate the planting depth.”

Gee amends her rich loamy soil with a yearly topdressing of fine pine-bark mulch and fertilizes in spring with a 5-3-3 organic fertilizer. Every few years she tests the soil to make sure the pH is within the optimum range for peonies—6.0 to 7.0 (neutral to slightly acidic).

Peonies need a steady supply of water during the growing season from early spring to midsummer. During dry spells, Gee provides supplemental water. Newly planted peonies should be watered regularly for the first year to help them get established.

Gee deadheads rigorously so that as the first blossoms fade, the side buds have room to show off their stuff. Deadheading also reduces the risk of spreading disease and prevents seed set, which saps energy from flowering.

Peonies are susceptible to a fungal disease called botrytis bud blight (shown in the photo, right), but Gee says she has not had a serious problem with this. “If I do see the mold, I immediately cut off affected buds or stems.” Botrytis spores winter over in dead foliage, so Gee removes stems and foliage in late fall, once they have turned yellow. —S.A.R.



grow larger, more like tree peonies. This hybridizing feat initially introduced yellow flowers into herbaceous-type peonies, but newer crosses offer vivid magentas and fuchsia. “They take a few years to get big enough to create an impact in the garden, but the older ones I have are stunning. Their stems are strong and the blossoms can take a lot more heat than tree peonies,” Gee notes. Her collection numbers 15 cultivars.

Because in Maryland it’s not unusual to have a few days of July-type tempera-

SUITABLE COMPANIONS

Herbaceous peonies bloom in a multitude of shades of pink and red—from salmon to coral, pastel to shocking pink, and blood-red to burgundy—cream, white, and the rare pastel yellow; tree peonies come in the same colors with the addition of yellow, lavender, and lilac, and the intersectionals boast vibrant yellows, reds, and fuchsia. Gee advises choosing complementary colors as blooming companions. She’s carefully planned masses of late spring- and early



In the front garden, peonies ‘Rozella’ and ‘Cheddar Charm’ are complemented by purple irises, including *Iris sibirica* ‘Caesar’s Brother’.

tures in May, Gee avoids late-blooming peonies that are most likely to get cooked by a surprise early heat wave. She also seeks out cultivars that have heat-tolerant blossoms that won’t fade in her full-sun garden.

As a result, Gee’s plantings rely heavily on very early-, early-, and mid-season peonies. Tree peonies bloom early, usually coinciding with the early-season herbaceous peonies. Intersectionals tend to bloom with the mid-season garden peonies. Thanks to the overlapping bloom periods, however, peonies reliably festoon her garden from late April into June, usually peaking the third week of May. (For a list of some of Gee’s favorite selections, turn to page 34.)

summer-blooming perennials with blue, purple, violet, and white blossoms to create eye-catching vignettes with the peonies. Pink flowers also bloom with her peonies, but careful color combining is necessary to avoid clashes. Gee’s learned that a pink that’s on the orange side does not work well with a cooler hue of lavender-pink or blood-red peonies.

She likes to use perennials that develop tall flower spires—such as false indigo (*Baptisia australis*), speedwell (*Veronica* spp.), and bluestar (*Amsonia hubrichtii*)—and some that form mats of dainty flowers—including cranesbills (*Geranium* spp.), pinks (*Dianthus* spp.), and violas and pansies (*Viola* spp.)—because they



Above: In Gee's hot border, peonies such as red-flowered 'Comanche', lower left and right, mingle with a variety of trees, shrubs, and vines including a weeping purple beech, shrub rose 'Eddie's Jewel', elderberry 'Sutherland Gold', 'Gold Mound' spirea, clematis, and 'Helmond Pillar' barberry. **Right:** Gee has paired tree peonies 'Shintenchii' and 'Kishu Caprice' with bleeding heart (*Dicentra spectabilis*) to allow the flower colors to play off each other.

provide pleasing contrasts of shape and size to the roundness of the peony blossoms.

Iris make natural companions, too, because their linear foliage creates compelling lines against the spherical peonies. Ornamental onions, such as *Allium sphaerocephalum* and *Allium christophii*, echo the roundness of the peonies in purple and white. One of Gee's favorite combinations is the tree peony 'Shintenchii' growing amid old-fashioned bleeding hearts (*Dicentra spectabilis*), which have the exact shade of the peony's ruffled petals. She's underplanted this combination with creeping blue phlox (*Phlox stolonifera*).

In the hot border, the weeping *Fagus sylvatica* 'Purpurea Pendula' and the upright 'Dawyck Purple', and three different cultivars of purple-leaf smokebush (*Cotinus coggygria* 'Royal Purple', 'Velvet Cloak', and 'Notcutt's Variety') echo the colors of the wine and crimson peonies blooming nearby. Diablo® ninebark (*Physocarpus opulifolius* 'Monlo'), with al-

most-black leaves and pink-blushed white flowers, adds smoldering drama. Turning up the thermostat further, Gee works gold-leaved plants such as golden ninebark (*Physocarpus* 'Dart's Gold'), spirea (*Spiraea japonica* 'Gold Mound'), and golden elderberry (*Sambucus racemosa* 'Sutherland Gold') into the mixed border along with numerous golden or gold-variegated hostas such as 'Sum and Substance' and 'Great Expectations'.

Lilacs and shrub roses, which come into bloom during peony time, make great taller companions, adding volume to the garden. One of Gee's favorite lilacs is the compact 'Miss Kim', planted near the deck steps so she can enjoy the fragrance. A favorite shrub rose in the pastel or "cool" border is *Rosa* 'Meidiland Alba', whose nosegays of creamy white blossoms and disease-resistant foliage replicate the charm of bygone gardens. An immense specimen of *Rosa* 'Eddie's Jewel' grows in the hot border, its bou-



quets of single red flowers echoing the crimson petals of 'Scarlet O'Hara' and 'Comanche' peonies. Gee trained Dublin Bay®, a tall red shrub rose with large, semi-double, fragrant, lipstick-red blossoms, to grow in the white lattice fence in the background.

A FEW OF GAIL GEE'S FAVORITE PEONIES

Here are some of Gail Gee's favorite peony selections. Bloom times are based on Gee's experience in Maryland's USDA Hardiness Zone 7, AHS Heat Zone 7. In general, herbaceous peonies and intersectionals thrive in USDA Zones 3 to 8 and AHS Zones 8 to 3; tree peonies in Zones 4 to 8, 8 to 4.

Very Early-Season Herbaceous (bloom late April)

'Athena' "The single, creamy ivory flowers have rosy flares; an unusual combination."

'Lady Gay' "A very delicate single ivory with crinkled petals and a rose-pink tint."

Early-Season Herbaceous (bloom early to mid-May)

'Buckeye Belle' "This is my favorite red for its great deep dark color."

'Coral Fay' The semi-double pink flowers bloom on strong stems and the foliage is finely cut, making a nice bush all summer.

'Salmon Dream' This vivid pastel salmon-pink semi-double keeps its color in cool weather but fades to a creamy sheen during long hot spells.

Mid-Season Herbaceous (bloom mid- to late May)

'Cheddar Charm' Beautiful Japanese-type with bright gold staminoides and overlapping white petals. The side buds extend the bloom period.

'Cora Stubbs' "Numerous side buds and a lovely fragrance." The Japanese-type flower is raspberry pink with a full center of pink-flushed white petaloides.

'Ludovica' Semi-double light rose-pink, large cupped flowers on a compact, 20-inch-tall plant.

'Paula Fay' Semi-double, vivid rose-pink flowers have crinkled petals and yellow staminoides.



'Rozella' "Blooms late mid-season with plenty of side buds." A double dark pink with lighter pink edges and very strong stems.

'Superior' "This single has a great salmon pink color that holds well and blooms early to mid-season."

Late-Season Herbaceous (bloom late May)

'Old Faithful' "I would not be without this semi-double dark red. It's a real showoff."

'White Frost' "This double white blooms early to late season, which is about as late as peonies do well in my garden."

Tree Peonies (bloom late April to mid-May)

'Kishu Caprice' "This silvery pink semi-double to double blooms before the others on a nice mounded plant."

'Leda' A lovely rose-lavender color. Large semi-double ruffled single flowers.

'Shintenchi' Numerous huge satiny pink semi-double blossoms with ruffled petals; "great combined with bleeding heart."

Intersectionals (bloom early to late May)

'Garden Treasure' "This is a nice bright yellow semi-double with long-lasting blossoms."

'Morning Lilac' "The vivid fuchsia color shows up well from a distance. The blossoms have white and deep fuchsia stripes and red-tipped carpels."

Clematis vines also make perfect companions because they bloom in the compatible colors of blue, lavender, purple, and white at about the same time as peonies. Many then extend their display later into summer. Over time, Gee has amassed some 20 clematis cultivars that she has incorporated throughout the garden, training them to grow English-fashion through the shrubbery or twined over the arbor gates and lattice fences. 'General Sikorski' blankets a tuteur with cornflower-blue

These are joined in late summer by a blooming allée of white-flowered crape myrtles (*Lagerstroemia* 'Natchez').

With so many plants to monitor, good record keeping is critical to Gee's success. Ask her to name a particular plant in her garden and, to reinforce her memory, she'll dig into the mulch for a cleverly hidden plant tag or search for the plant on her computer. Here's where her passion turns orderly, for she's included every plant she's grown—whether it



In the cool border, the flowers of 'White Frost' peony mingle well with the blue-purple flowers of *Geranium* 'Johnson's Blue' and the variegated foliage of various hostas.

flowers and the double-flowered pale blue 'Belle of Woking' weaves through a *Spiraea* 'Ogon' bush in the cool border. A few of the rare red clematis, such as the dainty-flowered 'Gravetye Beauty' echo peony colors in the hot border.

After the last peony fades, Gee's garden continues to flourish as a variety of summer- and fall-blooming shrubs and herbaceous perennials come into their own. Among the constants are daylilies (*Hemerocallis* spp.), rose of Sharon (*Hibiscus syriacus*), and butterfly bushes (*Buddleia davidii*). For summer drama, Gee also plants hundreds of cannas, elephant's ears (*Colocasia* spp.), and other tropical plants. In the sunny central beds, she plants a progression of annuals such as blue pansies, pink multiflora petunias, and blue salvias.

lived, died, or was banished—in a database. There she notes where the plant came from, its color and size, garden location, transplanting history, and yearly observations on bloom times, performance, and special care needs.

On stormy or unbearably hot days, she takes time out from tending her garden to make note of color combinations that need improving and holes that need filling. This helps during winter, when she plans acquisitions and design changes for the coming season.

LIFE AFTER PEONIES?

When asked if she has enough peonies, Gee says with a laugh, 'No, there's always something new I want. Right now, I'm feeling the need for more intersectionals.

Resources

The American Peony Society,
www.americanpeonysociety.org.

The Gardener's Guide to Growing Peonies by Martin Page. Timber Press, Portland, Oregon, 1997.

The Gardener's Peony: Herbaceous and Tree Peonies by Martin Page. Timber Press, Portland, Oregon, 2005.

Peonies by Allan Rogers. Timber Press, Portland, Oregon, 1995.

Sources

A&D Nursery, Snohomish, WA. (800) 553-3715. www.adpeonies.com. Online catalog.


Adelman Peony Gardens, Salem, OR. (503) 393-6185. www.peonyparadise.com. Free print and online catalog.

Century Oaks Peony Farm, Jordan, MN. (952) 873-6555. www.bestpeony.com. Online catalog.

Klehm's Song Sparrow Perennial Farms, Avalon, WI. (800) 553-3715. www.klehm.com. Free print and online catalog.

Reath's Nursery, Vulvan, MI. (906) 563-9777. www.reathsnursery.com. Print catalog \$3 or online.

Swenson Gardens, Delano, MN. (763) 350-2051. www.swensongardens.com. Online catalog.

They're the plant of the future." Although so far she has been able to stifle the urge to collect other kinds of plants—daylilies and Japanese maples are particularly tempting—Gee admits she doesn't really know where her passion for plants will lead her next. 

Susan A. Roth is a writer and photographer specializing in gardening and horticulture. She lives in Washington, D.C.

Composting Down Under

BY BARBARA PLEASANT AND
DEBORAH L. MARTIN

For those ready to go beyond the standard compost pile, here are some creative ideas for subterranean composting that can help solve some common garden problems.

INFINITELY USEFUL yet woefully underutilized, composting in excavated holes or trenches is a method every compost gardener should know. It is the best way to take soil improvement to new depths when creating planting space in sites with rocky or compacted subsoil.

Underground composting also works well in porous, sandy soils because deeply buried organic matter is less prone to leaching by rainwater. And it is useful in hot, dry climates because buried composting materials are insulated from surface heat and evaporation. In any soil situation, as well as in gardening sites that are not particularly problematic, underground composting puts organic matter exactly where it is needed, within easy reach of roots.

The most attractive aspect of taking compost underground is that it cannot be seen or smelled. On the practical side, some underground composting methods provide safe ways to put weedy manures or other problem materials to good use. When buried more than a foot deep, most weed seeds will eventually perish.

Some may consider it a disadvantage that finished underground compost can be awkward to scoop out compared to an aboveground heap, but this is not an issue if the compost is never scooped. If you make compost in the dark depths



As an alternative to unsightly aboveground compost heaps, underground composting techniques put organic matter in the root zone, right where plants need them.

where topsoil and subsoil come together, and later grow plants on top of your masterpiece, the compost is exactly where it needs to be. These underground composting methods are basically on-site in their nature, so they should be used in spots where you want more and better soil for garden plants.

Here we will explore three simple ways to put underground compost to work:

■ **Layered Craters.** These ready-to-plant beds combine the benefits of double digging with layers of organic matter, so they are an ideal way to wake up a new garden space.

■ **Treasure Troughs.** Do you need to extend a bed or add a row to the outside edge of your garden? Dig a trough, fill the bottom with compostable waste, and start planting.

This article is excerpted with permission from *The Complete Compost Gardening Guide* by Barbara Pleasant and Deborah L. Martin, released in March by Storey Publishing.

■ **Honey Holes.** Use a rich stash of underground compost as the heart of a working garden bed.

LAYERED CRATERS

If you layer different types of compostable materials into an excavated hole or trench rather than piling them up on the ground, you have a “layered crater.” This is an ideal method for making huge, lasting improvements in sites that have compacted subsoil or thin to nonexistent topsoil.

Historically, the layered crater method shares its background with a well-known innovation made by market gardeners living near Paris, France, in the 1830s. They discovered that by digging the soil very deeply—to two feet or more and improving its tilth with organic matter, they could get large yields from plants spaced closely. This practice of “double digging” became the foundation of the French Intensive method of gardening.

Like other underground methods, layered craters require a substantial amount of work up front, with little or no follow-up labor. The good news is that after only one season, a layered crater will show you how good your previously awful soil can become if you juice it up with plenty of biologically active organic matter.

Most gardeners who make layered craters do so because their soil needs a lot of work. Rocks may need to be broken up,



Once the digging is done, fill a layered crater with a rich mixture of compostable organic matter that will benefit the soil for years.

lifted out, or sifted from the excavated soil using a compost sifter or similar device. Removing rocks and roots reduces the volume of the excavated soil, about half of which should be piled next to the hole for layering back into it along with other materials. You will need a place to set aside

the extra excavated soil, which can be used for other projects.

Creating a Layered Crater

The crater hole can be of any shape but should not be so large that you cannot reach the middle when you kneel at the edge. Once created, the layered crater will become a footfall-free zone where physical compaction is kept to a minimum, so your plan for the site should include pathways that allow easy access.

After digging as deeply as you can, begin filling the crater by covering the bottom with a three-inch-thick layer of coarse compost materials, such as stemmy dead plants, hay, or thin sticks broken into small pieces. Using a coarse, slow-rotting base layer will keep a little air trapped at the bottom of the crater, and help to provide drainage in the event of prolonged wet weather. Next, add a two-inch-thick layer of shredded leaves or other high-carbon brown material, topped by an inch of soil. Sprinkle a light dusting of a dry organic fertilizer over the soil and water well. As an insurance policy against having the bottom layers dry out, you can install an access pipe, or “composter’s conduit” that will allow you to water during dry spells.



In arid regions, subterranean composting conserves moisture and helps loosen compacted soil.

(See “A Composter’s Conduit to Deliver Moisture,” right.)

Now the crater is ready for a two-inch-thick blanket of high-nitrogen green material, such as grass clippings, manure, or chopped green leaves. Top the green matter with another two-inch-thick layer of browns, an inch of soil, and a light sprinkling of organic fertilizer. Water well. Continue adding layers (greens, browns, soil, and fertilizer) until the top of the layered crater is four inches higher than the surrounding soil.

The filled crater will begin to compact and sink immediately, so plan to add more compostable material as needed to keep it from becoming a sinkhole. At the end of the season, use a digging fork to lift and mix the material in the crater, which should be nicely decomposed by this point. If the texture of the mix seems too light and fluffy, mix in more soil. After this bit of fine-tuning, your layered crater can be worked like any fertile, deeply dug bed.

TREASURE TROUGHS

Let’s say that compacted subsoil is a fact of life in your landscape, but you’ve managed to enrich your topsoil to the point where it does a good job of supporting plants. You’re still bothered by your subsoil, so you’d like to open up the hardpan as you enlarge existing beds. Now let’s add another factor: You have lucked into a supply of animal manure that’s easy enough to get but is likely to be rife with weed seeds. Or maybe you have another potentially putrid material at your disposal. The solution is to turn to the composting technique we call “treasure troughs”—on-site excavated trenches in which compostable materials are buried deeply, where they stay forever.

A treasure trough can be of any size or shape, but an oblong trench dug along the edge of an existing garden bed is the most versatile plan. If you dig carefully, you can eventually extend the bed without injuring plants that are growing along its edge. A treasure trough is a great technique for adding a few square feet of growing space to an established perennial bed, or you can treasure trough your way to a bigger and better “color bed” planted with long-blooming annuals. In your food garden, a new treasure trough can be put to work immediately as a home to deeply rooted plants, such as sunflowers or amaranth.

A COMPOSTER’S CONDUIT TO DELIVER MOISTURE

The lower portions of a layered crater have no access to fresh air beyond the spaces between the coarse materials at the bottom. Should the materials dry out, it can be difficult to restore the moisture to all of the layers simply by watering from the top. Installing a composteer’s conduit helps get air and water down into the crater, and the conduit provides an easy way to deliver water to plants you are growing in the site.

To construct a conduit, take a length of PVC pipe and drill a row of holes in it. Then lay it at the bottom of the layered crater with the holes facing down. Fit two shorter pieces of PVC pipe, also drilled with a row of holes facing away from the longer pipe, to each end of the horizontal pipe at a vertical right angle with a PVC elbow connector so that they will protrude about five inches aboveground after the crater has been filled. These two pieces of pipe allow air to flow beneath to the compost and also provide a port for a watering hose.



A conduit constructed from a PVC pipe allows air and moisture to reach the bottom of a layered crater.

To create a treasure trough, simply dig out the soil as deeply as you can, and pile it up next to the excavated hole. Place four to five inches of compostable materials in the bottom of the trench and then backfill it with the set-aside soil. Allow for future shrinkage of the buried organic materials by using enough soil to raise the surface level of the refilled trough two to four inches higher than surrounding ground.

Discourage Determined Diggers

A treasure trough filled with kitchen wastes may prove to be a magnet for the same curious critters that are drawn to food scraps in aboveground compost piles. A trough at least a foot deep with eight inches of soil over the compost ingredients is your best defense; shallowly buried or lightly covered materials are most likely to attract the unwanted attention of prowling varmints.

Even if your treasure trough is well secured with soil, once an animal discovers it, you’ll need to add another layer of protection. A roll of 18-inch-wide poultry net-

ting, also called chicken wire, works well for guarding the buried treasure.

Secure the end of the wire netting a few inches beyond the edge of the trough and roll it out until you’ve covered every bit of the treasure trough. If you’re covering a completed trough, use metal snips to cut off the wire and fasten down the other end. You may want to pin or stake down the netting at intervals along the trough, too, for extra security.

You should consider the poultry netting a temporary measure. After three weeks or so, before weeds can grow into a tangle within the wire, take it up and replace it with cardboard or newspaper covered with more attractive mulch.

HONEY HOLES

Before fertilizer became available for sale in bags, people came up with interesting ways to stash away nutrients in the soil. Some Native American tribes regarded the burying of a fish beneath each corn seed as a spiritual necessity, and early peach growers

in Georgia are said to have buried an old leather boot at the bottom of planting holes. In both cases, these traditions created hidden caches of bioactive nutrients that were slowly released as the materials degraded, which is part of what happens when you make compost in a “honey hole.” We don’t recommend planting right on top of a honey hole, however, mostly because it’s filled with a more massive amount of active organic matter compared to a fish or a shoe. In addition, planting in

are able to access a reliable supply of moisture from the honey hole.

No matter what compostables you put into a honey hole, or what you plant around it, after a year, it will change from a compost project into a remarkably fertile, well-drained spot in your garden.

Materials for Honey Holes

As in other compost compositions, a balance of nitrogen-rich greens and high-carbon browns will help a honey hole decom-

Very absorbent materials—even if they are high in carbon—are always welcome in honey holes. Corncobs make fantastic filler, as does weathered sawdust or hand-sized pieces of cardboard. For greens, you can use early season grass clippings, foliage from alfalfa or another cover crop, or newly pulled juvenile weeds. Rough layers or coarse mixtures are fine, because each material will support a slightly different community of microorganisms, which can go about their business in peace, without being set back by mixing and turning.

Avoid using a honey hole as a depository for a glut of high-nitrogen manure. Plant roots that wander into a moist environment that’s rich in nutrients may suffer damage from chemical overload.

To make a honey hole, select a bed that is approximately eight feet square or a similarly sized rectangle, circle, or oval. In the middle of the space, dig a 20- to 30-inch-wide hole up to two feet deep, or as deep as you can go. Then fill the hole with compostable material or add layers over a period of time. (The hole should be completely filled by the time the companion plants are planted or emerge from dormancy.) During the growing season, water the honey hole each time you water your garden and pile garden trimmings over the hole to reduce moisture loss.



Chicken wire laid over the top of a treasure trough helps to keep out unwanted scavengers.

a honey hole would compromise its secondary function as a reservoir for moisture when there is little water to be had.

Because of these dual talents, a honey hole is best used as the heart of a planting plan for four to six upright plants that encircle the hole. You can grow any plants you like around a honey hole, but the best candidates are those equipped to take advantage of all that honey holes have to offer:

- Tomatoes and other plants that send out strong lateral roots will take advantage of both the nutrients and moisture they find in the honey hole.

- Roses and other plants that need wide spacing to ensure good air circulation benefit from the open space created by a central honey hole, and earthworms moving in and out of the honey hole help to maintain good drainage.

- Blueberries and other shallow-rooted shrubs with limited drought tolerance are much less likely to be damaged by extremely dry weather if some of their roots

pose quickly. But maybe you don’t care how fast the process moves along, because you have no plans to do anything with the finished compost except to spread it around a bit. If you can be patient until the growing season ends, constant moisture (rather than an exact balance of greens and browns) will have turned the materials into finished, cured-in-the-hole compost.



Honey holes give shallow-rooted plants such as blueberries (*Vaccinium* spp.), a reservoir of nutrients and moisture.

TAKING THE LONG VIEW

All the underground composting methods we’ve described have one thing in common—they force you to get behind a spade and dig. Deep digging gives you an honest look at your soil in its raw, unimproved state, and the more you know about what’s down there, the better you can customize composting methods to your soil’s particular needs.

In the short run, soil improved using underground composting may seem chunky and littered with undecomposed materials compared to soil that is mixed with finished compost. Stop worrying about the short run. You’re keeping a composter’s garden now, where time is not measured in days or weeks, but in months and years.

Freelance writers Barbara Pleasant and Deborah L. Martin are, respectively, from Pisgah Forest, North Carolina, and Allentown, Pennsylvania.

from Passion to Purpose

the Rogerson Clematis Collection

After a nomadic life, one of North America's most comprehensive clematis collections is taking root in Oregon, thanks to a dedicated group of supporters.

BY MARTY WINGATE PHOTOGRAPHS BY ALLAN MANDELL

COLLECTING PLANTS isn't the same as collecting Lladró figurines or 18th-century breadboxes. Plant collections are no less precious to their owners than antique pewter jugs, but they are living things that are more changeable and more demanding of care.

Brewster Rogerson's passion is clematis. He started out growing a few, such as *Clematis* 'Jackmanii', which spurred him to "find out more about them than could be learned from the nursery lists and popular gardening literature of the 1970s," he says. But as his passion grew, so did the size of his collection, which by 2001 was nearing 900 plants, all living in pots in the overcrowded greenhouses of a wholesale nursery just outside Portland, Oregon. At the same time, as space to house the collection was dwindling, so was Rogerson's ability to take care of the plants—as he moved into his 80s, macular degeneration was robbing him of his sight.

Friends, supporters, and volunteers from what was then called the Pacific Northwest Clematis Society (PNCS), which Rogerson helped to found in 2000, came together to find a way to keep Rogerson's amazing collection of clematis species, hybrids, and cultivars intact. Despite several obstacles along the way, this determined group eventually found it a home in Lake Oswego, a small town about 10 miles south of Portland, at Luscher Farm, a historic homestead that

includes an early 20th-century farmhouse, barn, and just over 47 acres, of which the clematis collection has two-and-a-half. Although securing its permanent home may sound like the end of the story, it is really the beginning of a new chapter.

The PNCS evolved into the Friends of the Rogerson Clematis Collection



Brewster Rogerson shows off *Clematis* 'Kozo'.

(FRCC); the group comprises a board of directors, members, a part-time curator, and energetic volunteers who all value the collection and Rogerson's passion. Their aim is to foster an appreciation for this most fabulous genus and to pass along to others their knowledge of its cultivation.

A HOME IN LAKE OSWEGO

Rogerson began collecting clematis while he was working as an English professor at Kansas State University in the 1970s. Then, about 25 years ago, he retired and moved from Manhattan, Kansas, bringing his collection to the much more amenable environment of western Oregon. For about 15 years prior to its final move in 2005, the collection lived in two- or five-gallon nursery containers stored in greenhouses at Gutmann's Wholesale Nursery in an area called Mountaintale, near Portland. Despite the cramped conditions, the clematis vines flourished under Rogerson's tender care.

By the time the supporters of the Rogerson collection and Lake Oswego found each other, the volunteers had almost given up hope of finding any home, after trying to work with various municipal departments in Portland and the surrounding area. "We were beginning to despair," says Maurice Horn, co-owner of Joy Creek Nursery in Scappoose, Oregon, and a founding member of the PNCS. It began to look like Rogerson would be forced to sell off the collection.

It was November 2004, and at a PNCS meeting, Mike Darcy, garden expert on Portland radio and television and resident of Lake Oswego, suggested contacting his city. "Everyone else had said no, so we thought we might as well give Lake Oswego a chance to say no," says Linda Beutler, curator of the collection.



The Rogerson Clematis Collection includes large-flowered varieties such as 'Moonlight', above left, 'Marie Louise', top right, and 'Niobe', above right.

When Lake Oswego said yes, the group found not just a home for the collection, but land on which to grow and display clematis along with a supportive city and parks department. The two-and-a-half acres allotted to the FRCC includes the greenhouse—built in 2005 just before the collection was moved—a test plot in the community gardens, the historically accurate garden around the

farmhouse, and a meadow to the east of the buildings.

FROM GREENHOUSE TO GARDEN

One of the first hurdles the FRCC faced on moving into its new home was the financing and appointment of a part-time curator. Although the collection is housed on city land, Rogerson was adamant that a curator must be paid by

the organization, not by a government agency. Fundraising for maintaining the collection has also provided the funding for a curator. For this position, Beutler was the obvious choice, since she has worked with Rogerson as a volunteer since the collection was in Mountaindale. As the author of *Gardening With Clematis: Design and Cultivation* (Timber Press, 2004), Beutler's expertise, as



Luscher Farm, left, includes an outdoor test plot where Linda Beutler, curator of the Rogerson Clematis Collection, helps to evaluate chance clematis seedlings, above.

well as her passion for the plant group, is quite evident.

The move to Luscher Farm was a big adventure for the plants as well as the volunteers. After their many years in a greenhouse, up to 90 percent of the plants will be planted out in the garden. Although many are temporarily residing in the greenhouse while planning, design, and preparation are carried out for the various parts of the garden, Beutler made sure that the entire *atragene* group, which includes *Clematis alpina* and *C. macropetala* and their cultivars, which are hardy down to USDA Zone 3, went outside immediately. “When they moved from Mountindale,” Beutler says, “I promised them they’d never be in a greenhouse again.”

Although the collection started out as an eclectic mix of whatever struck Rogerson’s personal fancy, it has evolved into a public collection that contains clematis of both botanical and horticultural note. The significance of the collection, says Horn, is its depth. “It has both historic clematis—things that have been lost to the trade—and it’s been able to keep abreast of European and Japanese introductions,” he says. And while other collections may be larger, the Rogerson Clematis Collection is impressive by any standards: the inventory now includes

more than 1,000 plants representing nearly 600 distinct taxa.

SELECTING CULTIVARS

Among the many exciting possibilities related to the collection are its American clematis species—including *Clematis texensis*, *C. pitcheri*, *C. viorna*, and *C. crispa*—and cultivars developed from them. As has been the case with other American plants, European gardeners are wild for these North American natives, while they are little known or grown in American horticulture. These scrambling vines produce small, urn-shaped flowers—up to two inches long—that have a distinct curl to the ends of the sepals. Most bloom in shades of lavender, red, or rose, and they often have a white or cream interior.

Visiting the Rogerson Clematis Collection

The Rogerson Clematis Collection is located at Luscher Farm in Lake Oswego, Oregon, just south of Portland. Luscher Farm is open daily to visitors from dawn to dusk. For guided tours of the clematis collection, e-mail info@rogersonclematiscollection.org.

The fact that the collection was kept in close quarters for so long has resulted in seedlings of uncertain parentage popping up in many a pot. Several of these are growing along with the species in the 20-foot-by-20-foot test plot. For example, the FRCC has found a variety they are calling ‘Beaujolais’ (the study name). Its flowers have a new-wine color on the exterior and a velvety interior similar to *C. pitcheri*, a possible parent that is native to rocky woods, slopes, and bluffs from Texas to Illinois. Beutler guesses that *C. texensis* is another possible parent but points out that figuring out new crosses can take a while because there is a waiting period for a seedling to mature to flowering size.

Another possible *C. pitcheri/C. texensis* cross is ‘Vin Rose’. Its flowers are purple at the receptacle, changing to a violet-pink at the tips. Both ‘Vin Rose’ and ‘Beaujolais’ have dark petioles and an enticing, beguiling look about them, making you wonder why your garden isn’t filled with American clematis.

The FRCC’s mission encompasses promoting and advancing the joy of growing the genus *Clematis* through education and preservation of the Rogerson Clematis Collection. One way of doing this is to introduce into the gardening world new selections that have come its way. To that



Several new selections, such as 'Esprit', above, have been discovered in the Rogerson collection.

end, the group is keeping an eye on both 'Vin Rose' and 'Beaujolais' and other chance seedlings that may turn out to be fine garden clematis. If so, the FRCC will register the cultivars with the International Registry Authority for Clematis (through the Royal Horticultural Society).

That was what the (then) Pacific Northwest Clematis Society did in 2001 with the selection *C. montana* var. *rubens* 'Brewster'. "After observing this volunteer seedling for several years, it became clear to Brewster and others who saw it that it is a superior selection," explains Beutler,

"especially due to the fact that the bronze foliage color is held for longer than other selections of this species' variants." It has pale pink flowers that show a darker bar down each sepal and has a light fragrance.

'Skylark,' from the shrubby *C. integrifolia* group, is another plant that the FRCC has registered. It has the typical urn-shaped flowers, but the sepals look almost like wings. 'Esprit', a small, violet-flowered *C. viticella* seedling, has also been registered, and more introductions are on the way. Before registering a new selection, the group aims to have at least 10

Resources

American Clematis Society,
<http://clematis.org>.

Friends of the Rogerson Clematis Collection, www.rogersonclematiscollection.org.

The Gardener's Guide to Growing Clematis by Raymond Evison. Timber Press, Portland, Oregon, 2003.

Gardening with Clematis by Linda Beutler. Timber Press, Portland, Oregon, 2004.

An Illustrated Encyclopedia of Clematis by Mary Toomey and Everett Leeds. Timber Press, Portland, Oregon, 2001.

Pocket Guide to Clematis by Mary Toomey. Timber Press, Portland, Oregon, 2006.

Simply Clematis by Edith Malek. American Clematis Society, Irvine, California, 2004.

Sources

Bluestone Perennials, Madison, OH. (800) 852-5243. www.bluestoneperennials.com. Catalog free or online.

Brushwood Nursery, Unionville, PA. (610) 444-8083. www.gardenvines.com. Catalog online.

Chalk Hill Clematis, Healdsburg, CA. (707) 433-8416. www.chalkhillclematis.com. Catalog online.

Digging Dog, Albion, CA. (707) 937-1130. www.diggingdog.com. Catalog \$4 or online.

Garden Crossings, LLC, Zeeland, MI. (616) 875-6355. www.gardencrossings.com. Catalog online.

Joy Creek Nursery, Scappoose, OR. (503) 543-7474. www.joycreek.com. Catalog \$4 or online.

plants. This ensures that the plant can be propagated, and isn't just an oddity.

CLEMATIS EDUCATION AND HISTORY

Helping gardeners learn how to grow clematis and use them in the garden are two aims of the group. Information ranges from practical propagation—something volunteers learn early—to the best fertilizer (an organic rose and flower, 4-6-2). “We’re heavy on feeding,” Beut-



The Rogerson collection includes rare cultivars such as ‘Duchess of Waverly’.

ler says, noting that plants get monthly fertilizer applications from March to September. Large-flowered vines do not get fertilized when they are in flower because if they are fed then, dieback can occur. “Some things that people think are clematis wilt,” Beutler says, “are actually caused by operator error. Never fertilize a large-flowered clematis when it’s getting ready to, or is in, bloom.”

Volunteers learn much about propagating as they take cuttings, divide, and repot plants; and no one is finished learning about clematis, Beutler says. When a Japanese clematis expert visited the collection a couple of years ago, he explained to the group—which included Horn of Joy Creek Nursery, who speaks Japanese and so was able to translate—that the best way to take cuttings from the non-vining clematis was to harvest tip cuttings. This advice led to eight out of 10 cuttings striking—or rooting—a great improvement, says Horn, from previous results.

Visitors can get advice from volunteers who often are working in the garden, and

ROBUST AND FLORIFEROUS: CLEMATIS MONTANA

In much the same way as a proud parent can't pick a favorite child, Brewster Rogerson finds it impossible to single out a favorite clematis, but he will own that *Clematis montana* (Zones 6–9, 9–6) and its cultivars are among his many favorites. *Clematis montana* is a deciduous vine native to central and western China and the Himalayas. This robust vine can grow 20 to 30 feet long and it flowers in late spring or early summer. Available selections include plants with white flowers or varying shades of pink, and may be lightly or heavily scented.

The trifoliolate foliage often has a bronze cast, especially when young, and leaf margins may be entire or slightly lobed. Those ornamental characteristics, along with the reddish leaf stems, help *C. montana* stay interesting long past its flowering period. Its garden uses are on a large scale: It can cover the side and roof of a garage or a fence in only a few seasons; it will grow up into a sturdy, large tree.

Along with *C. montana* var. *rubens* ‘Brewster’, named in honor of Rogerson in 2001, the Friends of the Rogerson Clematis Collection’s many varieties of *C. montana* include:

‘Freda’—flowers are a pale pink with a deeper pink edge.

‘Marjorie’—a semi-double, pale pink selection with a greenish tint to the flowers.

‘Tetrarose’—large, deep pink flowers.

‘Vera’—pink, fragrant flowers.

‘Warwickshire Rose’—deep rose-pink flowers.

C. montana var. *wilsonii*—a naturally occurring, white-flowered variety that blooms in midsummer; flowers have a cocoa scent.



C. montana var. *rubens* ‘Brewster’

from the group’s website (See “Resources,” page 43). They also can get a history lesson by touring the garden around the farmhouse where the group has planted 30 roses and 126 clematis that were available before World War I.

The historic garden contains some old favorites, such as the large-flowered ‘Miss Bateman’, which has been in cultivation since 1869, the double-flowered ‘Belle of Woking’ (1875), and the summer-flowering, red *C. viticella* ‘Madame Julia Correvon’ (1900). The clematis fit comfortably into the farmhouse garden, along with roses such as the fragrant climber ‘Zéphirine Drouhin’ (1868) and ‘The Bishop’ (1821).

The Rogerson Clematis Collection contains many rarities, too, such as ‘Duchess of Waverly’, a hybrid that Beutler describes as a “showstopper.” It produces large, violet-red flowers with a reddish stripe down each petal, fading to lavender. The flowers also have showy pale yellow anthers. Rogerson acquired the plant, which originated in 1961 at a now-

defunct Oregon nursery, when he was living in Kansas. Although the cultivar is now commercially unavailable, Rogerson has saved ‘Duchess of Waverly’ from oblivion and it is being propagated by the FRCC.

Despite problems with his eyesight, Rogerson continues to work with clematis. “Brewster calls himself a scholar of the collection,” Beutler says. “He takes the greatest delight in revealing clematis secrets to the newly initiated, whipping them into a frenzy of enthusiasm. Brewster is not only the collection’s founder, he remains its greatest asset,” she adds.

While Rogerson’s knowledge and experience was vital to assembling the collection, it is now up to the Friends of the Rogerson Clematis Collection to find ways to share this valuable resource and the accumulated information on clematis cultivation with gardeners and scholars. “There is plenty of work ahead,” Rogerson says.

Marty Wingate writes for the Seattle Post-Intelligencer and is the author of three books.



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Ketzel Levine, Adventuring Horticultural Reporter

by Linda McIntyre

FANS OF National Public Radio (NPR) are familiar with Ketzel Levine, who, beginning in 1992, served a long stint as the “Doyenne of Dirt” on Weekend Edition Saturday’s gardening segment and more recently has reported on environmental and other issues from around the world. Her eccentric and irreverent style makes horticultural topics interesting and accessible to listeners who don’t necessarily share her passion for plants.



As a senior correspondent at NPR, Levine’s reporting assignments have taken her on adventures both rough and refined. She’s waded knee-deep in a Hawaiian jungle stream following scientists in search of a rare orchid, toured the renowned garden of plantswoman extraordinaire Helen Dillon in Dublin, Ireland, and climbed and slept overnight on a towering fir in an Oregon forest. In between traveling and filing radio reports, Levine maintains a blog, “Talking Plants” (www.npr.org/talkingplants), on the NPR website.

Garden writer Linda McIntyre caught up with Levine as she prepared to depart for a reporting trip to a farm on the Amazon for NPR’s “Climate Connections” project. Among other things, Levine talked about radio as a special medium for horticultural communication and the role of gardeners in safeguarding the environment.

Linda McIntyre: In your varied and successful career in radio, you’ve been a sports reporter and arts reporter. What led you to take a break from radio in 1990 to study horticulture and landscape design?

Ketzel Levine: I was burned out. I didn’t have my own garden at the time, but I would go to gardens in the Washington, D.C., area [where NPR is based] to recover from the stress of my deadlines. One April day, after a killer project, I went to a local park and saw people pruning dead branches and working compost into the soil and realized I was missing something.

Did you have to re-learn horticulture to create your own garden when you moved to Portland, Oregon?

I chose the Pacific Northwest on purpose, because it is not only a wonderful place for growing plants, there is also a lot of

crossover with species that grow well on the East Coast. One of the best things about gardening in Portland is that I can finally successfully grow *Carex testacea* (orange sedge)!

What is it like to report on gardens and plants on the radio, with no visual assistance?

My job is to ignite your interest, and I believe in radio, more than any other medium, for feeding the imagination. I don’t like television shows about gardens; they’re more static. We did a story, for example, on Helen Dillon in Ireland. Sure, if you go to her garden in Dublin, you can look around, but my advantage as a reporter is providing access to the gardener herself. Talking to her really gets the listener into the space she inhabits. The experience of her garden might be even better in your head than in reality!

The real challenge, frankly, is trying to appeal to and hold the attention of people who couldn’t care less about gardening while also appealing to and holding the attention of avid gardeners. Because of “Climate Connections” and other reporting on the subject, horticulture is finally getting the air time it deserves. I’m often taken aback when editors ask whether I think people will really know what terms like “variegated” mean.

As a reporter on climate change at a time when so many unusual weather patterns are occurring, have you seen its impact on American gardens?

Gardeners are on the front line of witnessing the effects of climate change. Here in the maritime Pacific Northwest, I’m in a more forgiving climate. The real telling anecdotes are the ones you hear from gardeners in the Midwest and the South. For



to grow so that we don't make things worse in the natural world.

As a tool, has blogging affected how you communicate your message?

It changes everything. On the radio, I only have a limited amount of time to work in. On my blog, I can cover the issues in depth and even use botanical Latin. Latin is so seductively beautiful. I wish I could do a whole story in it!

You've had so many unforgettable reporting adventures, but sleeping overnight in a hammock on a 210-foot-tall Douglas fir in an Oregon old-growth forest must rank near the top of the list.

Sleeping in that tree for NPR's Morning Edition in 2004 remains one of my great overall life experiences, yes. On the whole, the riskier and more exhausting the reporting experience, the more memorable it usually is.

Pretty gardens don't do it for me anymore; I've become addicted to the absurd and the inaccessible. No doubt that will change once I tire of schlepping both myself and my equipment up trees, through rivers, and into forests, but I'm only 55 and not quite ready to slow down.

It doesn't sound like you have much time to work in your own garden.

Between a ruptured disc in my back last year and my demanding travel schedule, my garden looks like hell right now. And I am not being coy. I don't think anything's died—it's just an unholy and unloved mess. It's a passing phase, and I've made my peace with it till the time comes when I can get out there again and tweak things.

So you're always finding changes to make in the garden?

Of course! What else would I do, just sit and enjoy it? You mean that's *allowed*?

We know about your passion for plants, but having spent much of your early career reporting on sports, do you still keep up with your favorites, and do you have a favorite team?

Alas, these days I can't even feign an interest in professional sports.

Linda McIntyre is a freelance writer who lives in Washington, D.C.



Above: On a recent assignment to Kaua'i, Hawaii, to cover a search for the rare fringed orchid (*Platanthera holochila*), Ketzell Levine records a conversation with field botanist Steve Perlman of the National Tropical Botanical Garden, who led the search team. **Left:** Soaked from head to toe, Levine gamely treks along a stream with the botanists during the orchid hunt. As she notes in her blog about this particular experience, "Yes, you're right, this job definitely has its perks."

instance, gardeners in the Midwest are noticing that lilacs, which used to bloom around Mother's Day [in May], are now flowering earlier in spring. The folklore we've built around many garden plants and their culture no longer holds true.

In your blog, you write about controversial issues, such as banning popular plants like butterfly bush (*Buddleia* spp.) that can become invasive, especially in the Pacific Northwest. Do gardeners today have a more complicated time than they did in the past?

People are entitled to lose themselves in

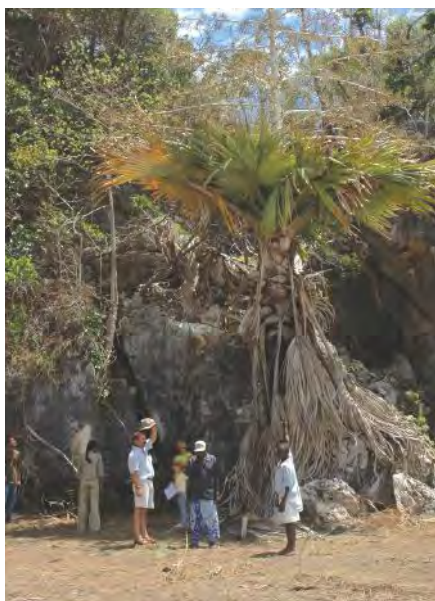
the garden and not think about reality, but it's much harder now to ignore the consequences. Because a plant is considered "pretty" doesn't necessarily justify our growing it. Our standards of beauty have to change.

I believe gardeners do much more good than harm, and that most of them take the responsibility to share what they've learned with others. It's like what Felder Rushing wrote about in his book, *Passalong Plants*: Sharing plants is one of the most cherished activities in gardening. Now the notion includes sharing information on what to grow and what not

Horticultural News and Research Important to American Gardeners

NEW PALM GENUS DISCOVERED

While the news of vanishing species is common these days, we rarely hear about the discovery of a new species. But in Madagascar, a palm has been discovered that is so unusual it required not just the naming of a new species, but the creation of an entirely new genus.



A palm tree discovered in Madagascar required the creation of a new genus.

When local residents Xavier and Nathalie Metz saw the palm's gigantic floral display, they suspected they had stumbled onto a previously unknown plant. Samples sent to the Royal Botanic Gardens at Kew, England, confirmed the discovery, which was documented in the January 2008 issue of the *Botanical Journal of the Linnean Society*.

Scientists named the plant *Tabina spectabilis* (*Tabina* means “to be protected” or “blessed” in Malagasy, the national language of Madagascar). The 30-foot tree bears fan-shaped leaves up to 15 feet across. One of a few species known as “suicide palms,” it grows for decades, then consumes every last bit of energy producing

one spectacular inflorescence—in essence blooming itself to death.

Efforts are being made to preserve the remaining *Tabina* palms—about 90 specimens have been found since the initial discovery in 2006—and local farmers as well as researchers and botanical gardens around the world are cultivating and conserving collected seeds.

SOUTHERN LIVING PLANT COLLECTION DEBUTS THIS SPRING

Southern gardeners take note: Plant Development Services, Inc., has teamed up with *Southern Living* magazine to introduce a new line of plants, branded as the “Southern Living Plant Collection.” The line will debut in the southeastern United States this spring with eight plants, with the plan to introduce more plants

and expand to the entire country in subsequent seasons.

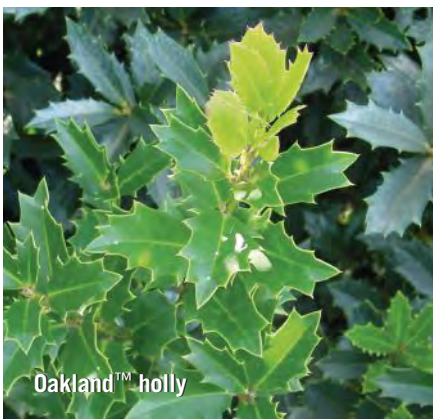
“Many of these plants have been developed specifically in response to landscape challenges articulated by readers of *Southern Living*,” says John Floyd, Jr., editor of the magazine. The collection will feature “quality plants with features like uniformity in size and appearance, low maintenance, and year-round interest,” he adds. Currently, the collection includes the following woody plant selections:

Purple Pixie™ loropetalum (*Loropetalum chinense* ‘Shang-lo’) has a unique weeping habit, rich burgundy foliage, and showy pink flowers that bloom in spring.

Oakland™ holly (*Ilex* ‘Magland’) develops a dense pyramidal form that needs little pruning. It features lobed, oaklike leaves and plentiful red berries in fall.

Spring Sonata™ Indian hawthorn (*Raphiolepis indica* ‘Wilcor’) produces white flowers in spring and dark purple fruit in fall and winter.

For more information about these and other plants in the collection, visit www.plantdevelopment.com.



BEYOND BEER: HOPS FOR HEALTH

The antibacterial and antifungal properties of hops (*Humulus lupulus*) have long been recognized; in addition to flavoring beer, hops help preserve the brew. As a medicinal tea, hops have been used to treat fevers and other disorders. But until recently, hops tea was an unpleasant medicine to swallow because varieties tend to be selected for their bitter qualities to flavor beer.

‘Teamaker’, a new hops selection developed and released by the USDA’s Agricultural Research Service (ARS) Forage Seed and Cereal Research Unit at Corvallis, Washington, provides the herbal attributes without the bitterness. And it has several potential commercial uses beyond tea. For example, sugar producers can use it as a substitute for an antibacterial product called formalin currently used in process-

ing. Researchers at ARS are working on developing more non-bitter hops varieties as potential applications expand.

GLOBAL WARMING COULD MEAN MORE PESTS FOR PLANTS

Rising temperatures and carbon dioxide levels associated with global warming have documented effects on plants, for example, causing weed species to flourish and increasing levels of allergy-inducing pollen, as reported in the March/April 2007 issue of *The American Gardener*. However, scientists are also finding that global warming will have an effect on insect pests and plant diseases.

William Quarles, integrated pest management specialist and executive director of the Bio-Integral Resource Center, reports in the September/October 2007 issue of the *IPM Practitioner* that recent research is showing that “global warming will probably lead to increased numbers of structural, agricultural, and forest insect pests.” These increased numbers are expected because warmer temperatures will allow more insects to survive the winter,

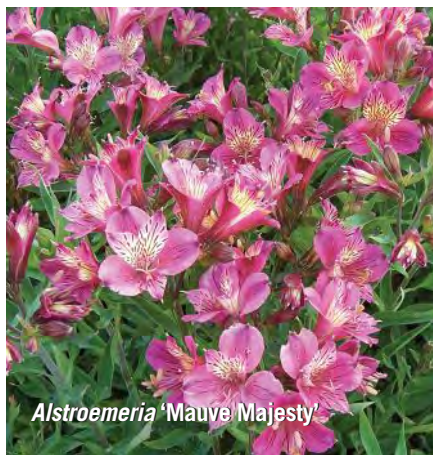
produce more generations in a season, and increase their natural ranges.

Quarles also notes that a warmer climate is likely to increase plant diseases, particularly those caused by fungi. However, “the amount of future disturbance will depend on the actual temperature increase over the next 100 years,” he adds.

CORNELL PATENTS NEW INCA LILY HYBRID

Last November, Cornell University in Ithaca, New York, patented its first orna-

mental plant: *Alstroemeria* ‘Mauve Majesty’, a new Inca lily hybrid. Developed by Mark Bridgen, director of Cornell Department of Horticulture’s Long Island Horticultural Research and Extension Center, this hybrid of Chilean and Brazilian *Alstroemeria* species blooms from summer to the first hard freeze in northern states. In warmer states, it blooms once in spring and again in fall. Its flowers have a unique lavender-lilac color with darker speckles and a pale yellow throat. ‘Mauve Majesty’ is hardy to USDA Zone 6, though Bridgen notes that if grown in colder regions, “good drainage is a must to survive the winter.” This hybrid is widely available through nurseries and mail-order catalogs.



Alstroemeria ‘Mauve Majesty’

REGISTER YOUR COMMUNITY GARDEN

The American Community Gardening Association (ACGA), a nonprofit organization that works to “promote and support all aspects of community food and ornamental gardening, urban forestry, preservation and management of open space, and integrated planning and man-

COURTESY OF MARK BRIDGEN

PHOTO BY ANNE C. ALLEN FROM 2008 GARDENERS CALENDAR



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PEOPLE and PLACES in the NEWS

Nina Bassuk Receives 2008 Scott Medal

Nina Bassuk, a Cornell University horticulture professor, has been named the 2008 recipient of the Scott Medal and



Award. The annual award, sponsored by the Scott Arboretum of Swarthmore College in Pennsylvania, recognizes outstanding contributions to the horticultural field. Bassuk received a bachelor's degree in horticulture from Cornell University, then completed a doctorate in horticulture at the University of London. For nearly 30 years

Bassuk has been a member of Cornell's horticultural physiology faculty. She is also program leader for Cornell's Urban Horticulture Institute, where she directs teaching, research, and Extension efforts that focus on plants growing in urban and disturbed areas.

New President for Holden Arboretum

Holden Arboretum in Kirtland, Ohio, recently appointed Clement W. Hamilton as its next president and chief executive officer, effective at the end of March. "I look forward to helping the Holden Arboretum to maximize its impact and influence for trees in all their environments, from city streets to national forests," says Hamilton.

Since 2004, Hamilton had been the vice president of arboretum programs and director of research at the Morton Arboretum in Chicago, Illinois. Prior to Morton, he spent five years as the executive director of Rancho Santa Ana Botanic Garden in Claremont, California.



agement of developing urban and rural lands," is creating a national community garden database on its website.

This database is designed to "help people find community gardens in their own neighborhoods and, more importantly, help community gardeners connect with each other," says Amy DeShon, ACGA executive director. "By keeping an accurate count of the growing number of gardens, we also hope to demonstrate the value and importance of community gardens in North America." To add a garden to the database, visit www.communitygarden.org to enter a free listing.

CONIFERS FOR COLLECTORS

The American Conifer Society (ACS), based in Lewisville, North Carolina, has named *Picea pungens* 'The Blues' and *Picea abies* 'Pusch' as its Collector's Conifers of the Year for 2008. 'The Blues' features a weeping habit and grows five to six feet tall over a 10-year period. 'Pusch' is a dwarf selection that grows to only about 11 inches tall by 16 inches wide in a decade, and features reddish cones in early spring.

The Collector's Conifer of the Year program makes rare conifers available to the ACS membership by identifying plants that would be of interest to collectors, then having them produced in sufficient quantities. The proceeds go towards fulfilling the ACS's mission, which is to support the development,



Picea pungens 'The Blues', above, and *Picea abies* 'Pusch', left, are two rare species that the American Conifer Society is making available to its members.

conservation, and propagation of conifers, standardization of nomenclature, and education of the public. For more information about the ACS, visit www.conifersociety.org.

Many plant societies and organizations name plants of the year or give awards to outstanding species and varieties. To see a list of more award-winning plants for 2008, click the link in this issue's table of contents on the American Horticultural Society website (www.ahs.org).

Written by Assistant Editor Viveka Neveln with Contributing Editor Rita Pelczar and freelance writer Eileen Powell.

Comparing Natural and Synthetic Fertilizers

by Rita Pelczar

A BUMPER CROP OF tomatoes, a colorful bed of flowering annuals, and a towering oak all need the same 16 essential nutrients for healthy growth. Both natural fertilizers (from organic sources and natural rock powders) and synthetic fertilizers can supply the necessary nutrients, but there are some significant differences in their availability and how these materials affect the soil environment.

NUTRIENT AVAILABILITY

Most plant nutrients are obtained by plant roots from the soil solution, the liquid portion of the soil that surrounds soil particles. Natural fertilizers introduce nutrients into the soil as complex molecules that must be broken down by soil organisms before plants are able to make use of them. This process, known as mineralization, requires time, appropriate temperatures, air, moisture, and of course the digesting organisms, which include bacteria, fungi, actinomycetes, and earthworms.

These organisms are inactive in cold soils, but as temperatures rise above about 50 degrees Fahrenheit (F), so does their rate of activity. “A rule of thumb is that for every increase in soil temperature of 10 degrees Celsius (18 degrees F), the activity of soil organisms doubles,” explains Michel A. Cavigelli, a research soil scientist who works at the USDA Sustainable Agricultural Systems Lab in Beltsville, Maryland.

The nutrients in synthetic fertilizers are generally much more readily available for plant uptake than those in natural fertilizers. Because they are already in a form that plants can use, they do not require soil organisms to break them into simpler forms. They also tend to be less expensive and are often easier to apply than natural fertilizers, which can be quite bulky. But their availability has its downsides: too much can burn plants, causing serious or lethal damage, and significant amounts of these soluble nutrients can leach through the soil beyond the root zone and contaminate nearby streams and groundwater.

Although it is possible to burn plants by applying excessive amounts of natural fer-



Natural and organic fertilizers, such as these from Gardener's Supply, above left, and Planet Natural, right, are now widely available in a variety of formulations.

tilizer—or by using manure that has not been aged—it is far less likely. And because microorganisms retain nutrients in their bodies, releasing them gradually into the soil solution, less is lost through leaching. According to USDA soil scientist Charles Kome, crop yields between synthetic and natural fertilizers are comparable. And although synthetic fertilizers may be more convenient, natural fertilizers, says Kome, “are better for the long-term stability of our global ecosystems.”

SUSTAINABLE GARDEN SOIL

A healthy soil is alive with organisms. Sustaining a viable population of these organisms is necessary for a continuous release of nutrients into the soil solution. These same organisms also contribute to improving a soil's structure.

As natural fertilizers such as animal manure, bone or blood meal, fish meal or emulsion, and seaweed are broken down

by soil microorganisms, these creatures secrete a sticky substance that causes soil particles to cling together to form aggregates. Soil aggregation improves the soil's structure by increasing pore space and facilitating the movement of air and water.

Synthetic fertilizers have little or no effect on soil structure. And the repeated use of these fertilizers can cause an increase in salts, which is detrimental to soil organisms, depleting their populations and their beneficial effects on soil.

NATURAL FERTILIZER ANALYSIS

Most fertilizers—save foliar types—can be considered soil amendments, but not all soil amendments are considered fertilizers. Soil amendments such as compost, leaf mold, and peat moss, for instance, are added to soil primarily to improve the soil structure. Many contain nutrients, but often at low levels. A fertilizer—whether natural or synthetic—will have an analysis on the label

detailing the percentage of nitrogen, potassium, and phosphorus it contains. This analysis is not required on products labeled as soil amendments.

There are many kinds of natural fertilizers, ranging from time-tested barnyard manure to prepackaged dry or liquid formulations. For non-packaged fertilizers, such as manure, the percentage of nutrients is variable, depending on the type of animal, what they were fed, the age of the manure, and other factors (see the chart below for the average nutrient analysis of many common organic materials).

Commercial natural fertilizers state their analysis on the label. Formulations may be supplemented with natural rock powders or plant and animal by-products for specific crops. These help boost certain nutrient levels or they may supply a wider range of nutrients. The Dramm

Corporation, for example, adds four species of kelp to their fish-based fertilizer, called “Drammatic K.” Tim Tetzlaff of Dramm says, in addition to adding several micronutrients, “Kelp contains natural hormones called cytokinins which plants use. The cytokinins help the plants’ internal immune system during stressful situations, [such as] too cold, too hot, too dry, too wet.”

USING FERTILIZER EFFECTIVELY

Although applying nutrients is important for healthy plant growth, it should be done properly to maximize its effectiveness and to avoid environmental damage. Whether you use natural or synthetic sources of fertilizer, you should first have your soil tested to determine your fertilizer needs so that you know exactly which nutrients are in short supply. The test will also indicate your soil reaction (pH) and



whether it needs to be adjusted. If your pH is too high or too low, it can cause nutrients to become chemically bound so that, even though they are present, they are unavailable for plant use.

Nutrient needs vary somewhat among different plants both in amounts and timing. Know the needs of the plants you

SAVING MONEY AND ENERGY WITH MANURE



According to a recent report published by the National Research Conservation Service (NRCS), by appropriately substituting manure for commercial fertilizers, farmers could reduce the production cost of their crops by as much as \$85 per acre. Using nitrogen-fixing plants as cover crops or as part of a crop rotation would further reduce commercial fertilizer needs.

According to data supplied by the U.S. Department of Agriculture, fertilizer accounts for as much as 29 percent of agriculture’s energy use. Using organic fertilizers such as animal manure and cover crops could lead to significant savings in both energy and money.

AVERAGE NUTRIENT CONCENTRATIONS AND RATES OF AVAILABILITY FOR VARIOUS ORGANIC MATERIALS

Material	% Nitrogen	% Phosphate	% Potash	% Availability*	Notes**
Alfalfa hay	2–3	0.5–1	1–2	slow to moderate	
Bone meal	1–6	11–30	0	moderate	alkaline
Blood meal	12	1–2	0–1	rapid	acidic
Cottonseed meal	6	3	1	slow	acidic
Composts	1–3	1–2	1–2	moderate	alkaline
Feather meal	12	0	0	moderate	
Fish meal	6–12	3–7	2–5	rapid	acidic
Grass clippings	1–2	0–0.5	1–2	moderate	
Hoof/horn meal	12–14	1.5–2	0	moderate	alkaline
Kelp	1–1.5	0.5–1	5–10	moderate	zinc, iron
Leaves	1	0–0.5	0–0.5	slow	
Legumes	2–4	0–0.5	2–3	moderate	
Manures: Cattle	2–3	0.5–1	1–2	moderate	weed seed
Horse	1–2	0.5–1	1–2	slow	weed seed
Poultry	3–4	1–2	1–2	rapid	
Sheep	3–4	0.5–1	2–3	moderate	weed seed
Swine	2–3	0.5–1	1–2	rapid	
Pine needles	0.5	0	1	slow	acidic
Sawdust	0–1	0–0.5	0–1	very slow	
Sewage sludge	2–6	1–4	0–1	moderate	zinc, iron
Seaweed extract	1	2	5	rapid	zinc, iron
Straw/corn stalks	0–0.5	0–0.5	1	very slow	
Wood ashes	0	1–2	3–7	rapid	

*Approximate rate of nutrient release from the material.

**Special properties or characteristics of the material.

The chart is from Utah State University Extension’s online bulletin, “Selecting and Using Organic Fertilizers,” by Rich Koenig, Extension Soil Specialist and Mike Johnson, Grand County Extension Agent, January 1999.

Sources

The following sources carry a variety of natural fertilizer products.

Bradfield Organics, www.bradfieldorganics.com.

Clean Air Gardening, www.cleanairgardening.com/fertilizer.html.

Dramm Corporation, www.dramm.com

Extremely Green Gardening Company, www.extremelygreen.com.

Gardener's Supply Company, www.gardeners.com.

MultiBloom, www.multibloom.com.

Planet Natural, www.planetnatural.com/site/index.html

Pure Barnyard, Inc., (makers of Cockadoodle DOO). www.purebarnyard.com/cockadoodledoo/default.asp.

Terracycle, Inc., www.terracycle.net.

Resources

The Soul of Soil, A Guide to Ecological Soil Management by Grace Gershuny and Joseph Smillie. AgAccess, Davis, California, 1995.

Teaming with Microbes: A Gardener's Guide to the Soil Food Web by Jeff Lowenfels and Wayne Lewis. Timber Press, Portland, Oregon, 2006.

National Sustainable Agriculture Research Service (NSARS) Alternative Soil Amendments, <http://attra.ncat.org/attra-pub/altsoilamend.html>.

plan to grow before you select or apply your fertilizer, and be aware of common nutrient deficiency symptoms. For example, tomato plants are heavy feeders. If they don't get enough nitrogen, lower leaves begin to yellow. Never apply more fertilizer than recommended.

Most natural fertilizers take time to break down, so work them into the soil in advance of planting or active growth. Subsequent applications can be made by topdressing with dry formulations such as Bradfield Organic's Tasty Tomato and Veggie, or Cockadoodle DOO, or applying soil or foliar applications of liquid fertilizers such as Terracycle All-Purpose Plant Food or Country Select MultiBloom. Maintaining a continuous supply of organic material such as compost will help sustain a balanced soil environment that is conducive to healthy plant growth.

A LIVING SYSTEM

The soil environment is a living system

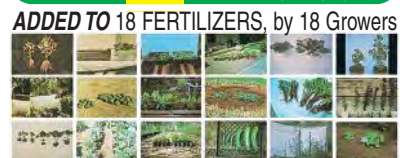


that supports plants both physically—providing anchorage for the aboveground growth—and nutritionally. While using synthetic fertilizers may be more convenient and less expensive in the short term, these products may cause significant imbalances in soil and water ecosystems in the long term. Instead, aim for sustaining a healthy soil system that minimizes environmental impact while maximizing garden results.

Rita Pelczar is a contributing editor for The American Gardener.

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- 6 TREES TO GET "TWO YEARS' GROWTH IN ONE"?
- 7 FRUITING For EARLIER, HEAVIER, BEARING?
- 8 BULBS TO START THEM VIGOROUSLY, Beating Soil-rot, Hastening Better BLOOMING
- 9 SEEDS To Help GERMINATION Percentage and SPEED EARLIER, BETTER YIELDS, including Vegetables
- 10 LAWNS To Make QUICKER, deeper, TOUGHER TURF from SEED, SOD, Stolons, Sprigs, HYDRO-seeding
- 11 XMAS TREES
- 12 REFORESTATION
- 13 HYDROPONICS
- 14 FIELD CROPS
- 15 BONSAI
- 16 TISSUE CULTURE
- 17 HYDROSEEDING
- 18 LANDSCAPING
- 19 PROPAGATION
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Recommendations for Your Gardening Library

The Authentic Garden: Five Principles for Cultivating a Sense of Place

Claire E. Sawyers. Timber Press, Portland, Oregon, 2007. 285 pages. Publisher's price, hardcover: \$34.95.

IF YOU CONSIDER yourself a conscientious consumer, one who tries to tread lightly on the earth, then the ideas Claire Sawyers presents in her elegantly written book, *The Authentic Garden*, will resonate with you. Globalization is ever-present in our world today, but the 21st century American backyard should—more than anything else in our lives—be an honest reflection of its place, she maintains.

Whether we've been dazzled by design magazine photographs of European or Asian landscapes or toured them in person, it's easy to be seduced by them. As director of the Scott Arboretum of Swarthmore College in Pennsylvania, Sawyer's own resume suggests she might be inclined to "borrow" from her years living and working in Japan, Belgium, and France. Yet the most powerful theme she draws from these distinct landscapes is to extract lessons rather than mimic their look.

"This book is about how to make gardens true to a place, a time, and a culture. . . to capture and reflect a certain authentic spirit so that in turn these gardens will nurture the spirits of those who frequent them," she writes. In a conversational tone, supported by excellent photography, Sawyers escorts the reader through five guiding principles to make a garden authentic: Capture the Sense of Place; Derive Beauty from Function; Use Humble or Indigenous Materials; Marry the Inside to the Outside; and Involve the Visitor.

Sawyers underscores the point of each principle using examples from private and public gardens around the country. She demonstrates that the most successful landscapes are ones where the owners or designers have observed and worked with the spirit of place rather than struggled against it.

The Authentic Garden reads like a mission statement for anyone blessed with the stewardship of a piece of land. With these lessons in mind, we can derive a deep sense of satisfaction from our environment, wherever it may be located.

—Debra Prinzing

Debra Prinzing is a southern California-based garden and design writer and the author of Stylish Sheds and Elegant Hideaways (Clarkson-Potter/Random House, 2008).

Native Ferns, Moss & Grasses

William Cullina. Houghton Mifflin Company, Boston, Massachusetts, 2008. 272 pages. Publisher's price, hardcover: \$40.

BILL CULLINA has done it again. Following his books on native wildflowers and on native trees, shrubs, and vines, this time Cullina tackles a somewhat less familiar suite of plants—those noted more for form and texture than for flowers. As Director of Horticultural Research for the New England Wild Flower Society nurseries, he brings 25 years of experience growing and propagating native plants to bear, with an air of authority and a sense of humor, in this third and final volume in his series on native American plants.

Cullina explores a subtle world populated by such charming characters as spleenwort, haircap, and broomsedge—the ferns, mosses, and grasses that grow in North America. He starts by defining terms—clearly articulating his concept of "native" and explaining why it is an important consideration from an ecological standpoint rather than from one of semantics. Equal weight is given to discussions of plant hardiness, light, soil, and pests.

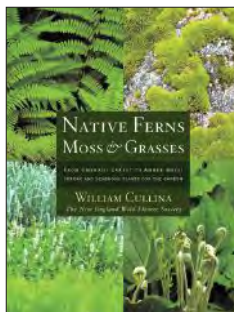
The meat of the book, the encyclopedic listings, is divided into four parts: Ferns; Mosses; Grasses, Sedges and Rushes; and Propagation. Sidebars provide detailed explorations of topics such as invasive plants, fern hybridization, and evolution. Throughout, beautiful photos by the author augment his vibrant words.

By his own admission, Cullina had limited familiarity with many of the plants before writing the book, which may account for occasional subtleties of identification or garden performance being overlooked. I also noticed a few inconsistencies in format. For example, Parts I and II—handling ferns and mosses—contain useful chapters covering anatomy, while in Part III, grass anatomy is included under "Gardening with Grasses" rather than having its own chapter. However, Cullina's considerable skill is evident in Part IV, which focuses on propagation. He provides concise techniques appropriate for each group of plants, as well as a chart with specifics for propagating each genus.

Overall, Cullina has produced an authoritative, readable, and enduring reference. It will provide experienced gardeners with the specifics they crave, while newcomers are sure to fall under the spell of these under-appreciated native gems.

—C. Colston Burrell

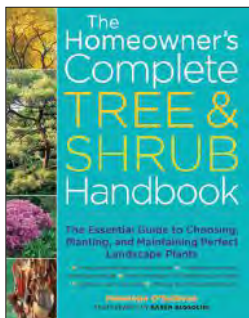
C. Colston Burrell is a garden designer, and coauthor of Hellebores: A Comprehensive Guide (Timber Press, 2006).



The Homeowner's Complete Tree & Shrub Handbook

Penelope O'Sullivan. Storey Publishing, North Adams, Massachusetts, 2007. 408 pages. Publisher's price, softcover: \$29.95.

ONE PROBLEM with garden books that try to say too much about everything is that they often end up saying too little



about anything. Happily, this is not the case with *The Homeowner's Complete Tree & Shrub Handbook* by garden designer and author Penelope O'Sullivan. The clean, crisp photography by Karen Bussolini—be it of the exquisite curling bark of a paperbark maple (*Acer griseum*), an uphill woodland path in three seasons, or an arborist in full-helmeted gear 20 feet up a tree—reinforces the comprehensive treatment of the subject. Helpful and clear illustrations also supplement the text.

This book begins with a couple of chapters on basic design concepts. “With a solid plan,” writes O'Sullivan, “you can arrange plants and garden structures to enhance your house, please your family, and simplify your life.” To that end, she gives her readers the necessary building blocks. For example, she explains important factors such as mature size and growth rate to consider to ensure selecting the right plant for the right place. Next, a section on how to care for landscape plants covers everything from planting and pruning to common insects and diseases. Both sections contain numerous insightful sidebars as well as handy charts and lists of plants that have specific attributes.

The book's final 250 pages are where it really earns its keep. Here, O'Sullivan lists 357 shrubs and trees, which she includes “for several reasons, but mostly for their garden merit.” Many selections are personal and personalized. For example, her mother gets a nod in the weigelas. And to enjoy the mottled bark of Persian ironwood (*Parrotia persica*) she advises patience because after several years in her garden, her own specimen hasn't yet begun to exfoliate.

So it goes from *Abelia* \times *grandiflora* to *Zenobia pulverulenta*. For each plant, O'Sullivan succinctly describes its characteristics and suggests landscape uses. Each entry lists the origin, hardiness zones, light and soil requirements, growing tips, and any cultivars of particular merit. She also takes care to warn of any weedy tendencies in particular regions of the country. Many of the listed plants are then tucked into a useful planning chart at the end of the book, along with additional sources of tree and shrub information, a glossary, and an index. Complete, indeed!

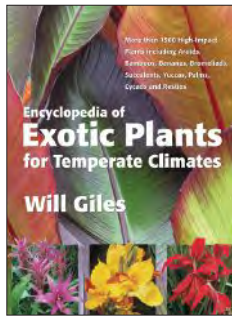
—Bob Hill

Owner of Hidden Hill Nursery & Sculpture Garden in Utica, Indiana, Bob Hill is also a garden writer and co-host of a garden radio show in Louisville, Kentucky.

Encyclopedia of Exotic Plants for Temperate Climates

Will Giles. Timber Press, Portland, Oregon, 2007. 440 pages. Publisher's price, hardcover: \$49.95.

IN HIS *Encyclopedia of Exotic Plants for Temperate Climates*, English gardener Will Giles states emphatically that he had “an all-embracing approach to my selection of exotic plants... though I am sure some purists will disagree with my choices.” No one, however, should quibble on the book's quality. The descriptions are well-written and full of good information on growing requirements. The images are plentiful, clear, and color-correct, providing plenty of inspiration to those gardeners living in cooler climates to try growing tropical exotics.



After a foreword by Fergus Garrett, the head gardener at the renowned Great Dixter garden, Giles explains in the introduction that the plants he chose to include in this encyclopedia are “subtropical or tropical in appearance but in fact originate in cooler climatic regions of the world, as well as true tropicals and subtropicals that, for various reasons, flourish in temperate gardens and in some cases are able to withstand several degrees of frost.”

However, as with many books that originate in the United Kingdom, it does not give cold hardiness ranges. Instead, it lists minimum temperatures in Celsius and notes if plants are tender, semi-tender, half-hardy, frost-hardy, or hardy, based on the author's experience growing these plants in the British Isles. In his defense, Giles explains that he purposefully eschewed the U.S. Department of Agriculture's hardiness zones in an effort to encourage readers to “push against boundaries, experiment with different care and maintenance regimes, and make the most of microclimates in your garden.”

The book's 14 chapters are divided into useful segments based on a plant's form and use in the garden, for example, “Grasses, Grasslike Plants, and Restios” and “Cacti, Succulents, Yuccas, and Other Spiky Things.” I would caution that some of the groups of plants described in the book display a propensity for growing out of control in various regions of the United States. For example, many bamboos, such as *Phyllostachys* spp., can be invasive on this side of the pond. The same goes for plants such as *Akebia* and *Ampelopsis*, so I would advise doing a little further research before planting some of these exotics.

If you are seeking the ultimate treatise on tropical plants, look elsewhere. But if you want a pleasant, well-written book to use as a reference on tropical and tropical-looking plants, this would be a good choice.

—Robert Bowden

Robert Bowden has been the director of the Harry P. Leu Botanical Gardens in Orlando, Florida, for 14 years and is the author of Florida's Top Ten Garden Guide (*Time Warner/Sunset Books*, 2008).



REGIONAL HAPPENINGS

Horticultural Events from Around the Country

NORTHEAST

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

MAR. 28–30. **Capital District Garden & Flower Show.** Hudson Valley Community College. Troy, New York. (518) 786-1529. www.gardenandflowershow.com.

MAR. 29 & 30. **Swing Into Spring with Orchids.** Show and sale. Connecticut Orchid Society. West Hartford, Connecticut. (860) 838-1919. www.ctorchids.org.

APR. 11–13. **25th Annual Spring Festival.** Mid-Atlantic Bonsai Societies. Kerhonkson, New York. (973) 379-3386. www.midatlanticbonsai.freesevers.com.

APR. 27. **NYC GROWS Garden Festival.** Show and sale. Union Square Park, New York, New York. (802) 291-0645. www.nycgrows.org.

Looking ahead

MAY 2 & 3. **Cape Cod Conservation District Spring Plant Sale.** Barnstable Village, Massachusetts. (508) 771-8757. www.capecodcd.org.

MAY 3. **May Gardeners' Market.** Garden Education Center of Greenwich. Cos Cob, Connecticut. (203) 869-9242. www.gecgreenwich.org.

RAP MAY 3 & 4. **Cherry Blossom Festival.** Brooklyn Botanic Garden. Brooklyn, New York. (718) 623-7200. www.bbg.org.

MAY 9–12. **Galleries in Bloom.** Educational sessions and display. Berkshire Museum. Pittsfield, Massachusetts. (413) 443-7171. www.berkshireremuseum.org.

MID-ATLANTIC

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

THROUGH APR. 13. **An Alphabet Garden of Orchids.** Exhibit. U.S. Botanic Garden Conservatory. Washington, D.C. (202) 225-8333. www.usbg.gov.

MAR. 20. **Green Roof Tour.** Scott Arboretum. Swarthmore, Pennsylvania. (610) 328-8025. www.scottarboretum.org.

MAR. 29 & 30. **Camellia Sale.** Brookside Gardens. Wheaton, Maryland. (301) 962-1400. www.brooksidegardens.org.

Events sponsored by or including official participation by AHS or AHS staff members are identified with the **AHS** symbol.

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/events/reciprocal_events.htm.

RAP MAR. 29. **Native Plants: Cultivars Considered.** Lahr Symposium. U.S. National Arboretum. Washington, D.C. (202) 245-2708. www.usna.usda.gov/Education/events.html.

APR. 9–13. **American Daffodil Society Convention and Show.** Richmond, Virginia. (478) 783-2153. www.daffodilusa.org.

APR. 15. **April Shower of Flowers.** Workshop. Tudor Place. Washington, D.C. (202) 965-0400. www.tudorplace.org.

AHS APR. 19–27. **Historic Garden Week in Virginia.** The Garden Club of Virginia. (804) 644-7776. www.VAGardenweek.org.

RAP APR. 25–27. **Plant Sale and Garden Fair.** U.S. National Arboretum. Washington, D.C. (202) 544-8733. www.fona.org.

APR. 26. **Rare Plant Auction.** Longwood Gardens. Kennett Square, Pennsylvania. (302) 658-6262. www.rareplantauction.org.

SOUTHEAST

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

RAP MAR. 22 & 23. **Annual Orchid/Bromeliad Show & Sale.** Flamingo Gardens & Wildlife Sanctuary. Davie, Florida. (954) 473-2955. www.flamingogardens.org.

MAR. 28. **Plant Fair and Sale.** Callaway Gardens. Pine Mountain, Georgia. (706) 663-2281. www.callawaygardens.org.

RAP MAR. 29 & 30. **Annual Plant Sale.** Harry P. Leu Gardens. Orlando, Florida. (407) 246-2620. www.leugardens.org.

AHS APR. 11–13. **Bloom 'n' Garden Expo.** Franklin, Tennessee. (615) 790-5721. www.bloomngarden.com.

RAP APR. 11–13. **Spring's Best Plant Sale.** Memphis Botanic Garden. Memphis, Tennessee. (901) 576-4100. www.memphisbotanicgarden.com.

APR. 12. **Annuals & Perennials for the Summer.** Class. Riverbanks Botanical Garden. Columbia, South Carolina. (803) 779-8717 ext.1141. www.riverbanks.org.

APR. 18–20. **Spring Plant Sale and Garden Party.** UNC Charlotte Botanical Gardens. Charlotte, North Carolina. (704) 687-2870. <http://gardens.uncc.edu>.

APR. 19 & 20. **An EPIC Celebration of Spring: Flower & Garden Expo.** St. Augustine, Florida. (904) 829-3295. www.epiccommunityservices.org.

RAP APR. 23–26. **Semi-Annual Plant Sale and Garden Gift Shop.** Wing Haven Gardens and Bird Sanctuary. Charlotte, North Carolina. (704) 331-0664. www.winghavengardens.com.

APR. 24–28. **National Garden Club Convention.** Memphis, Tennessee. (314) 776-7574. www.gardenclub.org.

APR. 24 & 25. **Boxwood Symposium.** American Boxwood Society. Charlotte, North Carolina. www.boxwoodsociety.org.

NORTH CENTRAL

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

RAP MAR. 31, APR. 7, & APR. 14. **Plant Identification.** Class. Matthaei Botanical Gardens and Nichols Arboretum. Ann Arbor, Michigan. (734) 647-7600. www.lsa.umich.edu/mbg/default.asp.

APR. 5. **Green Fair.** Mitchell Park Horticultural Conservatory. Milwaukee, Wisconsin. (414) 649-9800. www.county.milwaukee.gov.

RAP APR. 5 & 6. **Orchid Extravaganza.** Sale and show. Chicago Botanic Garden. Glencoe, Illinois. (847) 835-5440. www.chicagobotanic.org.

RAP APR. 19. **Garden Author Symposium.**

Winterthur Hosts Trillium Symposium

THE FIRST-EVER Trillium Symposium will be held in Winterthur's Copeland Lecture Hall in Wilmington, Delaware, from April 17 to 19. This two-day conference, with an optional field trip on the third day, will coincide with the sweeps of trilliums and other ephemerals that illuminate woodlands in springtime.

Dedicated gardeners, as well as academic and industry professionals, will discuss the cultivation of these charming American wildflowers, as well as the many aspects of the genus's ecology, biology, and considerable conservation and propagation challenges. Along with Winterthur, sponsors include the Mt. Cuba Center in Greenville, Delaware, and the New England Wild Flower Society in Framingham, Massachusetts—two institutions that are actively propagating trilliums. The American Public Gardens Association, based in Wilmington, is also a sponsor.

The Mt. Cuba Center is the originator of the symposium. "We are delighted to convene this first-ever Trillium Symposium, along with our partners," says Rick J. Lewandowski, director of the Mt. Cuba Center. "Our goal is to promote one of America's most beloved wildflowers and bring to the public a greater awareness of its beauty, conservation value, and horticultural potential."

Presentations during the symposium will include such topics as classification, morphology, distribution, propagation, conservation challenges, and uses for home gardeners. There also will be a field trip to Shenk's Ferry Wildflower Preserve where, from late March until the end of May, woodland glens shelter a profusion of wildflowers.

For registration and more information, visit the Symposium website at www.trilliumsymposium2008.org.

—Linda Yang, former New York Times garden columnist and author of *The City Gardener's Handbook* (Storey Publishing, 2002).



Trillium grandiflorum, shown here, and its kin will be the subject of a first-ever symposium in Delaware.

Fellows Riverside Gardens and Mill Creek Metro Parks. Youngstown, Ohio. (330) 740-7116. www.millcreekmetroparks.com.

APR. 29–MAY 1. **International Greening Rooftops for Sustainable Communities Conference.** Minneapolis, Minnesota. (416) 971-4494. <http://greenroofs.org/minneapolis>.

Looking ahead

AHS MAY 2–4. **Orchard in Bloom Garden Show.** Indianapolis, Indiana. (317) 713-5720. www.orchardinbloom.org.

RAP MAY 9 & 10. **Plant Sale with the Pros.** Olbrich Botanical Gardens. Madison, Wisconsin. (608) 246-4550. www.olbrich.org.

RAP MAY 9 & 11. **Festival of Blooms.** Fern-

wood Botanical Garden & Nature Preserve. Niles, Michigan. (269) 695-6491. www.fernwoodbotanical.org.

RAP MAY 10. **Spring Plant Sale.** Leila Arboretum. Battle Creek, Michigan. (269) 969-0270. www.leilaarboretumsociety.org.

SOUTH CENTRAL

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

RAP MAR. 24.–APR. 12. **Tulip Extravaganza.** Garvan Woodland Gardens. Hot Springs National Park, Arkansas. (800) 366-4664. www.garvagardens.org.

MAR. 28 & 29. **A Celebration of Edible Flowers.** Herbal Forum. Festival Hill. Round Top, Texas. (979) 249-3129. www.festivalhill.org.

RAP APR. 10 & 11. **Plant & Garden Sale.** Myriad Botanical Gardens. Oklahoma City, Oklahoma. (405) 297-3995. www.myriadgardens.com.

RAP APR. 12 & 13. **Mid-American Regional Lily Society Sale.** Missouri Botanical Garden. St. Louis, Missouri. (314) 577-9400. www.mobot.org.

RAP APR. 11–13. **Spring Plant Sale and Gardening Festival.** Lady Bird Johnson Wildflower Center. Austin, Texas. (512) 292-4200. www.wildflower.org/plantsale.

RAP APR. 18–20. **Lone Star Greats: Tough Texas Plants.** Lecture and plant sale. Dallas Arboretum and Botanical Garden. Dallas, Texas. (214) 515-6500. www.dallasarboretum.org.

APR. 26 & 27. **Earth Day and Oleander Festival.** Moody Gardens. Galveston, Texas. (800) 582-4673. www.moodygardens.org.

RAP APR. 27. **Wichita Garden Council Rare Plant Auction.** Botanica, The Wichita Gardens. Wichita, Kansas. (316) 264-0448. www.botanica.org.

SOUTHWEST

AZ, NM, CO, UT

MAR. 29. **Real Gardens for Real People.** Garden tour. Scottsdale/Moon Valley, Arizona. (602) 470-8086. www.cals.arizona.edu/maricopa/garden/gardentour.html.

RAP APR. 9. **Landscaping for Small Spaces.** Workshop. Desert Botanical Garden. Phoenix, Arizona. (480) 941-1225. www.dbg.org.

RAP APR. 11 & 12. **Spring Bulb Show and Competition.** Red Butte Garden. Salt Lake City, Utah. (801) 581-4747. www.redbutte.com/garden.org.

RAP APR. 24. **The Explorer in the Garden: Digging in the Garden as Metaphor.** Lecture. Denver Botanic Gardens. Denver, Colorado. (720) 865-3500. www.botanicgardens.org.

RAP MAY 9 & 10. **Plant Sale.** Denver Botanic Gardens. Denver, Colorado. (720) 865-3500. www.botanicgardens.org.

WEST COAST

CA, NV, HI

APR. 10. **Agaves, Yuccas and Related Plants.** Lecture. Southern California Horticultural Society. Los Angeles, California. (818) 567-1496. www.socahort.org.

APR. 12. **Open Garden: Sacramento Historic Rose Garden.** Plant sale and tours. Sacramento, California. (916) 448-0811. www.cemeteryrose.org.

New Exhibit Part of Garfield Park Conservatory's Centennial Celebrations

ON MARCH 1, as part of its centennial celebration, a new permanent exhibit, "Sugar from the Sun," opened in Chicago's sprawling Garfield Park Conservatory. The purpose of this exhibit is to present, in a way that will be interesting to a diverse population, the process that allows plants to harness sunlight to produce food, oxygen, and other resources.

Four botanical environments immerse visitors in the elements necessary to plants and all life on Earth—sunlight, air, water, and sugar. A meandering path leads through groves of fruiting plants,



mist-shrouded waterfalls and reflective pools, and lofty aeries of epiphytes. Sixty-five hidden speakers provide visitors with a seamless narration as they stroll through this sense-enveloping story of plants, keeping traditional museum signage to a minimum. "We hope 'Sugar from the Sun' will instill wonder in visitors of all ages," says David Snyder, director of education and exhibit development, "and start conversations about this mysterious process, which happens at a level we cannot see."

In Chicago style, 200 tons of stone and 3,900 linear feet of bent steel went into the building of this exhibit, funded by a grant from the National Science Foundation. Its opening coincides with a major renovation of the conservatory, which covers 4.5 acres and houses specimens from around the world, including 1,850 plants in this exhibit alone.

In addition to the opening of "Sugar from the Sun," the Conservatory has several other events planned, including a Grand Centennial Opening on April 13, to celebrate its 100th year. The



The Garfield Park Conservatory, shown above in 1908, celebrates 100 years with the opening of its exhibit, "Sugar from the Sun," left.

Garfield Park Conservatory Alliance is also publishing a beautifully illustrated book, which comprehensively presents the history of the Conservatory and the surrounding West Side neighborhoods using personal vignettes, historical documents, and both archival black-and-white and contemporary color photography. For more information, call (312) 746-5100 or visit www.garfield-conservatory.org.

—John Fiege, *Editorial Intern*

APR. 12 & 13. **Garden Tour & Spring Biodiversity Plant Sale.** Occidental Arts & Ecology Center. Occidental, California. (707) 874-1557. www.oaec.org.

APR. 14. **Practical Pruning: A Workshop for Arborists and Landscapers.** University of California. Davis, California. (800) 752-0881. www.extension.ucdavis.edu/agriculture/.

APR. 16–19. **Out of the Wild & Into the Garden VI.** Symposium. Rancho Santa Ana Botanic Garden. Claremont, California. (909) 625-8767. www.rsabg.org.

RAP MAY 3 & 4. **Montrose African Violet Society Show & Sale.** Descanso Gardens. La Cañada Flintridge, California. (818) 949-4200. www.descansogardens.org.

NORTHWEST

AK, ID, MT, OR, WA, WY

MAR. 29. **The Ornamental Plant: From Third Century Athens to Your Garden.** Symposium. Northwest Horticultural Society. Kenmore, Washington. (206) 527-1794. www.northwesthort.org.

RAP APR. 12. **Early Bloomers.** Plant sale. Washington Park Arboretum. Seattle, Washington. (205) 325-4510. www.arboretumfoundation.org.

RAP APR. 26. **Spring Plant Sale.** Idaho Botanical Garden. Boise, Idaho. (208) 343-8649. www.idahobotanicalgarden.org.

APR. 26 & 27. **Glide Wildflower Show.** Glide Community Center. Glide, Oregon. (541) 496-3323. www.glidewildflowershow.org.

RAP MAY 10. **Tour of the Historic High Plains Arboretum.** Cheyenne Botanic Gardens. Cheyenne, Wyoming. (307) 637-6458. www.botanic.org.

CANADA

MAR. 26. **An Ecological Vegetable Garden.** Class. Arboretum at the University of Guelph. Guelph, Ontario. (519) 824-4120 ext. 52113. www.uoguelph.ca/arboretum.

RAP APR. 12 & 13. **Creating a Community Garden.** Workshop. Glendale Gardens & Woodland. Victoria, British Columbia. (250) 479-6162. www.hcp.bc.ca.

RAP APR. 24. **Using Native Plants in Your Garden.** Class. Royal Botanical Gardens. Hamilton, Ontario. (905) 527-1158. www.rbg.ca.



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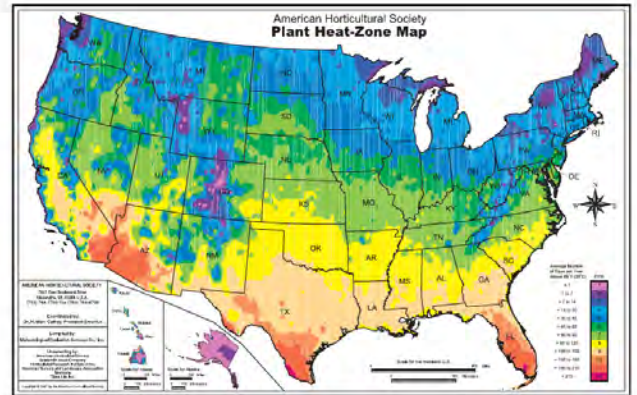


PRONUNCIATIONS AND PLANTING ZONES

Most of the cultivated plants described in this issue are listed here with their pronunciations, USDA Plant Hardiness Zones, and AHS Plant Heat Zones. These zones suggest a range of locations where temperatures are appropriate—both in winter and summer—for growing each plant.

While the zones are a good place to start in determining plant adaptability in your region, factors such as exposure, moisture, snow cover, and humidity also play an important role in plant survival. The codes 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.

To purchase a two-by-three-foot glossy AHS Plant Heat Zone Map for \$9.95, call (800) 777-7931 or visit www.ahs.org.



A-C

- Acorus calamus** AK-or-us
KAL-uh-mus (USDA Zones 3-8, AHS Zones 9-4)
- A. gramineus** A. gruh-MIN-ee-us
(5-8, 9-5)
- Agave americana** uh-GAH-vee
uh-mair-ih-KAN-uh (9-11, 12-5)
- A. gracilipes** A. gruh-SIL-ih-pees
(8-11, 12-5)
- A. havardiana** A. huh-var-dee-AN-nuh
(6-10, 12-5)
- A. montana** A. mon-TAN-uh
(7-10, 10-7)
- A. neomexicana** A. nee-o-mex-ih-KAN-uh
(9-11, 12-5)
- A. parryi** A. PAIR-ee-eye
(7-10, 12-5)
- A. scabra** A. SKAY-bruh
(7-10, 12-6)
- Allium christophii** AL-ee-um
kris-TOF-ee-eye (3-9, 9-5)
- A. sphaerocephalum** A. sfee-or-SEF-uh-lum (4-11, 12-1)
- Amsonia hubrichtii** am-SO-nee-uh
hew-BRIK-tee-eye (5-9, 9-3)
- Baptisia australis** bap-TIZ-yuh
aw-STRAY-liss (3-9, 9-1)
- Buddleia davidii** BUD-lee-uh
duh-VID-ee-eye (6-9, 9-3)
- Carex crinita** KAIR-eks kry-NY-tuh
(3-8, 8-1)
- C. pendula** C. PEN-dyew-luh
(5-9, 9-5)
- Clematis alpina** KLEM-uh-tiss
al-PY-nuh (4-9, 9-6)
- C. crispa** C. KRIS-puh (6-9, 9-6)
- C. integrifolia** C. in-teg-rih-FO-lee-uh
(4-11, 7-1)
- C. macropetala** C. mak-roh-peh-TAL-uh
(6-9, 9-6)
- C. montana** C. mon-TAN-uh
(6-9, 9-6)
- C. montana var. wilsonii** C. mon-TAN-uh
var. wil-SOWN-ee-eye (6-9, 9-6)

- C. pitcheri** C. PITCH-ur-eye
(6-9, 9-6)
- C. viorna** C. vy-OR-nuh (5-9, 9-1)
- C. viticella** C. vih-tih-SEL-luh
(4-11, 9-1)
- C. texensis** C. teks-SEN-sis
(4-11, 9-1)
- Cotinus coggygria** ko-TY-nus
ko-JEE-gree-uh (5-9, 9-3)

D-I

- Darmera peltata** DAR-mer-uh
pel-TAY-tuh (5-8, 8-5)
- Dasyliiron longissimum** das-il-LIR-ee-on
lon-JIS-sih-mum (8-11, 11-8)
- D. texanum** D. tek-SAY-num
(9-11, 11-9)
- D. wheeleri** D. WHEE-ler-ee
(7-10, 11-7)
- Dicentra spectabilis** dy-SEN-truh
spek-TAH-bih-liss (3-9, 9-1)
- Eryngium agavifolium** ee-RIN-jee-um
uh-gah-vee-FO-lee-um (6-9, 9-6)
- E. pandanifolium** E. pan-dan-ih-FO-lee-um
(9-10, 12-10)
- E. yuccifolium** E. yuk-ih-FO-lee-um
(4-9, 12-1)
- Fagus sylvatica** FAY-gus sil-VAT-ih-kuh
(5-7, 7-5)
- Hesperaloe campanulata** hes-pur-AL-o
kam-pan-yew-LAY-tuh (8-10, 10-8)
- H. parviflora** H. par-vih-FLOR-uh
(6-11, 12-6)
- H. tenuifolia** H. ten-yew-ih-FO-lee-uh
(8-10, 10-8)
- Hibiscus syriacus** high-BISS-kus
sih-ree-AH-kus (5-9, 10-3)
- Humulus lupulus** HEW-mew-lus
LEW-pew-lus (4-8, 8-1)
- Imperata cylindrica** im-peh-RAH-tuh
sih-LIN-drih-kuh (4-9, 9-3)
- Iris ensata** EYE-riss en-SAH-tuh
(3-9, 9-1)

- I. giganteaerulea** I. jy-gan-tih-see-ROO-lee-uh
(7-10, 10-7)
- I. hexagona** I. hek-sah-GO-nuh
(8-10, 10-8)
- I. kaempferi** I. kemp-FAIR-eye
(3-9, 9-1)
- I. laevigata** I. lee-vih-GAY-tuh
(3-9, 9-1)
- I. sibirica** I. sy-BEER-ih-kuh
(3-9, 9-1)
- I. virginica** I. vir-JIN-ih-kuh
(4-9, 9-4)

J-R

- Juncus effusus** JUNG-kus eh-FEW-suss
(6-9, 9-6)
- Loropetalum chinense** lor-o-PEH-tal-um
chy-NEN-see (8-9, 9-8)
- Mertensia virginica** mur-TEN-see-uh
vir-JIN-ih-kuh (3-8, 7-1)
- Nepeta racemosa** NEP-eh-tuh
ras-eh-MO-suh (4-9, 8-1)
- Nolina nelsoni** no-LIE-nuh
NEL-son-eye (8-10, 10-8)
- N. texana** N. tek-SAN-uh
(7-11, 11-7)
- Paeonia lactiflora** pee-O-nee-uh
lak-tih-FLOR-uh (3-8, 8-1)
- P. ×lemoinei** P. leh-MOYN-ee-eye
(3-8, 8-1)
- P. lutea** P. LEW-tee-uh (3-8, 8-1)
- P. suffruticosa** P. suh-frew-tih-KO-suh
(5-8, 8-5)
- Phlox stolonifera** FLOKS sto-lon-IF-ur-uh
(4-8, 8-1)
- Phormium tenax** FOR-mee-um
TEN-aks (9-11, 12-2)
- Physocarpus opulifolius** fie-so-KAR-pus
op-yew-lih-FO-lee-us (3-7, 7-1)
- Picea abies** PY-see-uh AY-beez
(2-8, 8-1)
- P. pungens** P. PUN-jenz
(3-8, 8-1)
- Pontederia cordata** pon-tuh-DEER-ee-uh
kor-DAH-tuh (3-11, 12-1)

- Raphiolepis indica** raf-ee-o-LEP-iss
IN-dih-kuh (7-9, 9-7)

S-Z

- Sambucus racemosa** sam-BOO-kus
ras-eh-MO-suh (3-7, 7-1)
- Spiraea japonica** spy-REE-uh
jah-PON-ih-kuh (4-9, 9-1)
- Stylophorum diphyllum** sty-lo-FOR-um
dy-FIL-lum (5-8, 8-1)
- Trillium catesbaei** TRIL-ee-um
KAYTS-bee-eye (6-9, 8-4)
- T. cuneatum** T. koo-nee-AY-tum
(6-9, 9-6)
- T. erectum** T. eh-REK-tum
(4-7, 7-3)
- T. foetidissimum** T. fee-tid-ISS-ih-mum
(5-9, 9-5)
- T. grandiflorum** T. gran-dih-FLOR-um
(4-8, 8-1)
- T. luteum** T. LEW-tee-um
(5-7, 7-4)
- T. nivale** T. nih-VAY-lee (5-8, 8-5)
- T. ovatum** T. oh-VAY-tum (5-8, 8-5)
- T. rivale** T. rih-VAY-lee (5-8, 8-5)
- T. sessile** T. SEH-sih-lee
(4-8, 8-1)
- T. simile** T. SIM-ih-lee (4-8, 8-1)
- T. underwoodii** T. un-der-WOOD-ee-eye
(5-9, 9-5)
- T. undulatum** T. un-dyew-LAY-tum
(4-8, 8-1)
- Yucca baccata** YUK-uh buh-KAY-tuh
(4-9, 12-4)
- Y. filamentosa** Y. fil-uh-men-TOH-suh
(4-11, 12-5)
- Y. gloriosa** Y. glor-ee-O-suh
(7-11, 12-7)
- Y. rostrata** Y. ros-TRAY-tuh
(5-11, 12-2)

GARDEN MARKET

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Starflowers: Shining Brightly in the Spring Garden

by Allan M. Armitage

AS I TRAVEL around the country and talk about the greatest, newest, or weirdest plants for gardeners, I am often asked, “What are some of your favorite things?” After I launch into a discourse about my children, grandchildren, and steroid-free baseball, the question is quickly rephrased to, “What are some of your favorite *plants*?” Well, that stops the verbal lava flow, as I now must try to pick a few things out from the ever-more bloated list of my favorites. Usually I say, “Let me tell you about one of my favorite things, my starflowers.”

When I buy spring starflowers (*Ipheion uniflorum*, USDA Hardiness Zones 5–9, AHS Heat Zones 9–5), I get enough of these little bulbs to pack them in like peas whenever space becomes available in my garden. They are lovely along paths, at the front of borders, or in rock gardens.

Emerging in fall, the narrow, pale green, nearly flat leaves are six to nine inches long. When crushed, they smell like garlic, although not as pungent. This seems to turn some people off, but if it bothers you, my advice is simply don't crush them. The flowering stem rises about six inches above the foliage and usually bears one—and occasionally two—pleasantly fragrant blossoms in March or April. The inch-wide star-shaped flowers have a lovely whitish to porcelain blue hue.

Native to Argentina and Uruguay, starflowers will thrive in well-drained soil in full sun, where colonies will increase rapidly. In some gardens, particularly in the Southeast, plants can become almost thuglike. I see them in old homesteads from Aiken, South Carolina, to the fine gardens of Williamsburg, Virginia, where they grow like the ubiquitous dandelion. Unlike the dandelion, however, starflowers go dormant and disappear in early summer. As for me, I welcome the invasion.

PROPAGATION

Offsets are readily produced, so if new colonies are wanted, simply lift existing plantings after flowering, separate bulbs



Starflowers form colonies of bright blossoms.

and offsets, and replant immediately about two inches deep where desired. Plants can be divided every two to four years to maintain vigor.

Starflowers can also be easily forced in containers. Plant seven to 10 bulbs in a four- or six-inch pot, place the pot in the

refrigerator or a cool garage where temperatures are around 40 degrees Fahrenheit for eight to 10 weeks, then bring the pot out to flower. They cannot compete with tulips for show, but their delicacy and scent are worth the effort.

COLOR SELECTIONS

There are a number of fine starflower selections available, but only a few are significantly different from the species.

‘Rolf Fiedler’ is outstanding, bearing shorter, wider leaves than the species and handsome clear blue flowers on short flower stems. Unfortunately, colonies are slower to fill in and flowers are not as numerous. Dividing the colonies more often will encourage more flowering. ‘Jesse’ is similar to ‘Rolf Fiedler’ but the flowers are a deeper blue. ‘Wisley Blue’, probably the most popular cultivar, has larger—up to two-inch-wide—flowers of lavender blue.

Among white-flowered selections, ‘Album’ has terrific, large white flowers highlighted by a purple vein that makes a handsome contrast. ‘Alberto Castello’ is similar to ‘Album’ but has larger flowers. ‘White Star’ also resembles ‘Album’ and may well be the same.

Two other color choices are ‘Charlotte Bishop’, which has lovely pink flowers with a small white center, and ‘Froyle Mill’, which has dark violet flowers. ☺

The Name Game

The taxonomy of *Ipheion* is in a state of flux. The genus is also published, depending on the taxonomic body, under the names *Brodiaea*, *Triteleia*, *Tristagma*, and *Milla*. Although the International Taxonomic Information System (ITIS) has declared *Tristagma* the proper name, *Ipheion* is accepted almost everywhere else. My advice is to stay out of the schoolyard fight and just enjoy the starflowers.

A horticulture professor at the University of Georgia, Allan M. Armitage is a well-known author, speaker, and photographer.

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