



# The American GARDENER

The Magazine of the American Horticultural Society

January/February 2005

**new plants**  
*for 2005*

**Native Fruits for the  
Edible Landscape**

**Wildlife-Friendly  
Gardening**

**Chanticleer:  
A Jewel of a Garden**

**The Do's and Don'ts of  
Planting Under Trees**

# Who knew that the secret to a green thumb was a pink bottle?

**Osmocote®** has been the choice of knowledgeable gardeners for 40 years. Most plant foods unleash a spike of nutrition in the first few days, and then fizzle out. But with Osmocote Plant Food, your plants will get consistent nutrition for four whole months. It's no wonder Osmocote is preferred by the world's best gardeners — people who demand the best results and refuse to risk losing the season to a bad experiment.

**Use it just about everywhere.** It's easy. Whether in-the-hole or in-the-mulch, whether for annuals, perennials, woody ornamentals or trees, Osmocote supplies the right amount of nutrition at the right time.

**Why not put it to work in your garden?** Pick up a package of Osmocote, and let the pink bottle turn your thumb green.



[www.osmocote.com](http://www.osmocote.com)

# contents

Volume 84, Number 1 · January / February 2005

## FEATURES



### 16 NEW FOR 2005

BY RITA PELCZAR

A preview of the exciting and intriguing new plant introductions.

### 22 CHANTICLEER

BY CAROLE OTTESEN

This Philadelphia-area garden is being hailed as one of the finest small public gardens in America.

### 26 NATIVE FRUITS

BY LEE REICH

Add beauty and flavor to your landscape with carefree natives like beach plum, persimmon, pawpaw, and clove currant.

### 31 TURNING A GARDEN INTO A COMMUNITY

BY JOANNE WOLFE

In this first in a series of articles on habitat gardening, learn how to create an environment that benefits both gardener and wildlife.

### 34 ICE "FLOWERS"

BY BRUCE MEANS

A naturalist admires delicate and ephemeral ice sculptures that emerge from the base of certain plants.

### 38 PLANTING UNDER TREES

BY DAVID OETTINGER

Protecting tree roots from damage is important when creating new beds under existing trees.

ON THE COVER: Bright Fantasy™, a hybrid snowberry that bears loads of clear white fruit, is one of Monrovia's new plant introductions for 2005. Photograph courtesy of Monrovia

## DEPARTMENTS

### 5 NOTES FROM RIVER FARM

### 6 MEMBERS' FORUM

### 8 NEWS FROM AHS

AHS's restored White House gates to be centerpiece of Philadelphia Flower Show entrance exhibit, *The Growing Connection* featured during United Nations World Food Day events, Utah city's volunteer efforts during America in Bloom competition earned AHS Community Involvement Award, Great Southern Tree Conference is newest AHS partner.

### 14 AHS PARTNERS IN PROFILE

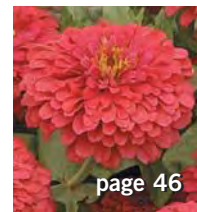
The Care of Trees brings passion and professionalism to arboriculture.

### 44 GARDENING BY DESIGN

Forget plants—dream of design.

### 46 GARDENER'S NOTEBOOK

Gardening trends in 2005, All-America Selections winners, Lenten rose is perennial of the year, wildlife gardening courses online, new Cornell Web site allows rating of vegetable varieties, Florida gardens recover from hurricane damage, gardeners can help with national bird count.



### 50 GROWING THE FUTURE

A Colorado greenhouse program connects kids to nature

### 52 BOOK REVIEWS

*American Azaleas*, *IPM for Gardeners*, and *Botanica North America*.

**Special focus:** Books on gardening tools and techniques.

### 56 REGIONAL HAPPENINGS

### 60 ONE ON ONE WITH...

David Milarch of the Champion Tree Project

### 62 HARDINESS AND HEAT ZONES AND PRONUNCIATIONS



# AMERICAN HORTICULTURAL SOCIETY

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

*Making America a Nation of Gardeners, a Land of Gardens*

## American Horticultural Society

**PRESIDENT** Katy Moss Warner  
**PRESIDENT EMERITUS** Dr. H. Marc Cathey

### Board of Directors

**CHAIRMAN** Arabella S. Dane *Center Harbor, New Hampshire*  
**FIRST VICE CHAIRMAN** Brian E. Holley *Cleveland, Ohio*  
**SECOND VICE CHAIRMAN** Don Riddle *Davidsonville, Maryland*  
**SECRETARY** Albin MacDonough Plant *Baltimore, Maryland*  
**TREASURER** Christine Perdue *Middleburg, Virginia*  
**IMMEDIATE PAST CHAIR** Kurt Bluemel *Baldwin, Maryland*  
**GENERAL COUNSEL** William A. Pusey

Leslie Ariail *Alexandria, Virginia* ■ Allan M. Armitage *Athens, Georgia* ■ William E. Barrick, Ph.D. *Theodore, Alabama* ■ Katherine Bull *Washington, D.C.* ■ Joel Goldsmith *Gilroy, California* ■ Beverly Hanselman *Nashville, Tennessee* ■ Natasha Hopkinson *New York, New York* ■ Margaret Kulp *Louisville, Kentucky* ■ Melissa R. Marshall *Pittsburgh, Pennsylvania* ■ Carol C. Morrison *Palatine, Illinois* ■ Felder Rushing *Jackson, Mississippi* ■ William Seale *Alexandria, Virginia* ■ Jeanne Otis Shields *Greenville, Delaware* ■ Arnold Steiner *Birmingham, Alabama* ■ Steven Still *Hilliard, Ohio* ■ Howard McK. Tucker *Alexandria, Virginia* ■ Susie Usrey *Dayton, Oregon* ■ Robert D. Volk *San Marino, California*

### 2004 Advisory Council

Bev Hanselman, Nashville, Tennessee – Chair

Katherine Belk-Cook, *Charlotte, North Carolina*  
Clarissa Bonde, *Washington D.C.*  
Walter Bull, *Columbia, South Carolina*  
Elaine Burden, *Middleburg, Virginia*  
Dr. H. Marc Cathey, *Silver Spring, Maryland*  
Fred Clapp, *Alexandria, Virginia*  
Russell Clark, *Boston, Massachusetts*  
Bartie Cole, *Owings Mills, Maryland*  
Jim Corfield, *Geneva, Illinois*  
Virginia Hill Daisey, *Deadham, Massachusetts*  
Edward N. Dane, *Center Harbor, New Hampshire*  
David and Kitty Ferguson, *Westwood, Massachusetts*  
Ben Griswold, *Glyndon, Maryland*  
Sheryl Heckler, *Middleburg, Virginia*  
Henry Jameson, *East Sound, Washington*  
Dr. Richard W. Lighty, *Kennett Square, Pennsylvania*  
Carolyn Marsh Lindsay, *Ponte Vedra, Florida*  
Mickey Lynch, *Dunmore, Pennsylvania*  
Stu McMichael and Lucinda Crabtree,  
*Falls Church, Virginia*

Robert and Joanna Martin, *Menlo Park, Colorado*  
Mrs. Malcolm Matheson, *Mt. Vernon, Virginia*  
Egon Molbak, *Bellevue, Washington*  
Nancy Keen Palmer, *Nashville, Tennessee*  
Bob Patterson, *Washington D.C.*  
Dr. Julia W. Rappaport, *Santa Ana, California*  
Harry Risetto, *Falls Church, Virginia*  
Deen Day Sanders, *Norcross, Georgia*  
Josephine Shanks, *Houston, Texas*  
Barbara Shea, *Baltimore, Maryland*  
Holy Shimizu, *Glen Echo, Maryland*  
Charles Henry Smith, *Middleburg, Virginia*  
Nancy Thomas, *Houston, Texas*  
Bryan Thomlison, *Haddonfield, New Jersey*  
Pauline Vollmer, *Baltimore, Maryland*  
Joyce and Harvey White, *Nashville, Tennessee*  
Joannah and Daryl Williams, *Sebring, Florida*

### Corporate Partners

The Care of Trees ■ Cherry Lake Tree Farm ■ DK Publishing ■ EarthBox™ ■ Kurt Bluemel, Inc.  
Monrovia ■ NaturaLawn of America ■ Osmocote ■ Thompson & Morgan

### AHS Horticultural Partners

America in Bloom ■ Bellingrath Gardens & Home ■ Center for Plant Conservation ■ Colonial Williamsburg Foundation Garden Symposium ■ Communities in Bloom ■ Cox Arboretum ■ Epcot International Flower & Garden Festival ■ The Gardeners of America/Men's Garden Clubs of America ■ Great Southern Tree Conference ■ Greater Gardens of the Washington Area ■ Homestead Resorts Horticultural Symposium ■ Horticulture Gardening Institute ■ International Master Gardener Conference ■ Leonard Haertter Travel Company ■ Magic of Landscaping Symposium ■ Morris Arboretum ■ Oklahoma Horticultural Society ■ Summer Master Gardener Conference in East Lansing

### AHS President's Council

**CHAIRMAN'S CIRCLE** Mr. and Mrs. John H. Ariail, Jr. ■ Mr. and Mrs. Kurt Bluemel ■ Ms. Claire Burrows ■ Mr. and Mrs. Edward N. Dane ■ Mr. Mark Garrison ■ Ms. Jill Hamilton ■ Mr. and Mrs. James S. Hutchinson ■ Mr. Robert E. Malesardi ■ Ms. Nancy Petersen ■ Mr. Phil Snyder **LIBERTY HYDE BAILEY ASSOCIATES** Mr. A. Michael Gelman ■ Mr. and Mrs. Mickey Lynch ■ Mr. and Mrs. Joseph L. Manson, III ■ Mr. and Mrs. Ken Mountcastle ■ The Honorable Lauralee M. Peters ■ Mr. W. R. Pickering ■ Jeanne Otis Shields ■ Ms. Katy Moss Warner ■ Ms. Donnan C. Wintermute **HAUPT ASSOCIATES** Mrs. Lynda A. Bachman ■ Dr. and Mrs. William E. Barrick ■ Mr. and Mrs. C. William Black ■ Mr. and Mrs. Robert L. Bogle ■ Mr. Richard C. and Mrs. Katherine Stark Bull ■ Dr. and Mrs. H. Marc Cathey ■ Mr. and Mrs. Louis Cordia ■ Mrs. Elisabeth C. Dudley ■ Mrs. Richard W. Hanselman ■ Ms. Minako Henderson ■ Mrs. Carole S. Holey ■ Col. and Mrs. Freeman E. Jones ■ Mr. and Mrs. Robert E. Kulp, Jr. ■ Mr. and Mrs. Malcolm Matheson, Jr. ■ Mr. and Mrs. Harold McClendon, Jr. ■ Mr. and Mrs. Tom McGlade ■ Mr. Paul H. Pusey ■ Ms. Michele Richardson ■ Mr. Harry A. Risetto, Esq. ■ Dr. and Mrs. George E. Staehle ■ Mr. and Mrs. Arnold Steiner ■ Mr. John Wm. Thomas and Mrs. Valerie Thomas ■ Mr. Howard McK. Tucker and Ms. Megan Evans ■ Mr. and Mrs. W. Bruce Usrey ■ Mr. and Mrs. Robert D. Volk **PRESIDENT'S COUNCIL** Mr. and Mrs. Richard C. Angino ■ Nancy J. Becker, M.D. ■ Mrs. Katherine McKay Belk-Cook ■ Mr. Phillip Birmingham ■ Mrs. George P. Bissell, Jr. ■ Ms. Sylvia Black ■ Dr. Sherran Blair ■ Count and Countess Peder Bonde ■ Mrs. Anne Bucher ■ Mr. and Mrs. Cason Callaway, Jr. ■ Mrs. and Mr. Charles E. Carr ■ Mr. and Mrs. Charles R. Chandler ■ Mr. and Mrs. James L. Corfield, Jr. ■ Mr. and Mrs. Thomas Crawford ■ Mr. and Mrs. Edward Daisey ■ Mr. and Mrs. James F. Delano ■ Mr. and Mrs. Nicholas Demisay ■ Mr. and Mrs. Michael D. Dubke ■ Mrs. Beverley W. Dunn ■ Mrs. Maureen Ecke ■ Ms. Anita Ellis ■ Mr. and Mrs. John H. Fitzpatrick ■ Dr. and Mrs. John A. Floyd, Jr. ■ Ms. Marguerite Peet Foster ■ Mr. Thomas B. Gentry ■ Ms. Dorothy Gillespie ■ Mr. John Sward Gleiber ■ Mr. and Mrs. Joel Goldsmith ■ Mr. and Mrs. David B. Gray ■ Mr. and Mrs. John H. Guy, IV ■ Mr. Gerald T. Halpin ■ Mrs. Richard W. Hamming ■ Dr. and Mrs. William O. Hargrove ■ Mr. and Mrs. Max Hard ■ Mrs. Enid A. Haupt ■ Mr. and Mrs. Brent Heath ■ Mr. and Mrs. Richard F. Hohlt ■ Mr. and Mrs. Brian Holley ■ Mr. and Mrs. Allan L. Holmstrom ■ Mr. and Mrs. Charles R. Hooff, Jr. ■ Mr. Ross Hotchkiss ■ Mr. Philip Huey ■ Mr. and Mrs. Waldo Hutchins, III ■ Mr. and Mrs. Robert B. Lindsay ■ Mr. and Mrs. Randolph Marshall ■ Mrs. Dorothy Marston ■ Mrs. Rachel L. Mellon ■ Mrs. Rosalyn Milbrandt ■ Mr. and Mrs. Egon Molbak ■ Dr. and Mrs. David E. Morrison ■ Mr. and Mrs. William J. Moss ■ Mrs. Shirley Ann Nicolai ■ Mr. and Mrs. William G. Pannill ■ Ms. Christine Perdue ■ Mr. and Mrs. Albin MacDonough Plant ■ Mr. and Mrs. William A. Pusey ■ Mr. and Mrs. Don E. Riddle, Jr. ■ Mr. and Mrs. Alfred G. Rindler ■ Mrs. Diana Carter Samples ■ Mrs. Deen Day Sanders ■ Mrs. Josephine M. Shanks ■ Mr. Bob Sierralta ■ Mr. and Mrs. Charles Henry Smith, Jr. ■ Mr. and Mrs. Turner T. Smith, Jr. ■ Ms. Vandy Solomon ■ Mrs. Juliet Sproul ■ Mr. Harold Stahly ■ Miss Jane Steffey ■ Ms. Lida M. Stifel ■ Mr. and Mrs. John B. Strassenburgh ■ Mrs. Benjamin W. Thoron ■ Mrs. Mary Ann Tucker ■ Dr. and Mrs. Peter Van Dyke ■ Mr. Joe Viar ■ Ms. Angela M. Vikesland ■ Mr. and Mrs. Harvey C. White ■ Mr. and Mrs. John W. White, Sr. ■ Mr. and Mrs. D. Anderson Williams ■ Mrs. Marilyn B. Wilson

# The American GARDENER

## EDITOR

David J. Ellis

## MANAGING EDITOR AND ART DIRECTOR

Mary Yee

## ASSOCIATE EDITOR

Carole Ottesen

## ASSISTANT EDITOR

Viveka Neveln

## CONTRIBUTING EDITORS

Rita Pelczar

Joanne Wolfe

## EDITORIAL ADVISORY BOARD

**CHAIR** John Alex Floyd Jr.  
*Birmingham, Alabama*

Allan M. Armitage  
*Athens, Georgia*

Nina L. Bassuk  
*Ithaca, New York*

Richard E. Bir  
*Brevard, North Carolina*

John E. Bryan  
*San Francisco, California*

John L. Creech  
*Columbus, North Carolina*

Keith Crotz  
*Chillicothe, Illinois*

Panayoti Kelaidis  
*Denver, Colorado*

Richard W. Lighty  
*Greenville, Delaware*

Elvin McDonald  
*West Des Moines, Iowa*

Felder Rushing  
*Jackson, Mississippi*

**ADVERTISING** *The American Gardener*  
7931 East Boulevard Drive  
Alexandria, VA 22308  
(703) 768-5700 ext. 120  
E-MAIL: editor@ahs.org

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

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

Copyright ©2005 by the American Horticultural Society.

♻️ Printed in the U.S.A. on recycled paper.

## NOTES FROM RIVER FARM

**N**OW IS A GREAT TIME to be a member of the American Horticultural Society. No matter where you live in this great land of ours, there are so many ways to be educated and inspired. Every two months, you receive a copy of this magazine, the AHS's official publication, filled with news from the AHS as well as interesting and important information carefully selected from the broader world of horticulture.

As an AHS member, you can also share seeds from your garden with thousands of other gardeners through the annual Seed Exchange program—and in return you have the opportunity to try more than 100 different seed varieties in your own garden—or on your windowsill!

Your AHS membership card is a gateway to free or discount admission at nearly 200 public gardens and more than 15 flower shows throughout America. At these gardens and events, you can find new ideas for your own garden while enjoying a respite from our hurly burly modern world. You'll find complete information on the Seed Exchange program and the participating gardens and flower shows in the annual *AHS Member Guide* bound in the center of this issue.

In addition, your AHS membership entitles you to special member rates on exciting new educational programs such as The Great American Gardeners Conference in Orlando, Florida, the AHS Garden School "The Art & Science of Color" at River Farm, and the National Children & Youth Garden Symposium in Atlanta. And, of course, if you are member of our President's Council, you have a unique opportunity—a special trip to the Philadelphia Flower Show and the gardens of the Delaware Valley (for more on this, see the box on page 23).

Equally as important to the benefits you receive as an AHS member are the benefits you extend to others as the AHS reaches beyond our members to achieve our vision of making America a nation of gardeners, a land of gardens. We are proud to support the important scientific work of our President Emeritus, Dr. H. Marc Cathey, as he codes all the garden plants we use in America for their cold hardiness and heat tolerance. We work closely with our main publishing partner, Doring Kindersley, to produce the most beautiful, helpful, and comprehensive garden reference books, such as the newly revised *AHS A-Z Encyclopedia of Garden Plants*.

In addition, the AHS is dedicated to connecting young people to plants. We do this by working with other organizations that have similar missions and by establishing unique programs to fill needed niches. *The Growing Connection*, a middle-school program we offer in partnership with the Food and Agricultural Organization of the United Nations, is an important step to connecting students in America with growing food, with the importance of nutrition, and with the value of sharing that learning experience with students from around the world.

As we start this new year, please encourage your gardening friends to join the AHS...and encourage your non gardening friends to garden!

Happy New Year!



—Katy Moss Warner, *AHS President*



## MEMBERS' FORUM

### ACCENT ON THE VERTICAL

I enjoyed reading Carole Ottesen's article "Vertical Accents" (November/December 2004). Many vertical evergreens don't perform well here in the rigors of the Great Plains, so it is always refreshing to read about some new selections to try.

As coordinator of the GreatPlants for the Great Plains program here in Lincoln,



Nebraska, I wanted to make your readers aware of another outstanding upright evergreen we have released called the 'Taylor' juniper [shown in the photo above]. This eastern red cedar (*Juniperus virginiana*) selection was discovered in north central Nebraska and has performed well throughout the Great Plains region. After 12 years, it has reached 25 feet tall and three to four feet wide. 'Taylor' seems to resist the fungal problems that plague the 'Skyrocket' juniper, which is no longer recommended here. For more information about GreatPlants, visit our Web site ([www.arboretum.unl.edu/greatplants](http://www.arboretum.unl.edu/greatplants)).

*Bob Henrickson*

*Assistant Director of Horticulture Programs  
Nebraska Statewide Arboretum  
Lincoln, Nebraska*

### APPLAUSE FOR DESIGN SERIES

I have been reading with great interest and pleasure Tres Fromme's series of articles on the theory and practice of garden

design, and would like to congratulate you on their quality. As a landscape historian and gardening enthusiast, I read a good many journals and magazines on landscape architecture and garden design, and in my experience have found nothing to compare with Fromme's "let's start at the beginning and ask ourselves what good design is all about" approach. His writing makes the discussion accessible to those just beginning to think about the issues involved, the tone is lighthearted and amusing, yet the concepts he proposes and explains are serious indeed. The series is more sophisticated, in my view, than anything I have encountered in other gardening magazines. Many thanks!

*Catherine Howett  
Snellville, Georgia*

### AGGRESSIVE DEER CONTROL NEEDED

As a northeastern gardener, I respectfully disagree with Dr. Cathey's article, "Deer in the Garden," which appeared in the November/December 2004 issue. His benign approach is disastrous for gardening. The impact of deer on horticulture is devastating for the following reasons:

1. The ecological future of our parks and forests is being destroyed.

2. The hobby of gardening is no longer an option for hundreds of thousands of potential gardeners. Many gardeners cannot afford the costly measures—fencing, plant replacement, chemicals, etc.—required to deal with deer.

3. Nurseries have been forced out of business because the gardening population has been severely reduced. Nurseries that remain are forced to stock mostly deer resistant plants with very few exotics or unusual plants because there is no market for them.

4. The amount of property damage to vehicles is incalculable and the potential for injury to people is frightening considering the number of collisions with deer. In New Jersey, more than 60,000 deer are killed each year in collisions with vehicles. Is this massacre more humane than a shotgun?

In the Northeast, we must accept the fact that the density of people rules out large populations of wildlife. A real effort has to be made to reduce the deer population by any means available.

*Bill Moran  
Mendham, New Jersey*

**Editor's response:** As Dr. Cathey noted in his article, deer are the top concern of the gardening industry in the Northeast. And while Dr. Cathey suggested some ways to reduce the impact of deer in individual gardens, he ended his article with a call to action for the gardening industry and natural resource managers to work together to find a more holistic solution to deer management. Look for more on reducing deer damage in the garden in the March/April issue.

### NATIVE STATE FLOWERS MAKE SENSE

As an avid Indiana gardener, I have been following with interest the ongoing effort to change the official state flower from the peony to another plant, as described in the article "State Flowers, State Pride" in your November/December issue.

Personally, I favored the coneflower but would have liked the fire pink as well. Peonies are lovely, but as your article points out, are not native to our area. They also bloom at a time when we often have heavy rains, which beat them down unless they are provided artificial support.

It seems more logical to have a state flower, such as coneflower, that is native and strong enough to stay beautiful without human intervention. Even as I write this at the end of November, I still have some blooming outside my back door! (Thank goodness for southern exposure!)

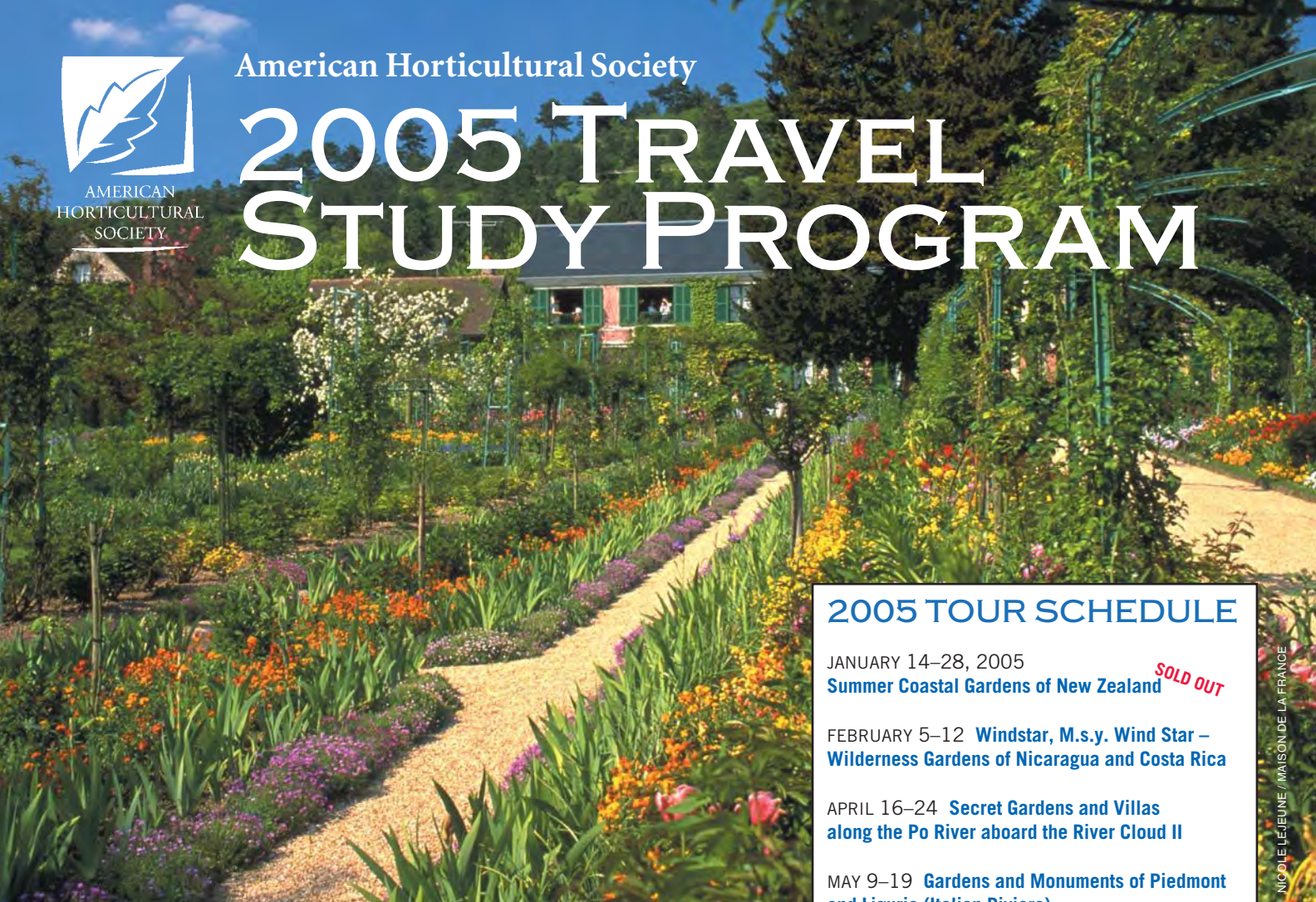
*Susan Sutton  
Indianapolis, Indiana*

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



American Horticultural Society

# 2005 TRAVEL STUDY PROGRAM



NICOLE LEJEUNE / MAISON DE LA FRANGE

Journey with America's premier travel team—AHS and the Leonard Haertter Travel Company—to some of the world's most beautiful destinations. Since 1985, we have offered extraordinary travel study programs to exceptional private and public gardens led by knowledgeable and experienced guides. Exciting opportunities await you this year!

## 2005 TOUR SCHEDULE

- JANUARY 14–28, 2005  
**Summer Coastal Gardens of New Zealand** **SOLD OUT**
- FEBRUARY 5–12 **Windstar, M.s.y. Wind Star – Wilderness Gardens of Nicaragua and Costa Rica**
- APRIL 16–24 **Secret Gardens and Villas along the Po River aboard the River Cloud II**
- MAY 9–19 **Gardens and Monuments of Piedmont and Liguria (Italian Riviera)**
- MAY 14–24 **Gardens of Japan** **SOLD OUT**
- JUNE 17–28 **Gardens of Normandy and the Isle of Jersey**
- JUNE 21–JULY 2 **M/V Clipper Adventurer – Gardens of England, Wales, Ireland, and the Isles of Scilly**
- SEPTEMBER 5–13 **Gardens of Rome**
- OCTOBER 2–11 **The Gardens of the Moors, The Gardens of Southern Spain**
- OCTOBER 21–26 **Clipper, M/V Yorktown Clipper, Gardens of San Francisco Bay**
- NOVEMBER 5–15 **Gardens of Japan, Fall Colors**
- FEBRUARY 3–17, 2006 **Summer Coastal Gardens of New Zealand**



For detailed tour information, tour brochures, or to make a tour reservation, call the Leonard Haertter Travel Company at (800) 942-6666.

No member dues are used to support the Travel Study Program

## White House Gates Make Grand Entrance at Philadelphia Flower Show

THE DISPLAYS AND EXHIBITS at this year's Philadelphia Flower Show will all reflect this year's theme, "America the Beautiful," but none more so than the entrance display. In tune with the theme, this year's entrance exhibit is designed around a set of former White House gates, on loan to the show from the American Horticultural Society. The show, produced by the Pennsylvania Horticultural Society (PHS), will be held March 6 to 13, 2005.

"Installed at the White House in 1819, these gates witnessed the passage of presidents from Monroe to FDR, and will now greet visitors to the nation's first and longest running flower show," says **Sam Lemheny**, designer of the Philadelphia Flower Show.

After their removal from the White House during a renovation in the 1930s, the gates ended up at River Farm, where for more than 30 years they hung anonymously at the property's former entrance. In 2002, **William Seale**, a historian and AHS Board member, uncovered the origins of the gates, and they were taken down for protection and restoration.

**Burke Brothers Landscape Contractors, Inc.**, of Glenside, Pennsylvania, is designing and creating the dramatic entrance display. Burke Brothers has won numerous awards for

its past displays at the Philadelphia Flower Show, including the AHS Environmental Award for its exhibit last year. Roses, many donated by **Conard-Pyle** nursery of Philadelphia, will be heavily featured in the exhibit.

Representing the AHS on the Show's opening day will be AHS President **Katy Moss Warner** and **Dean Norton**, director of horticulture at Mount Vernon Estate and Gardens, located just down the road from River Farm in Alexandria, Virginia. In line with the Show's theme, Katy will give a speech titled "America, A Land of Gardens," and Dean will speak on "Saving America's Horticultural Treasures."

Before making their national debut at the flower show, the gates have been undergoing restoration to repair decades of exposure to the elements. **Flaherty Iron Works** of Alexandria, Virginia, has been returning them to their original splendor under the direction of the metal conservation specialists at **Conservation Solutions, Inc. (CSI)** based in Washington, D.C. The restoration work was made possible by generous donations from AHS supporters.

For information about the Philadelphia Flower Show or to order tickets, visit [www.philadelphiaflowershow.com](http://www.philadelphiaflowershow.com).



An artist's rendering of the gates in the show's entrance

## United Nations Event Supports *The Growing Connection*



THE FOOD AND AGRICULTURE ORGANIZATION of the United Nations (FAO) designated October 16 as World Food Day, the same day it was founded in 1945. In 2004, the day was observed on October 18 with the annual celebration at the United Nations Headquarters in New York City. Participants included children from schools in Pocantico Hills, New York, and Scranton, Pennsylvania who are part of the AHS/FAO program, *The Growing Connection* (TGC).

AHS President **Katy Moss Warner** also attended the celebration. "This is a program we started two years ago with the FAO and other partners, and now here it is as part of the World Food Day events at the UN," says Katy. "There's a lot of excitement and enthusiasm for this program as it continues to grow."

TGC participants attend World Food Day celebration at the UN.



## River Farm Receives Landmark Award

At an outdoor dedication ceremony held at River Farm in December, top officials of the American Society for Horticultural Science (ASHS) designated AHS's River Farm headquarters as an American Horticultural Landmark site. At right, AHS President Emeritus Dr. H. Marc Cathey accepts the commemorative plaque from ASHS President Frederick S. Davies.



Through a videoconference, the school children at the UN headquarters communicated with other TGC participants in Guadalajara, Mexico. They discussed their projects and experiments with growing vegetables. The live videoconference could be viewed around the world on TGC's Web site, [www.the-growingconnection.org](http://www.the-growingconnection.org).

In addition, on October 21, students from Seaton Elementary School in Washington, D.C., celebrated United Nations

Week by participating in a TGC workshop given by **Mickey Lynch**, president of EarthBox™; **Charlotte Albers**, AHS coordinator of TGC; and several representatives from the FAO. The children planted nine EarthBoxes™ with various herbs and also held a live Webcast with their partner school in Cape Coast, Ghana. "Seaton's principal, **Willy Lamb**, has endorsed the project and will help students and staff in their efforts to learn about and grow healthy food," says Charlotte.

## Vernal, Utah Wins First AHS Award for Community Involvement

THE CITY OF Vernal, Utah, became the first recipient of the AHS-sponsored Community Involvement Award at the 2004 America In Bloom Awards Ceremony held in Indianapolis, Indiana, last October. When **Rance Searle**, Vernal resident and president of **Bloom Master Planter Corporation**, learned of the competition late in 2003, he immediately planned to enter the town the following year. "I'd heard of Villages in Bloom in England and Communities in Bloom in Canada," says Rance, "so I was thrilled to see the idea taking

To get your community involved in the 2005 America In Bloom contest, call (614) 487-1117 or visit [www.americainbloom.org](http://www.americainbloom.org) for more information. The deadline to enter is February 28, 2005.

# Enter To Win!



with **America in Bloom**®

- plant pride in your community
- visit [www.americainbloom.org](http://www.americainbloom.org) to learn how your municipality can benefit by participating in the America in Bloom® contest
- 2005 program registration deadline is February 28, 2005



(614) 487-1117  
[www.americainbloom.org](http://www.americainbloom.org)

## Free Seed Catalog!

Inspiration Required,  
Green Thumb  
Optional...

Reserve your copy  
of the 2005 seed  
catalog right now.



Receive a free gift with every order you place from our new 2005 Seed Catalog!

150 Years of  
British Tradition



**Thompson & Morgan**

1 8 5 5 - 2 0 0 5

Phone Us  
Toll Free:

**800.274.7333**

Offer  
#509

Log on to [www.ahs.org](http://www.ahs.org) and support the American Horticultural Society. Just click on the Thompson & Morgan link to place your order.



## AHS NATIONAL EVENTS AND PROGRAMS 2005 CALENDAR

Mark your calendar for these upcoming national events and programs that are sponsored or cosponsored by the American Horticultural Society.

- MAR. 4 & 5. **AHS President's Council Event at the Philadelphia Flower Show**, Pennsylvania Convention Center, Philadelphia, Pennsylvania.
- MAR. 31–APR. 1. **AHS Garden School: The Art and Science of Color in the Garden**. George Washington's River Farm, Alexandria, Virginia.
- APR. 1–30. **Washington Blooms!** George Washington's River Farm, Alexandria, Virginia.
- APR. 3–5. **Colonial Williamsburg Garden Symposium**. Williamsburg, Virginia.
- APR. 13–15. **AHS Great American Gardeners Conference and Awards Presentation**. Orlando, Florida.
- APR. 22 & 23. **Friends of River Farm Spring Plant Sale and Flower Show**. George Washington's River Farm, Alexandria, Virginia. (Note: Members-only preview sale starts 5 p.m. on the evening of April 21.)
- MAY 6. **Magic of Landscaping Conference**. Orlando, Florida.
- MAY 27. **AHS Member Day at Cleveland Botanical Garden Flower Show**. Cleveland, Ohio.
- JUNE 2. **Taste of River Farm**. George Washington's River Farm, Alexandria, Virginia.
- JULY 28–30. **AHS National Children & Youth Garden Symposium**. Atlanta, Georgia. Hosted by the Atlanta Botanical Garden and Wonderland Gardens.
- SEPT. 19–23. **Eastern Performance Trials**. George Washington's River Farm, Alexandria, Virginia.
- SEPT. 24. **AHS Annual Gala**. George Washington's River Farm, Alexandria, Virginia.

For more information about these events, call (800) 777-7931 or visit the AHS Web site ([www.ahs.org](http://www.ahs.org)).

hold in America because it's such a wonderful thing for communities to participate in."

Situated in a high desert valley in the Rocky Mountains, this aptly named town is located in "probably the only green spot in 100 square miles," says Rance. Brigham Young, the Mormon pioneer, founded the town in

1870 and Rance credits this rich Mormon heritage for Vernal's commendable community involvement. "That's how Mormons are, they always stick together and are supportive of other people, it's part of their nature," he explains. Indeed, Vernal often has so many volunteers that occasionally they have to turn people away!

"Never has there been an award more richly deserved," says Rance. "It belongs to all those who labored quietly in the background," including everyone who planted flowers, cleaned up their yards, picked up litter, and even a group of miners who held a flower-growing contest among themselves.

Rance's company, Bloom Master ([www.bloommaster.com](http://www.bloommaster.com)) is very involved with urban beautification, so it was only natural that it became a permanent steward of America In Bloom. As Rance explains, "We continually spread the word and encourage other communities to participate in the program." As for Vernal's future plans, Rance says, "America In Bloom is a permanent fixture in our community and it will continue to grow over the years."

## Photo Contest for AHS Members

DO YOU LIKE photographing flowers and gardens? **The Gardeners of America/Men's Garden Clubs of America (TGOA/MGCA)**, an AHS Horticultural Partner, offers an annual horticultural photography contest to its members. Through a special arrangement with this organization, AHS members are eligible to enter the 2005 competition. The \$20 entry fee for the contest also includes membership in TGOA/MGCA. Photography subjects are set up into sections and classes, much like a flower show. Categories include roses, annual flowers, wildflowers, vegetables, landscapes, and much more. Selected photographs from each year's contest are published in a calendar that the organization sells annually as a fundraiser.

The deadline for contest submissions is February 2, 2005. Visit [www.tgoa-mgca.org/PhotoCompet.htm](http://www.tgoa-mgca.org/PhotoCompet.htm) for official rules, entry forms, and judging criteria. Contact **Judy Schuck** at [jsschuck@sbcglobal.net](mailto:jsschuck@sbcglobal.net) with questions or for more information.

## 2005 Youth Garden Symposium

PLAN TO ATTEND AHS's 2005 National Children & Youth Garden Symposium from July 28 to 30 in Atlanta, Georgia. This year's event, which will be cohosted by the **Atlanta Botanical Gar-**



Flower displays like these literally stopped traffic in Vernal, Utah.



Announcing a new AHS Garden School for Spring 2005

# The Art & Science of Color in the Garden

March 31 & April 1, 2005

Immerse yourself in the intricacies of color in the garden with this exclusive AHS Garden School offering. Sharpen your skills and explore the kaleidoscope of possibilities of color in the garden with this two-day intensive program held in a truly inspirational setting—the Society’s River Farm headquarters overlooking the beautiful Potomac River.

- Join guest horticulturist **Heather Will-Browne** of the Walt Disney World Resort in Florida to learn about the art and science of color from a horticultural perspective. Get personal insights from industry pros and horticultural experts.
- Spend an evening with garden writer **Pamela Harper** to learn about “Harmonizing Color in the Garden.” If you have ever wondered, “How do they do that?” —this school is for you.
- Hear from other horticultural experts, including Tres Fromme of Longwood Gardens, Dr. H. Marc Cathey, Dr. Allan Armitage, and Katy Moss Warner as they inspire you with color gardening. Find out how an understanding of color and color relationships can transform an average garden into a “knock-your-socks-off” display of horticultural prowess.

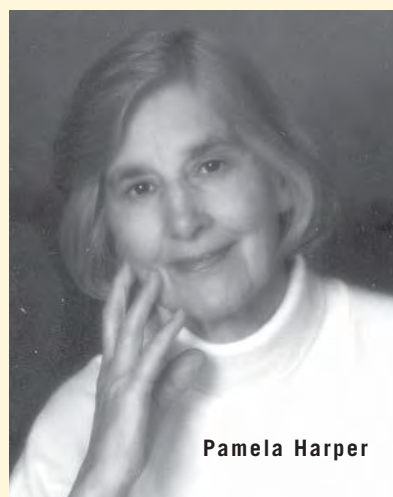
Through a variety of presentations, demonstrations, and specially planned activities, participants will learn practical tips and techniques for mastering the effective use of color in the landscape. Avid garden enthusiasts and horticultural professionals alike will benefit from this inspirational and informative study of the practical application of color theory and artistry in the garden.

The AHS Garden School offers a truly unique environment for life-long learning—intimate, in-depth workshops featuring personal instruction from noted garden authorities; opportunities for practical application and hands-on experiences; and outstanding settings.

Visit [www.ahs.org](http://www.ahs.org) or call (703) 768-5700 ext. 121 for more information about how you can be a part of this exciting program. Registration is now open.



Heather Will-Browne



Pamela Harper



The month of April is dedicated to *Washington Blooms!*, AHS’s celebration of springtime at River Farm and in the nation’s capital. In addition to the AHS Garden School, the scheduled events at River Farm include bulb tours, our annual plant sale, and a family activity day. To find out more about *Washington Blooms!*, visit [www.ahs.org](http://www.ahs.org).



Cherry Lake Tree Farm is pleased to announce its corporate partnership with the American Horticultural Society and is committed to helping fulfill the AHS mission by promoting the importance of large trees in the landscape.



## Gift of Irises Planted at River Farm



AHS staff members came together in the garden at River Farm last November to plant Louisiana irises (*Iris gigantea-ecaeerulea*) donated to River Farm by AHS Advisory Council member Josephine Shanks. The planting crew included AHS President Katy Moss Warner, right, and, above, AHS Horticulturist Peggy Bowers, foreground, AHS President Emeritus Dr. H. Marc, center, and Director of Horticulture Programs Tom Underwood, background right.



Ornamental grasses, perennials, bamboo, ferns. Liners available.

**KURT BLUEMEL, INC.**  
wholesale



earthly pursuits  
sales to the public

earthly pursuits, inc.  
2901 Kuntz Road Windsor Mill, Maryland 21244  
Tel: 410-496-2523 Fax: 410-496-5894  
Email: mail@earthlypursuits.net  
www.earthlypursuits.net

Kurt Bluemel, Inc.  
2740 Greene Lane Baldwin, Maryland 21013  
Toll Free: 800-498-1560 Local: 410-557-7229 ext. 6  
Fax: 410-557-9785 Email: Sales@kurtbluemel.com  
www.kurtbluemel.com

shipping nationwide

den and Wonderland Gardens, will feature the theme “Making Connections.” In addition to field trips and exhibits, the symposium will feature a lineup of exceptional speakers. Check the AHS Web site ([www.ahs.org](http://www.ahs.org)) for updates. For more information, please e-mail Nancy Busick at [youthprograms@ahs.org](mailto:youthprograms@ahs.org) or call (703) 768-5700 ext. 132.

## Great Southern Tree Conference Becomes New AHS Partner

THE AHS welcomes the Great Southern Tree Conference (GSTC) as a new Horticultural Partner. The Florida Nursery, Growers and Landscape Association developed this cutting edge event in collaboration with the University of Florida in Gainesville to benefit all segments of the nursery and landscape industry.

At the fourth annual GSTC conference—held in Gainesville this past December—AHS President Katy Moss Warner made a presentation titled “Trees: The Backbone of American Landscapes,” and listened to other experts address wide-ranging tree care and management issues. “Arborists, growers, landscape architects, scientists, city planners—they all come together and share ideas at this amazing conference,” says Katy.

To learn more about the GSTC, call (407) 295-7994 or visit [www.greatsoutherntreeconference.org](http://www.greatsoutherntreeconference.org).

News written by Assistant Editor Viveka Neveln.

American Horticultural Society

# 2005 GREAT AMERICAN GARDENERS CONFERENCE

ORLANDO, FLORIDA

APRIL 13-15, 2005

*“Sub-Tropical Garden Treasures, Old and New”*

We invite you to join your fellow AHS members for three days of sub-tropical garden delights this spring. Orlando, Florida, will be the site of our 2005 Great American Gardeners Conference and our home base as we explore the rich garden traditions of the region and discover the diversity of contemporary gardens to be found in central Florida.



## CONFERENCE HIGHLIGHTS

Enjoy an evening at Orlando's Harry P. Leu Gardens and experience the graciousness and beauty of "Old Florida"

Celebrate outstanding American horticulture and meet the winners of the 2005 Great American Gardeners Awards



Anna Ball, center, accepts the AHS National Achievement Award for Ball Horticultural from AHS President Katy Moss Warner and AHS President Emeritus Dr. H. Marc Cathey at the 2004 Great American Gardeners Awards ceremony.

Visit private gardens and see amazing horticulture—talk to the people who make it all happen, and learn firsthand about the joys and challenges of gardening in the sub-tropics

Take a step behind the scenes at the University of Florida's state of the art Mid-Florida Research and Education Center where researchers are studying the "art and science of growing plants for food and aesthetics"

Visit Hermann Englemann Greenhouses, one of the world's largest and most innovative growers of exotic foliage plants with 2.2 million square feet of glass greenhouses.

Be on hand for all the opening day festivities at the 2005 Epcot International Flower & Garden Festival, the signature garden event of the season at the Walt Disney World Resort



***The 2005 Great American Gardeners Conference promises to be an event not to be missed!***

Registration is now open. Visit [www.ahs.org](http://www.ahs.org) or call (703) 768-5700 ext. 121 for more information.

## AHS PARTNERS IN PROFILE

# The Care of Trees: Bringing a Passion for Trees to Arboriculture

by Viveka Neveln

**T**REES ADD more than aesthetic and monetary value to a landscape. They offer cooling shade, act as windbreaks, provide shelter for wildlife, and help to curb soil erosion. Research shows that trees have calming effects or even healing properties when they are viewed. Some trees have sentimental value; others have historical significance.

“There are often a lot of emotions tied to trees,” says **Scott Jamieson**, president of The Care of Trees (TCOT), an award-winning, national arboriculture firm. This powerful link between people and trees is the foundation of TCOT, as reflected in their slogan, “Our business is people and their love for trees.”

### EMPHASIZING TREE EDUCATION

Headquartered in Wheeling, Illinois, TCOT was founded nearly 60 years ago. Over the years, they have acquired or merged with tree care companies in Washington, D.C., Pennsylvania, New York, California, and several other states to become one of the largest employee-owned arboriculture companies in the country. TCOT’s highly trained and certified arborists provide service for residential, commercial, municipal, and institutional properties. These include tree preservation, pruning, tree and stump removal, tree value appraisal, lightning protection, and insect and disease management.

“Trees are not as tough as they appear,” says Jamieson. In addition to the natural

threats trees face, such as severe weather and pests, people sometimes inadvertently damage them. Construction activity often causes the greatest damage because



**Above:** The Care of Trees offers a wide range of tree care services. **Right:** A TCOT arborist prunes a Japanese apricot tree at River Farm.

the most sensitive part of a tree is its root system. Building a sidewalk, installing a sprinkler system, or even planting underneath a tree (see related article on page 38) can all affect a nearby tree’s health.

To best serve its clients, TCOT stays on “the cutting edge of technology and research,” says Jamieson, and emphasizes tree care education. The company’s staff members often speak at garden clubs and other meetings. “If we don’t connect with people and teach them about trees, they’ll keep unknowingly doing things that harm them,” says Jamieson.

### A NATURAL PARTNERSHIP

Because of TCOT’s dedication to community education and involvement, partnering with the American Horticultural Society was a natural step. “The AHS’s vision has gotten us excited and we want to be part of it,” says Jamieson. As a corporate partner, the company proudly maintains the trees at River Farm, including historic specimens such as an Osage orange (*Maclura pomifera*) reputed to have

been grown from seeds brought back by Lewis and Clark.

“Working closely with the professional arborists at The Care of Trees, we are formulating a long-term tree management plan for River Farm that addresses aesthetic issues as well as the cultural needs of our collection,” says **Tom Underwood**, AHS director of horticulture programs. “Trees are the backbone of our gardens, and it is reassuring to know that they are in such expert hands.”

TCOT has won numerous awards for its work from such groups as the **National Arbor Day Foundation**, the **Chicago Flower and Garden Show**, and the **Tree**



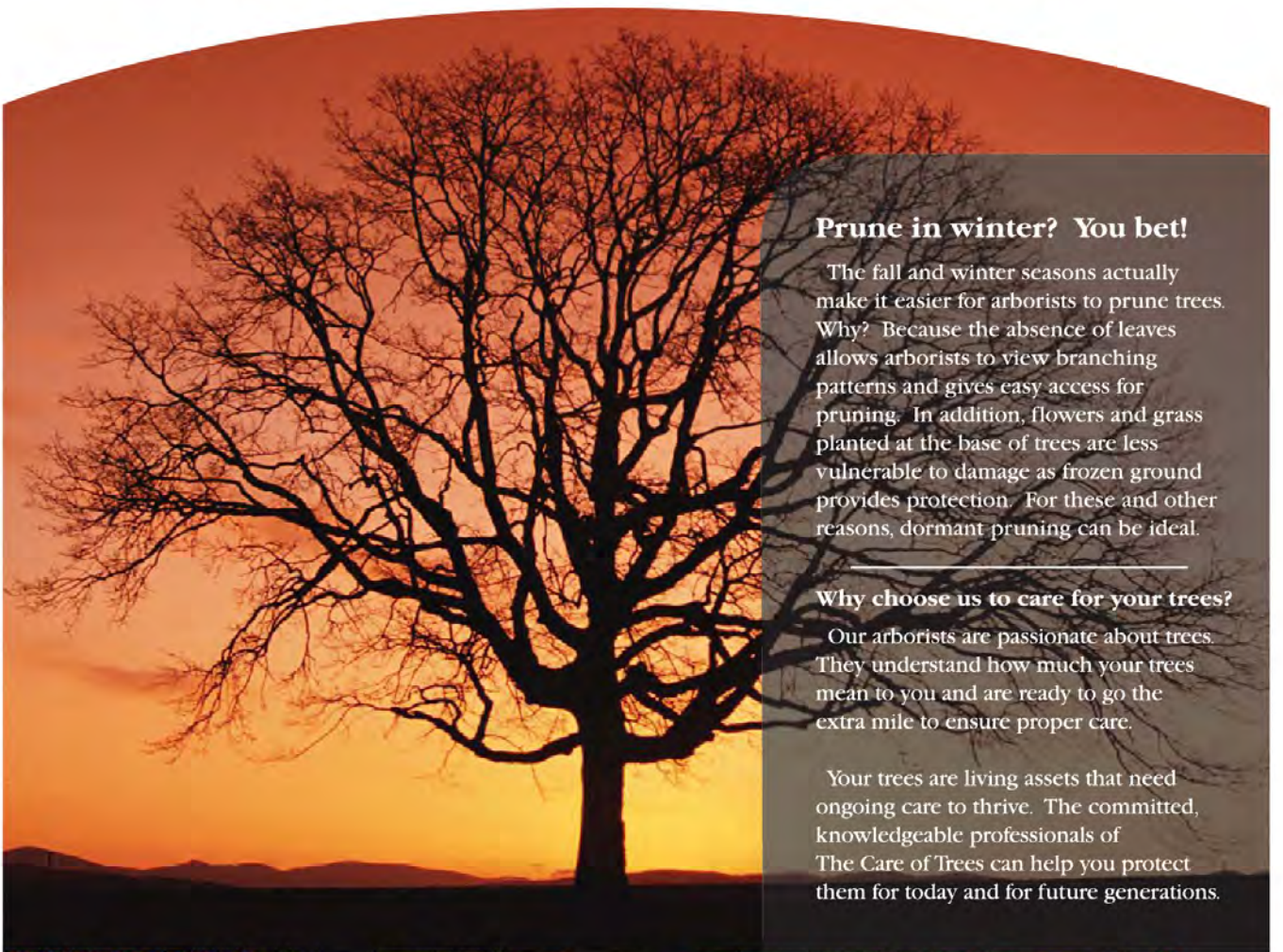
**Care Industry Association (TCIA)**. One project Jamieson remembers fondly is LeWa Farm in Lake Forest, Illinois, for which TCOT earned the Grand Award for Construction/Tree Preservation from the TCIA in 2001. Working with the city of Lake Forest and an organization called the Lake Forest Openlands, 130 acres of a 200-acre site were preserved, including many large, valuable oak trees. “The entire community benefited, which made it a really special, interesting project,” says Jamieson.

To learn more about The Care of Trees, visit [www.thecareoftrees.com](http://www.thecareoftrees.com).

*Viveka Neveln is assistant editor for The American Gardener.*

To find out how your company can support the AHS’s mission through a corporate partnership, call Joe Lamoglia, AHS director of business operations, at (800) 777-7931, ext. 115.

# Protecting One of Your Most Valuable Assets



## Prune in winter? You bet!

The fall and winter seasons actually make it easier for arborists to prune trees. Why? Because the absence of leaves allows arborists to view branching patterns and gives easy access for pruning. In addition, flowers and grass planted at the base of trees are less vulnerable to damage as frozen ground provides protection. For these and other reasons, dormant pruning can be ideal.

## Why choose us to care for your trees?

Our arborists are passionate about trees. They understand how much your trees mean to you and are ready to go the extra mile to ensure proper care.

Your trees are living assets that need ongoing care to thrive. The committed, knowledgeable professionals of The Care of Trees can help you protect them for today and for future generations.



*EXCLUSIVE TREE CARE*  
company of *The American Horticultural Society*

SERVING METROPOLITAN CHICAGO,  
PHILADELPHIA, NEW YORK CITY,  
SAN FRANCISCO AND WASHINGTON, D.C.

Alexandria, Virginia **703.922.8733** [www.thecareoftrees.com](http://www.thecareoftrees.com)





# New *for* 2005

EVERY JANUARY, seed and nursery catalogs brim with enticing descriptions of plants, all vying for space in your garden. Sorting through them can absorb many off-season hours as you plan dynamic ornamental combinations, non-stop flowering sequences, and bountiful vegetable harvests. But as much time as you spend selecting your seeds and plants, those hours pale by comparison to the years required to breed, trial, select, and introduce a new variety into commerce.

Each new variety begins when a plant breeder performs a deliberate cross, or when an attentive gardener or nurseryman observes a serendipitous crossing or mutation. The new variety must be grown for several generations in order for its unique

Here are the plants to look for in the coming season.

BY RITA PELCZAR

traits to develop stability. The time involved ranges from several years to decades.

Andrew Tokley, horticultural manager for Thompson & Morgan, notes that it took 10 years to breed the runner bean 'Wisley Magic' (see above, left), an award-winning 2005 introduction. The process "is both labor intensive and expensive in man hours," says Tokley.

Breeding time for seed-produced crops often depends upon whether it is a hybrid

or not. Johnny's Selected Seeds owner Rob Johnston explains, "Open-pollinated (non-hybrid) varieties take at least eight generations of breeding. Then we have a few seasons for field trials and for building up the supply." Hybrid seed may take longer. "The time for developing new hybrid varieties varies with the time needed to breed the parents," says Johnston.

In the case of 'Bonbon', a hybrid butternut squash and a 2005 All-America Selections winner (see separate article on page 46) he is introducing this year, Johnston says, "Both parents of 'Bonbon' have a complicated ancestry that traces back to the early years of my breeding program in the 1970s, so 'Bonbon' is the result of over 25 years of work."



Using existing inbred lines in new combinations can reduce breeding time, but when developing a breakthrough product—something really different—like *Impatiens* ‘Jungle Gold’, Ellen Leue, product group director for PanAmerican Seed, says, “We had to get in germplasm and basically ‘domesticate’ a wild species. This took 11 years, all told.”

For many plants that are vegetatively propagated, tissue culture has significantly reduced the time needed to ready new varieties for introduction. Dan Heims of Terra Nova Nurseries in Tigard, Washington, explains that with tissue culture, “the introductory period can be as quick as three years. This is down from the ‘old days’ where plants had to be increased in the fields for years.”

Before Renee Shepherd, owner of Renee’s Garden Seeds, decides which new varieties her company will offer, she goes through a multi-year process of conducting regional garden trials to compare candidates with other available varieties. “And if they’re vegetables,” she says, “we also have to cook with them.”

With this appreciation for the time, energy, and attention that goes into presenting a new variety to the gardening public, let’s take a look at some of this year’s seed and plant introductions that make the effort worthwhile.

## ANNUALS AND TENDER PERENNIALS

For your early spring garden, keep your eyes out for a new series of stock (*Matthiola incana*, USDA Zone 5–8, AHS Zones 8–5) called Hot Cakes, developed by Sahin of the Netherlands ([www.sahin.nl](http://www.sahin.nl)). These exceptionally fragrant, cool season annuals are available in five different colors: white, pink, rose, blue, and red. If you miss them in spring, try them next fall.

Brighten your summer shade garden with yellow and orange impatiens (Zones 10–15, 12–1). The Fusion™ series from Ball Horticultural Company ([www.simplybeautifulgardens.com](http://www.simplybeautifulgardens.com)) includes shades ranging from the soft-hued ‘Glow’, which has pale yellow blooms marked with an orange center, to the bold orange-red ‘Heat’.

New trailing petunias (*Petunia ×hybrida*, Zones 11, 12–1) include ‘Avalanche™ Grape’ from Bodger Seeds, Ltd. ([www.bodger.com](http://www.bodger.com)), and ‘Easy Wave™ Red’ from PanAmerican Seed ([www.panamseed.com](http://www.panamseed.com)).



‘Fusion Glow’ impatiens



Kong™ coleus

The first is an early bloomer that grows six to eight inches tall and spreads 24 inches. Its purple flowers are marked with a dark eye. Red is a new color for the Easy Wave™ series: These blooms open a dark red and mature to a softer tone, on plants that spread 30 to 36 inches.

Renee’s Seeds obtained seed for their new larkspur *Delphinium consolida* ‘Parisian Pink’ (Zones 0–0, 9–1) from a grower in France. It grows three to five feet tall, with strong, well branched stems and lacy foliage. Its double rose-pink blossoms open continuously from late spring to summer and are great for both the mixed border and indoor arrangements.

I’ve become a fan of the reliable Profusion series of zinnias, so I’m excited about two new color offerings from Sakata Seeds of Japan ([www.sakata.com](http://www.sakata.com)). *Zinnia elegans* ‘Profusion Fire’ (Zones 0–0, 12–1) bears brilliant scarlet-orange blooms, while those of ‘Profusion Apricot’ are a subdued apricot-pink. Both varieties grow 18 inches tall.

Another new zinnia to look for is the Magellan™ series from Goldsmith Seeds ([www.theflowerfields.com](http://www.theflowerfields.com)). Among the eight new colors is ‘Coral’, a 2005 All-America Selections winner (see page 46).

To add a tropical touch to annual beds, consider Thompson & Morgan’s *Cuphea ignea* ‘Matchless’ (Zones 10–11,

12–6), which bears tubular scarlet blooms against dark green foliage on compact, 10- to 12-inch plants.

Ball's colorful and aptly named Kong™ series of coleus (*Solenostemon scutellarioides*, Zones 11–12, 12–1) will make a bold statement in your gardens, whether mixed with other annuals or massed. Each of the five varieties in the series grows to 22 inches tall, with a mounding habit and leaves so large they have to be seen to be believed.

PanAmerican Seed presents *Plectranthus argentatus* 'Silver Shield' (Zones 10–11, 12–1), a rounded, 24-inch plant with soft silver-gray leaves. Both the above coleus and plectranthus make exceptional additions to container plantings.

Bred specifically for fall gardens is a new pansy (*Viola xwittrockiana*, Zones

4–8, 9–1) from Park Seed called 'Chianti Terracotta'. Its two-and-a-half-to-three-inch flowers are striped, in colors that include terracotta, violet, and wine red, with black markings. Don't forget to look for it at summer's end.

### HERBACEOUS PERENNIALS

The popularity of coneflowers still appears to be on the rise, if the number of new varieties is any indication. Wayside Gardens introduces *Echinacea* 'Sunrise' and 'Sunset' (Zones 3–9, 9–1). The fragrant yellow flowers of 'Sunrise' are huge—four-and-a-half to five inches across, on plants that grow 18 to 24 inches tall. 'Sunset' produces a spectacular flowering show—a single plant may flaunt as many as 20 four-inch flowers at once. The blooms are bright orange with russet brown cones.

Terra Nova ([www.terravanurseries.com](http://www.terravanurseries.com)) adds three new *Echinacea purpurea* (Zones 3–9, 9–1) selections: 'Fancy Frills' produces large, frilly pink flowers with multiple rows of petallike ray flowers; 'Green Eyes' bears magenta flowers with an indented green center that matures to an orange cone; and the soft pink flowers of 'Hope' are large and fragrant.

Also from Terra Nova comes *Thalictrum* 'Black Stockings' (Zones 5–8, 8–5), a six-foot-tall, back-of-the-border beauty. Its nearly black stems support ferny green leaves and fluffy, flat-topped clusters of lavender flowers.

*Rodgersia pinnata* 'Chocolate Wing' (Zones 3–7, 7–1) from Darwin Plants of



*Astilbe* 'Color Flash'

the Netherlands ([www.darwinplants.com](http://www.darwinplants.com)) is another statuesque selection for the background of your border. Its leaves emerge brown, turning to green, bronze, red, and back to brown. Flowers also undergo a color change, opening pale pink, then darkening to a deep burgundy-red.

For more chameleonlike foliage, *Astilbe* 'Color Flash'™ (Zones 3–8, 8–1) from Anthony Tesselaar ([www.tesselaar.com](http://www.tesselaar.com)) promises a mix of hues on each plant as new leaves emerge bright green, maturing to rich burgundy and purple. In fall, leaf colors become gold, orange, and russet.

For the front of your sunny border or in containers, you might want to try Proven Winners' ([www.provenwinners.com](http://www.provenwinners.com)) *Penstemon* hybrid 'Lilliput Rose' (Zones 7–11, 11–5). Its delicate pink, bell-shaped flowers show off well against bright green foliage on the mounding, 10- to 14-inch plants.

A new sage from Santa Barbara Botanical Gardens ([www.sbbg.org](http://www.sbbg.org)) may be just what's needed for a sunny, dry site. *Salvia brandegei* 'Pacific Blue' (Zones 8–12, 12–5) is a durable plant that grows three to four feet tall and four to six feet wide, bearing gentian blue flowers for several weeks in spring. Its narrow leaves are green above and downy white below.

Thought to be extinct, beardtongue red sage (*Salvia penstemonoides*, Zones 6–10, 12–1) was re-discovered a few years ago in a few isolated locations of south-central Texas. High Country Gardens nursery acquired stock from the Lady Bird Johnson Wildflower Center in Austin, Texas, in 1996 and now have a sufficient supply to offer it for sale. The



*Plectranthus* 'Silver Shield'



'Chianti Terracotta' pansy



*Echinacea* 'Sunset'



*Salvia penstemonoides*



*Verbascum* 'Dark Eyes'

plant forms a mound of glossy, evergreen foliage from which 24- to 30-inch flower stalks arise in summer, displaying showy, dark rose-red blossoms.

High Country Gardens also offers a new variety of hummingbird mint, *Agastache* × 'Ava' (Zones 5–10, 12–5). A hybrid between *A. cana* and *A. barberi*, it has large spikes of rose-pink flowers subtended by raspberry-red calyxes. The flowers bloom from midsummer to fall on plants four to five feet tall and two feet wide.

Bold, coarse-textured mullein can be spectacular when planted in the right spot, providing a lovely, long-season display of flowers. Terra Nova offers several new varieties for 2005, including *Verbascum* 'Dark Eyes', 'Lavender Lass', and 'Sierra Sunset' (Zones 5–9, 9–5). 'Dark Eyes' is a dwarf selection, with tight, pyramidal 12-inch spikes of soft yellow flowers with dark red centers; the spikes supporting the lavender and plum flowers of 'Lavender Lass' are nearly twice as tall. 'Sierra Sunset'

bears large ruffled blooms in shades from soft melon to orange with dark red eyes on 18-inch spikes.

## VINES

Clematises are back in vogue. Hines Horticulture ([www.hineshort.com](http://www.hineshort.com)) in San Gabriel, California, is unveiling two series of clematises bred by English nursery owner Raymond Evison. The RHS Bicentenary Collection includes Hyde Hall™ (white), Harlow Carr™ (purple-

blue), Rosemoor™ (deep red), and Wisley™ (purple). These large-flowered selections grow up to seven to nine feet tall and are extremely floriferous and vigorous.

Evison's Patio Clematis Collection consists of Cezanne™ (violet), Picardy™ (pinkish red), and Versailles™ (wine red), all of which are very compact (to three feet) and designed to thrive and bloom prolifically in containers.

Roseville Farms ([www.rosevillefarms.com](http://www.rosevillefarms.com)) in Apopka, Florida, is introducing

## Sources

Retail sources for many of the plants and seeds described in this article are listed here. For selections that were only available through wholesale distributors at the time of printing, the name of the distributor and contact information are provided in the article. Contact distributors to ask about retail sources.

**David Austin Roses Ltd.**, Tyler, TX. (800) 328-8893.  
[www.davidaustinroses.com](http://www.davidaustinroses.com). 'Grace', 'St. Alban', and 'Wisley' English roses

**Garden Medicinals and Culinaries**, Earlysville, VA. (434) 964-9113.  
[www.gardenmedicinals.com](http://www.gardenmedicinals.com). 'Brandeva' tomato

**High Country Gardens**, Santa Fe, NM. (800) 925-9387.  
[www.highcountrygardens.com](http://www.highcountrygardens.com). *Salvia penstemonoides*; *Agastache* × 'Ava'; *Philadelphus microphyllus* 'June Bride'

**Johnny's Selected Seeds**, Albion, ME. (207) 861-3900. [www.johnnyseeds.com](http://www.johnnyseeds.com). 'Bonbon' butternut squash; 'Fireball' lettuce; 'Cosmic Purple' carrot

**Native Sons** (wholesale), Arroyo Grande, CA. (805) 481-5996.  
[www.nativeson.com](http://www.nativeson.com). *Salvia brandegei* 'Pacific Blue'

**Park Seed Company**, Greenwood, SC. (800) 845-3369. [www.parkseed.com](http://www.parkseed.com). *Viola* × *wittrockiana* 'Chianti Terracotta'

**Pinetree Garden Seeds**, New Gloucester, ME. (888) 52-SEEDS.  
[www.superseeds.com](http://www.superseeds.com). 'Lunar' carrot

**Plants by Mail**, Loxley, AL. (888) 922-7374. [www.plantsbymail.com](http://www.plantsbymail.com). *Raphiolepis indica* Spring Sonata™; *Rhododendron* × 'Robled' and *R.* × 'Roblec'

**Renee's Garden Seeds**, Felton, CA. (888) 880-7228. [www.reneesgarden.com](http://www.reneesgarden.com). *Delphinium consolida* 'Parisian Pink'; 'Gala' mache

**Thompson & Morgan**, Jackson, NJ. (800) 274-7333.  
[www.thompson-morgan.com](http://www.thompson-morgan.com). 'Wisley Magic' runner bean; *Cuphea ignea* 'Matchless'; 'Rainbow' carrot

**Wayside Gardens**, Hodges, SC. (800) 845-1124. [www.waysidegardens.com](http://www.waysidegardens.com). *Echinacea* 'Sunrise' and 'Sunset'



Cezanne™ clematis



Juuli™ clematis



Autumn Chiffon™ azalea

three more clematis selections in its Kivistik Collection, which are bred to thrive and bloom heavily in regions that experience harsh winters. These are Huvi™ (wine red), Juuli™ (light blue), and Sakala™ (lavender), all of which are rated to grow in Zones 2–8, 8–2.

### SHRUBS AND TREES

A bold new hydrangea that is bound to make a big splash in gardens this year is *Hydrangea macrophylla* ‘Lady in Red’ (Zones 6–9, 9–5). Developed by horticulturist Michael Dirr at the University of Georgia, this new variety offers interest from spring through fall ([www.ladyinredhydrangea.com](http://www.ladyinredhydrangea.com)). In spring, the new leaves are accented with red petioles and veins, and in fall the foliage becomes a vibrant, reddish-purple. Depending on the soil pH, pale pink or pale blue lacecap-type flowerheads appear from late spring through summer, maturing to a deep burgundy-rose.

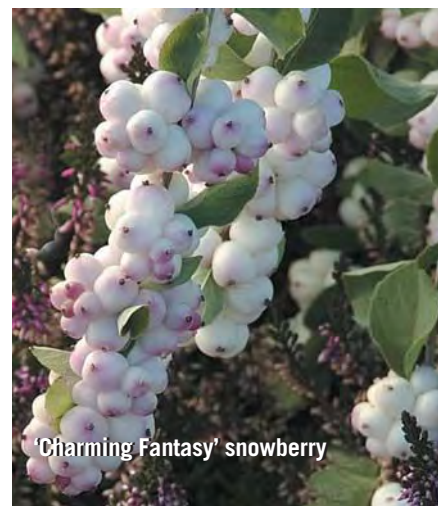
Plant Development Services Inc. (PDSI) in Loxley, Alabama, debuts a new Indian hawthorn, (*Raphiolepis indica* Spring Sonata™, Zones 7–9, 9–7), which tolerates a wide range of growing conditions, resists diseases, and blooms later than other varieties. It grows four feet

tall and five feet across with glossy evergreen leaves.

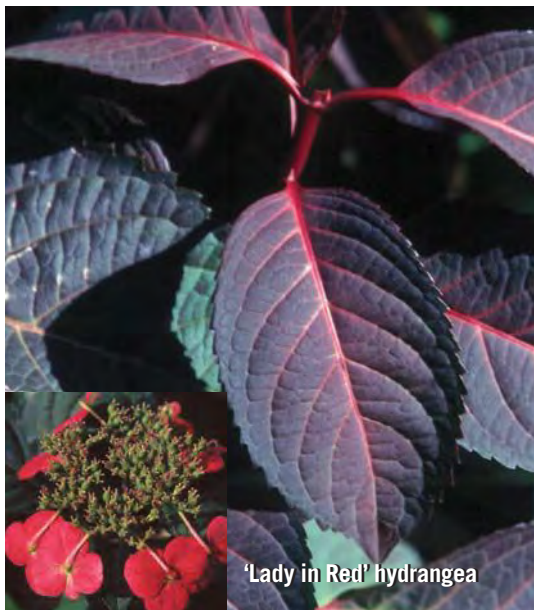
Also from PDSI (<http://plantdevelopment.com>) come two new varieties of Encore™ azaleas. Like others in this series, Autumn Chiffon™ (*Rhododendron* ‘Robled’, Zones 5–9, 10–5) and Autumn Carnation™ (*R.* ‘Roblec’, Zones 5–9, 10–5) bloom in spring, summer, and fall. Autumn Chiffon™ bears single, light pink flowers with a splash of dark pink on plants that are two-and-a-half feet tall and three feet wide—perfect for foundation plantings. Autumn Carnation™ produces semi-double, medium pink flowers on four and a half-foot plants.

Monrovia nursery in Azusa, California ([www.monrovia.com](http://www.monrovia.com)) is introducing three hybrid snowberries (*Symphoricarpos* spp., Zones 3–7, 7–1), bred in the Netherlands. All display abundant clusters of exceptionally large fruit at the end of their semi-pendulous branches. Bright Fantasy™

(‘Bokrabright’) bears clear white fruit; Charming Fantasy™ (‘Kolcharm’) produces shell-pink fruit; and those of ‘Scarlet Pearl’ are deep pink. Drought tolerant and soil adaptable, all three are compact, upright shrubs, three to five feet tall and wide. Their fruits persist well into winter, attracting birds and other wildlife.



‘Charming Fantasy’ snowberry



‘Lady in Red’ hydrangea

Midgee™ dwarf Japanese marlberry (*Ardisia japonica* ‘Moncue’, Zones 6–9, 9–1), another Monrovia introduction, is a non-aggressive, low-spreading ground cover with leathery, evergreen leaves suited for the shade garden. It has a more compact habit than the species, growing six to 12 inches tall and two feet wide, and bears bright red berries in late summer that remain attractive into winter.

*Philadelphus microphyllus* ‘June Bride’ (Zones 6–9, 9–6), a new release from Utah’s Choice, a western native plant introduction program, is being introduced by High Country Gardens. In addition to its large, white spring blooms that are delightfully fragrant, its dark green leaves are shown to advantage against attractive red-



*Philadelphus microphyllus* 'June Bride'

dish brown exfoliating bark. It grows six feet tall and wide.

Monrovia's Black Tulip™ magnolia (*Magnolia x soulangeana* 'JURmagr', Zones 5-9, 9-4) bears tuliplike, deep burgundy flowers even on very young plants. It grows 15 to 20 feet tall with a slender six-to-10-foot spread, making it a good choice for a small specimen tree or a container.

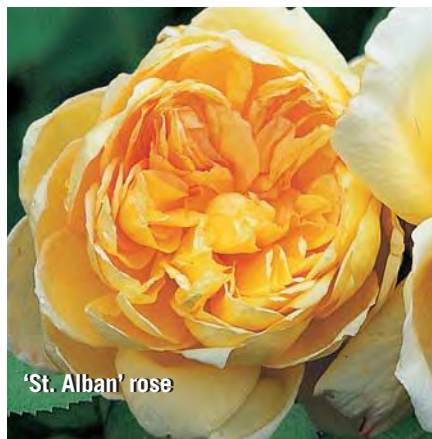
## ROSES

This year's new rose introductions include something for everyone. Among several new cultivars from Meiland Star Roses ([www.starroses.com](http://www.starroses.com)), 'Queen Mary 2'™ (Zones 5-9, 9-5) stands out; it is a white hybrid tea rose with long stems and an intoxicating fragrance. It makes a great shrub or cut flower. Another Star introduction, 'Pink Knock Out'™ (Zones 4-9, 9-4), is a good candidate for growing chemical-free. It resists both insects and diseases, even in humid climates, and bears self-cleaning, medium pink blooms over a long season.

David Austin adds to his line of old-fashioned English roses with several new



'Queen Mary' rose



'St. Alban' rose

selections. 'Grace' (Zones 4-9, 9-4) is a shallow-cupped, fragrant, apricot, repeat bloomer that grows four feet tall and wide. 'St. Alban' (Zones 5-9, 9-4) is a vigorous selection that can be grown as a four foot-tall shrub, or as an eight-foot climber. Its wide yellow flowers have a fresh scent. For large, deep pink blooms, try 'Wisley' (Zones 4-9, 9-4), a free flowering selection with a fruity scent that grows four feet tall.

## VEGETABLES

Homegrown vegetables promise to be more colorful, bountiful, and flavorful than ever this year. New carrot varieties sporting unusual hues include 'Cosmic Purple', a sweet flavored selection from Seeds by Design ([www.seedsbydesign.com](http://www.seedsbydesign.com)) that develops a purple exterior, an orange interior, and a yellow core. 'Lunar' is a mild-flavored white carrot that resembles parsnip from Pinetree Garden Seeds. And Thompson & Morgan offers 'Rainbow', a hybrid carrot whose long, slender roots range in shades from white to orange.

Thompson & Morgan's new runner bean is as ornamental as it is productive.



'Cosmic Purple' carrot

The bright red flowers of 'Wisley Magic' are followed by straight, slender pods to 14 inches long and are produced from mid-summer to frost. This variety has received the Award of Merit from the Royal Horticultural Society (RHS).

Jeff McCormack of Garden Medicinals and Culinaris crossed two heirloom varieties of tomato, 'OVT Brandywine' and 'Eva Purple Ball' to develop the new indeterminate variety 'Brandeva'. The sweet flavored fruit averages six ounces and is dusky red on the outside, rosy pink on the inside. Plants are disease resistant and productive over a long season.

For your salads, Johnny's Selected Seeds presents 'Fireball' lettuce, with its



'Fireball' lettuce

dazzling red outer leaves and creamy yellow interior. Its flavor remains mild even as the days heat up. And for an alternative to lettuce, Renee's Seeds offers 'Gala' mache, which was found superior in their trials with four other varieties. It has a mild, nutty flavor, buttery texture, and is faster growing than other varieties, although all maches grow more slowly than lettuce. When mature, it forms uniform, fist-size rosettes of four- to five-inch oval leaves.

## CELEBRATE DIVERSITY

Through the continuing efforts of plant breeders and collectors, our choice of new plants and plant varieties increases each year. By growing new plants in our gardens, we continue the process of testing these introductions as we cultivate them under our particular conditions.

*Rita Pelczar is a contributing editor to The American Gardener.*



IN JUST OVER a decade, Chanticleer Garden in Wayne, Pennsylvania, has emerged from obscurity to become a venue on every garden tourist's must-see list. At only 35 acres, it is dwarfed by major botanical gardens such as nearby Longwood at 1,050 acres, but boasts some of the country's most innovative plantings. And, if the recently appointed Executive Director Bill Thomas has his way, it will become "one of the finest gardens in the world."

It is already well on its way, with visitation now at 25,000 a year and rising. It "is the most vibrant and innovative of American gardens; the crown jewel of public horticulture in this country," says Dan Hinkley of Heronswood Nursery in Kingston, Washington. "This runs contrary to the notion that things horticulturally diminish as the available budget grows. It is a well-funded garden, but they do spend their dollars well."

In the 1990s, under the leadership of former Executive Director Chris Woods, the garden made "the move from preservation of open space to aesthetic wonder,"

*on the verge of greatness*

# Chanticleer

This Philadelphia-area "pleasure" garden is being hailed as one of the finest small public gardens in America.

BY CAROLE OTTESEN

wrote Woods in *Chanticleer*, a guide to the garden. Credit for this transformation goes to Woods, who acknowledges that his work was made easier by the unwavering support of Chanticleer's owner, Adolph Rosengarten, Jr., whose family's chemical company, Rosengarten & Sons, ultimately merged and morphed into Merck & Company, the largest pharmaceutical company in the United States.

The garden's history dates back to 1912, when Rosengarten's father purchased two parcels on which to build the family home. The original parcels consisted of "just over seven acres that lay about a mile and a half from the St. David's Station on the Main Line of the Philadelphia Railroad," wrote the late Rosengarten. In those days, he noted, "a dogcart went daily to St. Davids for the



Top: In the Teacup Garden, a huge container holding *Ensete ventricosum* 'Maurelii' is underplanted with purple alternanthera and coleus 'Beach Dragon'. Above: The ponds are backed by an exuberant "meadow" of flowering perennials. Opposite: Another view of the Teacup Garden shows its unusual color scheme of hot red-oranges and cool gray-greens.

mail" and the family moved the 16 or so miles "to town" in winter.

As the years passed and the automobile succeeded horses and dogs, the roads improved, and two more houses were constructed on the property, which grew to its present acreage. In the mid-1970s, Rosengarten established the Chanticleer Foundation, a nonprofit corporation, to maintain the estate as a public garden after his death. And in 1983, he made the fortuitous decision to hire Woods as chief horticulturist. Later, Woods succeeded Howard Holden as the garden's executive director.

### TRANSFORMING WITH BOLD STROKES

It was certainly under Woods's inspired leadership that most of the present-day Chanticleer Garden came into being.

Born in England, he had trained at Kew and worked at Portmeirion, a fantasy village in Wales, at Rudyard Kipling's Bateman's garden, and at Cliveden, an old British estate. He brought to Chanticleer solid experience, his passion for plants, and an artist's eye. Most important, he brought the confidence to move away from the status quo. He achieved the transformation of the garden using bold strokes.

A hemlock hedge and the tennis court it surrounded were some of the first things to go. They gave way to a garden devoted to herbaceous plants. Today, the tennis-court garden is showy from the garden's opening day in April until the closing of the gates at the end of October.

But it is the spring explosion of white and light pastels that is unforgettable. There are masses of white anemones (*A. sylvestris*) and pale pink columbines followed by the pale pink rambling roses, 'Dr.

### AHS Chanticleer Tour

Members of the American Horticultural Society's President's Council will be visiting Chanticleer on March 5 as part of a special tour that also includes a preview party at the Philadelphia Flower Show that evening. For information on how to join the AHS President's Council and be part of this spring tour, contact Joe Lamoglia at (800) 777-7931 ext. 115.

W. van Fleet' and 'New Dawn', festooning an arbor. There is a lush ground cover of pink evening primrose (*Oenothera speciosa*), the buxom balls of white peonies, and viburnums studded with pure white blooms.

And every spring, the lawn between the tennis court garden and the main house becomes a garden as 80,000 white and pale yellow narcissus burst into bloom.

In 1994, Woods had a forested area cleared of dense underbrush to become a home for collections of woodland plants from Asia. Today, the collection of gingers, including variegated forms such as *Asarum splendens*, flourishes in the dappled shade of forest trees. Ferns carpet the ground and *Arisaema sikokianum* and other Asian jack-in-the-pulpits raise their exotic hoods in late spring. Early summer witnesses the bloom of gargantuan tropical lilies (*Cardocrinum cathayanum*).

In 1996 and 2000, three small ponds were constructed to augment the water garden, a large pond that had been built in the 1970s. The ponds are surrounded by ornamental grasses and bold wildflowers such as ironweed (*Vernonia* spp.), and black-eyed Susans (*Rudbeckia* spp.). Lotus and *Thalia* grow in the water and a host of birds and other creatures make this garden their home.

Perhaps Woods's boldest stroke was the construction of the Ruin Garden. Originally, the idea was to partially dismantle Minder House, the late Rosengarten's home, and leave parts of it as a ruin. But because of safety concerns, the entire house was razed in 1999. A new ruin, consisting of three rooms, was erected on its foundations. Designed by Woods and landscape architect Mara Baird, this structure bows to the Picturesque tradition of a romantic ruin enhancing the landscape. It features stone works by artist Marcia Donahue.

## NEW HAND AT THE HELM

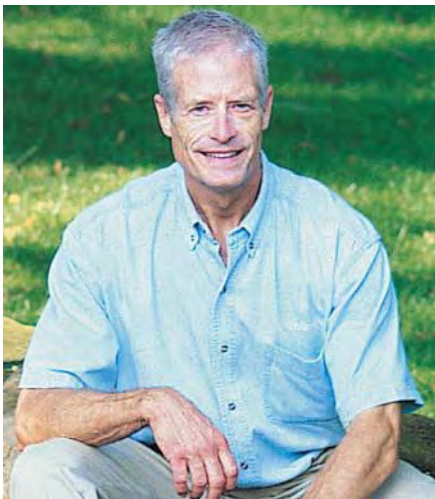
When Woods left Chanticleer to join



**The Ruin Garden, featuring sculptures by Marcia Donahue, was built on the spot where the late Adolph Rosengarten Jr.'s house once stood.**

Santa Barbara Botanic Garden, Thomas was hired. He had spent 26 years in the education and horticulture departments at Longwood Gardens in nearby Kennett Square, Pennsylvania. That experience gave him "a firm rooting in horticulture as well as in programming."

The change from a quarter-century at a huge institution to a small organization



**Chanticleer Executive Director Bill Thomas**

## Visiting Chanticleer

**Chanticleer Garden**, 786 Church Road, Wayne, Pennsylvania (610) 687-4163

[www.chanticleergarden.org](http://www.chanticleergarden.org)

■ Located near Philadelphia, Chanticleer is open from 10 a.m. to 5 p.m. Wednesdays through Sundays from March 31 to October 30. Extended summer hours from May through August are until 8 p.m. on Fridays. Admission is \$5 per adult; children under 16 enter free. Season passes are available.

has been a big one. "Here," says Thomas, "I'm *the* one. I write the checks, and, sometimes, I'm the only one in the office. But it's a great office with a great view."

Thomas took the job on April Fool's Day 2003, but his first act was not to rush in. Instead, he walked slowly around the garden and tried to get a feel for what was working really well and where it needed to improve. "The big thing that's working is that the staff has so much design input," says Thomas. The results of this creative freedom have not gone unnoticed. "There is a spirit and adventurism at Chanticleer that transcends the traditional and predictable," says Hinkley.

The creative freedom the Chanticleer staff enjoys is evident in the diversely planted containers placed throughout the garden. "Since Chanticleer opened, it has been known for its containers," says Thomas. "Containers are done by the gardener in an area and stay in that area, fitting in beautifully as part of the evolving garden design."

Thomas's vision for the garden is a more integrated whole. Chanticleer was developed as distinct garden areas, and Thomas wants to see those garden areas tied together. "I encourage the gardeners to look at the whole garden... to look outward rather than inward. It takes a mindset turnaround," he says. When he asked why the meadow by the ruin garden stopped abruptly at the path, he says he learned that the "area is handled by two different gardeners." The path functioned as a boundary between jurisdictions. The gardeners quickly responded to the idea of integration, says Thomas. "Within two days, they were digging up a new bed to





Horticulturist Dan Benarcik not only arranges the plants in the containers at Chanticleer, he makes the containers. The bromeliad, above, grows in a piece of salvaged post. Echeverias and graptopetalums, right, thrive in conical containers made of perforated steel plate.

have the meadow go across.”

In addition to further integration of the garden areas into a cohesive whole, there are plans to clear a large area of woodland and plant it with natives. But Thomas is mindful that “when you change anything you have unforeseen consequences,” he is proceeding with thoughtful deliberation. “I don’t want to make changes until I can figure out what they will be.”

Chanticleer was named for a castle in England with a garden that was “splendid but for a month in the year,” according to the 19th-century novelist William Thackeray. Its namesake in Wayne, Pennsylvania, has already lived up to and, perhaps, even exceeded its model in splendor. This, says the enthusiastic new executive director Thomas, is thanks to an “excellent board” and the creativity and labor of a truly extraordinary staff. ☺

*Carole Ottesen is associate editor of The American Gardener.*



# homegrown & delicious

# Native Fruits

Add beauty and flavor to your landscape with these carefree natives.

BY LEE REICH

**S**CATTERED THROUGH the woodlands and fields of North America grow native plants that bear tasty fruits. Only occasionally have these natives achieved horticultural prominence: Witness the meteoric rise in popularity of the highbush blueberry, which a mere 100 years ago was harvested only from wild stands.

In addition to their distinctive flavors, native plants are rugged and often thrive in gardens with little or no care, unlike apples, peaches, and many other common fruits.

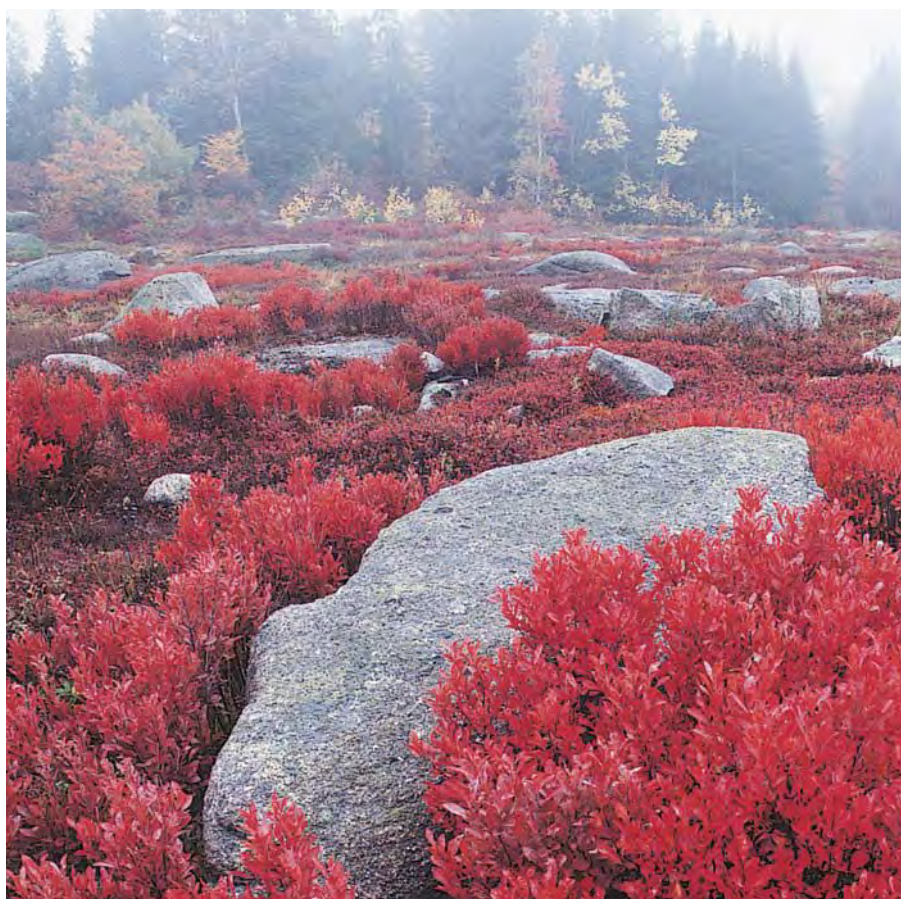
Pruning native fruits is also comparatively simple; trees may need a little shaping in their youth, and shrubs and some trees will benefit from occasional pruning to stimulate renewal growth, but it's nothing compared to the combination of science and art required to prune an apple tree.

Many native fruit-bearers double as landscape plants, providing beauty as well as food. In fact, some of these plants are so ornamental that they have been planted as such, their tasty fruits overlooked, at least by humans.

The following native plants bear fruits that are delectable right off the plant. Unlike the American cranberry and elderberry, these need no sweetening and cooking to make them palatable.

## LOWBUSH BLUEBERRY

The lowbush blueberry (*Vaccinium angustifolium*, USDA Hardiness Zones 2–8, AHS Heat Zones 8–1) has achieved the commercial prominence of its highbush cousin, but remains uncommon as a backyard plant. This is unfortunate because it is pretty and it yields a delicious fruit, commercially finding its way into cans, jams, and pie fillings. Plants reach a foot or two in height and in spring are covered with white urnlike flowers, then leaves that are healthy green all summer. In autumn leaves turn fiery red, followed by red winter stems. Planted on 18-inch



The lowbush blueberry is the most well known of our native fruits. Growing wild in Maine, left, it covers expanses of rocky ground with red foliage in autumn. Above: Plump berries form on a garden specimen.

LEFT: DAVID CAVAGNARO; RIGHT: LEE REICH

centers, the plants spread underground within a couple of years, becoming a solid groundcover.

Lowbush blueberry fruits are smaller and sweeter. A few named varieties are available, but unselected wildings or seedlings are more commonly sold; these also make up the bulk of commercial plantings.

Lowbush blueberries demand the same soil conditions as highbush blueberries: very acidic (pH 4 to 5), consistently moist and well aerated, low in fertility, and high in humus. Sulfur can be used to acidify soils that are too alkaline, and a bucketful of peat moss in each planting hole provides humus that helps maintain that acidity and keeps the soil moist and well-aerated. A two-inch layer of some organic mulch, such as sawdust or pine needles, and regular watering the first season complete the recipe for success.

Maintenance of a lowbush blueberry planting consists of fertilization, pruning, and annual replenishment of mulch. Soybean meal, at a rate of one pound per hundred square feet, provides a once-a-year, slow feed of nitrogen in a form the plants enjoy. Pruning stimulates the growth of new, fruit-bearing stems. Because a plant won't bear the first year after all its stems are cut back, I prune a different one-third of my planting every year; two-thirds of the planting, then, bears fruit.

## LINGONBERRY

As long as I was preparing a bed for lowbush blueberries along the front of my house, I decided to plant lingonberries (*Vaccinium vitis-idaea* var. *minus*, Zone 2–7, 6–1) as well. Both grow as groundcovers and they require the same soil conditions. Lingonberries' glossy, evergreen leaves, about the size of mouse ears, are attractive in themselves, and they provide a nice foil for the red blueberry stems as well as the pea-sized, red lingonberries that hang on the plants, still edible, well into winter. I prune my lingonberries less drastically than my blueberries.

Lingonberry, a close relative of our native American cranberry (*Vaccinium macrocarpon*), outshines it in a number of respects. Both fruits are used in the kitchen in similar ways, and neither fruit is sweet. But lingonberries couple just enough sweetness with a rich, intriguing aroma so



Lingonberries produce pea-sized fruits.

the fruits are delicious plucked right off the plants. Cranberries, on the other hand, are virtually inedible raw, and the plants' leaves turn a muddy purple in winter.

## BEACH PLUM

Along the Atlantic coast from Massachusetts to North Carolina grow thickets of beach plums (*Prunus maritima*, Zones 3–6, 6–1), and in late summer, their cherry-sized fruits ripen. The first time I put a fresh beach plum into my mouth, I spat it out; the second time, I started plucking more fruit, which pretty much describes their range of flavor. Most commonly deep blue, the skins are dusted with a white bloom; some plants, however, bear fruits with purple, red, or yellow skins. Beach plum astringency—which caused me to reject the first fruit I tasted—is due to tannins, which are much reduced in yellow-fruited clones. As a general rule, cultivars that mature



The flavor of beach plums varies from highly astringent to sweet and juicy.

## BEACH PLUM PROJECT

The native stands of beach plums in New York, Massachusetts, and New Jersey have long supported a local cottage industry for beach plum jams and chutneys. In 2001, researchers at Cornell University initiated a project to increase production and improve crop quality in an effort to increase the market for this local delicacy.

The Beach Plum Project, funded by a Northeast Sustainable Agriculture Research and Education grant, is led by project manager Rick Uva and principal investigator Thomas Whitlow, both of Cornell's Horticulture Department. Uva feels that the fruit is an excellent candidate for a heritage specialty crop. He sees the beach plum as a viable alternative crop for cranberry growers who are looking to diversify. With cranberry prices depressed and the demand for beach plums outstripping the supply, several local cranberry growers have decided to participate in the study. Bogs where cranberries are grown are often adjacent to upland areas that are well suited to beach plum cultivation, but little else.

Goals of the study include developing beach plum production orchards, maintaining a germplasm collection, establishing a quality control program, and developing a Beach Plum Consortium—a group that includes nurseries that sell beach plums as well as growers, processors, and distributors of beach plum products. Researchers are selecting fruit from both wild and cultivated stands for such traits as superior quality, size, color, and stability of production—yields can be erratic from year to year—in an effort to improve overall crop quality. They are also testing various irrigation, fertilization, and mulching strategies. The Project has developed a Web site that includes project contacts, information on crop history, culture, and disease control ([www.beachplum.cornell.edu/](http://www.beachplum.cornell.edu/)).

—Rita Pelczar, Contributing Editor

earlier and those producing softer and larger fruits also contain less tannin. Taste, of course, is more than just absence of astringency, and the best beach plums are sweet and juicy, with “plum good” flavor.

In the wild, beach plums inhabit sites that are drenched in sunlight, whipped with salt-laden wind, and where the soil is low in moisture, poor in nutrients, and relatively high in salts, in other words, beaches. Although they tolerate these conditions, they thrive in sites that are less challenging, as evidenced by the three healthy plants growing in my backyard.

Whether growing wild or in a garden, beach plums are capricious in bearing fruit. As yet, no one has pinned down the reason for large crops some years and small crops other years. The reliable profusion of blooms each spring compensates, in my opinion, for the occasional poor yield.

Though sometimes growing as a small tree, the plant is more commonly a scraggly shrub of decumbent or trailing stems from which grow upright shoots. Stems frequently root where they touch soil and creeping roots also send forth new stems. The combination produces a wide-spreading thicket over time. I prune only to keep the plants in bounds.

## PRICKLY PEAR CACTUS

One native fruit plant that really does perform best in very sandy soils is prickly pear cactus (*Opuntia* spp). Many edible species are native to America, most of them to our Southwest and Mexico, including such species as *O. megacantha* (Zones 11–12, 12–9), *O. robusta* (Zones 9–12, 12–1), and *O. phaeacantha* (Zones 9–12, 12–7).



## Resources

**Uncommon Fruits for Every Garden** by Lee Reich, Timber Press, Portland, Oregon, 2004.

## Sources

**Burnt Ridge Nursery**, Onalaska, WA. (360) 985-2873.  
[www.burntridgenursery.com](http://www.burntridgenursery.com).

**Edible Landscaping Nursery**, Afton, VA. (800) 524-4156. [www.eat-it.com](http://www.eat-it.com).

**Hidden Springs Nursery**, Cookeville, TN. (931) 268-2592.

**Nolin River Nut Tree Nursery**, Upton, KY. (270) 369-8551.  
[www.nolinnursery.com](http://www.nolinnursery.com).

**One Green World**, Molalla, OR. (877) 353-4028. [www.onegreenworld.com](http://www.onegreenworld.com).

**Raintree Nursery**, Morton, WA. (360) 496-6400. [www.RaintreeNursery.com](http://www.RaintreeNursery.com).

**Saint Lawrence Nurseries**, Potsdam, NY. (315) 265-6739.  
[www.sln.potsdam.ny.us](http://www.sln.potsdam.ny.us).

*Opuntia compressa* (sometimes designated *O. humifusa*, Zones 11–12, 12–9) bears edible fruits and is native almost throughout the eastern half of our country as far north as Minnesota.

Like other cacti, prickly pears thrive in very well-drained soil and full sun. Good drainage is especially important for winter survival. The flowers, usually yellow, appear in spring and are quite showy; even so, I find it hard to meld this plant into the lush vegetation typical of eastern United States.

Prickly pear fruits are about the size of chicken eggs, often red but sometimes yellow,

low, pink, purple, or lime-green. Inside is a juicy pulp that hints of watermelon, strawberry, fig, honeydew, or banana and contains numerous edible seeds.

## PAWPAW

The northernmost member of the tropical custard apple family, pawpaw (*Asimina triloba*, Zones 4–8, 9–5) seems a bit out of place in its native habitat, which is throughout most of eastern United States. Long, drooping leaves on a small pyramidal tree—growing 10 to 20 feet tall—suggest a tropical appearance, until autumn arrives and they turn a beautiful, clear yellow. The fruits look like mangos, hang in clusters like bananas, and contain a creamy pulp that tastes like banana with some vanilla custard, mango, and pineapple mixed in. These “Hoosier bananas” or “poor man’s bananas,” as they have been called, ripen in late summer and autumn.

Pawpaw requires little else than full sun and two different cultivars for cross-pollination. Occasional light pruning stimulates the growth of new shoots on which the following year’s fruits are borne. ‘Zimmerman’ and ‘Pennsylvania Golden’ are among my favorites of the dozen or two cultivars now available.



Attractive *Opuntia* flowers, left, are followed by the formation of egg-size fruit, above, with sweet, juicy interior and edible seeds.



The pawpaw, left, is native to much of eastern North America. In spring, it bears curious-looking brown flowers before the leaves emerge. Later, elongated clusters of green-skinned fruit appear. Ripe fruits, above, contain large brown seeds surrounded by creamy flesh with a tropical flavor.

## PERSIMMON

Similar in native range to pawpaw is another delectable native fruit, American persimmon (*Diospyros virginiana*, Zones 4–9, 9–1). In contrast to their Asian cousins, called *kakis*, American persimmons are smaller, often the size of large cherry tomatoes, and have a richer flavor, something like moist, dried apricots that have been drizzled in honey along with a dash of spice.

Some folks scorn American persimmons because they have tasted an unripe fruit, an admittedly horrible experience. The key to enjoying American persimmons is to grow those that will ripen in your growing season and refrain from eating them until they are *thoroughly* ripe—when the skins are translucent and the flesh is like jelly.

Delicious cultivars for northern areas include ‘Szukis’, ‘Mohler’, ‘Meader’, ‘Dooley’, and ‘Yates’. The species is dioecious—the male and female flowers grow on separate plants—but many high quality cultivars, such as ‘Szukis’, ‘Early Golden’, ‘Garretson’, and ‘John Rick’, will bear fruit in isolation.

Growing 30 to 50 feet tall, persimmons are handsome trees distinguished by deeply fissured “alligator-hide” bark. Their leaves have a slightly bluish cast and turn rich yellow in autumn. Neither pawpaw nor persimmon is particularly bothered by any pests, including deer!

## MAYPOP

Maypop (*Passiflora incarnata*, Zones 5–10, 12–1) a hardy, herbaceous perennial vine, has sometimes been the object of scorn. In warmer parts of its range—throughout the east, as far north as Pennsylvania—maypop can be an invasive weed that eagerly escapes confines and “pops” up unexpectedly elsewhere.

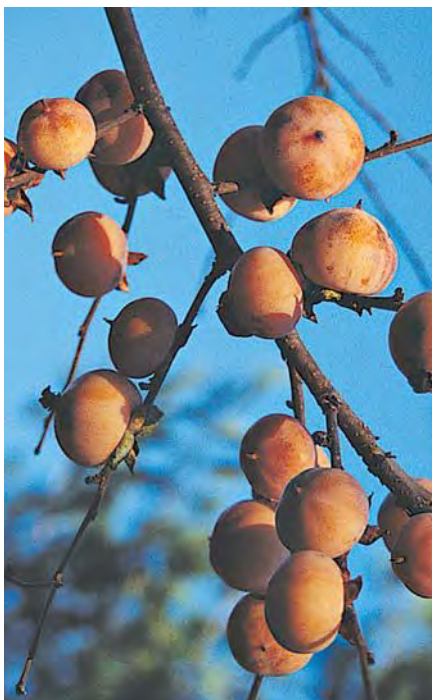
But the scorn is tempered once you look at the maypop’s flower and taste the

fruit. The flowers have the same beauty and intricacy as other *Passiflora* species, and, like its tropical cousins, the inside of a maypop fruit is filled with air and seeds surrounded by a tasty gelatinous pulp. To quote 17th-century writer William Strachey, maypop has “the bigness of a green apple, and hath manie azurine or blew kernels, like as a pomegranat, a good summer cooling fruit.”

Maypop thrives in full sun and with the protection of mulch, can be grown north of its native range. To keep it from straying, plant it in an old chimney liner or a deep plastic food bucket buried in the ground with the rim above the soil line.



Maypop is a native perennial vine usually grown for its tropical-looking flowers, above. Its seed-filled fruits, left, are yellowish green and ripen in late summer.



Orange globes of persimmon fruits persist on trees long after the leaves have fallen.

## JUNE BERRY

Unlike some of the previously mentioned native fruits, Juneberry (*Amelanchier* spp.), sometimes called serviceberry or shadbowl, is a well-known plant, but one that is known as an ornamental rather than for its fruits. With species native to every state in continental United States, Juneberries are valued for their early spring show of blossoms, which are white or pink; for their autumn leaf color, in blazing shades of purple, orange, and yellow; and for the plant’s neat growth habit. The best fruits are borne on the saskatoon (*A. alnifolia*, Zones 4–9, 8–3), the Allegheny serviceberry (*A. laevis*, Zones 5–9, 9–3), the thicket serviceberry (*A. canadensis*, Zones 3–7, 7–1), and the apple serviceberry (*A. ×grandiflora*, Zones 3–7, 7–1) a hy-



**Juneberry is a highly ornamental tree native throughout North America. Its spring blooms, top, give way to tasty blue and purple summer fruits, above, that have a flavor all their own.**

brid of the Allegheny and thicket serviceberries). The growth habit of all these species is something between a small tree and a large shrub.

Juneberry fruits are blueberry-sized and usually dark blue or purple, but taste nothing like blueberries; they are juicy and sweet, with the richness of sweet cherry and their own unique flavor that carries a hint of almond. Grown as trees, the plants need little pruning; shrubs should be peri-

odically renewed, the oldest stems cut back to the ground or to low, vigorous shoots.

### CLOVE CURRANT

My final pick for this sampler of the best uncommon native fruits is clove currant (*Ribes odoratum*, Zones 5–8, 8–5), also called Missouri currant, Crandall currant, or buffalo currant, as is the closely related *R. aureum*. Beauty, toughness, and good flavor are married in this one

plant. It is a five- or six-foot-high bush with small, bluish green leaves that turn purplish red in autumn. Floppy branches and numerous suckers popping out of the ground give the plant an unkempt air. With rigorous pruning, I have managed to train some plants as standards. The bush is native to the varied climates of the Midwest as far north as Minnesota and as far south as Texas, so is very tolerant of cold (to Zone 4, at least), heat, and drought. My plants also are unfazed by insects, diseases, or deer.



**Clove currant fruits are good for eating fresh.**

The red-tinged yellow trumpet-shaped flowers are two or three inches long and dangle in profusion from the branches like charms on a bracelet. But the visual show is eclipsed by the flowers' heavy fragrance of clove and vanilla. The fruits ripen unevenly from mid- to late summer, range in size from one-quarter to three-quarters of an inch across, and are usually smooth, shiny, and blue-black. The flavor is sweet-tart, fruity, and very aromatic—good popped right into your mouth or cooked into jams and tarts.

As a melting pot nation, America has generally escaped provincialism—except when it comes to growing fruits. Apples and most other common fruits reflect our European, especially British, heritage. But there was a strong push in the latter half of the 19th century to cultivate native fruits and the interest appears to be on the rise again today. Let's give some of our native fruits a fair shake once again. 🍷

*Lee Reich is the author, most recently, of Uncommon Fruits for Every Garden (Timber Press, 2004). He gardens in New Paltz, New York.*

*turning the* **Garden**  
*into a* **Community**



In this first in a series of habitat gardening articles, learn how to get started.

BY JOANNE WOLFE

PHOTOGRAPHS BY JERRY PAVIA

**I**N CASE YOU hadn't noticed, American gardens are undergoing a revolution in philosophy and practice. Slowly but surely people are realizing that gardens can and should be so much more than sterile collections of plants, that they have the potential to be vibrant living and evolving spaces where people and critters of all shapes and sizes can co-exist. One of the most exciting concepts in this new movement is that of habitat gardening.

Habitat is the place a plant or animal naturally grows or lives — its native landscape. Although it may not be possible for you to replicate all the elements of a native landscape in your yard, habitat gardening can enrich your property, create an almost endless source of enjoyment, and provide a welcoming environment for wildlife. In this issue, I'll introduce some basic habitat gardening concepts. In subsequent issues, I'll explain how to implement those ideas in your specific region.

#### **TAKING INVENTORY**

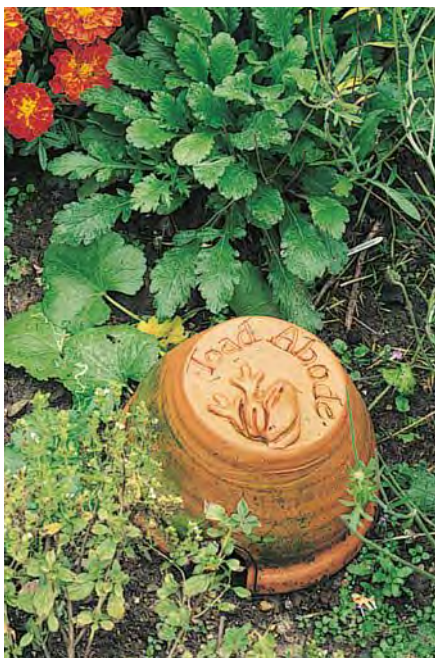
Whether you garden on a standard city lot or on a large country estate, the first step in becoming a habitat gardener is to discover who and what lives on your

**This habitat garden in the Midwest features black-eyed Susan and cup plant, species that also grow in that region's natural landscape.**

property. Begin by drawing a rough map of the landscape and mark the position of your house and any prominent features such as outbuildings, trees, water features, and fences or hedges. Label each lawn area, flower bed and border, and vegetative feature such as a tree or group of shrubs with a letter or number, then make a corresponding list of the plant and animal inhabitants. Don't forget to include human residents and domestic animals because they, too, will affect your landscaping choices and the wildlife that visits your garden.

Continue to add to your list as you observe seasonal patterns. Which birds visit your property and where and when do you see them most frequently? Do chickadees roost in the group of birches at the edge of your yard? Does the cardinal prefer the tall, dense shrubbery by the garage? Are those flashes of gold in your garden goldfinches? Has a family of chipmunks colonized your stone wall? If butterflies and hummingbirds already visit your yard, note which plants they prefer for nectar.

You'll also need to be aware of how much sunlight your property receives throughout the year and the direction of prevailing winds. Use a compass to add directional information to your map, and take note of the parts of your property that can be seen from inside your house.



**A habitat garden has room for animals.**



**In this garden, a variety of shrubs—including juniper, barberry, and winterberry—offers a pleasing backdrop for deckside relaxation, as well as food and shelter for birds and other wildlife.**

You'll want to plan your habitat garden so that you can observe its visitors. Mark the placement of water spigots and irrigation systems and shade in your children or grandchildren's favorite play areas and paths. Now that you know what you have in place, you're ready to think about adding vegetation and other features (see sidebar, opposite page) to enhance your garden's appeal to wildlife.

### **BUILDING A COMMUNITY**

The first step in choosing plants for your habitat garden is to identify your bioregion, which in turn will help you discover which plants and animals are unique to your part of the country. The earth's natural vegetation is grouped into geographic areas: desert, forest, grasslands, and so on. Within those larger regions exist smaller and more specific plant communities. To determine what natural vegetation existed in your neighborhood before the land was farmed or developed, contact your state's conservation department, native plant society, agricultural colleges, or private conservation organizations such as The Nature Conservancy. Or ask a librarian at your local library to help you

search for historical reference books on local native vegetation.

Based on your bioregion and what's already in your yard, you'll need to decide whether a woodland garden, a meadow or prairie garden, a desert habitat, or a bog garden—which might be soggy or even flooded in some seasons and quite dry in others—is right for you.

If, for example, you live in the Eastern Deciduous Forest region of North America and you have large trees that shade much of your landscape, the choice of a woodland garden is fairly obvious. If, however, you have a newly built home that has not yet been landscaped, your options are more numerous. In such cases, a meadow garden can be established quickly, whereas a woodland garden may take several decades to mature. If you have a large enough property, you may even want to consider creating more than one habitat area.

After you have a feel for the types of woody plants and herbaceous perennials that originally grew in your area, the easiest and most productive way to plan your habitat garden is to think in terms of plant communities, or guilds. A guild



is a group of plants that prefer to live in proximity to each other; they may even assist one another in some way. Moreover, plant guilds tend to attract specific birds, mammals, and insects that complete the communal interaction. Animals and insects assist plants with pollination and seed distribution, and the plants themselves may exchange beneficial bacteria and fungi, produce chemicals that discourage competing vegetation, or parasitize each other.

Unless your property has been scraped clear of topsoil—a common practice, unfortunately, in new construction—your native soil may have the proper pH and necessary nutrients to support regionally native plants. These, in turn, will offer food, shelter, and breeding places for your local wildlife.

So, before you begin a major campaign to “improve” your soil by adding compost, fertilizers, and other amendments, consider selecting plants that will thrive in the soil you already have. Besides attracting and supporting the wildlife native to your area, most regionally native plants are water-thrifty once they are well established and they will give your garden a “sense of place” that is in tune with the natural landscape.

## THE GARDEN FAMILY

When we think about a habitat garden in terms of community, we should include its human members. As we discuss plant guilds in future columns, we'll include plants that offer food for people as well as wildlife. For example, a guild could be anchored by a hickory nut tree surrounded by complementary shrubs and herbaceous perennials that help conserve water, reduce root competition, improve soil fertility, and lure beneficial insects to pollinate and help control pests. The insects attract birds—as do the fruits produced by the tree and shrubs. Small mammals also benefit from the food and cover.

In a habitat garden, plants, people, and wildlife form an engaging and mutually beneficial whole. Our focus in the March/April issue will be on creating habitats suited to West Coast gardens. 🍀

---

*Joanne Wolfe is a contributing editor for The American Gardener and a key voice in the habitat gardening movement. Her native habitat is the Pacific Coast of Oregon.*

## GETTING STARTED: HABITAT BASICS

Water, food, and shelter—our survival depends on them. So, too, does the survival of the wildlife around us. It takes only a few minutes to make your yard or garden friendlier to wildlife by adding these essentials.

**WATER.** All living things need water. Birdbaths and water features provide places to drink and bathe for birds, mammals, insects, and amphibians. You needn't purchase a fancy birdbath or install a pond, however; a shallow dish or old pie plate filled with water serves the purpose. Scatter a few well-washed pebbles in the bottom of a smooth dish to give birds a secure place to stand. A depression atop a large rock also makes a handy catch basin for rainwater or the excess moisture from your sprinkler or downspout. Place several containers of water at various heights, including one or two at ground level to accommodate thirsty mammals and ground-feeding birds.

**FOOD.** Wildlife enjoys many of the same foods you and I do. The list of fruits, nuts, grains, and mushrooms that humans and wildlife both relish is long.

If your yard has few edibles for either wildlife or humans, start by placing several bird and mammal feeding stations in strategic locations. Scatter birdseed on a scrap of plywood placed in the fork of a tree or secured between two branches. Hang cakes of suet from a bare branch in winter and secure cobs of dried corn in sheltered locations away from bird feeders to attract the attention of squirrels and larger birds. Hold off on deadheading at least a few of the seed heads of perennials and grasses until spring, and then place the dried seeds (be sure they're not moldy) in your bird feeders rather than in the compost pile.

When you visit the garden center in spring, look for plants that produce seeds, fruits, or nectar that wildlife will enjoy. By incorporating these plants in your garden, it will gradually become a cornucopia of wild foods, and you can reduce the amount of supplemental food you provide.

**SHELTER.** Creating shelter doesn't require spending a small fortune on birdhouses. Winter garden cleanup and spring pruning usually result in a pile of branches and garden debris. Stack a small pile of woody debris in an out-of-the-way corner or behind your garage to create instant shelter for birds, frogs, beneficial insects and butterflies, and small mammals. Cut the branches off your discarded Christmas tree and add them to the brush pile. Don't prune the lower branches of an evergreen tree or shrub; let them sweep the ground and your tree will become a critter hotel.

If you're lucky enough to have a fallen or standing dead tree (you may need to top the latter and secure it so that it doesn't fall over in a storm), don't be too quick to haul it away—wildlife will soon colonize it. Fallen trees in shady settings form a wonderful natural centerpiece for fern and moss gardens. —J.W.



This birdhouse is conveniently sited next to a fruitful *Ilex x attenuata* 'Savannah'.

*mysterious*

ARTICLE AND PHOTOGRAPHS BY BRUCE MEANS

# Ice “Flowers”



A naturalist admires delicate and ephemeral ice sculptures that emerge from the base of certain plants.

**T**HE FLAT-SEED SUNFLOWER (*Verbesina virginica*) is an ugly duckling sort of plant. During the growing season, it is one of those leggy composite weeds, like dogfennel (*Anthemis cotula*), that we tend to overlook. Its small clusters of tiny white flowers are unremarkable, even somewhat unsightly because the composite heads have a non-symmetrical arrangement of ray flowers. Unlike dogfennel, it has large, hairy leaves that have serrated edges and taper to a point. In winter, its bare stems are indistinguishable to the casual eye from those of other slightly woody weeds.

In the early hours before dawn on cold winter nights, however, the flat-seed sunflower turns into a swan. From the bases of the plant's dead stems delicate and ephemeral ice "flowers" are extruded. Early American botanists, recognizing the association between ice flowers and the flat-seed sunflower, gave the plant another common name: frostweed.

I noticed my first ice flowers early one winter morning as I was walking through a rich hardwood bottomland near my home in Tallahassee, Florida. At the time, I only noted occasional white reflections off what looked like small balls of ice on the brown, leaf-littered ground. A couple of winters later, I observed them again. This time I decided that they were not just clumps of frost and seemed worth photographing. By the time I returned with a camera a couple of hours after sunrise, however, they had all melted.

Several years passed and my curiosity continued to grow. Before sunup one December morning, in sub-20-degree temperatures—very cold for Florida—I stole out of the house, determined



Unprepossessing during the growing season, above, flat-seed sunflower puts on a spectacular ice show on winter nights, as seen in the images on these and the following pages.



to solve the mystery. The cold ground crunched as I walked on it. After a couple of minutes, my flashlight glanced over something small and white in the distance. When I reached it, I stood transfixed, looking down at the delicate loops of a sparkling tiara of ice. I sank carefully to my knees and stared in mute awe at this most exquisite "flower."

Just beyond lay another, and yet another. I raced from one to the next, filling my eyes with their splendor. Each one was a separate creation, sculpted by some magical hand and waiting for someone to finally appreciate them. They were the most beautiful, wondrous, and un-icelike works of ice art I had ever seen.

#### EPHEMERAL WONDERS

The delicate natural ice sculptures lasted only a few hours that morning, but I lost no time learning everything I could about them before they vanished. It was apparent that these ice "flowers" grew out of the bases of the flat-seed sunflower. Upon close inspection, I could see that the icy "petals" seemed to have been squeezed through the dead stems. Apparently the leading edge of the emerging ice freezes to the thin but tough bark of the stems,



and as the ice grows, it is lifted upward by the attached bark, forming delicate, lacy, and curvy ribbons of ice. Ice formations normally are angular because of the crystalline nature of ice, but the exotic petals of ice flowers form in broad, flowing loops. This may actually be governed by flowing water emerging at different rates between the tops and bottoms of stems. The clinging bark creates an upward torque at the zone of freezing, allowing more water to escape, and freeze, at the bottom of each petal.

During later freezes in that same winter, I discovered that ice flowers produced by the same plants took on entirely different shapes, often looking more like true flowers. This happened because the bark of the woody stems already had been peeled upward by the first freeze and was unavailable to influence their later growth. Also, once the vascular bundles of the plants had been broken apart by the first flowers, their sculpting effect on emerging water was not so delicate. Later-emerging ice flowers were more compact.

I spent one morning examining similar-sized woody perennials in my woodland ice garden and found that among all the

species I examined, only flat-seed sunflowers had thick, fleshy-fibrous roots that were large enough to serve as a storage organ for all the water needed to produce an ice flower. I transplanted six of these to my home garden and placed six more in buckets of water and “grew” beautiful ice flowers in both experiments.

### OTHER ICE FLOWERS

After spending some time online and reading wildflower guides, I learned that many people have reported sightings of ice flowers on the flat-seed sunflower throughout its large native range from Virginia to Florida and west to Kansas and Texas. They can be found anytime from fall through winter, as soon as temperatures drop below freezing.

Similar ice formations have been reported in connection with other plants, including the closely related yellow ironweed (*Verbesina alterniflora*); frostweed (*Helianthemum canadense*), which ranges north into Canada from Alabama and Georgia; and American dittany or stonemint (*Cunila origanoides*), which has a similar range to flat-seed sunflower. I have also seen pho-



tographs of ice flowers on dead plant stems from Ladakh, India, at about 10,000 feet in elevation, although I was not able to identify the plant or even the family in which it might belong.

Despite much research, I have yet to find a definitive explanation for why these particular plants produce ice flowers, but it likely has to do with a natural “antifreeze.” As sap is forced upward into the stem during freezing weather, only the water freezes and exits into the cold night air as a growing ice formation. The electrolytes, left behind, increase in concentration, lower the freezing point of the remaining sap, and may thus protect the shallow roots from freezing.

Although cold and lifeless, ice flowers warmly remind me that the beauty of the organic world is derived partly from the innate beauty of the inorganic world. It took me eight years to “see” these fancy fringes as something more than just frost. That makes me wonder: What other miracles am I overlooking every day? ☺



---

*Ecologist Bruce Means is an adjunct professor in the Department of Biological Science at Florida State University in Tallahassee.*

# *planting* Under Trees

Protecting tree roots from damage is important when creating beds under trees.

BY DAVID OETTINGER

A CLIENT ONCE ASKED me to examine the root system of a large tree in his back yard. He wanted to plant a perennial bed around the base of the tree, but was having trouble because the tree's roots were so close to the soil surface. He sought my opinion as a practicing arborist on whether he could clear away some of the surface roots with an axe.

My response was that if he did that he might as well just cut the tree down. Cutting into the root system that extensively, I explained, would make the tree—which was growing close to his house—unstable and dangerous and would probably kill it eventually.

Instead, we accommodated his wish by creating an unobtrusive mulch bed around the tree to incorporate shrubs and perennials. The tree's roots were not harmed and he was able to install a great new garden.

A desire to create new beds under and around existing trees is very common among gardeners. Often this allows several trees to be brought together in a single bed, reducing the area of lawn to be mowed and fed. Sometimes it reflects a wish to replace turf grass struggling to become established in dry shade with something more attractive and easier to care for.

Understanding the physiology of tree roots *before* you launch into a project like this will increase your chances of sustaining a tree's health. Because trees—especially mature ones—are a valuable investment, it is critical to carefully consider what you plant around your trees and how you plant it. The closer you garden



**Epimediums and stinking hellebores thrive in the dry shade beneath this southern magnolia at the American Horticultural Society's River Farm headquarters in Virginia.**

to an existing tree trunk, the greater the potential there is for root damage.

## THE ROOT OF THE ISSUE

According to Scott Josiah, an Extension forester with the University of Nebraska, the leading cause of tree death during landscape construction is damage to roots. Such damage is usually a result of digging or grading within the “critical root zone” of a tree, which, says Josiah, is defined as the area in which the loss, disturbance, or damage to any roots will adversely affect the tree's long-term

health and/or structural stability.

This kind of root damage may not directly kill your tree. More often, in order to make up for the lack of nutrient uptake, the tree begins to divert resources from defense to growth. This leaves it vulnerable to secondary stresses such as disease and insects. It is this secondary attack that usually kills the tree—sometimes months or even years later.

Gardeners naturally tend to fixate on the health of the visible, above-ground structure of the tree. It's easy to forget about the roots, which serve several key

functions—namely: anchorage, absorption of water and mineral nutrients, storage of food, and synthesis of certain organic materials, including those that regulate activities in the top of the plant.

Roots, unlike stems, do not have regular branching patterns. They grow wherever moisture and oxygen are available. Paul Cowie, a consulting arborist in New Jersey, says there's a common misconception that roots do not grow beyond a tree's crown—the circumference of the branch spread. He notes that under ideal growing conditions, a tree's root system can extend up to two to three times the width of the crown. "Roots won't stop at the drip line unless a physical or environmental barrier prevents them from growing beyond it," says Cowie.

Tree roots are easily damaged because the roots of most ornamental trees grow in the first one to two feet of soil. And most of the fine feeder roots—the ones that absorb water and nutrients—are located in the upper foot.

Of course, some trees do tend to send roots deeper than others. Roots are opportunistic and root depth is as much soil dependent as species dependent. According to Cowie, even typically deep-

## CHEMICAL DEFENSES

A few tree species are allelopathic—they produce chemicals that can kill or inhibit the growth of other plants growing underneath or nearby. The best known example of this are walnuts (*Juglans* spp.), which produce juglone, a chemical toxic to a wide range of plants including azaleas, blueberries, and tomatoes. Other trees known to have allelopathic tendencies are sugar maple (*Acer saccharum*), black locust (*Robinia pseudoacacia*), cherries (*Prunus* spp.), hackberries (*Celtis* spp.), some eucalyptus (*Eucalyptus* spp.), and sassafras (*Sassafras albidum*). So be aware it may be harder to establish new plants under these trees than with some others.

rooted species may become surface-rooted when growing in compacted soil or above a hard pan or rock outcrop.

"The more important thing for gardeners to understand," says Cowie, "is that some tree species produce a denser root mass that is more difficult to work around.

Maples for example, produce a thick, dense mat of fibrous roots while oaks tend to have larger, more distinct primary horizontal roots that can be located and worked around."

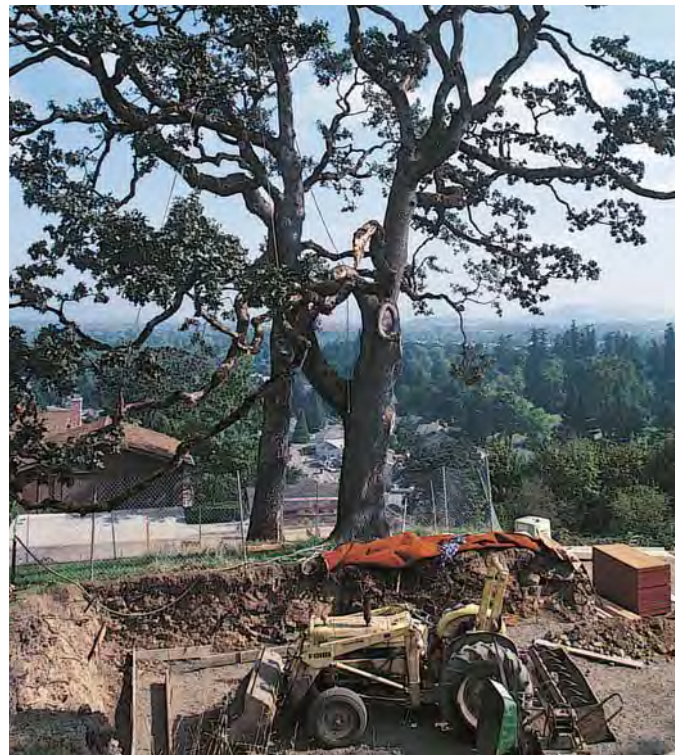
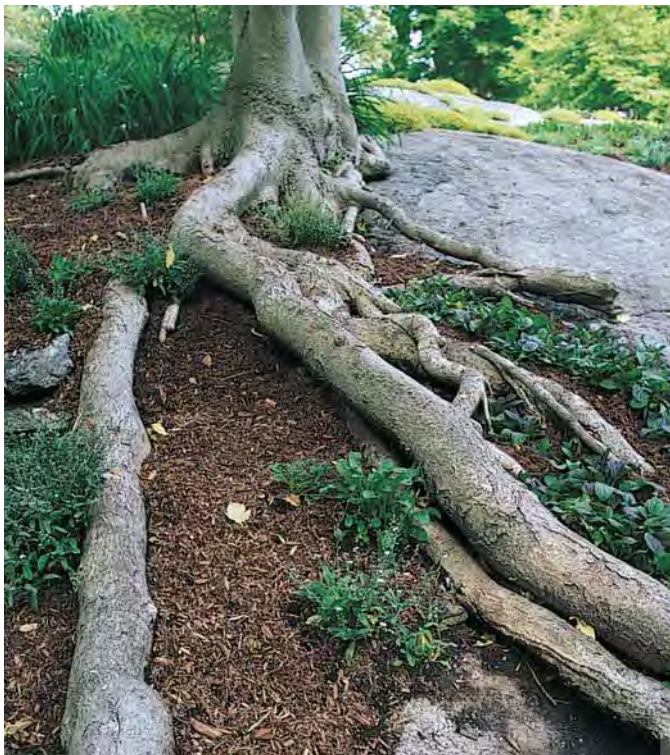
Severely compacting the soil around a tree—which often happens when heavy equipment is used during construction or major landscaping—can also jeopardize tree health because compacting soil removes air that roots need for healthy growth. If you are planning major construction for your home or garden, ask the contractors to make the root zones of trees off limits to heavy equipment by roping them off or installing temporary fencing.

Perhaps the biggest dilemma in trying to plant under trees is the same problem my client encountered—finding space to plant without damaging roots. Attempting to dig through a series of roots will test the patience of any gardener—and induce considerable stress on the tree.

The other main option is to add soil for new beds around the base of a tree, but unless this is done carefully, it can also increase the likelihood of root loss over time.

## CUT WITH CARE

The rule of thumb among arborists is



**Above, left:** Filling in between surface roots with a thin layer of soil and/or mulch is generally fine, but avoid covering them completely. **Above, right:** Construction damage within the critical root zone doomed these once majestic white oaks in Oregon.

## DISTURBANCE TOLERANT

The following common landscape trees have shown some tolerance of root disturbance or soil compaction.

- Acer rubrum* (red maple)
- Carya glabra* (pignut hickory)
- Cercis canadensis* (eastern redbud)
- Crataegus phaenopyrum*  
(Washington hawthorn)
- Fraxinus pennsylvanica* (green ash)
- Gleditsia triacanthos* (honey locust)
- Gymnocladus dioica*  
(Kentucky coffee-tree)
- Ilex opaca* (American holly)
- Magnolia grandiflora*  
(Southern magnolia)
- Picea abies* (Norway spruce)
- Picea pungens* (blue spruce)
- Pinus banksiana* (Jack pine)
- Pinus virginiana* (Virginia pine)
- Quercus prinus* (chestnut oak)
- Quercus rubra* (red oak)

## PLANTS FOR DRY SHADE

Plants growing under trees must tolerate shade cast by the canopy and dry conditions caused by the tree roots' great intake of water. The following perennials and grasses fit the bill.

- Asarum canadense*  
(Canadian hardy ginger)
- Aster cordifolius* (blue wood aster)
- Aster divaricatus* (white wood aster)
- Carex pensylvanica*  
(Pennsylvania sedge)
- Chrysogonum virginianum*  
(green and gold)
- Convallaria majus* (lily of the valley)
- Dennstaedtia punctilobula*  
(hay-scented fern)
- Epimedium* spp. (barrenwort)
- Hakonechloa macra* (Hakone grass)
- Helleborus foetidus*  
(stinking hellebore)
- Liriope* spp. (lilyturf)
- Ophiopogon* spp. (Mondo grass)
- Polypodium virginianum* (rock fern)
- Polystichum acrostichoides*  
(Christmas fern)
- Sanguinaria canadensis* (bloodroot)



These mature oak trees in a suburban Chicago garden were damaged when major roots were cut to allow the planting of large shrubs close beneath them.

that once 50 percent of a tree's root mass is lost, the eventual death of the tree is a foregone conclusion. Extensive root loss also makes a tree very unstable, which can create a hazardous situation.

Of course, the fewer roots removed, the better. According to the International Society of Arboriculture, severing even one major root can cause the loss of 15 to 25 percent of the root system. And root damage does not repair quickly. On average, it takes a tree one year for every inch in trunk diameter to recover from torn roots. If you must trim roots radically to accommodate landscape construction, you should consider root pruning well in advance of construction to lessen the impact.

The further away from the trunk the cut, the less likely you are to cut a large root that will have a profound impact on the entire root system.

"Unfortunately, on most sites, space is limited and this rule must be bent," says Gary R. Johnson, a professor of urban forestry at the University of Maryland. "Just how close an activity can come without seriously threatening the survival of a tree depends on the species, the extent of damage, and the plant's health."

Johnson offers the following rule of thumb for minimizing root damage. For each inch of tree trunk diameter at breast height (dbh), he recommends allowing for one and a half feet of critical root zone for

sensitive trees, or one foot for trees regarded as "more tolerant" of root disturbance. So, for a tree with a dbh of 10 inches, cutting roots no less than 15 feet away from the trunk would reduce the risk of major damage to the tree.

Arboriculture and forestry professionals use a specially graduated tape to determine tree diameter, but anyone can make this calculation by measuring the circumference of a tree with a household measuring tape and then dividing that number by three (3.14, or  $\pi$ , if you want to be precise).

Some tree species are more tolerant than others of root disturbance (see list on the left). Older trees are generally less tolerant of disturbance than are younger trees, so if you have a choice, consider creating a new bed under a younger tree.

## RAISING THE GRADE

For small-scale landscaping renovations, adding soil around the base of a tree to provide a planting area is probably a better option than cutting roots. This approach has its own potential problems. Adding too thick a layer of soil can starve the root zone of oxygen. Raising the grade around the tree can also potentially divert water and nutrients away from roots.

It has been my experience, however, that adding some soil around a tree will cause less harm than indiscriminate cutting of roots. Experts recommend adding



no more than two to four inches of planting medium to the base of any tree at one time. If you decide to take this route, do not to let the soil or mulch come into direct contact with the trunk because it can facilitate fungal and bacterial infections. And, of course, avoid those mulch “volcanoes” that are so popular with landscapers.

If you do add planting medium, use a “light” blend of soil—or, better yet, compost—and organic mulch such as wood chips, shredded bark, or pine needles. As it slowly decomposes, this organic matter will condition the soil, moderate soil temperatures, maintain moisture, and reduce competition from weeds and grass.

Rex Bastian, an arborist with The Care of Trees in Wheeling, Illinois, strongly recommends amending the soil around trees

several months in advance of planting.

“Mulching first and installing later provides a couple of advantages,” notes Bastian. “First, the soil and mulch mix will have had some time to break down, providing some organic matter to the soil. Second, the organic layer will also help loosen the soil beneath it, making it easier to open holes to receive the plants. This allows a greater depth over the existing root system with which to work.”

### A BALANCING ACT

Landscaping under or around existing trees involves balancing the health of the tree against the needs of the plants you want to grow under them.

When deciding what to plant under your tree, try to match the moisture

## ESTABLISHING PLANTINGS

Remember, once you’ve planted underneath trees you will now have multiple root systems competing for water and nutrients. Be sure to water your new planting regularly for a couple of months until the plants are well established.

After the plants have settled in, gradually reduce the frequency of waterings but soak the entire planting area thoroughly each time you water. Research shows that deep watering encourages root systems to grow deeper, making plants more drought tolerant and reducing surface rooting that can interfere with your garden. Letting the soil dry between irrigations allows for natural shrinking and swelling that will help improve soil structure.

If you are installing an irrigation system in and around a new garden bed that encompasses trees, make sure the nozzles do not spray the trunk of the tree for any prolonged period. Better yet, consider using sprinkler heads with low application rates, or perhaps bubblers or a drip system. Watering the lower trunk near the root collar can lead to fungal problems.

Rex Bastian of The Care of Trees also cautions against running irrigation lines across tree roots. “Many system installers will simply cut the roots of a tree when installing irrigation,” he says. “Require the contractor to run the main line *outside* the drip line, and run the branches toward the trunk of the tree like spokes on a wheel. Install a directional head that waters away from the tree trunk to avoid problems.”

Established trees generally don’t need much supplemental fertilizer, but with new roots to feed, you may want to add a balanced slow-release fertilizer (10-10-10 is fine) or compost tea at the time you install your new planting. Once the new planting is established, you can apply fertilizer a couple of times a growing season or amend the bed annually with compost or other organic matter. —D.O.



Small bulbs such as glory of the snow (*Chionodoxa* spp.), shown here growing under a river birch, are good choices for planting in shallow soil under trees.

## Resources

**International Society of Arboriculture**, Champaign, IL. (888) 472-8733. [www.isa-arbor.com](http://www.isa-arbor.com)

**Tree Care Industry Association**, Manchester, NH. (800) 733-2622. [www.natlarb.com](http://www.natlarb.com).

**Arboriculture Care of Trees, Shrubs, and Vines in the Landscape** by Richard Harris. Prentice-Hall Inc., Englewood Cliffs, New Jersey, 1983.

**Principles and Practices of Planting Trees and Shrubs** by Gary W. Watson. International Society of Arboriculture, Champaign, Illinois, 1997.

**Trees and Development: A Technical Guide to Preservation of Trees During Development** by James R. Clark and Nelda Matheny. International Society of Arboriculture, Champaign, Illinois, 1998.

**Trees in the Urban Landscape** by Peter Trowbridge and Nina Bassuk. Wiley, New York, New York, 2004.

needs of the new plants with those of the tree or trees they are going to accent. This is important because as you try to get your new garden established, you might wind up overwatering an existing tree that does not like wet soils. Trees such as birches, alders, bald cypresses, and some maples will thrive in moist soils, but most others do not.

Thirsty trees tend to quickly absorb water in their root zone, leading to the dreaded gardening challenge known as “dry shade” (see the list of plants adapted to dry shade on page 40). Soil moisture levels are also affected by the “rain shadow” cast by different trees; dense-canopied trees such as maple, beech, pear, pine, and spruce tend to divert water toward their drip lines.

Dense-canopied trees also cast heavier shade than open-canopied trees, which means you have a narrower choice of plants adapted to grow underneath them. To let through more light, your main op-



Johnny jump-ups add fresh color to a bed beneath these quaking aspens in an Oregon garden.

tions are to limb the tree up (remove some of the lowest branches) or have its canopy “thinned” by a certified arborist.

### PLANT SELECTION

In general, shallow-rooted herbaceous perennials, bulbs, and ground covers are best suited to sharing soil space with existing tree roots because they need less growing medium and will not require the digging of large holes around the tree.


Small bulbs such as crocuses, snowdrops (*Galanthus* spp.), *Iris reticulata*, and hardy cyclamen (*Cyclamen* spp.) only need to be planted a couple of inches deep (or covered to that depth with new soil) and can be easily integrated between roots. Rhizomatous or shallow-rooted ground covers like hardy gingers (*Asarum* spp.), Allegheny spurge (*Pachysandra procumbens*), crested iris (*Iris cristata*), foamflowers (*Tiarella* spp.), and some ferns are also ideal for such sites as long as the soil remains somewhat moist.

Because they need to be replaced frequently, annuals are not the best choice under shallow-rooted trees, notes Bonnie Appleton, an Extension horticulturist at Virginia Polytechnic and State University in Blacksburg. Digging fresh planting holes every year has the potential to cause ongoing root damage to the tree.

Two to four inches of soil is not deep enough to successfully plant shrubs with larger root balls. “There is no good way to incorporate a lot of large plants close under a tree without doing long-term damage to the tree,” says Nina Bassuk, a horticulture professor at Cornell University.

If you are set on planting shrubs underneath a tree, your best bet is to plant them in phases over several growing seasons. This provides the tree with some recovery time from root disturbance.

If you are planting a bed of mixed shrubs and perennials, consider planting perennials closest to the tree trunk, then gradually integrating shrubs as you get further away from the tree’s major roots.

Remember, arboriculture, like gardening, is both an art and science, so there’s no magic-bullet solution or rule of thumb that covers every situation. But you’ll have better results with both your trees and garden plants if you take tree-root health into account before putting shovel to earth. When in doubt, consult a professional arborist rather than make a costly mistake or risk the loss of a treasured tree. 

*David Oettinger is the senior urban forester with Paul Cowie & Associates, an arboriculture and urban forestry consulting firm in Montville, New Jersey.*



AMERICAN  
HORTICULTURAL  
SOCIETY

# Join us now to take advantage of the many benefits of membership in the American Horticultural Society

## As an AHS member, you get

**The American Gardener** Our beautiful full-color bi-monthly magazine offers in-depth articles written by plant and gardening experts and enthusiasts.

**Free Admission or special discounts** to 170 public gardens and flower and garden shows across the United States and Canada.

**Free Seed Exchange Program** AHS's annual seed exchange program enables members to obtain hundreds of uncommon varieties of seeds.

**Travel Study Program** AHS and the Leonard Haertter Travel Company offer superb national and international garden-based, educational tours to beautiful private and public gardens in the United States and abroad.

**Special invitations** to educational programs such as the AHS Garden Schools and AHS partner events that include the Epcot International Flower & Garden Festival and the Colonial Williamsburg Foundation Garden Symposium.

**AHS Online** Our Web site ([www.ahs.org](http://www.ahs.org)) contains a wealth of information, including articles from *The American Gardener*, members-only pages with special information and updates, and links to other prominent gardening sites.

## Your membership also supports our many national programs

**George Washington's River Farm** The AHS's National Headquarters is located on a scenic 25-acre site overlooking the Potomac River. Formerly one of our First President's farms, the property now features an artful blend of naturalistic and formal gardens that offer year-round delight to visitors of all ages.

**National Children and Youth Garden Symposium** Since 1993, this annual program has led the way in promoting the value of children's gardens and garden-based education.

**The Growing Connection** This innovative educational program teaches children about the science of growing food plants and their role in a healthy diet.

**Online Gardening Courses** Enroll in state-of-the-art online garden classes through AHS's partnership with the Horticultural Gardening Institute of Michigan State University.

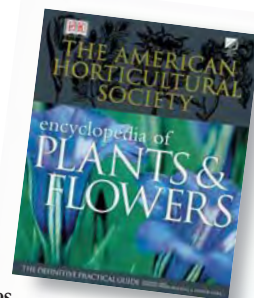
**Heat Tolerance Map** In 1997, AHS introduced the AHS Plant Heat Zone Map, which has revolutionized the way American gardeners select region-appropriate plants.

**Book Program** AHS and DK Publishing, Inc., have teamed up to create a definitive horticultural reference library for the 21st century.

**SMARTGARDEN™** Launched in 2000, this AHS program uses existing tools, such as the USDA Plant Hardiness and AHS Plant Heat Zone codes, and considers new criteria to develop guidelines that best reinforce our stewardship of the earth.

**Horticultural Intern Program** Horticulture students from around the country get hands-on experience in garden maintenance and design and an opportunity to work with leading gardening experts.

**National Awards Program** The Great American Gardeners Awards recognizes individuals and organizations who have made significant contributions to horticulture. The Flower Show Awards spotlight earth-friendly garden displays at flower shows. Noteworthy garden books are the focus for our Book Awards program.



## Annual Membership Levels

Annual membership in the American Horticultural Society, including six issues of *The American Gardener* magazine and all the benefits described on this page, is available at the following levels:

- \$35 Individual
- \$50 Family
- \$50 International
- \$1,000 President's Council
- Corporate Membership (contact our office)
- Horticultural Partner (contact our office)

Please join the AHS family.  
To become a member, call (703) 768-5700  
or visit us at [www.ahs.org](http://www.ahs.org)

# Forget Plants—Dream of Design

*This is the seventh article of an ongoing series on garden design.*

**I**N THE LAST ISSUE we discussed how creating a program statement can serve as a blueprint for the garden. Assuming you have now successfully collected, compiled, and summarized your hopes for your garden, what do you do next? How do you take your needs, dreams, and budget—in short, your vision—and turn them into reality?

The next step in the process is critical, because, having put all this creative energy into planning the garden, it is all too easy to lose focus on the Big Picture and start delving into the specific. Many gardeners, confronted with an empty expanse of space, immediately abandon the ideas generated in the program statement and start buying, begging, and borrowing PLANTS, PLANTS, PLANTS! They may have no idea where they want to put them or how the plants will relate to, much less realize, the garden design. Filled with a horticultural fervor bordering on mania, gardeners unwisely make important aesthetic decisions in the heat of passion, often at a nursery far in distance as well as concept from their own gardens.

Does this sound familiar? Be honest. Do you have CHAD (Compulsive Horticultural Acquisition Disorder)? Has your garden become something of a slightly haphazard agglomeration of fantastic horticultural what-nots without which you once thought you could not live? Many impulse-based gardens have exceptional components, but they often lack cohesion and an overall unity of aesthetic and functional purpose. This is because they are evolving in a reverse manner. The gardener is starting with disparate pieces and attempting to mold them into some sort of whole, based on mere hints the pieces might (or might not) suggest.

The difficulty with the CHAD-affected approach is it often fails to create a compelling garden. It absorbs time and effort as the gardener repeatedly moves plants into ever “better” locations in the hopes of locating the “right” spot. It wastes money as the gardener continuously buys more plants, paving, or pots only to find them useless or out of place. Worse, it undermines the gardener’s morale and enthusiasm as he or she follows fad after trend in the vain hope of finding salvation.

## BACK TO THE PROGRAM

Here’s where the program statement proves its worth and rewards you for the time you spent in its development. The Pro-



gram outlines the Big Picture, but does not directly explain specifically what to construct or to plant in different locations. The trick is to leave the possibilities open, not to shut the process down by jumping to the specific too rapidly.

Plants, ironically, are an impediment during the beginning stages of designing. A garden is much more than a collection or assemblage of plants, it is the concrete manifestation of your ideas and your life, in short who you are and what you do. A program statement focuses on space and function and thus is able to help the gardener overcome CHAD and get on with creating a garden.

So, hard as it may seem, try to forget the plants a little longer. Instead, think about how to realize the spaces and spatial sequences you want your garden to contain.

## VISUALIZING PLANT FORMS

When you look at plants, try not to see the plant itself, but to comprehend its core design characteristics—its form, line, color, scent, and texture, among other sensual factors. Consider what the design intent calls for, such as a mass of spiky textured forms with overall rounded outlines highlighted against a purple backdrop. You might also want a flash of yellow foliage to contrast against the purple. This seems simple, bold, and “right” in terms of the

overall garden, so only now should you consider specific plants.

You might achieve the spiky, mounded, yellow mass with any of the following: *Yucca flaccida* 'Golden Sword' or 'Color Guard', *Yucca gloriosa* 'Variegata', *Iris pallida* 'Aurea Variegata', or even a *Phormium* cultivar kept outside for the summer and overwintered in a sunny room. At this point, it really does not matter. The purple background might be a clipped hedge of *Fagus sylvatica* 'Atropunicea,' a line of *Berberis thunbergii* 'Atropurpurea', or a casual mass of *Weigela florida* 'Wine and Roses'. The point is: Several or even many different plants are able to support a specific aesthetic goal. You just need to keep an open mind and follow the program.

Your final selection depends on many factors. Additional aesthetic considerations might suggest the spiky mass should be evergreen, thus weighing in favor of the yuccas. Low maintenance needs would point you to barberries (*Berberis* spp.) or weigelas for the background. If the background should be both purple and evergreen, you may have to rethink the design intent and select the more important characteristic of the two. However, if you are lucky enough to live in the Deep South, you could have both in *Loropetalum chinense* var. *rubrum* 'Zhuzhou Fuchsia'. Again, the design intent is more important than—and guides the selection of—the individual plants.

### ENCLOSING SPACES

You also want to contemplate how to shape and enclose spaces and subspaces. Again, plants are a vital means to the end of garden making, not precious objects unto themselves. You may decide to wrap a private seating garden in a six- to seven-foot evergreen mass, tall enough to provide all-season screening, but not tall enough to seem claustrophobic. A fine to medium texture seems appropriate to the intimate scale of the space; bold foliage might seem overwhelming and a dark green color, especially in the winter, is very desirable. Selections of false cypress (*Chamaecyparis* spp.), hollies (*Ilex* spp.), false hollies (*Osmanthus* spp.), yews (*Taxus* spp.), and arborvitae (*Thuja* spp.) are all evergreen and fine to medium in leaf texture.

A shaded garden site greatly limits—but also, mercifully, focuses—plant selection. Suitable choices might include *Taxus x media* 'Hicksii' or perhaps American holly (*Ilex opaca*). The yew is easy to keep at a six- to seven-foot height and responds well to pruning, even shearing. The American holly may not be as amenable as the yew, so yew is the first choice. If, for some reason, the yew fails, you can substitute the holly if the evergreen enclosure is key to the design. Or you may change your design intent. Either way, the yew is dead; long live the design intent!

A strong program statement allows for flexibility within the overall design and allows the garden to evolve with time and changing conditions, functions, and needs. It forces the plants to support the designed garden instead of having the garden follow the eccentric whims of ongoing plant acquisition. Design, in short, provides plants with a purpose.

In the next issue, we will explore how relying too heavily on particular garden styles can have a severely limiting effect on the realization of your unique design intent. ☺

*Tres Fromme is a landscape designer at Longwood Gardens in Kennett Square, Pennsylvania.*

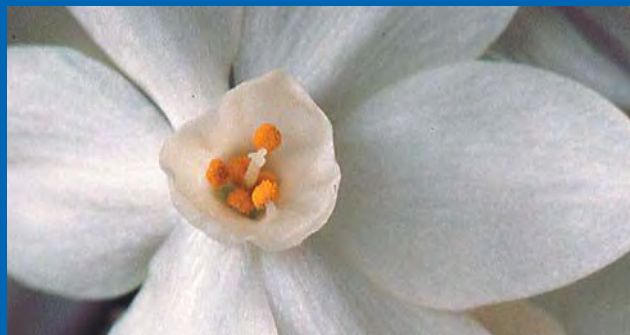
## Help Us Recover America's Vanishing Flora



Center for  
**PLANT**  
Conservation

[www.centerforplantconservation.org](http://www.centerforplantconservation.org)  
(314) 577-9540 • [cpc@mobot.org](mailto:cpc@mobot.org)

### AHS President's Council Philadelphia Flower Show and Gardens Tour March 3-5, 2005



**Exclusively for AHS President's Council Members**, this excursion will include special tours of the must-see gardens in the Philadelphia area as well as a chance to attend the pre-opening



party at the Philadelphia Flower Show. AHS has partnered with the Show on the entrance exhibit featuring restored historic White House gates on loan from AHS—the theme "America the Beautiful" says it all.

For more information on this tour, or to find out how to join the President's Council, call Joe Lamoglia at (703) 768-5700 ext. 115.

## Horticultural News and Research Important to American Gardeners

### GARDEN TRENDS IN 2005

In case you're wondering how to keep up with the Joneses this year, we polled several movers and shakers in the garden industry around the country to get their thoughts on gardening trends.

The garden is shrinking, says Susan McCoy, whose Philadelphia-based Garden Media Group surveys garden trends in the United States. "With less horizontal space," says McCoy, "our need to garden *up* is growing."



**Bold-leaved plants, like cannas (above), are expected to stay "on trend" for 2005.**

"Small yards require plants that are columnar or stay a more modest size," says Ann Murphy, director of marketing for the Oregon Association of Nurseries. She adds that gardeners are putting less emphasis on flowers and instead looking for plants that offer "colorful bark and leaf texture."

Not to mention "foliage, foliage, foliage," on such plants as *Physocarpus opulifolius* 'Diablo' and *Cotinus* 'Golden Spirit', notes Tom Fischer, acquisitions editor at Timber Press in Portland, Oregon. He adds that gardeners are also achieving season-long interest with "glamorous foliage plants." "Everybody is getting into huge, bold tropical plants," agrees Jim Adams, curator of the National Herb Garden.

Colorado garden writer Lauren Springer Ogden sees a negative industry trend in growers who "homogenize products endlessly" and flood the market with "trademarked, tissue-cultured plants without species names." On the positive side, she finds "advanced gardening information becoming more regionally attuned and specific."

Better information makes for better-informed gardeners who are aware of "the damage that invasive species are causing throughout North America," notes Fischer. "The reaction to this has been an increased interest in native plants."

"Native plants are still big, with a focus on selected cultivars," agrees Tony Avent of Plant Delights Nursery in Raleigh, North Carolina. It is also becoming easier to find unusual natives and other rarities, says Ogden, through the Internet.

### THE ALL AMERICANS

All-America Selections (AAS) is an international, independent testing organization for flowers and vegetables grown from seed. Their stated mission is: "To promote new garden seed varieties with superior garden performance judged in impartial trials in North America."

Since its founding in 1932, hundreds of new varieties of flowers and vegetables have been grown in AAS trial gardens

across the United States and Canada. Independent judges evaluate each variety, with superior performers selected as AAS Winners. Here are this year's winners:

**Eggplant 'Fairy Tale'** (Zones II, I2-I). A diminutive plant that produces miniature, sweetly flavored eggplants that are white with violet-purple stripes.

**Tomato 'Sugary'** (Zones II-15, I2-I). This indeterminate tomato produces abundant small, dark pink, extremely sweet-flavored fruit that resists cracking.

**Winter squash 'Bonbon'** (Zones 8-II, 7-I). Its semi-bush habit means that this squash requires less room than older varieties, producing dark green silver-striped fruit with sweet, thick orange flesh.

**Gaillardia aristata 'Arizona Sun'** (Zones 3-8, 8-I). Blooming the first year from seed, this perennial produces three-inch-wide, mahogany-red flowers with yellow tips.

**Catharanthus roseus 'First Kiss Blueberry'** (Zones I2-15, I2-I). The first blue flowered vinca, it bears two-inch, violet-blue flowers with a darker eye on compact plants.

**Zinna elegans 'Magellan Coral'** (Zones 0-0, I2-I). This undemanding plant produces five- to six-inch, double flowers with coral petals. Flowering begins early and continues all growing season.



'Bonbon' squash and 'Magellan Coral' zinnia are among the AAS best picks for 2005.

To find retail sources for these AAS winners, visit [www.allamericaselections.org](http://www.allamericaselections.org).

### LENTEN ROSE IS PERENNIAL WINNER

Every year Perennial Plant Association (PPA) members nominate perennials for the honor of Plant of the Year. After narrowing candidates down to four, members voted in the Lenten rose (*Helleborus xhybridus*) as the 2005 winner.

The recognition couldn't have gone to a nicer plant or to one with attributes that more perfectly fulfill the requirements for selection—that it be widely adaptable, low-maintenance, easily propagated, and showy in several seasons.

Flowering in late winter to early spring, the Lenten rose has showy seedpods that persist into summer and a handsome, 18-inch tall bushel basket of evergreen foliage. Unfussy about soil and extremely adaptable (USDA Zones 5–9, AHS Zones 9–5), it asks only for a little protection from harsh sunlight.

### VIRTUAL WILDLIFE UNIVERSITY

The National Wildlife Federation is offering online courses through its Web site Wildlife University ([www.nwf.org/wildlifeuniversity](http://www.nwf.org/wildlifeuniversity)). Students may take courses for personal enrichment free of charge. Those wishing credit toward an undergraduate or graduate degree, continuing education units (CEUs), or service learning credits pay a \$75 per credit hour fee.

Among the offerings is "Creating Places for Wildlife," a series of seven courses that teaches how to attract a wide variety of wildlife to a backyard, a schoolyard, or an area of the community. Each course contains online presentations, downloadable study guides, and recommended activities.

### NEW WEB SITE FOR VEGETABLE VARIETIES

An innovative new tool for vegetable gardeners is Cornell University's recently launched Web site, "Vegetable Varieties for Gardeners" ([www.cce.cornell.edu/veg](http://www.cce.cornell.edu/veg)), which allows users to compare over 2,000 vegetable varieties and determine which is best suited to their needs and conditions. Variety profiles include brief descriptions, days to maturity, and links to seed sources.

Visitors to the site are invited to register and rate each variety based on a five-point system for taste, yield, ease/reliability,

## Hurricanes Hit Florida Gardens

When Hurricanes Charley, Frances, Ivan, and Jeanne swept across Florida last August and September, they wreaked havoc on some of Florida's botanical gardens. With clean up well underway, the gardens are taking stock of the damage and making plans for the future.

One of the hardest hit was Bok Sanctuary in Lake Wales. "Lake Wales," says director of marketing Cindy Turner, "was at the crossroads of Charley, Frances, and Jeanne and even got the rains from Ivan." The worst was Charley, which left organic debris, on average, four feet deep strewn throughout the gardens. The largest tree in the garden, a 100-year-old oak, was torn up by its roots.

Several State Champion trees were uprooted and are down at the McKee Botanical Garden in Vero Beach. In Orlando, at the Harry P. Leu Gardens, "the total number of trees lost was 130," says Director

Robert E. Bowden. "The cost of disaster-debris removal was \$232,00."

Some smaller trees at Tampa's University of South Florida Botanic Garden were blown over or drowned when lake water rose. In addition, "a spreading, 40 foot bunya-bunya (*Araucaria bidwillii*) with a three-foot trunk came down," says Director Laurie Walker. When it went down, it took six cycads and palms with it. And the bromeliad collection, once protected in the shade of its spreading branches, was left to the mercy of the Florida sun.

Helping the gardens move forward through the aftermath of these storms was an army of volunteers who gave freely of their time and efforts. "In addition to staff and community volunteers," says Bowden, "help came from other botanical gardens as far away as Cheekwood in Tennessee."

Perhaps that is why there's a tendency to look at the glass as half full. Leu Gardens is taking what it has learned to the community. "We've been talking about trees such as *Magnolia grandiflora* that can withstand hurricanes," says Bowden. The garden has published a list of hurricane-resistant plants on its Web site ([www.leugardens.org](http://www.leugardens.org)).

There is also the sense that losses have, literally, opened up options. "We were a very shaded garden and our plant palette could not be as diverse," says Turner. "In nature, disturbance is natural and necessary to open up new opportunities," says Walker. "It's a great research opportunity and allows us to diversify our collection," says Bowden.



This tree near the South Gazebo at Leu Gardens in Orlando was one of many felled by the hurricanes.

and overall quality, and to offer additional comments and observations. This input is then incorporated for the benefit of other gardeners.

“Gardeners look to us for recommendations. But we can’t test all these varieties,” says Lori Bushway, coordinator of the Vegetable Variety Citizen Science Project. The Web site provides a forum for sharing the experiences of many backyard vegetable growers. “Our goal,” says Bushway, “is to connect gardeners with their neighbors and others who have similar growing conditions to help them pick winners for their garden.”

As one might expect with a new launch, not all varieties have been reviewed, and few presently have more than four reviews. But as more people learn about the site and contribute their input to the information pool, its utility will grow.

In the meantime, the profiles will help vegetable growers compare varieties and locate sources. As Marcia Eames-Sheavly, senior extension associate in Cornell University’s Department of Horticulture, explains, “If you’re looking for a paste

## PEOPLE and PLACES in the NEWS

As a symbol of friendship between the people of China and the United States, a 12-acre classical Chinese garden is planned at the **United States National Arboretum** in Washington, D.C. “The new garden will deepen the American people’s understanding of Chinese garden culture and provide research opportunities to study Chinese plants and flowers,” says former Agriculture Secretary Ann M. Veneman of the garden, which is expected to be completed by 2006. ☺

tomato, the site lists more than 25—traditional heirlooms and the latest hybrids—in a range of sizes and colors from red to yellow to gold to pink.”

### GARDENERS NEEDED FOR BIRD COUNT

The Cornell Lab of Ornithology, the National Audubon Society, and storeowners

of Wild Birds Unlimited invite gardeners to participate in the 8th Annual Great Backyard Bird Count.

The bird count will be held the week-end of February 18 to 21 in backyards, schoolyards, local parks—anywhere birds can be seen. Participants are asked to note the numbers of each bird species they see and report their observations over the Internet, to participating local libraries, or to Wild Birds Unlimited stores.



Last year’s people across the country submitted almost 50,000 checklists totaling more than four million birds of 512 species. The count documented a decline of the American crow in some regions that may be the result of West Nile virus.

To participate in the bird count, visit [www.birdsource.org](http://www.birdsource.org). ☺

*Written by Associate Editor Carole Ottesen and Contributing Editor Rita Pelczar*

COURTESY OF FISH AND WILDLIFE SERVICE



*Colonial Williamsburg®*

59TH GARDEN  
SYMPOSIUM

INSPIRING IDEAS  
FOR THE  
HOME GARDENER

*April 3–5, 2005*

© 2004 The Colonial Williamsburg Foundation

Join expert horticulturists, designers and Colonial Williamsburg landscape professionals as they discuss garden design and recommend plants that will inspire you to start planting next spring.

CO-SPONSORED BY  
*fine* Gardening &  
AMERICAN HORTICULTURAL SOCIETY

For program information,  
call: 800-603-0948  
email: [dchapman@cwf.org](mailto:dchapman@cwf.org)



# Incredible Discoveries

Tune in to television's most exciting series of infomercial programs featuring unique, unusual, fun and essential items.

Discover ways to enhance your lifestyle!

Flush Cut is a revolutionary reciprocating saw adapter that lets you cut almost anything with zero clearance. Cut behind trim. Slice behind framing members. Saw underneath fixed objects quickly, easily and without breaking blades. The Flush Cut Adapter works with almost all major brands of reciprocating saws: Dewalt, Porter Cable, Makita, Milwaukee Sawzall, Bosch and many more. Flush Cut is made in the USA of professional grade hand crafted steel. It is reversible and can easily make cuts from the right or left side. The blade can be reversed so that you can make your cuts in either an upward or downward direction. Flush Cut is tough enough to handle the most rugged demolition jobs, yet precise enough to handle the most delicate finishing jobs. Along with the Flush Cut Adapter, the complete Flush Cut line includes the Pro Sander, which gives you a professionally sanded finish in the hardest to reach areas, and the Pro Rasp Adapter that easily delivers amazing rasping and filing results in places you never imagined possible. Featured in countless magazines and TV news programs, Flush Cut is quickly becoming the tool of choice for professional and amateur craftsmen everywhere.



The residential and commercial landscaping industry is in an absolute boom. More homeowners and businesses are spending more money than ever before on the exterior appearance of their properties. Concrete curbing is a major solution to several problems facing the landscape business today, and Tygar Manufacturing, producers of the Tygar Curbing System is one of the major players in the business. Tygar is looking for partners to join in its growing business. When you become a Tygar Curbing System partner, you will receive hands-on training in every facet of the concrete curbing business from business start-up and finance to field operations and marketing. When you become a customer of Tygar manufacturing as an independent business operator, you also become a partner with a lifetime of support. Tygar Manufacturing is committed to providing entrepreneurs the opportunity to establish a successful business with quality machinery and enduring support system. It is Tygar's goal to share their wealth of knowledge in the concrete curbing industry with those who are ready to realize their own dreams of independent business ownership.

The Eazy Mow lawn mower conversion kit turns any walk-behind push or self-propelled lawn mower regardless of age, model or manufacturer into a zero-turn lawn mower that saves you time and physical labor when you mow your lawn. Eazy Mow provides almost feather-light maneuvering, so you can pivot your mower 360 degrees in a full circle for quick easy turns and no more pulling your mower backwards. With Eazy Mow even the most difficult trim areas of your lawn such as your sidewalk edging and garden beds are a cinch to mow. Easy to install with no special tools required, Eazy Mow turns your walk-behind lawn into a professional grade swivel mower that costs several times more. Eazy Mow is available for \$69.95 plus S&H.



Call toll-free **1-800-964-6537**  
to order one of these Incredible Discoveries!



## The Little Greenhouse in the Mountains

by Jodi Torpey

**A**T THE BEGINNING of the school year, Jeffrey stood in front of his seventh grade class and talked about the “miracle of abundance”—a lesson he learned from a handful of morning glory seeds. These seeds had sprouted and grown up onto trellises at the entrance of the initial Global Children’s Gardens greenhouse in Evergreen, Colorado. Situated on the edge of a 1,000-acre forest, this uniquely designed greenhouse helps children like Jeffrey make connections with the natural world.

After a season of continuous blooming, the morning glories produced enough seeds to share with other schools. As the mission of Global Children’s Gardens (GCG) is “to cultivate harmonious and mutually beneficial relationships among the children of the Earth through the wonders, wisdom, and nourishment of natural gardening,” the sharing of seeds, ideas, and other resources among children is key.

### FULFILLING A DREAM

GCG started as a dream in 1999. Allan Werthan, the founder and director of this nonprofit organization, wanted to help children cultivate a deeper appreciation for nature. He had experience working with kids aged 10 to 12, providing day hikes and overnight trips to explore the forest. “At some point, I recognized the need to go deeper with the experience,” Werthan says.

That vision started a five-year partnership with architect Richard Laws, designer of the original greenhouse. They worked on the greenhouse one day a week for four years. They named the greenhouse Gebo, after an ancient rune symbol they found at the site. *Gebo* means “the gift and sacrifice of harmonious relationships,” a fitting name for the greenhouse’s purpose.

Just before the spring planting season in 2003, a blizzard hit the mountain community, dropping 87 inches of snow and crushing the greenhouse. Despite this setback, Gebo was rebuilt in time for the 2004 growing season. From spring until fall, nearly 30 children from the community and the Evergreen Montessori school did all the planting, maintenance, and har-



**Above:** Gebo, the first greenhouse built by Global Children’s Gardens, features a labyrinth of raised growing beds and a small pond. Children from the community, left, pick a tomato they helped to grow in the greenhouse.

vesting. In addition to a variety of annual and perennial flowers, they planted potatoes, tomatoes, sugar snap peas, lettuces, beets, cucumbers, and beans.

In addition to good gardening practices, the children learned lessons that were only limited by their imagination.

For example, after a season working in the greenhouse, Claire told her class how impressed she was by plants “doing the absolute best they can no matter what they’re given to work with and without whining or complaining. They do the best they can all the time.”

### COMPLETING THE CYCLE

A main tenet of GCG is to continue the cycle by having each group of young gardeners help another group build a greenhouse. To achieve this objective, seeds and

plants grown in Gebo were sold at farmer's markets over the summer to help raise funds for the next two greenhouse projects—one at the Southern Ute Indian Academy in Ignacio, Colorado, and one



Allan Werthan, founder and director of GCG, helps a child see the wonders of plants.

on the Evergreen Montessori School grounds. "The children are excited to leave a legacy in the form of an ongoing greenhouse and gardening program at their school," says Werthan.

The schools are planning to exchange ideas, correspond by e-mail, and conduct student visits this spring and fall. Students will be involved in the entire process of the project, from site selection to design and construction. It will be their responsibility to plant, care for, and harvest their crops.

### SEEDS OF THE FUTURE

"The Global Children's Gardens name seems presumptuous now with only one greenhouse built and two in the planning stages," Werthan says. "But our intention is that the greenhouses will grow exponentially."

The nonprofit will act as a grantor organization, providing funding and support for other children's organizations to develop similar greenhouses and gardening programs. "We frequently receive requests for support from children's groups and help as much as we can," says Werthan. "Additional resources will accelerate the work we do, so donations are much appreciated."

Werthan would like to see gardening integrated into as many school curriculums as possible because it can serve as a

For more information on Global Children's Gardens, visit [www.globalchildrensgardens.com](http://www.globalchildrensgardens.com).

valuable teaching tool across a variety of disciplines.

### SOURCES OF INSPIRATION

Werthan discovered a host of kindred spirits when he attended the AHS National Children & Youth Garden Symposium in Ithaca, New York, last July. "It was most enlightening to find out I wasn't a lone wolf, but part of a growing movement in children's gardens," says Werthan. "Any time that people come together to focus on children and gardening, it is inspiring."

In Evergreen, Gebo waits out the long Colorado winter to teach the next group of students respect for nature, creative uses for the fruits of their labor, and many other important lessons.

*Jodi Torpey is a free-lance garden writer based in Denver, Colorado.*

COURTESY OF ASHLEY SPICER

**New Ideas. Fresh Techniques.**  
Discover the Horticulture Gardening Institute's face-to-face events and online programs.

The Art and Science of Container Gardening

The Art and Science of the SMARTGARDEN™

Herbaceous Perennials for Sun: Identification, Culture and Garden Attributes

Herbaceous Perennials for Shade: Identification, Culture and Garden Attributes

Programs feature national experts and help gardeners at all levels develop new skills. Visit us to learn more.

[www.gardeninginstitute.com](http://www.gardeninginstitute.com)

**"That's one smart garden!"**  
- Carol F., Greenwood IN

Join the 1000's of gardeners who praise the EarthBox  
**"It's simply the Easiest Garden Ever Developed!"**

- Gil Whitton, Host  
The National Lawn and Garden Show

**SO SIMPLE**  
There's no digging, weeding, or guessing. The EarthBox grows automatically - year after year.

**WORKS ANYWHERE**  
Your deck or patio - even *the back forty!* all you need is sunlight for fresh vegetables and herbs.

**MORE PRODUCTIVE**  
The EarthBox out produces any gardening method - with less water, less fertilizer and less care.

**100% NATURAL**  
No chemicals or expensive hydroponics. The EarthBox grows healthy produce, the way nature intended.

**ONLY \$29.95 + \$6.95 S&H**

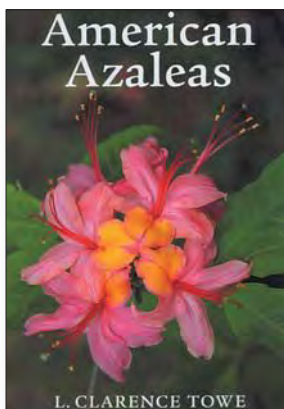
**Call NOW To Order 1-888-502-7336**  
Or mail your check to: Dept P-AH153  
P.O. Box 1966, St. Petersburg, FL 33731

## Recommendations for Your Gardening Library

### American Azaleas.

L. Clarence Towe. Timber Press, Portland, Oregon, 2004. 188 pages. Publisher's price, hardcover: \$39.95.

I HAVE RESEARCHED, grown, propagated, written, and spoken about North American native azaleas professionally for nearly three decades. During that time, I think I have read most of what has been written on the subject. L. Clarence Towe's book, *American Azaleas*, taught me things I did not yet know.



The reader does not have to be botanically adept to understand this book and the technical information is current and useful. Towe's species descriptions—a subject that can be quite confusing—are the most straightforward and most complete that I have seen in any book. His taxonomic groupings make excellent sense and his explanations of how to tell the species apart are clear and concise.

"Rhodoholics" and novices alike will appreciate the chapter on where to find these native plants growing in the wild and which ones are likely to be naturally occurring hybrids. The sections on landscaping with azaleas, azalea culture, and propagation contain good information. The section on hybridization is the best and most succinct handling of the subject I have seen. Towe's discussion on human-directed evolution of these species offers interesting fodder for even the most knowledgeable azalea enthusiast. The book includes valuable resources such as a list of existing cultivars as well as sources of plants.

Towe's relaxed and often humorous style makes for easy reading. An acknowledged azaleaphile for more than 25 years, he writes from both his experience and that of others. He obviously knows the giants and legends in this field personally such as Dr. August (Augie) Kehr, a renowned plant breeder, and Tom Dodd, III (also known as T3), notorious in rhododendron and nursery circles. His priceless anecdotes reflect their idiosyncrasies down to Augie's "curtain-back" propagation and T3's references to the Civil War as "the recent unpleasantness." Such insights are rare and to be savored, as is *American Azaleas*.

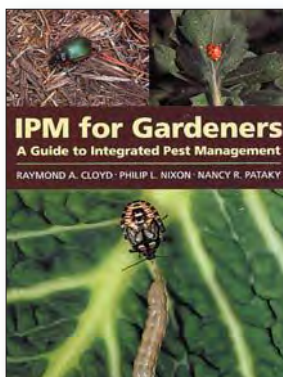
—Dick Bir

*Dick Bir is the author of Growing and Propagating Showy Native Woody Plants. He recently retired after exactly 25 years on the horticulture faculty at North Carolina State University.*

### IPM for Gardeners: A Guide to Integrated Pest Management.

Raymond A. Cloyd, Philip L. Nixon, and Nancy R. Pataky. Timber Press, Portland, Oregon, 2004. 204 pages. Publisher's price, hardcover: \$27.95.

INTEGRATED PEST MANAGEMENT (IPM), a buzzword in the horticultural world, involves studying not only the pest, but also signs and symptoms of the pest. It is a landscape maintenance philosophy and practice that enhances plant health while reducing pesticide use. This book describes how to manage garden pests at home using the same IPM techniques that professionals do.



The authors, all professors at the University of Illinois, explain scientific principles in a succinct yet academic style. While the technical information may seem daunting at first, the authors do an excellent job of defining terms—in fact, the appendices include a glossary. The book clearly conveys

the core IPM approach, which is to minimize pest problems "by assessing the needs of plants, pests, and organisms in the landscape." The focus is on pest prevention, early diagnosis, monitoring ("scouting"), and a combination of control strategies.

Beginning with the premise that "healthy plant growth... is one deterrent to plant problems," the authors address genetics, nutrition, water, and environmental stress. Nearly 150 color plates reinforce pest and symptom recognition. Armed with this knowledge, the reader becomes a "better judge on whether the potential damage justifies management." As the authors note, sometimes "doing nothing" is a viable control option.

The second half of the book discusses the major pest control strategies used in IPM: cultural, physical, biological, and chemical. The authors advocate the use of pest-resistant varieties, proper plant placement, sanitation, and promoting naturally occurring beneficial organisms. Handy sidebars explain specific tactics for managing various pests and problems.

This book describes how to care for the landscape in a holistic fashion, with reduced impact on the environment. It will empower any gardener who desires to use IPM techniques successfully at home.

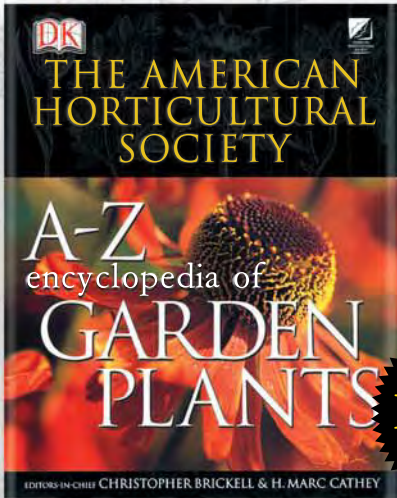
—Deborah Smith-Fiola

*An IPM consultant in Maryland, Deborah Smith-Fiola has worked in the landscape industry for 15 years. She is the author of Pest Resistant Ornamental Plants.*



# THE BEST TOOLS OF THE TRADE FOR YOUR GARDEN

Your perfect garden is only 3 steps away:



**NEW!**

## Step 1:

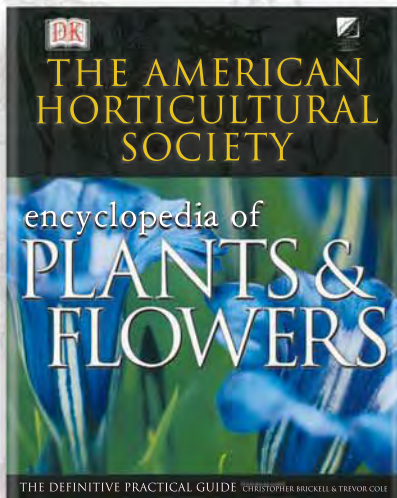
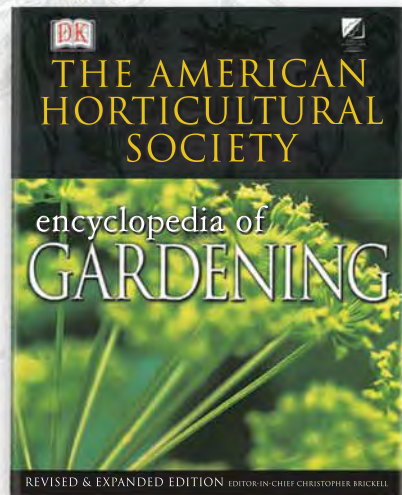
### Identify the best plants for your garden

A revised and updated edition with complete profiles of 15,000 plants and shrubs, their growth habits, height and spread, and geographical origin. Coming in October 2004.

## Step 2:

### Improve your gardening techniques to obtain the best results

More than 400 step-by-step sequences to troubleshoot any problem, from preparation and landscaping to frost control and water conservation.



## Step 3:

### Expand and add color and variety

More than 8,000 plants and flowers, along with expert advice on cultivation, pests, and diseases.

## SETTING THE STANDARD IN GARDENING REFERENCE

Available wherever books are sold • For more great ideas visit [www.dk.com](http://www.dk.com) and sign up for our FREE newsletter



*A flock of sheep that leisurely pass by,  
One after one; the sound of rain, and bees  
Murmuring; the fall of rivers, winds and seas. . .*

—William Wordsworth



**Cotswold  
Sheep**

Garden treasures  
for all seasons . . .  
replica sculptures  
of the Charles Layland work  
at Morris Arboretum  
available exclusively  
for the discriminating gardener

To order by phone, call 215-247-5777 ext. 181

*The Gardens at Morris Arboretum*

100 Northwestern Avenue, Philadelphia, PA 19118  
215-247-5777 • morrisarboretum.org



**2005 "Gardener's" Calendar**

**\$6.95 (\$59.00 for 10) Postpaid**

**2004 Computer Screen Saver**

**\$10.00 Postpaid**

**13 prize color photos in both items**

**The Gardeners of America  
Men's Garden Club of America**

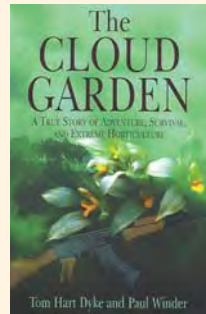
**Box 241**

**Johnston, IA 50131-0241**

**Phone: 515-278-0295**

**www.GardenersOfAmerica.org**

**F**OR AN ESCAPE from the winter doldrums, *The Cloud Garden: A True Story of Adventure, Survival, and Extreme Horticulture* by Tom Hart Dyke and Paul Winder (The Lyons Press, 2004, 336 pages, hardcover, \$22.95)



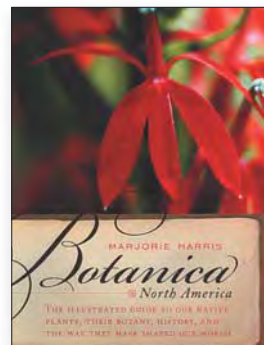
will transport readers into the steamy and dangerous jungles of Central America. A journey that starts out as a cock-eyed quest to see rare orchids becomes far more of an adventure—or rather, misadventure—than Englishmen Dyke or Winder anticipated when gun-toting guerillas take them hostage. Told with pure British panache, this riveting tale details their nine-month ordeal with a mixture of humor and suspense sure to keep readers breathlessly turning pages to the end.

—Viveka Neveln, Assistant Editor

**Botanica North America: The Illustrated Guide to Our Native Plants, Their Botany, History, and the Way They Have Shaped Our World.**

Marjorie Harris. HarperCollins Publishers Inc., New York, New York, 2003. 665 pages. Publisher's price, hardcover: \$59.95.

THOSE WHO ARE fascinated by the historical and ethnobotanical uses of native plants will enjoy this well-researched encyclopedic tome, which covers more than 400 North American plants. In the introduction, author Marjorie Harris avoids any possible confusion by explaining that she is defining a native plant as one "documented to have been in North America before European contact—about A.D. 1450."



The book is organized into sections by 10 major North American plant communities, including "Eastern Forests," "Swamps and Wetlands," "The Prairie," and "The Desert." A chapter on "The Three Sisters: Agriculture" covers crops domesticated by Native Americans.

Each region's ecologically and historically significant native plants are described in detail. Individual entries include the plant's botanical information, ethnobotanical lore, natural history, and uses today. Harris integrates passages from other works—even poetry—to highlight important facts and show historical perspective. More than 250 color photographs depict many of the described plants growing in their native habitat.

Although its size and weight make for cumbersome bedtime reading, this informative book is worth adding to the reference library for naturalists and gardeners interested in the history and lore connected with native plants.

—Bruce K. Riggs

*Bruce K. Riggs is president of the Mountain Top Arboretum in Tannersville, New York, and a volunteer judge for America in Bloom.*

## Tools and Techniques

**M**OST GARDENERS know what to do with tools such as trowels, hoses, and pruners—or at least *think* they know. The techniques used when wielding these and other tools can greatly affect the success of a garden. Here are a few books designed to acquaint gardeners with a variety of tools and the techniques for maximizing their usefulness.

As Susan Berry points out in her book, *The Essential Guide to Gardening Techniques* (Thunder Bay Press, 2002, hardcover, \$24.98), gardeners have a lot to figure out, such as “coming to grips with Latin plant names, discovering the best plants to choose for different types of soil and situations, and learning the seasonal maintenance requirements of the garden.” That’s why Berry created this comprehensive reference—to “make these tasks both pleasurable and inspirational, as well as simple to master.” Easy-to-understand instructions, colorful photos, and helpful illustrations guide readers through everything from pollination and propagation to performing a soil test and planning a garden. There’s even a plant directory, which lists both botanical and common names, sizes, cultural requirements, and includes a brief description of each plant.



One technique that deserves more in-depth study is pruning. When it comes to whacking up their woodies, many gardeners—even those with experience—could benefit from Cass Turnbull’s *Guide to Pruning: What, When, Where & How to Prune for a More Beautiful Garden* (Sasquatch Books, 2004, softcover, \$17.95). The author is the founder of PlantAmnesty, a somewhat tongue-in-cheek organization whose mission is to reduce and prevent “plant abuses” such as tree topping and other forms of “mal-pruning”—a term she coined for badly done pruning.

This well-written book explains all you ever wanted to know about pruning and includes helpful diagrams to illustrate various techniques. Part I covers the basics, while Part II offers a plant-by-plant guide to proper pruning.

The Brooklyn Botanic Garden (BBG) also offers some helpful advice on pruning in their handbook, *Pruning Trees, Shrubs & Vines* by Karan Davis Cutler (BBG, 2003, softcover, \$9.95). “Even if you’re not interested in becoming a pruning virtuoso, you don’t want to be a botanical butcher,” writes Cutler. This slim volume covers the basics of “making the cut,” instructing readers how to do more good than harm.

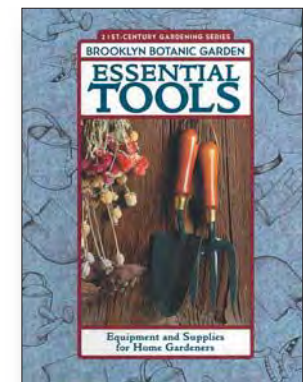
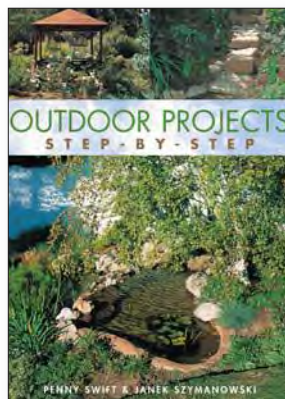


Speaking of pruning, many cutting implements exist to accomplish this task. To help gardeners decide which to choose, there’s *Essential Tools: Equipment and Supplies for Home Gardeners* (BBG, 2002, softcover, \$9.95). Since the word “tool” can have a broad definition, you’ll find practical information not



only on tools like pruners, but also on ornaments, clothing, books, and plenty of other not-so-obvious items. There’s even an interesting section in which several well-known gardeners divulge the six tools they couldn’t live without and why. Both books are available on the Brooklyn Botanical Garden Web site at [www.bbg.org](http://www.bbg.org), or by calling (718) 623-7826.

For the do-it-yourselfer, there’s *Outdoor Projects: Step-By-Step* by Penny Swift and Janek Szymanowski (The Lyons Press, 2003, softcover, \$19.95). This book explains the techniques for building a variety of garden features with stone, wood, and brick. According to the authors, “the options are endless and the materials diverse.” Regardless of your skill level in carpentry and masonry, there’s a project here to suit you. Clearly written step-by-step instructions accompanied by color photographs guide you in creating everything from a stone slab patio and simple bog garden to a trellis arbor and treehouse. Each project includes a list of the tools and materials needed to get the job done. Handy tips that help save time and ensure success are included with most projects.



—Viveka Neveln, Assistant Editor



## REGIONAL HAPPENINGS

# Horticultural Events from Around the Country

### NORTHEAST

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

JAN. 20–APR. 17. **Contemporary Photography and the Garden.** Exhibition. American Federation of Arts. The Middlebury College Museum of Art. Middlebury, Vermont. (802) 443-5007. [www.middlebury.edu/arts/museum](http://www.middlebury.edu/arts/museum).

**RAP** JAN. 25. **Plant-o-rama.** Trade show and symposium. Co-hosted by Metro Hort Group. Brooklyn Botanic Garden. Brooklyn, New York. (718) 623-7200. [www.bbg.org](http://www.bbg.org).

**RAP** JAN. 26. **The Balance Between Control and Release.** Garden design lecture. Wave Hill. Bronx, New York. (718) 549-3200. [www.wavehill.org](http://www.wavehill.org).

JAN. 31–FEB. 26. **Camellia Blooming Days.** Society for the Preservation of New England Antiquities. Lyman Estate. Waltham, Massachusetts. (781) 891-4882. [www.historicnewengland.org](http://www.historicnewengland.org).

**RAP** FEB. 6. **Understanding Botanical and Horticultural Names.** Class. Arnold Arboretum. Harvard University. Jamaica Plain, Massachusetts. (617) 524-1718. [www.arboretum.harvard.edu](http://www.arboretum.harvard.edu).

**RAP** FEB. 12. **Boundless Alpines.** Slide talk and garden walk. Wave Hill. Bronx, New York. (718) 549-3200. [www.wavehill.org](http://www.wavehill.org).

FEB. 17. **The Pollinator Partnership: Design & Plants for Pollinator Gardens.** Lecture by Holly Shimizu. New England Wild Flower Society. Garden in the Woods. Framingham, Massachusetts. (508) 877-7630. [www.newfs.org](http://www.newfs.org).

### MID-ATLANTIC

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

JAN. 15–MAR. 18. **Welcome Spring Display.** Longwood Gardens. Kennett Square, Pennsylvania. (610) 388-1000. [www.longwoodgardens.org](http://www.longwoodgardens.org).

**RAP** JAN. 21. **Spice It Up!** Herb workshop. Scott Arboretum of Swarthmore College. Swarthmore, Pennsylvania. (610) 328-8025. [www.scottarboretum.org](http://www.scottarboretum.org).

**RAP** JAN. 25. **Full Moon Hike.** U.S. National Arboretum. Washington, DC. (202) 245-2726. [www.usna.usda.gov](http://www.usna.usda.gov).

JAN. 31–FEB. 3. **Mid-Atlantic Horticulture**

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](http://www.ahs.org/events/reciprocal_events.htm).

**Short Course.** Oceanfront Ramada Plaza Resort Conference Center. Virginia Beach, Virginia. (757) 523-4734. [www.mahsc.org](http://www.mahsc.org).

**RAP** FEB. 10. **Tree Care Symposium.** Lewis Ginter Botanical Garden. Richmond, Virginia. (804) 262-9887. [www.lewisginter.org](http://www.lewisginter.org).

FEB. 11. **Pruning: A Basic Primer.** Demonstration. United States Botanic Garden. Washington, DC. (202) 226-4082. [www.usbg.gov](http://www.usbg.gov).

FEB. 12. **Orchid Festival Day.** Smithsonian's National Museum of Natural History. Washington, DC. (202) 357-2627. [www.mnh.si.edu](http://www.mnh.si.edu).

FEB. 17. **Land Ethics Symposium: Creative Approaches to Ecological Landscaping.** Bowman's Hill Wildflower Preserve. New Hope, Pennsylvania. (215) 862-2924. [www.bhwp.org](http://www.bhwp.org).

FEB. 24–27. **Maymont Flower & Garden Show.** Greater Richmond Convention Center. Richmond, Virginia. (804) 358-7166 ext. 314. [www.maymont.org](http://www.maymont.org).

**RAP** FEB. 26. **Eco Savvy Gardening.** Symposium. Green Spring Gardens. Alexandria, Virginia. (703) 642-5173. [www.greenspring.org](http://www.greenspring.org).

**Looking ahead**

**AHS** MAR. 6–13. **Philadelphia Flower Show.** Pennsylvania Convention Center. Philadelphia, Pennsylvania. (215) 988-8800. [www.theflowershow.com](http://www.theflowershow.com).

MAR. 10 & 11. **Enhancing Your Visitor's Experience.** Symposium. Longwood Graduate Program. Longwood Gardens, Chanticleer, and Winterthur. Winterthur, Delaware. (302)

831-2517. [www.udel.edu/LongwoodGrad](http://www.udel.edu/LongwoodGrad).

MAR. 12. **Residential Landscaping Workshop.** Maryland Cooperative Extension. College of Southern Maryland. La Plata, Maryland. (301) 934-5403. [www.agnr.umd.edu/users/charlesmg/](http://www.agnr.umd.edu/users/charlesmg/). (Pre-register by February 28.)

### SOUTHEAST

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

JAN. 21–23. **Southern Gardening Symposium.** Callaway Gardens. Pine Mountain, Georgia. (800) 225-5292. [www.callawayonline.com](http://www.callawayonline.com).

**RAP** JAN. 26. **Native Plant Symposium.** The State Botanical Garden of Georgia. Athens, Georgia. (706) 542-1244. [www.uga.edu/botgarden](http://www.uga.edu/botgarden).

JAN. 29. **Camellia Show & Sale.** Lakeland Camellia Society. Florida Southern College. Lakeland, Florida. (863) 640-3381.

**RAP** FEB. 5. **Annual Spring Perennial Symposium.** Co-sponsored by the Georgia Perennial Plant Association. Atlanta Botanical Garden. Atlanta, Georgia. (404) 591-1551. [www.atlantabotanicalgarden.org](http://www.atlantabotanicalgarden.org).

FEB. 11–13. **Camellia Show.** Birmingham Botanical Gardens. Birmingham, Alabama. (205) 414-3900. [www.bbgardens.org](http://www.bbgardens.org).

**RAP** FEB. 19. **Winter Tree Identification.** Lecture and tree walk. The State Botanical Garden of Georgia. Athens, Georgia. (706) 542-1244. [www.uga.edu/botgarden](http://www.uga.edu/botgarden).

FEB. 25–27. **Landscape Design Mini-Certificate.** Callaway Gardens. Pine Mountain, Georgia. (800) 225-5292. [www.callawayonline.com](http://www.callawayonline.com).

FEB. 28–MAR. 1. **Davidson Horticultural Symposium.** Davidson Garden Club. Davidson College. Davidson, North Carolina. (704) 892-6281. E-mail: [sugarden@aol.com](mailto:sugarden@aol.com).

**Looking ahead**

MAR. 3–6. **Nashville Lawn & Garden Show.** Tennessee State Fairgrounds. Nashville, Tennessee. (615) 876-7680. [www.nashvillelawnandgardenshow.com](http://www.nashvillelawnandgardenshow.com).

MAR. 4 & 5. **Hellebore Days.** Piccadilly Farm. Bishop, Georgia. (706) 769-6516.



## “Orchid Daze” at Atlanta Botanical Garden

AT THE perfect time for winter-weary gardeners, the Fuqua Orchid Center at the Atlanta Botanical Garden (ABG) is showcasing beautiful, rare, and fragrant orchids from around the world in a unique exhibit known as “Orchid Daze.” The event will run from February 5 to April 3 to take advantage of the peak orchid-blooming season. ABG invites visitors to immerse themselves in the lush environment of the Orchid Center, and to be “enveloped by the dizzyingly floral and spicy scents of orchids, with their dazzlingly colorful and romantic flowers.”

ABG Orchid Curator and Exhibit Designer Becky Brinkman says, “This year’s ‘Orchid Daze: Hypnotic Exotics’ is all about color and fragrance. I drew on orchids from our collection of more than 1,000 different species.” Through the AHS Reciprocal Admissions Program, AHS members get free entrance to ABG if they show a current member card.

In addition, three “Orchid Nights” are scheduled for February 23, March 9, and March 23. These candlelit evening events will feature live music and culinary fare from Atlanta’s celebrity chefs. Admission is \$20 for individuals or two for \$35, but AHS members qualify for a discounted individual rate of \$15 and \$30 for two.

For a unique Valentine’s Day, the Fuqua Orchid Center will host a special celebration on Saturday, February 12. Music, champagne, and an extravaganza of chocolates will enhance the romantic surroundings of fragrant and colorful orchids. Admission to Valentine’s Orchid Night is the same as for the other Orchid Nights.

To make reservations for any of the four evenings, call (404) 876-5859 ext. 1721. Visit [www.atlantabotanicalgarden.org](http://www.atlantabotanicalgarden.org) for more information about “Orchid Daze” and the Fuqua Orchid Center.

—Viveka Neveln, Assistant Editor



*Trichopilia suavis* from South America will be among the orchids at the Fuqua Orchid Center.

### NORTH CENTRAL

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

**RAP** JAN. 15–FEB. 6. **WinterBlooms.** Orchid show and sale. Holden Arboretum. Kirtland, Ohio. (440) 946-4400. [www.holdenarb.org](http://www.holdenarb.org).

JAN. 19–21. **Mid-America Horticultural Trade Show.** Lakeside Center at McCormick Place. Chicago, Illinois. (800) 462-4769. [www.midam.org](http://www.midam.org).

JAN. 22. **Toward Harmony With Nature Conference.** Fox Valley Area Chapter of Wild Ones. Oshkosh, Wisconsin. (920) 987-5587. [www.for-wild.org](http://www.for-wild.org).

**RAP** JAN. 22 & 23. **The Orchid Show.** Grand Valley Orchid Society. Frederik Meijer Gardens & Sculpture Park. Grand Rapids, Michigan. (616) 957-1580. [www.meijergardens.org](http://www.meijergardens.org).

**AHS / RAP** JAN. 26. **Annuals and Perennials for the Northern Garden.** Lecture by Allan M. Armitage. Cleveland Botanical Garden. Cleveland, Ohio. (216) 721-1600. [www.cb garden.org](http://www.cb garden.org).

**RAP** FEB. 11–MAR. 20. **Orchid Mania.** Display and workshops. Cleveland Botanical Garden. Cleveland, Ohio. (216) 721-1600. [www.cb garden.org](http://www.cb garden.org).

**RAP** FEB. 13. **How to Plant Perennials to Highlight Your Lilies.** Lecture. Chicago Botanic Garden. Glencoe, Illinois. (847) 835-5440. [www.chicagobotanic.org](http://www.chicagobotanic.org).

FEB. 16. **The Art and Science of Container Gardening.** The Horticulture Gardening Institute. Traverse City, Michigan. (517) 353-3123. [www.gardeninginstitute.com](http://www.gardeninginstitute.com).

FEB. 24–27. **Ford Field Home & Garden Show.** Detroit, Michigan. (800) 328-6550. [www.fordfieldhomeshow.com](http://www.fordfieldhomeshow.com).

**AHS / RAP** FEB. 26. **Dynamic Duos: Plants and Pollinators.** Lecture by Holly Shimizu. Cleveland Botanical Garden. Cleveland, Ohio. (216) 721-1600. [www.cb garden.org](http://www.cb garden.org).

FEB. 26–MAR. 6. **The Central Ohio Home & Garden Show.** Ohio Expo Center. Columbus, Ohio. (614) 461-5257. [www.dispatchevents.com](http://www.dispatchevents.com).

## Cultivate Your Checkbook

Now you can support the American Horticultural Society with every check you write.

**FREE**  
Shipping & Handling



American Horticultural Society Checks

AHS Address Labels



- 10% from each purchase goes directly to AHS.
- Our checks meet all U.S. bank standards and are guaranteed to work with your bank.
- 100% Satisfaction Guaranteed.

**Order Form**

Name \_\_\_\_\_

Address \_\_\_\_\_

E-mail \_\_\_\_\_ Confidential. For shipment verification.

Phone (\_\_\_\_) \_\_\_\_\_

Check Start # \_\_\_\_\_ (If no start number is given, #1001 will be used.)

in (8M33U) AHS Checks ..... \$ \_\_\_\_\_

\$14.95 (150 Singles)  \$16.95 (150 Duplicates)

Check Custom Lettering ..... add \$2.50 \$ \_\_\_\_\_

*Cursive*  Modern  *Elde* English

(8M33C) Cotton Checkbook Cover ... add \$11.95 \$ \_\_\_\_\_

(8M133) 240 Address Labels ..... add \$9.95 \$ \_\_\_\_\_

Label Custom Lettering ..... add \$2.50 \$ \_\_\_\_\_

*Cursive*  Modern  *Elde* English

Shipping & Handling ..... add \$1.95 per item \$ \_\_\_\_\_

Rush Delivery ..... add \$4.95 per item \$ \_\_\_\_\_

EZShield Check Fraud Protection Program™:

add \$1.00 for EACH box of checks you order ..... \$ \_\_\_\_\_

OFFER CODE: **8MG078** SUBTOTAL \$ \_\_\_\_\_

Sales Tax only AR (7.5%); MD (5%) ..... \$ \_\_\_\_\_

TOTAL \$ \_\_\_\_\_

**IMPORTANT! Include the following with this order form:**

Voided check or reorder form with changes indicated.

Deposit ticket from the same account.

Three lines of personalization for address labels. (Max. 32 letters/spaces per line.)

Payment choice:

Check made payable to **Message!Products™**

Charge to:  Visa®  MasterCard®

Acct# \_\_\_\_\_ Exp. Date \_\_\_\_/\_\_\_\_/\_\_\_\_

Sig. \_\_\_\_\_

Automatically debit my checking account (for Auto Debit option, orders must include checks)

**MAIL COMPLETE ORDER TO:**

Message!Products™ • PO Box 700 • Edgewood, MD 21040-0700

Order Online! [www.messageproducts.com](http://www.messageproducts.com) or call toll free 1-800-243-2565

To redeem this offer, use OFFER CODE 8MG078 during online checkout.

Allow 2-3 weeks for regular delivery; Alaska and Hawaii delivery may take longer. Items shipped separately.

Offer expires 12/31/06.



**EZShield Check Fraud Protection Program™ (Pat. Pend.):**  
Guard your checks from unauthorized use of up to \$25,000 for only \$1.00 per box. Underwritten by Lloyd's of London. See Order Form. To learn more, visit [www.ezshield.org](http://www.ezshield.org).

### Looking ahead

MAR. 3-6. **Midwest Regional Lawn, Garden and Flower Show.** Davenport, Iowa. (563) 322-0931. [www.symphonyninbloom.com](http://www.symphonyninbloom.com).

**RAP** MAR. 5-20. **Spring Flower Show.** Olbrich Botanical Gardens. Madison, Wisconsin. (608) 246-4550. [www.olbrich.org](http://www.olbrich.org).

### SOUTH CENTRAL

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

**RAP** JAN. 22. **Life in a Two Litre: Terrariums.** Workshop. Longue Vue House & Gardens. New Orleans, Louisiana. (504) 488-5488 ext. 920. [www.longuevue.com](http://www.longuevue.com).

**RAP** JAN. 29. **Rose Bed to Rose Bud.** Class. Corpus Christi Botanical Gardens & Nature Center. Corpus Christi, Texas. (361) 852-2100. [www.ccbotanicalgardens.org](http://www.ccbotanicalgardens.org).

**RAP** JAN. 29-MAR. 13. **Orchid Island.** Display. Missouri Botanical Garden. St. Louis, Missouri. (314) 577-9400. [www.mobot.org](http://www.mobot.org).

FEB. 25-27. **Neil Sperry's All Texas All Garden Show.** Arlington Convention Center. Arlington, Texas. (800) 752-4769. [www.neilsperry.com](http://www.neilsperry.com).

**RAP** FEB. 27. **Tips & Tricks of Small Space Garden Design.** Class. Powell Gardens. Kingsville, Missouri. (816) 697-2600. [www.powellgardens.org](http://www.powellgardens.org).

### Looking ahead

**RAP** MAR. 5-APR. 10. **Dallas Blooms.** Floral festival. Dallas Arboretum. Dallas, Texas. (214) 515-6500. [www.dallasarboretum.org](http://www.dallasarboretum.org).

MAR. 5 & 6, MAR. 12 & 13. **Azalea Trail.** House and garden walk. River Oaks Garden Club. Houston, Texas. (713) 523-2483. [www.riveroaksgardenclub.org](http://www.riveroaksgardenclub.org).

### SOUTHWEST

AZ, NM, CO, UT

**RAP** JAN. 29. **Artistic Pruning of Desert Trees.** Desert Botanical Garden. Phoenix, Arizona. (480) 481-8144. [www.dbg.org](http://www.dbg.org).

**RAP** FEB. 7. **Winterfest.** The Arboretum at Flagstaff. Flagstaff, Arizona (928) 774-1442. [www.thearb.org](http://www.thearb.org).

FEB. 26. **World Desert Fair.** Boyce Thompson Arboretum. Superior, Arizona (520) 689-2723. <http://arboretum.ag.arizona.edu>.

### Looking ahead

MAR. 12 & 13. **Spring Plant Sale.** Tucson Botanical Garden. Tucson, Arizona. (520) 326-9686. [www.tucsonbotanical.org](http://www.tucsonbotanical.org).

MAR. 12-27. **Spring Plant Sale.** Boyce Thompson Arboretum. Superior, Arizona (520) 689-2723. <http://arboretum.ag.arizona.edu>.

## Xeriscape Conference Celebrates a Decade

HUNDREDS OF professionals, thousands of homeowners, and more than 100 exhibitors are expected to attend the 10th Xeriscape Conference, which will be held at the Albuquerque Convention Center from February 24 through 26 in Albuquerque, New Mexico. This year's event is titled "Adapting to Our Changing Reality" and will explore the past, present, and future of xeriscaping.

While participants mostly hail from the southwestern states, this year's conference will also welcome a delegation from the Japan Xeriscape Design Association from Tokyo and eight representatives from the University of Mexico in Chihuahua, Mexico. "It will really be an international conference," says Scott Varner, executive director of the Xeriscape Council of New Mexico.

"One real highlight of this conference will be Shlomo Aronson, the Berkeley/Harvard educated landscape architect from Israel," says Varner. "He is probably one of the most prominent landscape architects of this time." Other notable speakers include Gary Nabhan, director of the Center for Sustainable Environments in Flagstaff, Arizona; William Dick-Peddie, professor emeritus at New Mexico State University and author; and Panayoti Kelaidis, curator of plant collections at the Denver Botanic Gardens.

The main conference will be held on February 24 and 25, but there will be a "free to the public" day on February 26. Several seminars covering design, plant selection, irrigation, use of trees in the landscape, graywater systems, and other related topics—as well as the exhibition hall—will be available at no charge.

For more information or to register, visit [www.xeriscapenm.com](http://www.xeriscapenm.com), call (505) 468-1021, or e-mail [scott@xeriscapenm.com](mailto:scott@xeriscapenm.com). The registration deadline is February 18.

—Viveka Neveln, Assistant Editor



This bed demonstrates how lack of water does not preclude having a colorful, thriving garden.

### WEST COAST

CA, NV, HI

**RAP** JAN. 28 & 29. **Beyond the Garden Gate.** Symposium. San Francisco Botanical Garden. San Francisco, California. (415) 661-1316. [www.sfbotanicalgarden.org](http://www.sfbotanicalgarden.org).

**RAP** JAN. 30. **Camellia Forest Walk.** Descanso Gardens. La Cañada Flintridge, California. (818) 949-4200. [www.descansogardens.org](http://www.descansogardens.org).

FEB. 5-18. **Permaculture Design Course.** Occidental Arts and Ecology Center. Occidental, California. (707) 874-1557 ext. 201.

FEB. 28. **Ten Tips for a SMARTGARDEN™.** Talk and book signing by Pat Welsh. Scripps Mesa Garden Club. Scripps Miramar Ranch Public Library. San Diego, California. (858) 538-5946.

### Looking ahead

MAR. 4-6. **Santa Barbara International Orchid Show.** Earl Warren Showgrounds. Santa Barbara, California. (805) 967-6331. [www.sborchidshow.com](http://www.sborchidshow.com).

MAR. 5. **Fertilizing, Pruning, and Dividing Perennials.** Talk and book signing by Pat Welsh at San Diego Spring Home/Garden Show. Del Mar Fairgrounds. Del Mar, California. (619) 295-2489. [www.springhomegardenshow.com](http://www.springhomegardenshow.com).

### NORTHWEST

AK, ID, MT, OR, WA, WY

FEB. 9-20. **Chinese New Year Celebration in the Garden.** Portland Classical Chinese Garden. Portland, Oregon. (503) 228-8131. [www.portlandchinesegarden.org](http://www.portlandchinesegarden.org).

### CANADA

FEB. 16. **Green Trade Expo 2005.** Trade show. Ottawa Civic Centre. Ottawa, Ontario. (613) 796-5156. [www.greentrade.ca](http://www.greentrade.ca).

**RAP** FEB. 24. **Gardening From a Natural Perspective.** Lecture and tour. The Arboretum at the University of Guelph. Guelph, Ontario. (519) 824-4120 ext. 52113. [www.uoguelph.ca/arboretum](http://www.uoguelph.ca/arboretum).

## GARDEN MARKET

CLASSIFIED AD RATES: All classified advertising must be prepaid. \$2.50 per word; minimum \$60 per insertion. Copy and prepayment must be received on the 20th of the month three months prior to publication date. To place an advertisement, call (703) 768-5700.

### BOOKS

**Hortica: Color Cyclopedic of Garden Flora** with Hardiness Zones and Indoor Plants, 8,100 color photos by Dr. A. B. Graf, \$195

**Tropica 5th ed:** 7,000 color photos of plants and trees for warm environments, \$185

**Exotic House Plants:** 1,200 photos, 150 in color, with keys to care, \$8.95

Shipping additional. Circulars gladly sent.

**ROEHRS Co.**, 1230 Hwy 33, Farmingdale, NJ 07727. (732) 938-5111. fax (732) 938-3075. [www.roehrsco.com](http://www.roehrsco.com).

### GIFTS

**WildWood-Collections**

Wonderful World of Garden Plants 2005

Fine Art Photo Notecards, Calendars, Notepads

Full Color Offset Lithography  
Photos by Bobbe A. Luce

Visit us at [WildWood-Collections.com](http://WildWood-Collections.com)

### NURSERY STOCK

**BOTANYSHOP.COM MAIL ORDER**—Princeton & Valley Forge American Elm; Allée Lacebark Elm; Thuja x Green Giant; Pink, Blushing & Red Knock Out Roses; Endless Summer Hydrangea; Dawn Redwood; Autumn Blaze Maple; Butterfly Bushes in Bicolor, Honeycomb, Guinevere; Golden Glory Dogwood; Ann & Centennial Magnolia; Avondale Redbud. Botany Shop Inc., 710 Minnesota, Joplin, MO 64801. 1-888-855-3300. [info@botanyshop.com](mailto:info@botanyshop.com). [www.botanyshop.com](http://www.botanyshop.com).

**Plant Trees!**

[arborday.org](http://arborday.org)

### PLANT LABELS

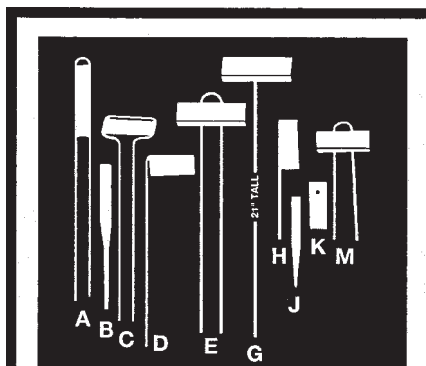
#### ENGRAVED BOTANICAL PLANT LABELS

PLANT IDENTIFICATION FOR EVERY GARDEN  
FAMILY - GENUS - SPECIES - COMMON NAME

Order @ [www.gardenmarkers.com](http://www.gardenmarkers.com)

FAX: 434-975-1627

PLANT LABELS - STAKES - TREE TACKS



#### THE PERMANENT METAL GARDEN LABEL

A - Hairpin Style Markers	100 For \$30.40
B - Plant or Shrub Labels	100 For \$12.85
C - Cap Style Markers	100 For \$25.25
D - Swinging Style Markers	100 For \$23.45
E - Rose Markers	100 For \$29.35
F - Tall Display Markers	100 For \$36.25
G - Tall Single Staff Markers	100 For \$29.10
H - Flag Style Markers	100 For \$23.50
J - Small Plant Labels	100 For \$12.70
K - Tie-On Labels	100 For \$18.75
M - Miniature Markers	100 For \$23.10

Special Quantity Prices Available  
Prices Include Prepaid Postage

INTRODUCTORY OFFER:  
1-Each; A,B,C,D,E,H,J and K  
With Waterproof Crayon, Only \$4.45

**PAW PAW EVERLAST LABEL COMPANY**

P.O. Box 93-AH

Paw Paw, Michigan 49079-0093

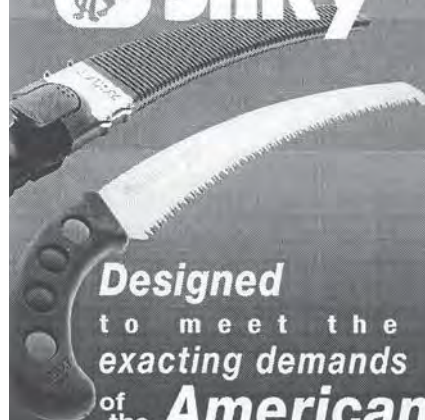
Michigan residents add 6% sales tax.

#### LET OUR READERS KNOW ABOUT YOUR BUSINESS.

To place your ad here or to request a media kit, call *The American Gardener* advertising office at (703) 768-5700 ext. 120.

The Ultimate In Hand Saws

**Silky**



Designed to meet the exacting demands of the **American gardener**

The Silky Store

PO Box 317 • Midland, NC 28107

[www.SilkyStore.com](http://www.SilkyStore.com)

Toll Free: 888.605.0001

©1984 EDF

Buy recycled.



It would mean the world to them.

Recycling keeps working to protect their future when you buy products made from recycled materials. For a free brochure, write *Buy Recycled*, Environmental Defense Fund, 257 Park Avenue South, New York, NY 10010, or call 1-800-CALL-EDF.





## David Milarch

**I**N 1996, David Milarch thought that cloning Champion Trees—the biggest and often the oldest of each tree species—might help him save his family tree farm in northern Michigan. But it wasn't long before Milarch realized it was the legacy of the Champion Trees themselves that needed saving.

Garden writer Lynda DeWitt recently talked with Milarch, co-founder with his son, Jared, of the Champion Tree Project, about his work to help preserve American history and protect our environmental future.

**Lynda DeWitt:** You made headlines a year and a half ago when you set out to clone the world's oldest tree, a 4,768-year-old bristlecone pine in California. How are these seedlings doing?

**David Milarch:** Of the dozen or so healthy bristlecone seedlings propagated, one is in a non-public greenhouse of the U.S. Botanic Garden in Washington D.C.; one was sent to the Strybing Arboretum in San Francisco; and one is on display at the new airport in Traverse City, Michigan. Discussions are underway to share seedlings with other planting partners.

In this particular cloning process, the seedlings are grown as rootstock for future grafting. All are about three inches tall now; hopefully, they will soon be large enough to attempt the grafting procedure.

**Tell me about some other efforts to propagate America's tree giants.**

We've cloned the 13 remaining 18th-century trees at Mount Vernon, George Washington's home in Alexandria, Virginia. Those trees, which include seven American hollies, were planted on the grounds of Mount Vernon and at the Edsel and Eleanor Ford House in Michigan.

In Florida, we cloned numerous tropical trees, including the National Champion silver buttonwood and green buttonwood trees. Out West, we just completed our first collection of Champion Tree tissue from along the route of Lewis and Clark.



David and Jared Milarch with clones of the National Champion red ash at the Pentagon.



David Milarch, center, demonstrates the tree cloning procedure for the benefit of Senator Debbie Stabenow of Michigan and a national television audience.

At the Pentagon, just outside of Washington, D.C., we've planted nine red ash trees, all clones of the 400-year-old National Champion red ash, as a living memorial to the victims of the September 11 attack.

We definitely have our work cut out for us. There are about 800 native tree species in the United States—and each one has a “National Champion.” Our mission, however, is not solely to clone the champions. We want to use the genetic heritage of these giants to strengthen America's urban landscapes.

#### How do you plan to do this?

Many nursery-grown trees that are planted in urban areas die or perform poorly. To achieve environmental sustainability, we need trees that are more tolerant of the stresses of urban environments, such as soil compaction, drought, air pollution and disease infestations.

That's where the clones of the champions and old-growth forest giants come in. We're working now with large-scale nurseries and professional arborists to produce, archive, and market genetic duplicates of champion trees, called ChampTree® clones. Research on these trees will help us understand how genet-

ics enable trees to better cope with the environments in which we place them.

#### When will the ChampTree® clones be available to gardeners?

Dozens of different ChampTree® clones are now in the pipeline, and we expect the first ones will be available at the retail level later in 2005. Bringing a new tree cultivar to market is a time-consuming and costly process. It takes about five to seven years and averages about \$250,000.

#### Genetics is only one factor that determines how big a tree grows or how long it lives. Can you guarantee that ChampTree® clones will outperform other trees?

Environmental factors play a huge part in the survival of any tree, and we can't stress enough the importance of sound management practices, such as planting a species where it receives adequate light.

However, every living thing starts with a unique genetic code, which dictates the potential for that organism. A ChampTree® clone will have the genetic potential of the parent tree, which has demonstrated the ability to withstand stress over long periods of time in order to attain great size.

## Resources

- Learn more about David Milarch and the Champion Tree Project at [www.championtreeproject.org](http://www.championtreeproject.org).
- Visit [www.championtrees.org/champions/StateBigTreeLists.htm](http://www.championtrees.org/champions/StateBigTreeLists.htm) to find out about the Champion Trees in your state.
- Become a Champion Tree™ supporter and receive free periodic e-mail updates on the Champion Tree Project by e-mailing Executive Director Terry Mock at [champtree@bigplanet.com](mailto:champtree@bigplanet.com).
- Contact Alliance for Community Trees, [www.actrees.org](http://www.actrees.org), to get involved with a nearby state or local organization dedicated to tree planting, care, and conservation.
- Learn more about national urban and community forestry at [www.treelink.org](http://www.treelink.org).

#### The Champion Tree Project has gone international. Tell us about your efforts abroad.

We've been invited to clone the oldest known tree in Africa, a leadwood tree in central Namibia. Additionally, we're planning expeditions to China to clone Ming Dynasty trees for the 2008 Beijing Olympics and to Europe to work with remnant old-growth forest trees.

#### With all this going on, how is the family tree business faring?

We're beginning to include some Champion Tree clones in our own landscape projects, and we look forward to the day when a full line of ChampTree® clones are commercially available across the country. When that happens, we hope to put a small royalty from each tree sale toward funding the Champion Tree Project's research, genetic archiving, and other programs.

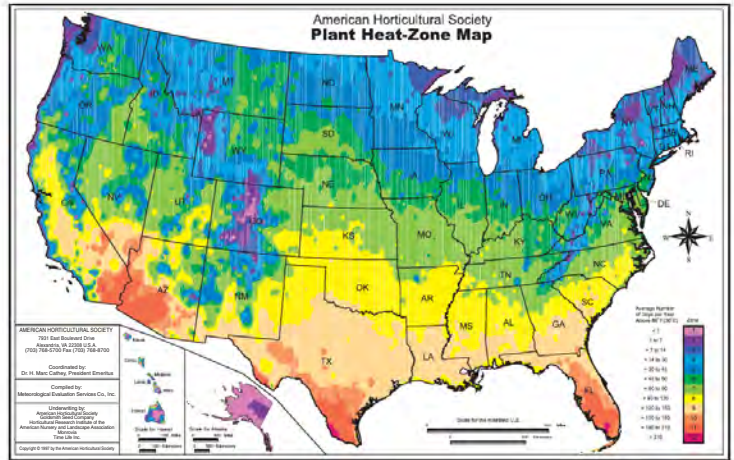
*Formerly editor of the Mid-Atlantic edition of People, Places, & Plants, Lynda DeWitt lives in Bethesda, Maryland.*

# 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](http://www.ahs.org). Hardiness and Heat zone codes are generated by AHS and documented in the Showtime® database, owned by Arabella Dane.



## A-C

- Acer rubrum** AY-ser ROO-brum (USDA 3-9, AHS 9-1)  
**A. saccharum** A. sak-AH-rum (4-8, 8-1)  
**Amelanchier alnifolia** am-eh-LANG-kee-ur al-nih-FO-lee-uh (4-9, 8-3)  
**A. canadensis** A. kan-uh-DEN-sis (3-7, 7-1)  
**A. ×grandiflora** A. gran-dih-FLOR-uh (3-7, 7-1)  
**A. laevis** A. LEE-vis (5-9, 9-3)  
**Anemone sylvestris** uh-NEM-o-nee sil-VES-triss (3-9, 9-1)  
**Ardisia japonica** ar-DIZ-ee-yuh jah-PON-ih-kuh (6-9, 9-1)  
**Arisaema sikokianum** air-ih-SEE-muh sih-ko-kee-AN-um (4-9, 9-3)  
**Asarum canadense** uh-SAR-um kan-ah-DEN-see (3-8, 8-2)  
**A. splendens** A. SPLEN-denz (7-9, 9-7)  
**Asimina triloba** uh-SIH-mih-nuh try-LO-buh (4-8, 9-5)  
**Aster cordifolius** ASS-tur kor-dih-FO-lee-us (5-8, 8-1)  
**A. divaricatus** A. dih-vair-ih-KAY-tus (3-9, 9-1)  
**Berberis thunbergii** BUR-bur-iss thun-BUR-jee-eye (5-8, 8-5)  
**Berlandiera lyrata** bair-lan-DEER-uh ly-RAY-tuh (7-9, 9-7)  
**Cardiocrinum cathayanum** kar-dee-o-KRY-num kath-ay-AN-um (7-9, 9-7)  
**Carex pensylvanica** KAIR-eks pen-sil-VAN-ih-kuh (4-8, 8-1)  
**Carya glabra** KEH-ree-uh GLAB-ruh (5-8, 8-1)  
**Cercis canadensis** SUR-siss kan-uh-DEN-siss (4-9, 9-2)  
**Chrysogonum virginianum** krih-SOG-on-um vir-jin-ee-AN-um (5-9, 9-2)

- Crataegus phaenopyrum** krah-TEE-gus fee-no-PY-rum (4-8, 8-1)  
**Convallaria majus** kon-val-LAIR-ree-uh MAY-jus (2-7, 7-1)  
**Cuphea ignea** KOO-fee-uh IG-nee-uh (10-11, 12-6)

## D-O

- Delphinium consolida** del-FIN-ee-um kon-SOL-ih-duh (0-0, 9-1)  
**Dennstaedtia punctilobula** den-STET-ee-uh punk-tih-LO-bew-luh (3-8, 8-1)  
**Diospyros virginiana** dy-OS-pih-ros vir-jin-ee-AN-uh (4-9, 9-1)  
**Echinacea purpurea** ek-ih-NAY-see-uh pur-PUR-ee-uh (3-9, 9-1)  
**Fagus sylvatica** FAY-gus sil-VAT-ih-kuh (4-7, 9-4)  
**Fraxinus pennsylvanica** frak-SIH-nus pen-sil-VAN-ih-kuh (4-9, 9-1)  
**Gleditsia triacanthos** gleh-DIT-see-uh try-uh-KAN-thos (3-7, 7-1)  
**Gymnocladus dioicus** jim-NOK-luh-dus dy-o-EE-kus (5-9, 9-5)  
**Hakonechloa macra** ha-kon-ee-KLOH-uh MAK-ruh (5-9, 9-2)  
**Hydrangea macrophylla** hy-DRAN-juh mak-ro-FIL-uh (6-9, 9-3)  
**Ilex opaca** EYE-leks o-PAH-kuh (5-9, 9-5)  
**Iris cristata** EYE-riss kris-TAY-tuh (4-8, 8-1)  
**I. pallida** I. PAL-lih-duh (1-9, 9-1)  
**I. reticulata** I. reh-tik-yew-LAY-tuh (5-8, 8-5)  
**Loropetalum chinense var. rubrum** lor-o-PEH-tal-um chy-NEN-see var. ROO-brum (8-9, 9-8)  
**Magnolia grandiflora** mag-NOLE-yuh gran-dih-FLOR-uh (7-9, 10-7)  
**M. ×soulangeana** M. soo-lan-jee-AN-uh (5-9, 9-5)

- Matthiola incana** math-EYE-o-luh in-KAN-uh (5-8, 8-5)  
**Oenothera speciosa** ee-no-THEE-ruh spee-see-O-suh (5-8, 8-1)  
**Opuntia compressa** o-PUN-shuh kum-PRES-uh (11-12, 12-9)  
**O. megacantha** O. meh-guh-KAN-tuh (11-12, 12-9)  
**O. phaeacantha** O. fee-uh-KAN-tuh (9-12, 12-7)  
**O. robusta** O. ro-BUS-tuh (9-12, 12-1)

## P-R

- Pachysandra procumbens** pak-ih-SAN-druh pro-KUM-benz (5-9, 8-3)  
**Passiflora incarnata** pass-ih-FLOR-uh in-kar-NAY-tuh (5-10, 12-1)  
**Petunia ×hybrida** peh-TOON-yuh HY-brih-duh (11, 12-1)  
**Philadelphus microphyllus** fil-uh-DEL-fus my-kro-FIL-lus (6-9, 9-6)  
**Picea abies** PY-see-uh AY-beez (3-8, 8-1)  
**P. pungens** P. PUN-jenz (3-8, 8-1)  
**Pinus banksiana** PY-nus bank-see-AN-uh (3-8, 8-1)  
**P. virginiana** P. vir-jin-ee-AN-uh (5-8, 8-5)  
**Plectranthus argentatus** plek-TRAN-thus ar-jen-TAY-tuss (10-11, 12-1)  
**Polypodium virginianum** pawl-ee-PO-dee-um vir-jin-ee-AN-um (5-8, 8-5)  
**Polystichum acrostichoides** pah-LIS-tih-kum uh-kro-stih-CHOY-deez (3-8, 8-1)  
**Prunus maritima** PROO-nus muh-RIT-ih-muh (3-6, 6-1)  
**Quercus prinus** KWER-kus PRY-nus (4-8, 8-3)  
**Q. rubra** Q. ROO-bruh (4-9, 9-5)  
**Raphiolepis indica** ra-fee-o-LEP-iss IN-dih-kuh (7-9, 9-7)

- Ribes aureum** RY-beez AW-ree-um (5-8, 8-5)  
**R. odoratum** R. o-doh-RAY-tum (5-8, 8-5)  
**Robinia pseudoacacia** ro-BIN-ee-uh soo-doh-uh-KAY-shuh (4-9, 9-3)  
**Rodgersia pinnata** rah-JERZ-ee-uh pin-NAY-tuh (3-7, 7-1)

## S-Z

- Salvia brandegei** SAL-vee-ah bran-DEE-jee-eye (8-12, 12-5)  
**S. penstemonoides** S. pen-stuh-mon-OY-deez (6-10, 12-1)  
**Sanguinaria canadensis** san-gwi-NAIR-ee-uh kan-uh-DEN-sis (3-9, 9-1)  
**Sassafras albidum** SASS-uh-frass AL-bih-dum (4-8, 8-3)  
**Scilla sibirica** SIL-luh sy-BEER-ih-kuh (5-8, 8-5)  
**Solenostemon scutellarioides** so-len-O-steh-mon skoo-tuh-LAIR-ee-OY-deez (11-12, 12-1)  
**Taxus ×media** TAK-suss MEE-dee-uh (4-7, 7-1)  
**Vaccinium angustifolium** vak-SIN-ee-um ang-gus-tih-FO-lee-um (2-8, 8-1)  
**V. macrocarpon** V. mak-ro-KAR-pon (2-7, 7-1)  
**V. vitis-idaea var. minus** V. VY-tis-eye-DEE-uh var. MY-nus (2-7, 6-1)  
**Viola ×wittrockiana** VY-o-luh wih-trah-kee-AN-nuh (4-8, 9-1)  
**Weigela florida** wy-JEEL-yuh FLOR-ih-duh (5-8, 8-4)  
**Yucca flaccida** YUK-uh FLAS-sih-duh (5-9, 9-5)  
**Y. gloriosa** Y. glor-ee-O-suh (7-11, 12-7)  
**Zinnia elegans** ZIN-ee-uh EL-ih-ganz (0-0, 12-1)



high-bred,  
*well-fed,*  
loving-care...

Nuccio's Bella Rossa Camellia  
*Camellia japonica* 'Nuccio's Bella Rossa' P.P. #13023

 **MONROVIA**<sup>®</sup>

*Only from Monrovia...*

- Genetically superior specimens exceed industry norm
  - 42 exclusive soil blends ensure stronger root systems and disease resistance
- Each plant is nurtured and cared for by specially trained Horticultural Craftsmen

*Distinctively Better<sup>®</sup> Plants...from the Ground Up*

*Available at fine garden centers.  
For the location nearest you, call 1-888-Plant It!*

 **MONROVIA**<sup>®</sup>

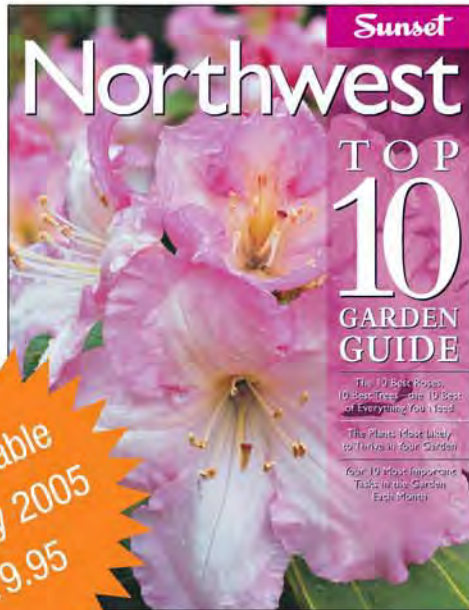
HORTICULTURAL CRAFTSMEN<sup>®</sup> SINCE 1926

[www.monrovia.com](http://www.monrovia.com)

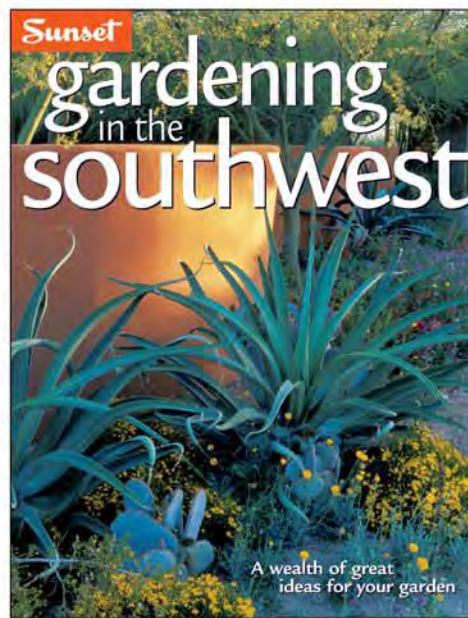
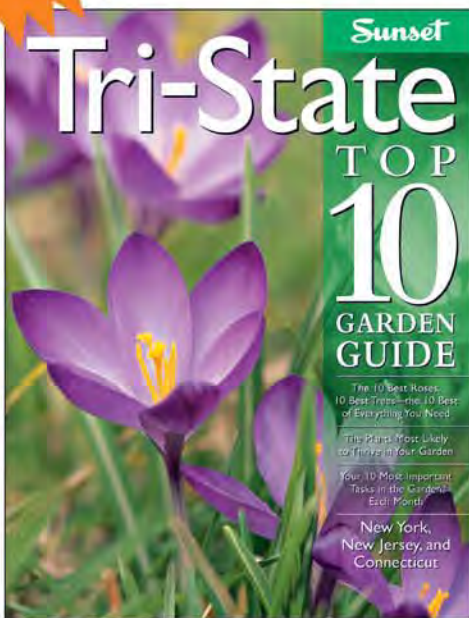
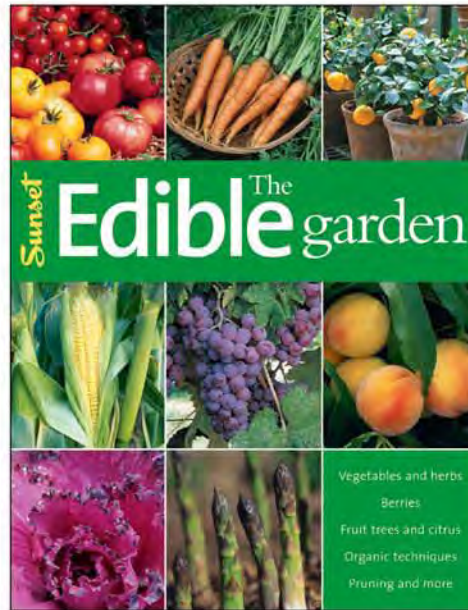


# Put Down Roots

Favorite Plants for a Thriving Garden in Your Region



All Available  
January 2005  
\$19.95



## Northwest Top 10 Garden Guide

Organized into easily accessible chapters such as Top 10 Perennials, Edibles, Annuals, Shrubs, Bulbs, Roses, and more, this book offers novice and seasoned gardeners alike a comprehensive guide to planning and maintaining a thriving garden in the Northwest.

## Tri-State Top 10 Garden Guide

Now, gardeners in New York, New Jersey, and Connecticut have a groundbreaking resource. This book charts a new path to successful gardening by recommending plants that are easy to find, easy to grow, and naturally suited to the climatic zones and seasonal conditions of the Tri-State area.

## The Edible Garden

*The Edible Garden* is packed with practical advice for designing a horticultural haven that's tasty and beautiful. It covers tried-and-true methods as well as more avant garde approaches to growing herbs, vegetables, fruit trees, edible flowers, and more.

## Gardening in the Southwest

A landscaping guide dedicated to gardeners from West Texas to Southern California. Stunning photo galleries showcase signature Southwest gardens. An extensive section is devoted to design elements such as shade structures, water features, and fire pits. Essential reference information focuses on microclimates, soil, and seasonal factors.

**Sunset**